NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

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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

Euro area economy continued to pick-up moderately; the situation in Slovakia also improved

The improvement in macroeconomic expectations and projections for the euro area and the appreciable pick-up in Slovakia's economic performance had a favourable impact on financial stability. The key factors behind the recovery included falling oil prices and the easing of monetary policy connected with the weakening of the euro. In Slovakia there was an improvement not only in the rate of economic growth, but also in the composition of growth, most notably in the form of an increase in domestic demand (particularly in household final consumption – stemming from real wage growth and labour market recovery). Such a trend contributes to financial stability, mainly by reducing credit risk.

The growth of lending to households continued to accelerate, while corporate lending picked up slightly

Improving macroeconomic developments were reflected in increasing loans to households. Even though Slovakia already reported one of the highest rates of household loan growth in Europe, this growth increased still further in 2014 and the first quarter of 2015. There was also a change in the composition of this growth. In the largest segment of household debt, housing loans, the highest growth was in standard mortgage loans. A key trend is the rising growth in consumer loans (up to 20% year-on-year), which to some extent reflects the practice among customers of consolidating their bank and non-bank borrowings into a single consumer loan. Hence the share of non-bank credit in the overall debt of households remained at a low level (5.8%).

Accelerating household debt growth was related to the increase in disposable income, falling interest rates, stable property prices, and improved consumer confidence. Part of the rise in household debt was also attributable to loan refinancing in which the principal is increased. At the same time, credit growth was significantly boosted by banks, as they sought to step up lending in order to compensate for falling interest margins.

The situation in the corporate loan market situation improved moderately in the first quarter of 2015. As for corporate credit, the first quarter saw growth in loans to domestic firms and foreign-owned firms, whereas last year the only increase was in loans to state-owned enterprises. It is also positive to note increasing growth in loans to small and medium-sized enterprises.

Several risks persist and some are mounting

The trend rise in prices across a large aggregate of financial assets has accelerated in the recent period, owing more to an inflow of liquidity than to any improvement in their economic fundamentals. Prices formed in this way are more prone to fluctuate in response to changes in financial market sentiment. The significance of this risk has also increased in the recent period due to episodes of heightened volatility and reduced structural liquidity in financial markets. The general uncertainty about future developments is also exacerbated by the situation in Greece. Although tensions have not yet spread to other euro area countries, the euro area economy could be jeopardised by any materialisation of Greece-related risks. This and the persisting geopolitical tensions in Ukraine represent significant external factors which, if they deteriorate, could have repercussions for Slovakia via its main trading partners.

The financial sector is being significantly affected by the environment of low interest rates, in particular the decrease in rates at longer maturities. The decrease in the yield curve slope is impairing profits in the banking sector, since it affects loans more than deposits. This trend therefore has a greater impact on banking sectors, such as in Slovakia, that follow a more traditional model of banking. Interest margins have thus contracted further, and the only way that banks managed to maintain profit levels last year was by significantly increasing the amount of loans to households. Any further reduction in interest rates would put substantial downward pressure on banks' profits. The response of majority of banks to this situation in 2013 and 2014 was to extend the duration of the bond portfolio. Under the scenario that customer in-

terest rates remain low for an extended period, the current high share of government bonds in banks' portfolios would constitute a significant source of interest income, although even in this case such income may gradually decline as funds from redeemed bonds are reinvested in lower-yielding assets.

The upward impact of falling interest rates on household credit growth has resulted in a sharp rise in household debt. In Slovakia, the pace of debt growth measured by the increase in loans themselves, or by the ratio of loans to disposable income, was the highest in central and eastern Europe and the second-highest in the European Union. The decline in interest rates on new housing loans was greater in Slovakia than in any other euro area country. On the one hand, this contributed to a reduction in credit default risk, since the decrease in interest rates translated into lower monthly loan repayments for those households that refinanced their old loans at lower interest rates or arranged new fixation periods at lower rates. On the other hand, subdued interest rates generally lead to a build-up of credit risk in the future. This is because low interest rates promote increased lending to less creditworthy customers, and also because the indebtedness of numerous more creditworthy customers increases, as they take on additional debt through refinancing.

Low interest rates also have a negative impact on the insurance sector, not only by increasing risk appetite, but also directly, by lowering returns on financial instruments that cover a large part of the guaranteed income under life insurance policies.

The banking sector's liquidity represents a separate risk and one that is becoming gradually greater over the long-term horizon. This stems mainly from the increasing maturity mismatch between assets and liabilities. On the other hand, this risk is being mitigated by a number of factors. A more detailed analysis of this issue is provided in the last part of the report.

The resilience of the financial system remains relatively strong

Capital adequacy in the banking sector remained relatively high, and as at the end of 2014 the total capital ratio and CET1 capital ratio averaged, respectively, 17.3% and 16%. No bank had a capital ratio below the 10.5% minimum requirement. At the same time, Národná banka Slovenska decided to introduce an additional capital requirement of between 2% and 3% for systemically important banks, to be phased in between 2016 and 2018. This requirement is intended to strengthen the resilience of systematically important institutions and hence the stability of the financial sector as a whole.

Given the high potential accumulation of risks related to retail lending, NBS introduced in October 2014 new regulatory rules for this market. The rules are in the form of a Recommendation, the implementation of which is being monitored on a regular basis. The impact of the Recommendation was evident in the first quarter of 2015, as risks related to the strong growth in retail credit decreased. The aim of NBS is to have these rules implemented in relevant legislation and thus ensure that they apply not only to banks, but also to non-bank entities.

It is, however, important for financial stability that the ongoing changes in the legislative and regulatory environment at the national and European level do not interfere with banks' commercial strategies, which face strong pressure owing to the persistence of extremely low interest rates. It is also necessary that new regulatory rules, particularly those concerning liquidity and crisis management, take sufficient account of banking funded predominantly by customer deposits.

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 euro area	Increase in credit risk costs in the event of adverse macroeconomic developments	Continuing increase in retail credit risk costs in 2014 despite falling interest rates and higher employment.	Relatively high solvency in the banking and insurance sectors. Improving performance of the Slovak economy and increasing domestic consumption. Falling oil prices Low interest rates.	The capital conservation buffer was implemented in full from 1 October 2014. For systemically important banks, a systemic risk 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	Higher share of retail loans with an LTV ratio close to 100%.	Relatively stable property prices with no signs of emerging imbalances in previous years.	Recommendation A (NBS Recommendation No 1/2014 of 7 October 2014), effective from 1 November 2014. NBS aims to have it enacted into legislation.
		Weakened financial position of several parent undertakings of Slovak banks, owing mainly to geopolitical risks	Direct negative impact on banks in Slovakia owing to capital and credit linkages between parent undertakings and subsidiaries.	Low direct exposures of domestic financial institutions and funds to Russia and Ukraine.	
	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 down pressure on profits over the long-term horizon	Banks: gradually diminishing potential for further household lending growth and falling interest margins. Insurers: widening gap between returns on assets covering technical provisions and the technical interest rate. Risk arising from negative interest rates on deposits or loans – principal determinant of banks' business strategy. Negative impact of low interest rate environment exacerbated by banks' new contribution obligations (ECB, SRM, DPF) and restrictions on the amount of fee income.	Rates of return on banks' bond portfolios are falling far more slowly than market rates, thanks to the long duration of the portfolios; nevertheless reinvestment risk has been gradually increasing. Lending to the corporate sector is slowly picking up.	
		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 correction.
		Risk of price bubbles in riskier assets; increasing potential impact on financial markets in the event that central banks unwind their operations	The combination of risk underestimation (owing to low risk aversion among investors) and the decline in structural liquidity in global financial markets is increasing the potential impact of any correction resulting, for example, from the escalating uncertainty about the situation in Greece.	Relatively low exposure of domestic financial institutions to emerging countries where the impact could be most pronounced; SPMC funds showing an increase in exposure to equity risk.	
	Regulatory environment	Risk arising from the implementation of the minimum requirement for own funds and eligible liabilities (MREL)	The proposed method of implementing this requirement fails to take account of the particularities of banking sectors funded primarily by customer deposits, and makes macroprudential policy less efficient.	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 increasing indebtedness of households could weaken this sector and consequently increase the banking sector's sensitivity to a potential deterioration in the macroeconomic situation	Increasing concentration of debt among certain types of household.		Recommendation F (NBS Recommendation No 1/2014 of 7 October 2014), effective from 1 March 2015. NBS aims to have it enacted into legislation.
			Accelerating debt growth alongside flat growth in household disposable income.	Labour market recovery, real wage growth and increasing household consumption.	Recommendation B and E (NBS Recommendation No 1/2014 of 7 October 2014), effective from 1 March 2015. NBS aims to have it enacted into legislation.
			Banks' policies for retail lending are insufficiently prudent.	Increase in interest rate fixations.	Recommendation C (NBS Recommendation No 1/2014 of 7 October 2014), effective from 1 March 2015. NBS aims to have it enacted into legislation.
	Liquidity	Maturity mismatch between assets and liabilities	Widening mismatch between assets and liabilities and declining liquidity buffers.	Adherence to minimum regulatory limit for liquid assets, sound funding structure, and low chance of risk spreading outside banking sector.	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.
	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 exhibits a relatively high degree of economic links between domestic firms; the largest of them could pose a risk to the solvency of certain banks. Increase in the banking sector's exposure to Cyprus.		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 systemic risk 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	The deteriorating economic situation in Ukraine and Russia had a negative impact on certain parent undertakings of domestic banks.	The cost-to-income ratios of domestic banks (especially large ones) remains 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.

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
	Business practices of financial institutions	Potential strategic risk from increasing linkages between banks and financial intermediaries	Pressure on banks to ease credit standards and shorten interest rate fixation periods.		Recommendation G (NBS Recommendation No 1/2014 of 7 October 2014), effective from 1 March 2015. NBS aims to have it enacted into legislation.
		Risks arising from intensive price competition in the motor insurance market	The loss-generating decline in premiums in comprehensive motor vehicle insurance became even more unsustainable in 2014.		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

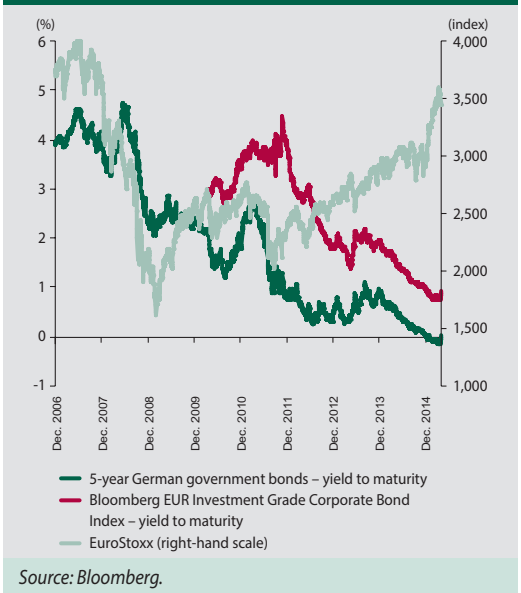
The macroeconomic situation in Europe improved slightly in the period between the publication of the previous *Financial Stability Report*, in November 2014, and this FSR. Consequently, the projections for euro area economic growth in 2015 have been revised up. The key stimuli to recovery were falling oil prices and the ECB's easing of monetary policy. The principal transmission channel of these two "shocks" was an increase in the real value of disposable income and an increase in consumer confidence, which had an upward effect on household demand for goods and services. The performance of the economy is expected, with a lag, to be boosted by foreign trade, as weakening of the euro's nominal effective exchange rate, by approximately 10%, has contributed substantially to the competitiveness of exporters in the region. Another key factor has been improved sentiment in the business sector, which, in conjunction with increasing demand for, and availability of, loans, is conducive to a pick up in fixed capital investment – the area that remains hardest hit by the repercussions of the crisis.

Although the events of recent months have diminished the risk of nominal growth being low for an extended period, the risks to financial stability in the euro area remain present. Even after being revised up, the projection for real GDP growth in the euro area in 2015 is only 1.5% (according to the ECB). The pace of growth is expected to accelerate over the next years, to reach 2.1% by the end of the projection horizon; nevertheless, this outlook is already surrounded by significant uncertainty. The question remains whether the recovery will take on a sustainable nature after the fading of the one-off effects of falling oil prices and euro depreciation. Not only are several countries due to implement further fiscal austerity, but the absolute level of economic activity is still lower than it was just before the Great Recession. The negative output gap and high rate of unemployment will, it appears, create continuing disinflationary pressure.

The European Central Bank announced in January 2015 that it would launch an expanded asset purchase programme, also known as quantitative easing. The ECB resorted to this instrument after the average annual inflation rate for the euro area turned negative and market-based inflation expectations also began to fall. The expanded asset purchase programme involves Eurosystem central banks purchasing mainly government bonds of euro area countries, as well as covered bonds and asset-backed securities. The target amount of the combined monthly purchases is set at €60 billion. The programme is due to run at least until September 2016, and therefore the overall amount of purchases is expected to reach €1.1 trillion.

Although the expanded asset purchase programme (APP) was not actually launched until March, its impact on financial markets has been substantial. Much of the impact on asset prices occurred during the second half of 2014 as a result of the strengthening view that quantitative easing would be essential given the situation in the euro area. Prices of government bonds issued by euro area countries (apart from Greece) rose sharply from the summer of 2014. Yields on these debt securities fell across the full spectrum

Chart 1 Selected price indicators of financial markets in Europe



Source: Bloomberg.

of maturities, and in the case of benchmark ten-year bonds, the decrease was around 100 basis points. Even more significant than the extent of the decline was the fact that a large proportion of euro area government bonds were starting to trade at negative yields. In April 2015 some one-third of the total amount of euro area sovereign debt was yielding negative. The spectrum of German government bonds with negative yields extended to up seven-year maturities. The inflow of liquidity from the ECB also put upward pressure on prices of government bonds issued by non-euro area European countries and by the United States.

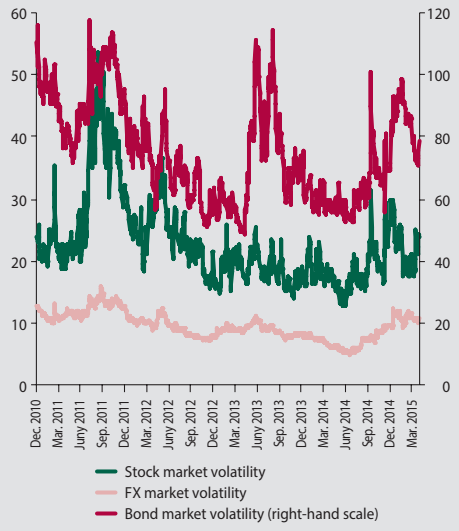
The expanded APP in the euro area is a further contribution to the trend of substantial monetary policy easing in advanced countries. The persistence of such a situation may, however, provide an incentive for excessive risk-taking in the financial sector. Recent months have also seen loosening of monetary conditions outside the euro area. The central banks of Sweden, Denmark and Switzerland reduced key interest rates to negative levels, in order to curb upward pressure on the exchange rates of their national currencies against the euro. In Japan, deteriorating macroeconomic conditions prompted an expansion of the programme of "quantitative and qualitative easing".

Thus in most advanced economies, risk-free interest rates are at historically low levels. In such conditions, investors are searching for higher yield in riskier instruments. One recent example of such behaviour is the inflow of funds into European equities, causing their prices to rise sharply. After a small correction at the end of 2014, demand for speculative-grade corporate bonds picked up again. In bank lending, too, particularly in the United States, certain elements are appearing which could be a source of problems in the future. These include covenant-lite loans and highly leveraged buyouts. It is also worth noting that the ratio of total debt used for stock-exchange margin trading to the total stock market capitalisation in the United States is now higher than it was during the bubble at the end of the 1990s.

In the light of the above, it may be said that market risks in the financial system are at an elevated level. It seems that the price growth observed in recent years across a significant range of assets stems largely from strong demand supported by an influx of liquidity, rather than from any change in economic value. Such assets are therefore more liable to fall in price if market sentiment suddenly shifts in response to a shock. Although the prevailing situation in financial markets remains relatively calm, the recent period has seen a slight rise in their volatility across all types of instruments. In addition there have been several bursts of substantial turbulence, but so far without any systemic repercussions. Prominent examples include the "flash crash" of 15 October 2014 – when yields on US government bonds fell sharply and immediately rebounded – and the steep appreciation of the Swiss franc against the euro in early 2015, after the Swiss central bank unexpectedly ceased intervening to cap the franc's exchange rate.

A factor that may contribute to similar episodes of heightened volatility in the future is the structural decline in liquidity in financial markets. In the midst of a liquidity shortage, even a moderate initial shock will be amplified into large price fluctuations and subsequently spread to other parts of the financial market. A key background cause of the lower market

Chart 2 Volatility of different types of financial assets (index)

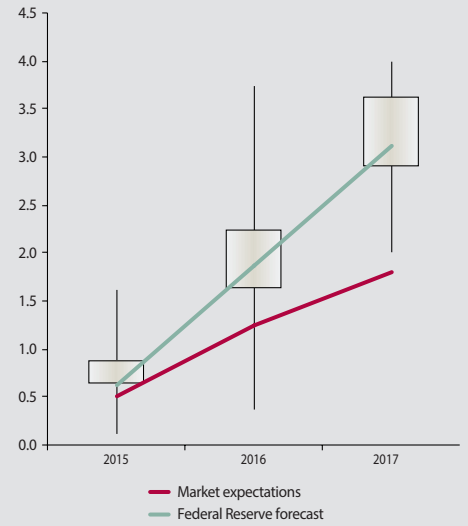


Source: Bloomberg.

liquidity appears to be that market makers are less willing to enter into transactions as counterparties owing to stricter regulatory regimes. Another risk to liquidity that has emerged in recent years is the growing role of shadow banking. The total assets of investment funds (including hedge funds) are rising sharply, while in the case of collective investment funds in particular there is an increasing mismatch between liabilities falling due almost immediately and relatively illiquid assets.

The start of monetary policy normalisation in the United States is one of the main risk factors that could set off a wave of turbulence in financial markets. The economic recovery in the United States is approaching the stage at which the continuance of virtually zero interest rates could begin to cause overheating of the economy. The Federal Reserve, according to its public communications, has therefore lifted its previous commitment to leave the federal funds rate at zero and has indicated its readiness to raise interest rates for the first time in seven years. It is widely expected that the Federal Reserve will increase rates before the end of 2015, although the precise timing remains a matter of uncertainty. While the first increase in rates could have the potential to move markets, it is not the only risk associated with the future development of US monetary policy. There could also be a shock if monetary policy is subsequently tightened at a pace different from that widely expected by investors. The likelihood of such a scenario is increased by the fact that the median values of reference rates in the forecasts of the Federal Open Market Committee members have a significantly steeper trajectory than do the implied market rates.

Chart 3 Expectations for the movement of short-term interest rates in the United States (%)



Source: Bloomberg, Federal Reserve.
Notes: Market expectations derived from Federal Reserve funds futures. The Federal Reserve's forecast is the median of the expected values of the federal funds rate at the end of the respective calendar year on the horizontal axis, calculated from the individual forecasts made by the FOMC members in March 2015. The chart also shows the interquartile range of the FOMC members' forecasts and the spread between their minimum and maximum values.

The developments in Greece have not so far had repercussions in other euro area countries; nevertheless, any escalation of events could jeopardise the nascent economic recovery and raise tensions in financial markets. In Greece, from January 2015, political changes brought to a halt the implementation of agreed structural reforms, and consequently the country was not paid the final tranche of financial assistance under its second bailout package. At the same time yields on Greek government bonds increased sharply, leaving the country practically shut out of market funding. Greek public finances were therefore in a state where there was insufficient liquidity to cover short-term liabilities. The new Government has in recent months been conducting negotiations with EU representatives on the conditions for releasing the blocked tranche, but as yet no agreement has been reached. So far during the crisis, the Greek government has mobilised alternative sources of funding to settle liabilities, but its room for manoeuvre is narrowing quickly. If the negotiations do not result in a mutual agreement soon, the risk is that Greece will not be able to meet some approaching repayment deadlines, which would effectively mean the country is bankrupt. Despite the strengthened defensive mechanisms in the euro area, such an event would very likely have an adverse impact on the region's economic situation.

The marked deterioration in outlooks for economic growth in certain emerging countries and increasing risks associated with their rising indebtedness are creating scope for a change in sentiment and redirection of capital flows. Economic growth forecasts in sev-

eral key emerging economies have been revised down in the recent period. This has in large part been caused by the sharp drop in prices of oil and other commodities, but the threat of a slowdown in GDP growth has not been confined to those economies dependent on exports of raw materials. At the same time, many of the countries concerned have in recent years reported a marked rise in both private and public debt levels, funded by inflows of cheap money from abroad. The combination of these two facts is increasing the risk that foreign investors will seek simultaneously to pull out of these markets. If that happened, it would not only exacerbate the problems of the countries involved, but also trigger a broad reassessment of risk in the global economy.

The launch of the Single Supervisory Mechanism led to strengthening of banks' balance sheets and, in conjunction with the comprehensive assessment of banks, to increased transparency in the sector. At the same time, the quantitative easing programme and other liquidity-providing measures adopted by the ECB are expected to ease banks' access to funding. These positive developments have in recent months been reflected in greater availability of credit and increased lending activity.

Despite several signs of stabilisation, the euro area banking sector still has a long way to go in its recovery from the crisis years. The credit quality of the sector's aggregate loan portfolio, measured by the amount of non-performing loans (NPLs), continued to deteriorate during 2014. The ratio of gross NPLs to euro area GDP was approaching ten per cent, while the provision coverage of NPLs was less than 50%. Such impaired loans are also heavily concentrated in euro area periphery countries. Banks therefore face having to provision for significant potential credit losses, and this in turn may reduce their willingness to ramp up lending to the real economy, regardless of whether their capital position has improved.

Box 1

THE ECB'S EXPANDED ASSET PURCHASE PROGRAMME (QUANTITATIVE EASING) AND ITS POTENTIAL IMPACT ON FINANCIAL STABILITY

Since inflation expectations for the euro area remain below the target rate of 2% despite an environment of historically low interest rates and the ECB's implementation of non-standard monetary policy measures, the Eurosystem began from 9 March 2015 to purchase assets under the Public Sector Purchase Programme (PSPP). This programme is intended to reduce risks associated with future price developments by further easing monetary and financial conditions and thus, over the medium-term horizon, helping to bring the inflation rate back up towards two per cent. Under the PSPP, the ECB and euro area national central banks (NCBs) should purchase, on the secondary markets, marketable debt instruments issued by euro area central governments, certain agencies located in the euro area or certain international or supranational institutions located in the euro area. When such bonds are purchased by a central bank they are basically exchanged in the balance sheet of the selling entity for more liquid assets – which for commercial banks means reserves at the central bank, and for other selling entities (another bank that may not trade directly with the central bank, or another financial or non-financial corporation) means deposits at the intermediary bank. Through this programme, the ECB together with the NCBs increases the amount of liquid assets in the banking sector and the liquidity in financial markets; this liquidity should then be used for lending to the real economy.

This quantitative easing (QE) is due to run from March 2015 until at least September 2016, and it may be extended if necessary. The Eurosystem's target amount of monthly purchases within the expanded asset purchase programme is €60 billion, encompassing purchases under the PSPP as well as private sector asset purchases under the previously established asset-backed securities programme (ABSPP) and third covered bond purchase programme (CBPP3).

QE is generally expected to have a positive impact on financial stability. There are several reasons for this view. In the absence of the expanded APP, both actual and expected inflation rates would probably continue to fall. A lower or falling price level would result in increases in real interest rates, with an adverse impact on the credit market and on overall financing conditions for the real economy. With customers struggling to service their debts or to obtain access to funding, financial stability would be impaired.

Moreover, the negative effect of deflationary expectations on demand – accentuated further by this interest rate channel – would be clearly detrimental to growth in the real economy. The real economy growing more slowly than expected, or contracting, is one of the main triggers of risks to financial stability, and therefore the boost that QE gives to growth in the real economy is expected to support financial stability as a whole.

QE may in some areas put negative pressure on financial stability in Slovakia. The impact of QE on the financial position of the banking sector could be quite significant. The likely flattening of the yield curve could have a further adverse impact on net interest income from the customer portfolio and hence on the profitability and financial position of banks. The Slovak banking sector is probably more affected by this development than are other banking sectors, since interest income from customers makes up the largest share of Slovak banks' profits. Trading income that could offset the drop in customer interest margins accounts for a marginal part of the profits of domestic banks.

The temporary upward impact of QE on government bond prices could result in imbalances in several areas. The first of these areas is liquidity. Government bonds make up a large proportion of the banking sector's liquid assets. As yields fall, the prices of government bonds rise, with the result that the banking sector's liquid asset ratio could to an extent be artificially inflated. This in conjunction with the previous flattening of the yield curve could lead to a further increase in the amount of lending to customers, especially through housing loans. This risk of a sovereign debt bubble could materialise after the end of QE, when a potential sharp drop in the liquid asset ratio resulting from the fall in government bond prices will be relatively difficult for banks to offset. Another risk in the current environment is that banks are focusing on growth in assets with long-term maturities (in particular retail loans), which increases the risk arising from maturity mismatches between assets and liabilities. The issue is analysed in more detail in the Selected Topic. Apart from the area of liquidity, rising government bond prices could also cause a temporary overvaluation of capital ratios, as further expanded on in Section 3.1.

The increase in bond market prices is also affecting the returns of funds, in particular pension funds, collective investment funds and unit-linked insurance funds. This situation could lead to a temporary rise in the returns of funds focused on bond investments, although the returns may fall again when the ECB ends QE.

In the light of current developments there are growing concerns about the underestimation of risks and therefore also the underestimation of the consequences of a return of investor risk aversion. Flattening of the yield curve could have a distorting effect in both the government and private debt markets, possibly leading to misassessment of credit risk and hence to a marked decline in

the sensitivity of credit spreads to the riskiness of particular assets. As risk appetite increases, so does the likelihood that the prices of certain assets rise to unwarranted levels. In Slovakia, such scenario could occur in, inter alia, the residential property market.

Although QE is expected to have a positive impact, whether directly or indirectly, it is important to monitor its effect on financial stability. The scope for the emergence of imbalances related to financial stability lies largely in the fact that the business and financial cycles of different euro area countries are not synchronised. Any imbalances at the national level are expected to be addressed in a timely and effective manner through the application of macroprudential policy instruments.

CHAPTER 2

DOMESTIC CONDITIONS FOR FINANCIAL STABILITY

2

2 DOMESTIC CONDITIONS FOR FINANCIAL STABILITY

Economic growth in Slovakia has improved in the recent period, as have outlooks for growth. Given that the Slovak financial sector is heavily oriented to the domestic economy, this has strengthened the basis for maintaining the sustainability of its financial stability. GDP growth began to accelerate in 2014 and its level for the year was 2.4%. According to NBS projections, this upward trend will continue over the next two years.

The composition of economic growth became more balanced. Whereas in previous years GDP growth was driven mostly by foreign trade, in 2014 it was based predominantly on domestic demand. Household final consumption in particular exceeded expectations. Consumption demand was stimulated by growth in household purchasing power, with household disposable income increasing by a substantial 3.6% thanks to wage growth, low inflation and positive employment figures. Along with these factors, the related improvement in consumer confidence also supported consumption growth.

Fixed capital investment also picked up in 2014, owing mainly to growth in government investment but also increasing fixed investment in the private sector. The other component of domestic demand, government final consumption, also made a positive contribution to GDP growth in 2014.

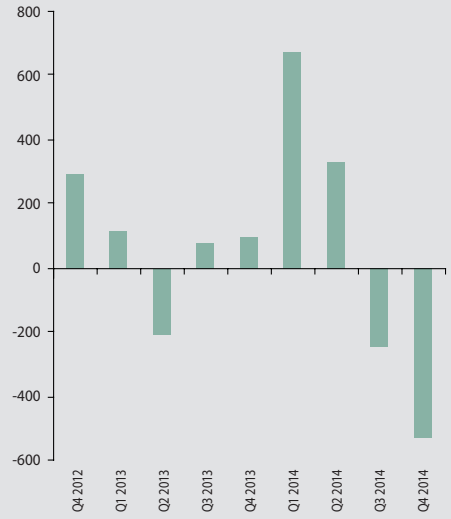
Assuming no unexpected shocks, the positive demand-side trends are expected to continue in the period ahead. Although growth in household disposable income will probably slow down in comparison to 2014, household consumption growth is expected to accelerate due to improving consumer confidence. The greater availability of loans and diminishing gap in production capacity will see the centre of investment shift to the private sector. At the same time, given the upturn in the euro area and depreciation of the euro exchange rate, Slovakia's export performance is expected to gather momentum. Exports returned to positive quarter-on-quarter growth in the last quarter of 2014.

Although domestic demand has risen in importance as a contributor to GDP growth, the continuing health of the Slovak economy remains heavily dependent on what happens in the external environment. Of particular importance in this regard are developments in the European economy, and especially in Germany, which is the largest economy in Europe and is also the most important trading partner of Slovakia. The repercussions of any future economic headwinds in Europe would probably, as in the past, not be confined to the trade channel, but would entail also a deterioration in consumer and business sentiment. Among the key factors that could prompt a reversal of the emerging upward trends in the European and domestic economies are any escalation in geopolitical tensions, particularly with respect to the situation in Ukraine.

The improving labour market situation is beneficial with regard to, among other things, household credit risk. The employment situation began to pick up in 2014. As economic growth gathered pace and business confidence improved, job creation intensified. Total employment grew by 1.4%, and this pace is expected to be sustained in 2015. Net job creation was so high that the unemployment rate fell by one full percentage point, to 13.2%. This trend has a weakness in relation to credit risk in that it does not appear so strongly in the age group 30 to 45, which is the most significant group in terms of indebtedness. The income of households was also supported by solid wage growth, which was relatively evenly spread across sectors.

Although growing aggregate household income is creating some positive conditions, it is not per se sufficient to ensure that quality of household loans will not deteriorate. Just as important is the liability side of the sector's balance sheet, in other words the level of household debt. It should be noted in this regard that the pace of household debt growth is such that the net financial assets of households began to fall in the second half of 2014.

Chart 4 Changes in net financial assets of households (EUR millions)



Source: NBS.

Chart 5 Annual nominal sales growth by economic sector (%)

Source: Slovstat.

The financial position of non-financial corporations improved moderately in 2014. Nominal sales increased year-on-year in all sectors apart from construction and energy supply. Despite substantial growth in real economic activity, average annual nominal sales growth for all sectors was the same in 2014 as in the previous year. This seems to be explained mainly by the slowing rate of increase in sale prices of goods and services in an environment of disinflationary pressures. On the other hand, the fall in energy prices in the second half of the year had a favourable effect on firms' costs, which was reflected in profit growth.

CHAPTER 3

THE FINANCIAL SECTOR IN SLOVAKIA

3

3 THE FINANCIAL SECTOR IN SLOVAKIA

3.1 SOLVENCY AND FINANCIAL POSITION OF THE FINANCIAL SECTOR

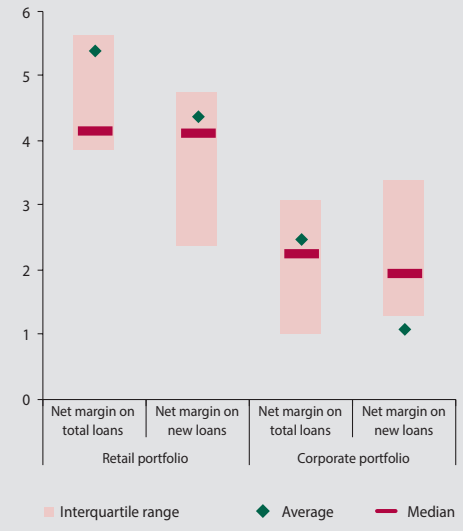
FINANCIAL POSITION

In 2014 aggregate profits remained flat year-on-year, but in the early months of 2015 they showed a certain upward trend. The banking sector's net profit for 2014 was €560 million, similar to the profit for 2013. In the first quarter of 2015, however, the sector's profit was 18.7% higher compared with the same period of the previous year.

Profits reflected mainly a decline in interest margins in the recent period. The extended period of low interest rates has led to a gradual decrease in returns on loans and securities. The most marked drop has been in average returns on retail loans, which net of credit risk costs fell over the past two years from 5.5% to 4.6%. During the same period, returns on the securities portfolio dropped from 3.3% to 3.0%. As Chart 6 shows, returns on loans will continue to fall, since the net interest margin on new loans is lower than that on existing loans, particularly in the retail sector.

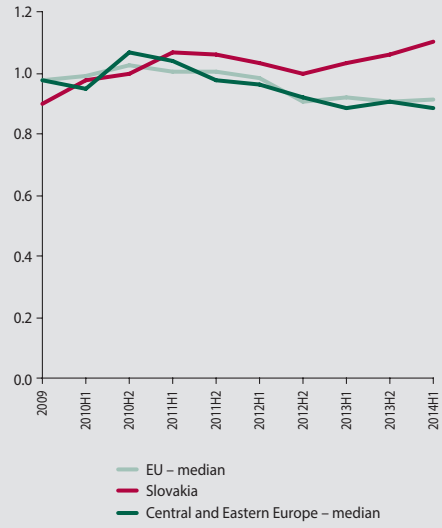
The narrowing of these margins was, however, fully offset by increased retail lending. Owing to this trend, the banking sector in Slovakia has reported rising net interest income since 2012 (Chart 7), unlike its counterparts in most other European countries (including the central and eastern European region). The main cause of the long-standing growth in retail loans has been the substantial decline in interest rates. This factor is, however, expected to have less of an impact in the future, since interest margins on housing loans have largely converged with levels in western European countries. In the case of consumer loans, however, there remains a greater difference between the interest margins in Slovakia and in these other countries.

Chart 6 Distribution of net margin on retail and corporate loans across banks in 2014 (%)



Source: NBS.
Notes: The chart shows the average and median net margin and the interquartile spread. The net margin was calculated as the return on the respective type of loan from interest and fees, less average credit risk costs and less costs of funds. Only those banks with a share of at least 1% of the credit market are included in the chart.

Chart 7 International comparison of net interest income trends (index)



Source: ECB.
Notes: Index: 1 = average for the period 2009 to 2011.
Data for the first half year of each year are seasonally adjusted.

Profits were also dampened by increases in credit risk costs. In 2014 the most marked increase in these costs was in the retail portfolio, where they rose by 43%. In the first quarter of 2015, by contrast, these costs declined slightly year-on-year. On the whole, annual credit risk costs remain relatively low, equivalent to around 1% of the stock of loans in the retail and corporate portfolios. Although the provision coverage of non-performing loans fell slightly in 2014 (especially in the corporate portfolio), it corrected in the first quarter of 2015.

The above factors that weighed on the banking sector's profitability were partly offset by developments in non-interest income. Most significant in this regard was fee income from loans to non-financial corporations, which increased moderately over the past two years despite subdued growth in the amount of loans. In the first quarter of 2015 fee income from the retail portfolio also rose slightly, reflecting a marked increase in loans and continuing growth in deposits. Furthermore, the value of the banking sector's bond portfolio increased in the last quarter of 2014 and first quarter of 2015, owing to the gradual decline in interest rates and the ECB's launch of an expanded asset purchase programme in March 2015. Given that a relatively small proportion of banks' bond holdings are fair valued through profit or loss, this factor is of less significance to the banking sector as a whole. At the same time, the sector faced lower costs related to the bank levy, since it was reduced as of 2015 (from 0.4% to 0.2%) and banks were not required to make any levy payment in the fourth quarter of 2014.

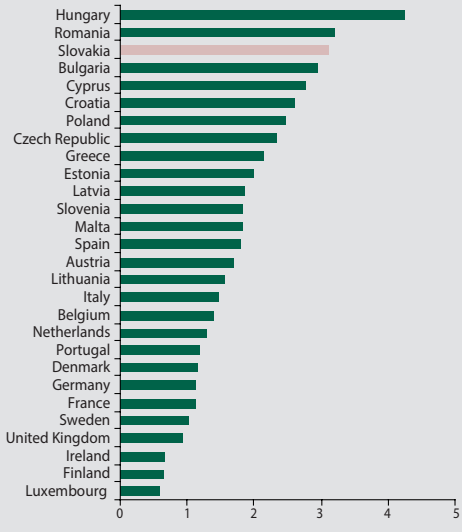
Other segments of the financial market reported healthy profits in 2014. The aggregate profit of insurers increased by 13.3% year-on-year, to €179 million. This figure encompassed a positive contribution from financial results and a negative contribution from technical results. Substantial increases in profit were also reported by pension funds management companies (second pillar of the pension system) and the collective investment sector, owing mainly to increases in fee and commission income. In the case of PFMCs, the growth in this income was accounted for by the improved performance of pension funds, while in the collective investment sector it was largely attributable to strong growth in asset value. The only segment in which profits fell was that of supplementary pension management companies (third pillar), despite an increase in the average net asset value (NAV) and a rising number of new participants. The decline in the aggregate profit was due largely to a reduction in the statutory maximum coefficient for the calculation of management fees.

IMPACT OF LOW INTEREST RATES ON BANKING SECTOR PROFITS

The ongoing period of low interest rates is putting pressure on banks' profits. The share of interest income in the total profit of Slovak banks is one of the highest in the European Union. This is due to the sector's traditional model of banking, which is based primarily on taking deposits from customers and providing loans to them. A major proportion of interest income comprises income from bonds, in particular domestic government bonds. Trading income and fee income account for less significant shares of profits. The fall in market interest rates and consequent squeezing of interest margins thus has a substantial impact on the total profit of the banking sector.

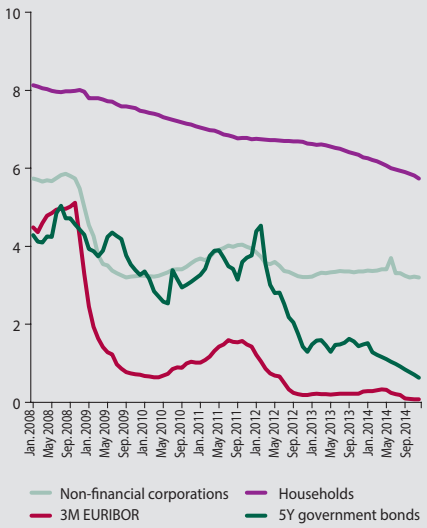
For this reason, the following part focuses on the testing of the sensitivity of the banking

Chart 8 Net interest income as a share of total assets, by EU countries (%)



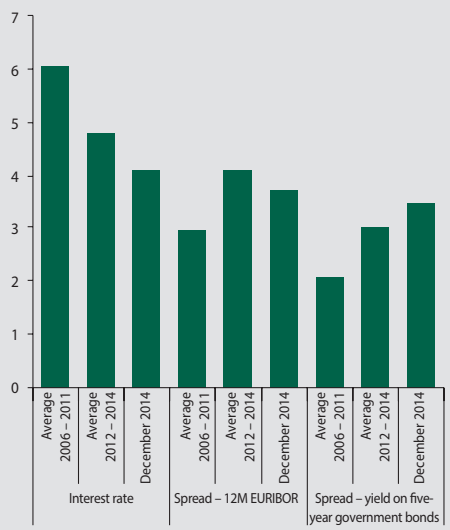
Source: ECB.
Note: Data are for 2013.

Chart 9 Market and customer lending rates (%)



Source: NBS.
Note: The chart shows the movement of the three-month EURIBOR interbank rate, the yield on five-year Slovak government bonds, and the average interest rate on standard loans to non-financial corporations and households.

Chart 10 Interest rate on retail housing loans with a maturity of over five-year (%; p.p.)



Source: NBS.
Notes: The chart shows the average rate in the given period, the spread between the interest rate and the 12-month EURIBOR interbank rate, and the spread between the interest rate and the yield on five-year Slovak government bonds.
Data on interest rates are in per cent; data on spreads are in percentage points.

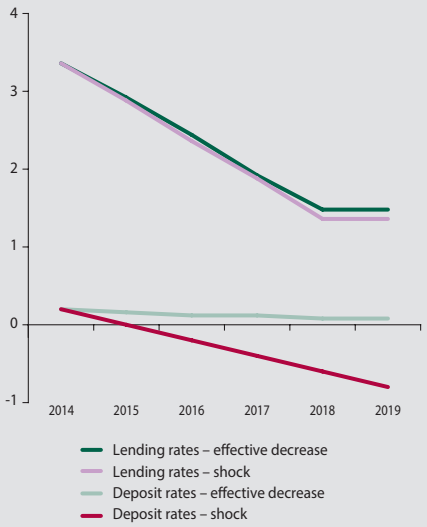
sector's pre-tax profit to any further decline in customer interest rates. Since the impact on profits is being tested, the calculations include the average interest rates on the stock of customer loans and deposits. The rates have followed a falling trend since the beginning of the financial crisis in 2008, and they fell most sharply in the recent period, owing mainly to the easing of monetary policy by the ECB. According to the ECB's statements, this policy will be continued in the near term, and thus the downward pressure on both market and customer rates will be maintained.

A key factor for customer rates in Slovakia will be developments in interbank rates and in government bond yields. Despite sharp falls in both market rates and interest rates on new customer loans, average interest rates on the stock of customer loans still seem likely to continue falling – owing to, for example, the gradual pass-through of interbank rate changes to these rates, and ongoing competition between banks (notably in the provision of retail housing loans). Although customer interest rates have followed a downward trend since 2012, their decrease has naturally been less marked than the fall in interbank rates and Slovak government bond yields.

A simplified scenario was used to analyse the sensitivity of the banking sector to a fall in customer interest rates. The scenario assumes that the average interest rate on the stock of customer loans will fall by 2 percentage points over a horizon of four years (by 0.5 p.p. in each year from 2015 to 2018). This decrease applies to all categories of retail and corporate loans at all banks. It is further assumed that customer deposit rates will fall 1 p.p. over a five-year horizon (by 0.2 p.p. per year).

The interest rates "shocks" were applied to each category of customer loans and deposits and on a bank-by-bank basis, while at the same time there was an interest rate floor of 0%; in other words it was not assumed that rates could fall into negative territory. The adverse impact of a further drop in customer interest rates is further exacerbated by the fact that, due to the cur-

Chart 11 Impact of interest rate shock on interest rates for non-financial corporations (%)



Source: NBS.
Notes: The chart shows the movement of average interest rates on the stock of loans and deposits after application of the interest rate "shock".
"Lending rates – shock" and "deposit rates – shock" denote the theoretical level of interest rates in the absence of a floor of 0%, i.e. the movement of the average interest rates if in each bank and for each category of loan and deposit, the interest rate shock is fully deducted from the interest rate.
"Lending rates – effective decrease" and "deposit rates – effective decrease" denote change in the actual level of interest rates, i.e. after taking into account the rate floor of 0%. The difference between the rates with and without the floor arises because, in several banks and in several categories of loans and deposits, average interest rates are so low that there is not full pass through of a 2 p.p. shock to loans and a 1 p.p. shock to deposits.

rent level of interest rates, there is in each bank almost complete pass-through of the interest rate shock to lending rates; the impact on the deposit side is far less effective.

An important assumption concerns developments in retail loans and deposits. The growth in retail loans alongside falling margins has now become a key determinant of overall profitability. It is assumed that the growth in retail housing loans and other loans over the next two years will be approximately the same as the growth in 2014. As for retail deposits, their current trend growth across banks is assumed to continue. In both cases the assumed growth is adjusted for potential one-off fluctuations at individual banks in 2014. For other types of loans and deposits, their stocks are assumed to remain constant over the scenario horizon. Net fee income from overall retail deposits and loans is also assumed to be constant, as is the ratio of credit risk costs to the stock of retail loans. Consequently, these profit items changed only in line with the growth in deposits and loans.

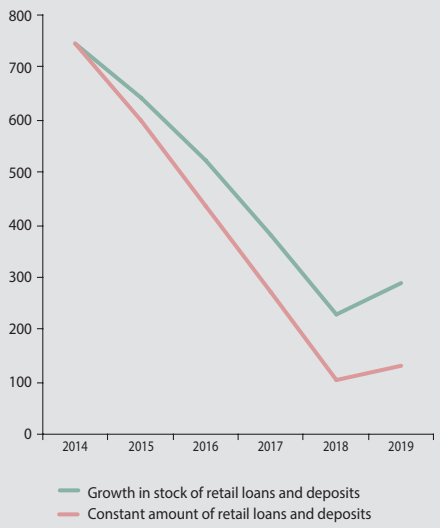
Assumed growth in retail loans and deposits could help to moderate the adverse impact, but in this case, too, profits would be under pressure. The impact of this scenario on the banking sector's net pre-tax profit is quite significant. The net pre-tax profit falls to just under €230 million in 2018, around 30% of its level in 2014. Thanks to growth in loans and decreases in deposit rates, the net profit rises slightly in 2019, to end the scenario horizon at around 40% of the 2014 level. Although the sector as a whole reports a profit under the scenario, seventeen banks and foreign bank branches – a significant number – make a loss.

While the impact of the interest rate shock on the net profit is relatively pronounced and the effective decrease in deposit rates is less than that in lending rates, the results are not significantly worse if no decrease in deposit costs is assumed. If interest rates on the stock of deposits are assumed to remain constant, the aggregate net profit falls even more sharply over the scenario horizon, so that in 2018 it stands at just over 7% of the 2014 profit, and in 2019 at just over 10%.

The sensitivity test also points to the significant role of the growth in retail loans. Under the assumption of a constant amount of retail loans and deposits, the profit of the sector as a whole falls substantially, to 14% of the 2014 profit in 2018, and to 17% in 2019. Assuming constant deposit rates, the sector even makes a loss of €48 million.

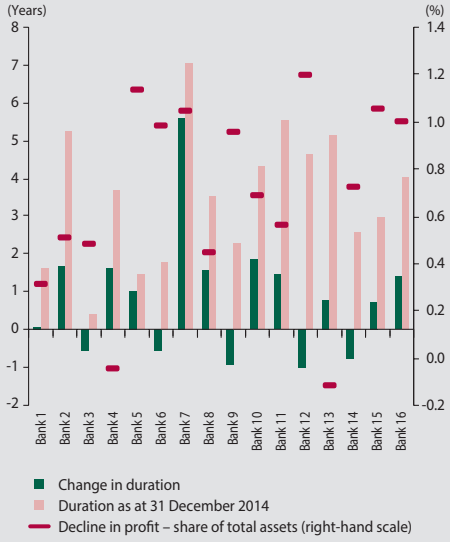
If the period of low interest rates persists, banks will probably face pressure to respond to the decline in net interest income. The results of the simplified sensitivity test indicate that an extended period of low interest rates and further cuts in customer interest rates could squeeze the banking sector's profit.

Chart 12 Impact of sensitivity test on the sector's net pre-tax profit (EUR millions)



Source: NBS.

Chart 13 Duration of the bond portfolio and the impact of a decrease in customer rates



Source: NBS.
Note: The chart shows changes in duration in the HTM and AFS portfolios between December 2011 and December 2014, the duration of the AFS and HTM portfolios as at December 2014, the decline in net pre-tax profit as a share of total assets.

Hence banks are expected to respond to this pressure.

One of the potential responses that may currently be identified in the banking sector is the effort to extend the duration of the bond portfolio. A longer duration means that banks fixed the current composition of their bond portfolios for a longer period and that the coupon yields on the portfolio are now less sensitive to the ongoing decline in bond yields. It is therefore a form of hedging against the risk of a protracted period of low interest rates and a potential further drop in net interest income from the customer loan and deposit portfolio. This means that banks which currently have a high-duration bond portfolio (whether due to historical reasons or to lengthening of the duration in recent years) and whose bond portfolio accounts for a significant share of either their total assets or interest income are expected to be more resilient to a fall in customer interest rates over the medium-term horizon.

At the same time it may be supposed that when interest rates are falling and profits are under pressure, banks will attempt to increase income from other non-interest bearing items, such as trading income.

Banking sector solvency and leverage

Capital ratios in the banking sector remain at relatively high levels. Their growth trend of several years came to a halt in 2014, but nevertheless their level, and also the quality of own funds, still constitute a sufficient buffer against any unexpected losses resulting from a deterioration in the economic situation. This resilience is confirmed by the outcomes of macro stress testing (Box 2). The average total capital ratio for the sector as a whole was 17.3% at the end of 2014, and the CET1 ratio was 16.0%. The banking sector also reported a relatively high leverage ratio in 2014, of between 8.0% and 8.2%.

All banks comfortably met not only the basic capital requirement under Pillar I of the Basel III framework (8% of risk-weighted assets), but also the additional capital conservation buffer (2.5%). Furthermore, the five largest banks are

expected to be easily able to meet the additional buffer for domestic systemically important banks, which is due to be phased in from 1 January 2016 (for further details, see Section 5).

A temporary increase in government bond prices could lead to an overestimation of capital ratios. As Box 1 shows, the ECB's current monetary policy stance could put upward pressure on prices of assets, in particular government bonds, and these prices could fall back again after the current monetary policy operations have been discontinued. Since a proportion of the Slovak banking sector's government bond holdings are held in the available-for-sale portfolio, such price growth will also be reflected in rising capital ratios. If the impact of this factor were even more pronounced, it would be necessary, with regard to the stability of the Slovak banking sector, for banks to treat such increase in their capital ratios as temporary and to be ready for a future correction when bond prices fall.

Box 2

MACRO STRESS TESTING OF THE SLOVAK FINANCIAL SECTOR

Macro stress testing was used to analyse the stability of the Slovak financial sector under a Baseline scenario and two stress scenarios, one entitled "Economic downturn" and the other "Financial Crisis". The stress tests were performed on data as at 31 December 2014, with a time horizon covering 2015 and 2016. The Baseline scenario is based on the update of the December 2014 NBS Medium-Term Forecast, published in January 2015. Accordingly, it assumes real GDP growth over the stress test horizon, with domestic demand accounting for most of the growth at the beginning of the period and net exports making a gradually increasing positive contribution. The Economic Downturn scenario assumes, by contrast, a softening of external demand, which adversely affects the Slovak economy (GDP contracts by almost 6% in total over the two years) and the labour market (the unemployment rate rises to 14.2%) and causes some escalation of tensions in financial markets, in particular equity markets. The Financial Crisis scenario assumes both a more severe and a more prolonged deterioration in the macroeconomic situation (GDP falls by almost 12%, while inflation is at a zero rate in both years) as well as quite adverse developments in financial markets (including decreases in prices of bonds issued by EU governments, especially those issued by higher-risk countries).

Owing to its high solvency ratio and ability to generate net interest income, the domestic banking sector showed in the stress test its relatively strong resilience to the adverse developments of the stress scenarios. Although around half of all banks make a loss under the stress scenarios, none of them fail to meet the regulatory minimum capital requirement of 8%. If the overall capital requirement is taken to include the capital conservation buffer requirement, set at 2.5% of risk-weighted assets, it amounts to 10.5% of risk-weighted assets, and in that case the sector has a capital shortfall under each of the stress scenarios: €9 million (0.2% of aggregate own funds) under the Economic Downturn scenario and €21 million (0.4% of own funds) under the Financial Crisis scenario.

Applying the stress tests to second-pillar pension funds (managed by PFMCs), bond funds make a loss (moderate) only under the Financial Crisis scenario, owing mainly to the assumed increase in bond credit spreads. By contrast, the returns of equity funds and in particular index funds fall quite sharply under both stress scenarios. As for the performance of collective investment funds under the stress scenarios, the great majority of funds either do not make a loss or do not make a loss of more than 5%. On the other hand, the highest-risk collective investment funds

– particularly certain equity, mixed, and bond funds – may incur a loss of more than 20%. The sector recording the highest average loss under the stress scenario was third-pillar pension funds (managed by SPMCs). The exposure of this sector to interest-rate, equity and foreign-exchange risk increased slightly during 2014. Under the heightening of financial market tensions envisaged in the Financial Crisis scenario, the asset value of these funds falls by an average of more than 5%, and in contrast to the impact of this scenario on the collective investment sector, several of the most significant funds are negatively affected.

3.2 BANKING SECTOR ASSETS

Growth in lending to households

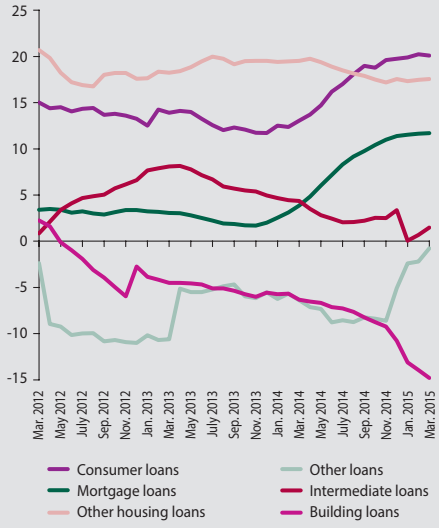
Retail lending is maintaining a growth trajectory, while the composition of its growth is changing. In March 2015, the annual growth rate of retail loans reached 12.6%, which was broadly based across all the institutions active in retail lending. The stock of retail loans in the sector increased by €2.6 billion from March 2014 to March this year.

Growth in aggregate housing loans accelerated during the period under review up to 13.3 % in March 2015. From the beginning of 2014 there was a steep increase in mortgage loans, while the annual rate of change in the stock of building loans became increasingly negative and the rate of growth in "other housing loans" (not falling under statutorily-defined categories) slowed. Consumer loans increased by 20% year-o-year, and intermediate loans recorded almost zero growth. The category of "other loans", which includes American mortgages, also contributed positively to overall retail lending growth. Chart 14 shows the annual rates of change in loan stocks.

Average interest rates fell gradually in most loan categories. In the case of consumer loans, however, the stepped decrease in rates probably contributed to the increase in the stock of loans. The rates on mortgages for young people are at zero thanks to the state interest subsidy. On the whole, interest rates are at new historically low levels.

As for non-bank financing, it has been increasing in the recent period, but its share in total consumer lending continues to decline. In 2014 the share of leasing in the retail sector's borrowing continued to fall. By contrast, hire purchase financing was increasing towards the end of the period after around three years of uncertain movement. As a result, the previously declining share of hire purchase financing on consumer loans to households came to a halt. At the end of the period, the share of non-bank products in total consumer credit was slightly below 30%.

Chart 14 Rates of change in selected categories of retail loans (%)

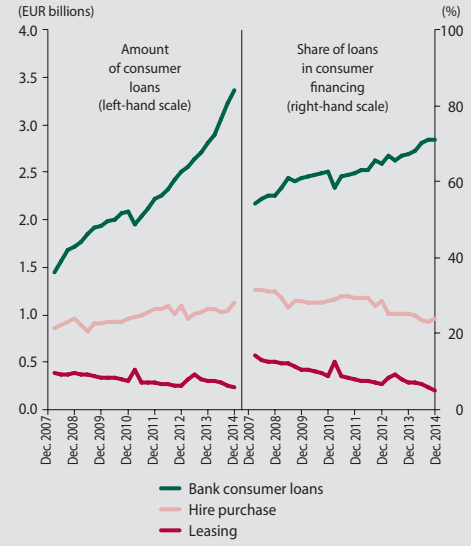


Source: NBS.

The amount of non-bank credit appears to be stable and independent of external effects. On the other hand, the still accelerating growth in consumer loans provided by banks appears to be directly related to interest rates, falling unemployment and the increasing income of households. The falling cost of bank loans probably caused the movement of customers from the non-bank sector to banks.

Despite a softening of competition between banks and a tightening of credit standards,

Chart 15 Consumer financing broken down by type of creditor



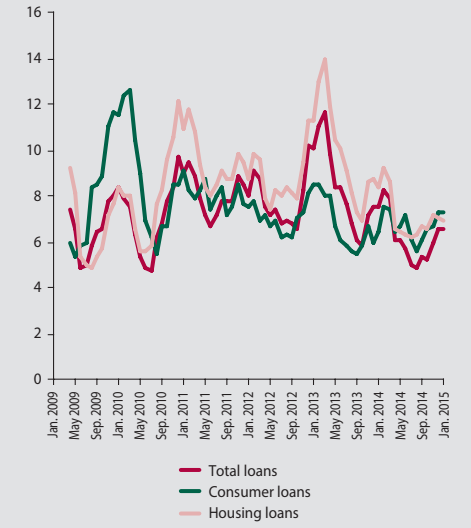
Source: NBS.

Chart 17 Credit standards and demand in retail lending

Source: NBS.
Note: The data are given as net percentage shares. Positive values denote an increase in demand and/or an easing of credit standards. H1 – first half of the year; H2 – second half of the year.

demand for loans has increased substantially. Except at the beginning of 2014, banks' shares in the new loan market did not change significantly in the period under review, which implies a softening of competitive pressures. The trends shown in Chart 16 also point to a correlation in competition intensity between housing loans and consumer loans, although this is less clear-cut at the level of individual banks. The easing of competition was confirmed also by banks themselves in the regular Bank Lending Survey (BLS), particularly in the first half of 2014.

Chart 16 Share of new loans that moved among banks on the month-on-month basis (p.p.)



Source: NBS.
Note: The chart shows the share of sums of the absolute value of month-on-month changes in banks' shares of new loans. To eliminate double counting of the increases and decreases, the final value is divided by two. The values in the chart are five-month moving averages.

According to the BLS results, credit standards were tightened in the period under review, while demand for loans recently increased. The higher demand was attributed to stronger consumer confidence, increased spending on durable goods, and improving outlooks for the property market. Banks expect demand to continue rising in the short term, while at the same time they are tightening credit standards, apparently in response to NBS Recommendation No 1/2014.

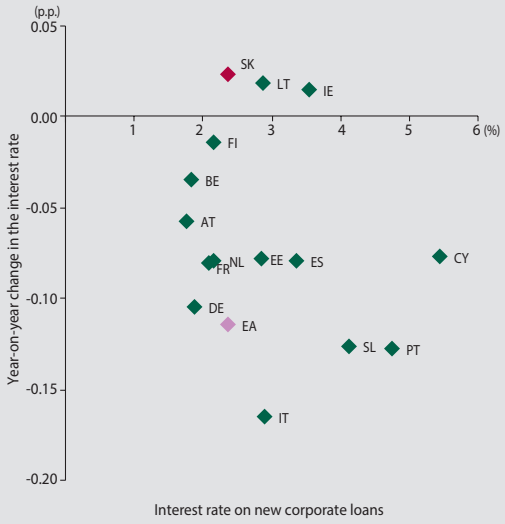
Growth rate of credit to the corporate sector

The situation in corporate sector has remained largely unchanged despite the improving economic developments in the EU. The positive economic results in Slovakia and signs of improvement in the EU economy have not yet had a significant effect on corporate sector indicators, which are still somewhat

uncertain. An exception is the economic sentiment indicator (ESI), which has risen quite markedly since the end of 2013. In addition, the OECD's business confidence indicator has risen moderately. The economic pick-up has only partly passed through to sales. Average sales growth was slightly more than 2% from the beginning of 2014, before gradually weakening towards the end of the year. In February 2015, however, it accelerated to 5.5%. The slowdown and subsequent acceleration of sales was largely attributable to results in industry. At the beginning of the year, sales growth increased substantially in the automotive sector and in transportation and storage. Export performance was subdued from the second half 2014, providing further confirmation of the uncertain economic situation in the EU. Overall, the corporate sector trends may indicate that both continuing uncertainty about signs of recovery and the sector's further improvement will be subject to macroeconomic developments in the EU.

The supply side of corporate lending has not changed significantly. Although credit standards were eased slightly in the fourth quarter of 2014 for the first time in more than four years, however, this easing was heavily concentrated. Standards remained unchanged in the first quarter of 2015, and banks do not envisage easing them further in the period ahead. Hence credit standards are still relatively tight and reflect banks' cautious approach to the current situation in the corporate sector. As for interest rates, no significant changes in the principal trends were observed here, either, during the period under review. Concerning the loan stock, the decline in average interest rates slightly accelerated, while rates on new loans increased moderately from mid-2014. Therefore the difference between rates on new loans and rates on the loan stock narrowed. By contrast, the already quite large difference between rates on new loans to small and medium-sized enterprises and those to large corporates increased somewhat. An international comparison of average lending rates on new corporate loans shows the level in Slovakia to be directly above that in the euro area core countries. In terms, however, of the annual rate of change in these rates, Slovakia with an annual increase was more of an exception, since in most countries they fell quite significantly, and in the euro area as a whole they fell by fully 11%.

Chart 18 International comparison of the average interest rate on new corporate loans



Source: ECB Statistical Data Warehouse, NBS.

Lending to firms is showing signs of picking up, even though the stock of corporate loans fell in the first quarter of 2015. Demand for corporate loans trended slightly upwards in 2014, but in the first quarter of this year it declined for the first time in almost two years. It should be noted that this reversal, like the change in credit standards, was relatively heavily concentrated. Demand for corporate loans is not expected to increase in the near term, either.

The outstanding amount of corporate loans mirrored demand for these loans during 2014 and the first months of 2015. Lending activity gradually gathered momentum in 2014, as its annual rate of change first became less negative and then, in the second half of the year, turned positive. In the first quarter of 2015, the total stock of loans fell by just over 1% year-on-year, although from the beginning of 2014 it was heavily affected by lending to state-owned enterprises (SOEs). The initial influx of credit to these firms caused the annual growth rate of such loans to increase markedly, up to almost 40%. Later, towards the end of 2014 and during

the first quarter of 2015, these loans were being repaid and thus their outstanding amount fell by 40%. This development in lending to SOEs caused the year-on-year decline in the overall stock of corporate loans. In contrast, lending to private firms showed a more favourable trend, as it increased from the beginning of 2014 and was gradually reflected in the annual growth rate of these loans, which reached 4.2% in March 2015. The annual growth rate of loans to foreign-owned firms also increased significantly in the first quarter of this year, at an average level of 8%.

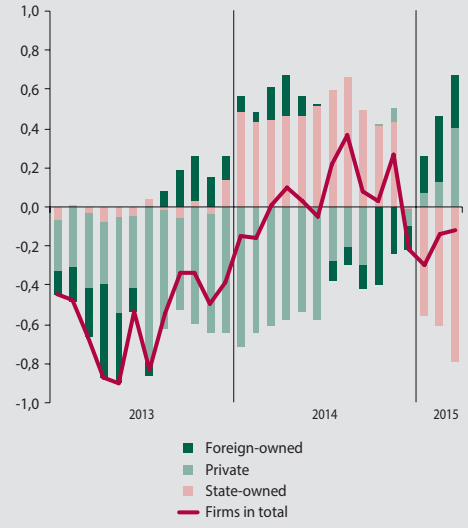
Lending to small and medium-sized enterprises accelerated, and the annual growth rate of these loans was higher, on average, in the first months of 2015 than in the previous two years.

In comparison with other countries, Slovakia is recording above average growth in corporate lending. In 2014 Slovakia had one of the highest rates of lending growth, although this result is assumed to have been largely caused by the sizeable injection of credit to SOEs in that year.

In the breakdown of lending by economic sector, a shift in lending activity was observed in late 2014 and early 2015. After a long subdued period, the amount of loans to industry began to grow. This trend, along with the upward trajectory of sales may be a further sign of the gradually improving situation in industry. Towards the end of 2014 lending to the commercial real estate (CRE) sector picked up quite significantly, and in the first quarter of 2015 the amount of CRE loans rose year-on-year by an average of 6%. In the case of lending to both the energy supply sector and transportation and storage sector, it went from an upward to a downward trend. This shift is assumed to have been caused by the above-mentioned repayment of loans by SOEs, since most of these loans were provided to firms in the sectors concerned. Lending to the construction sector maintained its prolonged declining trend.

Overall, lending to firms showed a positive trend during the period under review, owing mainly to growth in loans to private firms which are to a greater extend determined by macroeconomic developments and also by the strengthening of credit activity in certain key economic sectors.

Chart 19 Annual rate of change in stock of corporate loans, broken down by type of firm ownership (EUR billions)



Source: NBS.

3.3 FUNDING SOURCES OF THE BANKING SECTOR

The downward trend in the annual growth rate of retail deposits came to a halt in 2014. After reaching a low of 2.1% in March 2014, the rate increased almost continuously, reaching 4.2% at the end of 2014 and more than 5.2% in March 2015. This growth was largely accounted for by increases in sight deposits and saving deposits, while the stock of time deposits fell continuously, with its annual rate of decrease stabilising from July 2014 in the region of 4.3% to 4.7%.

The trend in time deposits broadly reflects the impact of the low-interest rate environment. As their returns become less attractive, naturally demand for these deposits is diminishing. On the other hand there is demand for more liquid forms of saving such as sight deposits and saving deposits, or for alternative investments such as collective investment funds. Home savings are also on an upward trend, owing to their relative advantages.

Deposits from non-financial corporations have also been growing. The stock of corporate deposits rose almost constantly during the period under review; their annual rate of change fell only in October 2014, before picking up again from November 2014 to March 2015 (when it reached almost 9%). Time deposits accounted for almost all fluctuations in total deposits, while sight deposit maintained an annual growth rate of not less than 7% from the beginning of 2014.

As for securities issued by banks, these continued to comprise mostly mortgage bonds. But whereas in 2014 only 17% of the total nominal value of mortgage bonds issued by banks had floating coupons (as opposed to fixed coupons), in the first quarter of 2015 that share surged to almost 70%. Developments on the demand side may also have accounted for this development, since, at this time of historically low interest rates, interbank rates are not expected to fall much lower over the next three to four years while floating-coupon mortgage bonds offer a higher potential return in the event of interest rates rising again.

The average coupon rate of mortgage bonds moved in line with Slovak government bond yields, and therefore the average spread between the returns on these securities was stable. Probably because of the environment of historically low interest rates, the mortgage bonds issued by banks in the last quarter of 2014 had a longer average maturity than any previous issues, while the average maturity of those issued in the first quarter of 2015 was back to the long-term average.

Interbank operations, whether on the asset or liability side, remain relatively volatile and are used mainly to offset movements in other volatile items of banks' balance sheets. Although no significant changes from previous years were observed in 2014, there were some smaller adjustments.

At the end of 2013 the amount of surplus funds deposited with the ECB increased, while in May and June 2014 it fell back to a level close to its long-term average. This shift was based on developments in several banks and cannot be attributed to a clear cause. In any case, the point to note is that the volume of banks' operations with the ECB has increased, in contrast to the situation in the past when banks placed almost all their surplus funds on the interbank market. Some banks are assumed to have used ECB operations partly in order to enhance their liquid asset ratio.

Demand from Slovak banks for the ECB's targeted longer-term refinancing operations (TLTROs) was relatively low. In the TLTROs conducted in September 2014, December 2014 and March 2015 there was very little direct bidding from Slovak banks. Furthermore, in February 2015 Slovak banks made the final repayment of funds allotted to them within the ECB's programme of three-year longer term refinancing operations (LTROs).

3.4 FINANCIAL SECTOR RISKS

Household credit risk

Trends in credit portfolio quality appear positive, although internal imbalances could build up. The non-performing loan (NPL) ratio remained above 4%. Abstracting from the one-off effect caused by methodological changes, the default rate was lower in late 2014 and early 2015 than in previous periods. In addition, the amount of loans past due by between 30 and 90 days has remained flat for around two years. This may be partly explained by the upturn in employment and by wage growth in larger sectors of the economy. There is no guarantee, however, that these recent trends will continue to be maintained. To begin with, it is difficult to predict how far, and for how long, unemployment will fall. Furthermore, the prolonged downward impact of falling interest rates on the unemployment rate may already have exhausted its potential. It should also be noted that where loans are subject to overly relaxed credit standards, whether in respect of customer repayment ability or the loan-to-value (LTV) ratio, there may be a build-up of credit risk.

Incentives to increase lending remain present, while the level of prudence in lending practice appears to still be an issue. On one side of the credit relationship are customers who have seen

lending rates fall in recent years and may consequently underestimate their future debt servicing burden. On the other side are banks that, as a result of falling margins, are having to provide a greater volume of loans in order to maintain profit levels.

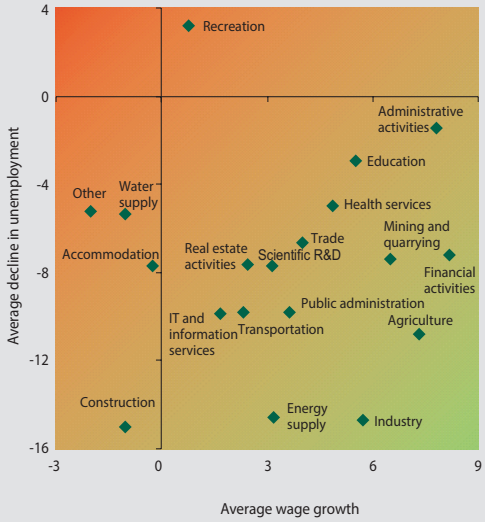
In this context, it may be beneficial to both sides of the credit relationship if banks take a less prudent approach to lending and ease credit standards. Such a situation may also be supported by financial intermediaries, since it is in their interest to process a greater volume of loan contracts, even ones carrying higher risk. Should banks become dependent on the activities of external agents, such agents could begin to apply direct pressure on banks to loosen credit standards.

The Recommendation that NBS issued in response to these risks is among the less strict regulations of the housing loan market in Europe and indicates more relaxed credit standards in Slovakia. The existence of this regulation implies that imbalances are already present, or are just emerging, in this market. A number of EU countries are evidently aware that the housing loan market faces potential risks that require timely prevention. In order, moreover, to maintain smooth functioning of the financial market, the setting of specific regulatory limits is based to some extent on current practice.

The regulation of LTV ratios is heterogeneous across countries, and in Slovakia it falls broadly in the less strict category. The general LTV ratio limit averages around 85% for loans not subject to specific conditions. Only the Netherlands and Denmark have LTV ratio limits higher than 90%, applicable under relatively specific conditions to the housing loan market. In no other countries is the limit set higher than 90%. This also suggests that credit standards in Slovakia prior to the introduction of the LTV ratio limit were relatively relaxed in comparison with standards in other European countries.

The majority of countries that have introduced an LTV ratio limit have also set a limit for the respective indicator of customer repayment ability. Estonia has one of the strictest such regulations, with the maximum level of loan repayment instalments set at 50% of net income (with certain exceptions), while Hungary has a maximum level of between 10% and 60% depending on the currency of the loan and the income of the borrower. Slovakia has quite relaxed debt-to-income rules, with NBS recommending only that loans not be provided to people whose expenditure exceeds their income.

Chart 20 Average wage growth and average decrease in number of unemployed, broken down by economic sector (%)



Source: ÚPSVaR, SO SR.
Note: The values denote the arithmetic average of the monthly figures for the annual rates of change in wages or in the number of unemployed in 2014. The categories given in the chart are simplified versions of those used in Slovakia's implementation of the NACE Rev. 2 Statistical Classification of Economic Activities in the European Community.

Table 2 Overview of housing loan regulation in Europe

	LTV ratio limit (year)		DTI ratio limit (year)	Other instrument
	Base	Special cases		
Euro area countries:				
EE	85% 2015	90% – exemption for up to 15% of loans	Yes 2015	Maturity cap of 30 years; 15% above limit
IE	80% 2015	70% – 90% – exemption for up to 10% – 15% of loans above limit	Yes 2015	
GR			Yes 2005	
CY	80% 2003	70%	Yes 2003	
LV	90% 2007	95%	Yes 2007	
LT	85% 2011		Yes 2011	Maturity cap of 40 years
LU				ST[2)]
NL	100% 2012	To be gradually reduced by 1 p.p. per year until 2018	Yes 2013	Tax relief tied to loan amortization
AT		80% – only for home savings banks		
SK	90% 2014	Percentage of loans allowed to be above the limit to be gradually reduced from 25% to 10% in 2017	Yes[1)] 2014	Maturity cap of 30 years; 10% of new loans with maturity of up 40 years; ST[2)]
FI	90% 2016	95%		
Non-euro area countries:				
BG			Yes 2006	
DK	95% 2015			
HR	75% 2006		Yes 2006	
HU	80% 2015	35% – 50%	Yes 2015	
PL	80% 2014	Gradual decrease from 95 % to 80 % in 2017	Yes 2014	
RO	85% 2011	60% – 75%	Yes[1)] 2011	
SE	85% 2010			Mandatory amortisation of loans with an LTV ratio of more than 50%
UK			Yes[1)] 2014	
Selected non-EU countries:				
NO	85% 2011			Minimum LGD from 10% to 20%

Source: ECB, ESRB, national authorities.
Note: The years denote when the current regulations came into force. The DTI ratio limit denotes any limit for the respective indicator of customer repayment ability.
The base limit for the LTV ratio is usually set for residential housing loans provided to residents in the domestic currency, without any specific guarantees. LTV ratio limits under special cases may be higher than the base (when, for example, customers take out a housing loan for the first time, or when guarantees are applied), or lower than the base (with, for example, buy-to-let loans, foreign currency loans, loans to non-residents). This table is not necessarily exhaustive.
1) The limit must be met also under the predetermined scenario of a rise in interest rates or change in exchange rates (RO).
2) ST – mandatory stress testing.

Box 3

THE IMPACT ON CREDIT STANDARDS IN THE RETAIL LENDING MARKET OF NBS RECOMMENDATION NO 1/2014 OF 7 OCTOBER 2014

The NBS Recommendation[1] has contributed significantly to containing the emergence of imbalances in the retail lending market. The Recommendation entered into force on 1 November 2014 in respect of the maximum share of new loans that have an LTV ratio of more than 90%, and on 1 March 2015 for other issues. The aim of NBS is to have these rules implemented in legislation and thus ensure that they apply not only to banks, but also to non-bank entities.

The share of new loans with an LTV ratio of more than 90% has fallen. For loans provided in the second quarter of 2014, this share was slightly higher than 24%, while in the fourth quarter of 2014 and first quarter of 2015 it fell to 23.1% and 21.2%, respectively. A positive feature of this trend is that the decrease was higher among loans with an LTV ratio of 100%.

Banks are monitoring the values of real estate collateral in the current credit portfolio. All banks have (or plan to implement in the near future) a statistical model for reappraising real estate collateral. Loan portfolios are being reappraised at least once every three years, but in most cases on an annual basis, in respect of either all the real estate collateral or, at least, a particular category identified as a greater risk. Several banks have confirmed that any indication of a significant decline in property prices is reflected in the internal appraisals of their collateral. At the same time, no bank has sought to lower its internal appraisal standards for real estate collateral.

Banks have also, as part of the verification of customer repayment ability, implemented the recommended test scenario of an interest rate increase. All banks require that debt servicing burdens, taking into account a potential interest rate increase of 2 percentage points and the borrower's standard living costs and other financial liabilities, do not exceed 100% of the borrower's income. Moreover, banks have implemented a system for monitoring increases in outstanding amounts resulting from the refinancing of existing loans. If the threshold stipulated in the Recommendation is exceeded, a standard loan approval process is applied (including income assessment), or the borrower's income is at least verified (particularly with the Social Insurance Agency).

Another effect of the Recommendation was to end the trend of banks prolonging the maturity periods of unsecured (consumer) loans. As from 1 March 2015 banks are recommended not to provide unsecured loans with a maturity of longer than nine years (except in cases of loan refinancing where neither the amount of the loan, nor the maturity is to be increased). All banks have brought their credit conditions into line with this recommendation. Even so, throughout the first quarter of 2015, the share of all unsecured loans whose maturity is longer than nine years remained at 30.5% and the average maturity of new unsecured loans was 7.2 years. As for new loans secured by real estate, the share of these loans with a maturity of more than 30 years was 0.5% in the first quarter of 2015, which is significantly lower than the recommended upper limit (10%).

Loans provided through external financial intermediaries make up a sizeable share of new business, and their highest share (46%) is observed among loans secured by real estate. In most banks, only a small proportion of new unsecured loans are arranged via intermediaries (the share at the sectoral level is 4%).

1 *The full version and a summary of the Recommendation are available on the NBS website at: http://www.nbs.sk/en/financial-market-supervision/macroprudential-policy/current-status-of-macroprudential-instruments/current-setting-of-other-instruments-applicable-in-slovakia*

Corporate credit risk

The NPL ratio in the corporate credit portfolio increased moderately in the first quarter of 2015. At 8.4%, the NPL ratio for the first three months of this year was slightly higher than the average ratio for the whole of 2014 (8.2%) and for the first quarter of 2014 (8.1%). The increase was caused, on the one hand, by a decrease in the outstanding amount of loans (resulting from a decline in loans to SOEs), and, on the other hand, by a modest rise in the amount of NPLs observed towards end of March 2015. NPL ratios were relatively heterogeneous across banks, with diverse growth trends observed in the stocks of both total loans and NPLs.

The breakdown of the corporate credit portfolio by economic sector continued to show heterogeneity in credit quality. An important development is the improvement in some key sectors that have high NPLs, such as construction, real estate activities, and industry. In the sectors of wholesale trade and water supply, however, the NPL ratio increased.

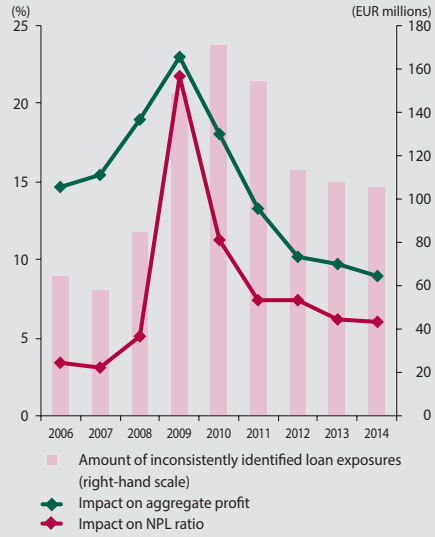
Inconsistency across the banking sector in the classification of NPLs has become slightly less of a risk. Such inconsistency has a potentially significant impact on future loan loss provisions. A problem could arise if a significant number of corporate exposures would be classified by one bank as performing and by another bank as non-performing. Such inconsistency may mask as yet unidentified losses in the corporate credit portfolio. The amount of such exposures has changed quite markedly over time, rising sharply before 2010, and then falling sharply for two years and more moderately from 2012.

In 2014 the inclusion of these exposures among NPLs would have increased the aggregate NPL ratio by around 0.80 p.p. and reduced the total profit by almost 6%[2]. The slightly falling volume of these exposures in recent years may be seen as positive in terms of future loan loss provisioning and the impact on the banking sector's profit. In the economic sector breakdown of firms where inconsistency was identified, the situation was relatively homogeneous in 2014; the impact on sectoral NPL ratios of the inconsistently identified exposures would range between 0 p.p. and 1.40 p.p. Within this sectoral breakdown there is also a certain positive cor-

Chart 21 NPL ratios for selected economic sectors (%)

Source: NBS.

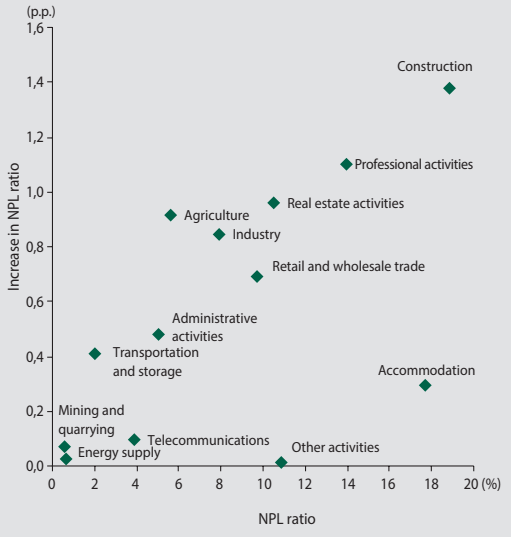
Chart 22 Share of inconsistently identified loans to total non-performing loans and the possible impact on aggregate profit



Source: NBS.
Note: The chart shows the volume of performing loans affected by inconsistent identification. The impact that the inclusion of such exposures among the NPLs would have on the NPL ratio and profit of the banking sector is shown as a percentage increase in the NPL ratio and the percentage decrease in profit. For calculating the impact on profit, the loan recovery rate was assumed to be 70%. The data used in the chart are averages for the respective years.

2 *Assuming a recovery rate of 70% for the exposures reclassified as non-performing.*

Chart 23 Risk of inconsistency in the identification of NPLs, broken down by economic sector



Source: NBS.
Note: The horizontal scale shows the average NPL ratio for 2014. The left-hand scale shows the average increase in the NPL ratio if inconsistently identified exposures in 2014 are included.

relation between the sectoral riskiness and the potential impact of inconsistently classified exposures on the sectoral NPL ratio.

The continuation of current trends in the commercial real estate (CRE) sector may be fostering the build-up of several risks. Given its large share in the total amount of corporate loans, as well as in the total amount of NPLs, this sector is significant in terms of credit risk concentration. Furthermore, this risk is mounting as a result of the above-mentioned increase in the domestic banking sector's exposure to this sector.

Situation improved on both supply and demand side of residential and office segments. The number of occupied premises in the office segment increased in the last quarter of 2014, with the result that the vacancy rate fell quite sharply, while office rents maintained their long-running stability. The number of office premises under construction also increased, possibly indicating increasing optimism among developers. Similar developments were observed in the residential segment. Here the supply of apartments was slightly lower in the first quarter of 2015 than in the previous period, but this situation was caused more by rising demand and an increasing number of apartment sales than by weakening supply. Demand in this segment continued to grow, while the number of apartment sales and the share of residential projects recording sales reached their highest levels since 2009 (when this data series began).

The increasing demand is largely attributable to a substantial increase in housing loans provided by domestic banks, as well as to moderately rising prices of new apartments. The favourable situation in demand is also supported by the fact that of the 543 apartments in new residential projects which came on to the market in the capital city during the first quarter, almost 30% were pre-sold. There was also rising demand for apartments under construction or still only at the project stage.

This situation in the CRE sector may entail various risks. On the demand side several trends share similarities with those that preceded the 2008 crisis, while on the supply side, the current climate may give developers greater incentive to reduce costs and to increase pressure on domestic banks to ease credit standards. The risks in that case would include pressure to extend loan maturities (causing slower amortisation of loan principals), pressure for further reduction in the already low margins on these loans, and a decline in developers' capital exposures to projects. In this regard, it is important that banks' maintain a conservative approach, with changes in credit standards made only in line with market fundamentals.

Concentration risk

Concentration risk in the form of the systemic importance of certain customers to the domestic banking sector has been present for a long time. Concentration risk is a quite sizeable risk to the domestic banking sector, particularly with respect to the prevalence of large firms in the domestic economy as well as to the relatively high degree of ownership and other financial interlinkages between firms. The systemic importance of customers shows either in their absolute level of borrowing across a number of banks, or in their borrowing as share

of a given bank's own funds. As of December 2014 there were several customers, or groups of customers, whose default would cause the capital ratio of one or more banks to fall below 10.5% or to whom the domestic banking sector is significantly exposed. The adverse impact of the default of any such customer would be further amplified by secondary effects, such as the defaulting of other smaller customers that have substantial business links with these systemically important customers.

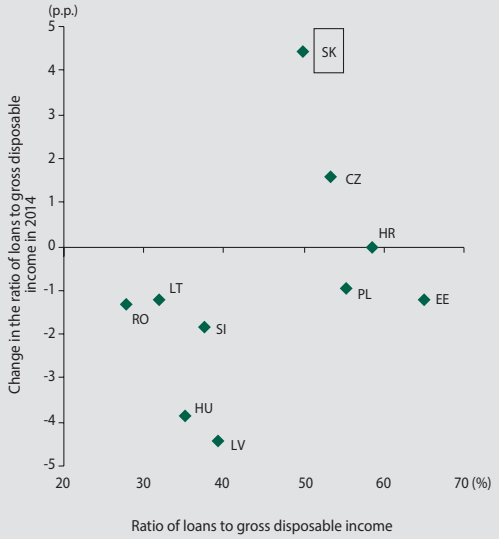
Concentration risk also appears in the relatively high intra-group exposures of certain medium-sized banks. In these banks, the amount of such exposures fluctuated above 50% of own funds during most of 2014 and fell below this level towards the end of the year. The risk in this case is that banks are more heavily exposed to potential risk contagion from external banking sectors. In order to mitigate this risk, NBS is gradually reducing the cap on intra-group exposures that constitute more than 25% of a bank's own funds – from €150 million to, as from 1 January 2017, €50 million.

The increasing exposure to Cyprus may represent a potential heightening of risk. Looking at the exposure of the Slovak banking sector to stressed countries, the situation in 2014 was marked by rising exposure to Cyprus. This exposure gradually rose during the course of 2014, and in December it stood at 16.6% of the sector's own funds. The growing exposure in the form of lending to Cyprus may represent a potential increase in risk, particularly given the deterioration in market indicators of that country.

Household indebtedness

The rapid growth in household debt in Slovakia was in contrast with the trend in the vast majority of EU countries. Bank loans to households as a ratio to household disposable income increased in only six EU countries in 2014. Its increase in Slovakia was the highest in the central and eastern European region and the second-highest in the EU as a whole. Slovakia is also the sole EU country in which this ratio has increased without interruption since 2010.

Chart 24 Bank loans to households and gross disposable income of households

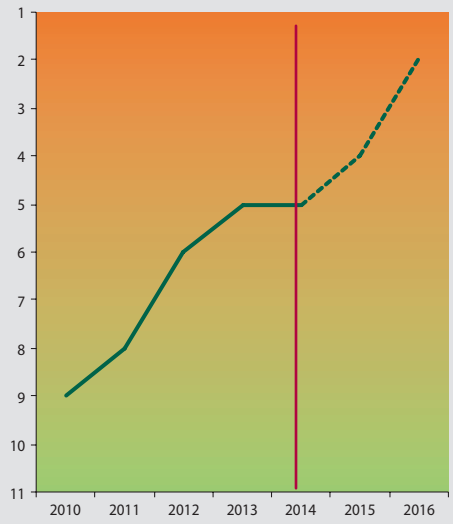


Source: ECB, Eurostat, NBS calculations.
Note: The gross disposable income of households for 2014 is estimated using GDP figures for the respective countries.
The chart includes only loans provided by domestic banks.

Although household debt in Slovakia is still low in comparison with the EU average, the strength of its growth rate is shifting Slovakia ever closer to the category of more indebted countries. On current trends in households' gross disposable income and debt, the next two years could see Slovak households become the second most indebted among the eleven CEE countries.

Although their debt growth was the second highest in the EU, households in Slovakia were not burdened by it in their monthly debt repayments. Euro area monetary policy has been putting downward pressure on interest rates since 2009, and this has also affected housing loans. In the case of Slovakia, the decline in interest rates in the previous twelve months was the highest within the euro area, and it is important in two aspects. First, rates on new housing loans fell more in Slovakia than in any other euro area country, while the average level of these rates is now almost at the euro area average. Clearly, such interest rate movement is a significant stimulus for loan demand. The second aspect is the decline in the average interest rate on the outstanding amount of loans.

Chart 25 Slovakia's ranking among 11 CEE countries by level of household debt



Source: ECB, Eurostat, NBS calculations.
Note: The gross disposable income of households for 2014 is estimated using GDP figures for the respective countries.
The calculations of the positions in 2015 and 2016 assume that the 2014 trends in households' gross disposable income and debt are maintained.
The chart compares Slovakia with the Czech Republic, Poland, Hungary, Slovenia, Estonia, Latvia, Lithuania, Bulgaria, Romania, and Croatia.
The chart includes only loans provided by domestic banks.

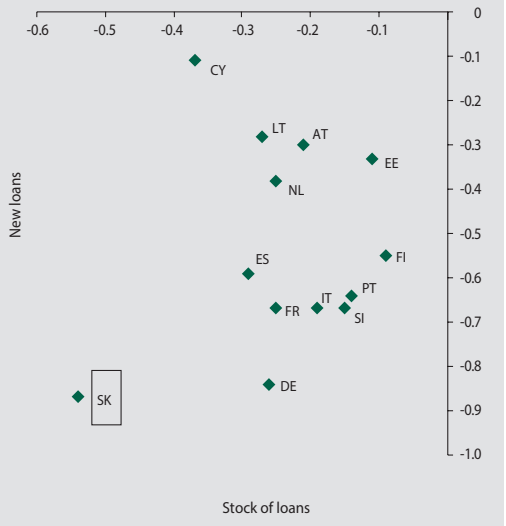
In this comparison, the difference between Slovakia and the euro area is even more significant. On the one hand, this trend reflects decreasing interest rates on new loans and the fact that the average rate on the stock of housing loans remains the third highest in the euro area. On the other hand, it underlines the large extent of loan refinancing.

The combination of strong debt growth and falling interest rates is weakening the future financial position of Slovak households. In each of these trends (rising debt and falling rates), the figures in Slovakia are exceptional in comparison with the situation both in other countries, and previously in Slovakia. But aside from the immediate benefits that they offer customers and banks, these trends entail a number of risks. This is evident in several EU countries in which high indebtedness is proving and obstacle to economic recovery.

One risk is that higher indebtedness reduces the ability of households to cope with potential adverse economic developments. Moreover, the current low interest rates limit the scope for monetary policy to respond to such a scenario. The economic and financial crisis in 2009 had a relatively minor impact on Slovakia thanks to the country's combination of low household debt and falling interest rates; however, each of these key parameters are now in the opposite position.

A second risk is the impact of sharply falling interest rates on interest margins, which banks are having to offset by increasing their new lending or existing exposures. Amid adverse demographic developments, these increases may arise by raising the indebtedness of existing borrowing households (and hence also the concentration of debt) or by widening the group of borrowers to include less creditworthy households. Either case involves an increase in household credit risk in the period ahead.

Chart 26 Changes in interest rate on new housing loans and the stock of these loans in euro area countries over past 12 months (p.p.)



Source: ECB.
Note: The data are for the period February 2014 to February 2015.

Residential property market

Residential property price trends remain unchanged, although in the capital city they are showing signs of growth. While the national trend in average property prices has been slowly downward since 2010, prices in Bratislava began to pick up in autumn 2014 and their year-on-year increase in April 2015 was more than 5% (based entirely on price growth from November 2014). The average month-on-month increase in the five-month period was therefore almost 1%.

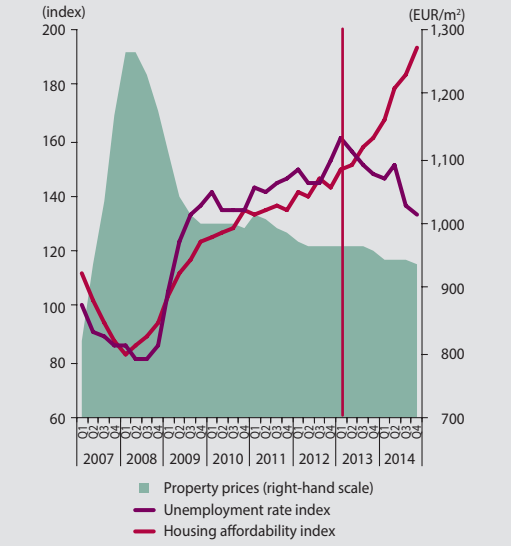
Prices are coming under upward pressure from several key sources, including increasing household income, falling interest rates, and a decreasing unemployment rate. While the first two of these factors have been present for several years and have therefore increased the technical affordability of housing to its current all-time high levels, the positive trends in unemployment began only between one to two years ago. Furthermore, in Bratislava, as well as in the eastern city of Košice, the property market is more liquid. Consequently, bank lending in these areas includes loans with LTV ratios of 100%, which further contribute to the increase in property prices.

Insurance sector facing risk related to low interest rates

The environment of extended low interest rates poses a direct risk to the delivery of guaranteed returns in life insurance. A significant proportion of life insurance policies guarantee a certain rate of return to the policyholder, but in the current climate these returns are difficult to achieve while pursuing a prudent risk strategy. According to EIOPA's analysis, more than half of all insurers in Europe guarantee a return on investment which is higher than the yield on the local 10-year government bonds; this situation constitutes a risk to their solvency. Although this issue is not as yet a systemic risk, the collapse of any one insurer could damage confidence in the sector as a whole. Any turbulence in the insurance sector could spread to other parts of the financial system through ownership links or portfolio exposures.

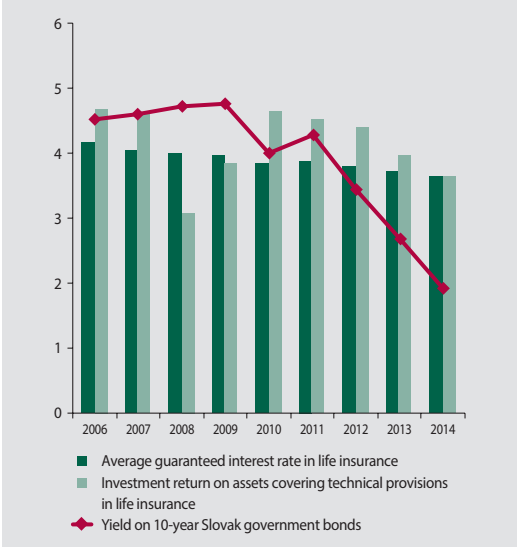
In 2014 returns on assets covering technical provisions in life insurance declined in Slovakia, and in December of that year they were virtually identical to the returns guaranteed in insurance contracts. Falling market interest rates have

Chart 27 Housing affordability index, unemployment rate index and property prices



Source: NBS, ÚPSVaR, SO SR, CMN.
Note: The housing affordability index indicates the purchasing power of households based primarily on property prices, household income, and interest rates. The higher the value, the greater the purchasing power. The unemployment rate index denotes the relative historical level of unemployment, with 100 corresponding to the level in Q1 2007.

Chart 28 Guaranteed interest rate and actual returns (%)



Source: NBS.

gradually been reflected in decreases in the technical interest rate, which has been at 1.9% since 1 January 2014. This rate marks the upper limit of the guaranteed interest rate in standard life insurance. Naturally, there has been a gradual shift towards unit-linked business, where returns are not guaranteed and the investment risk is borne by the customer rather than the insurer. An important issue for insurers, however, is that only new contracts are subject to the lower technical interest rate; contracts entered into in the past guarantee returns higher than those normally available in today's market. Hence insurers are finding it increasingly difficult to deliver the returns guaranteed.

As regards the related reinvestment risk, a key point is that 8% of the bond portfolio is maturing in 2015 and 2016 and around one-third of the portfolio is due to be redeemed by 2020.

Competition in motor insurance

The combined ratio in motor vehicle insurance maintained its rising trend in 2014. Increasing to almost 99%, the ratio reached a level that will be even more difficult to sustain over the long term. Moreover, the ratio would rise to almost 104% if, in the sub-category of motor third-party liability (MTPL) insurance, it included the transfer of a proportion of premiums to the special account of the Slovak Interior Ministry, the contribution to the Slovak Insurers' Bureau (SKP), and the change in the technical provision for the liability to the SKP. The main cause of the increase in this indicator is the decline over several years in premiums earned. Although competition is axiomatic to a functioning market, the current situation may be described as exceeding the boundaries of healthy competition.

Liquidity risk in the banking sector

The maturity mismatch between assets and liabilities in the Slovak banking sector continued to widen during 2014. In addition, the regulatory liquid asset ratio of the sector decreased, as did the overall net creditor position of banks vis-à-vis their groups. All these changes are, however, a logical consequence of the long-term growth in housing loans and the increasing amount of deposits – developments that stem from the traditional model followed by the Slovak banking sector. It is therefore important to monitor changes in risk-mitigating factors, notably the sufficiency of liquid assets and the availability of surplus collateral. This issue is addressed in a particular section.

Market risks in the financial sector

Both the banking and insurance sectors saw an increase in sensitivity to interest rate movement during the period under review. In the portfolios of each sector there was a slight extension of the average residual maturity and an increase in the duration. In the case of banks, such developments are part of a trend of several years. It is probably explained by demand for relatively higher-yielding assets, which, in an environment of low interest rates, requires investment at longer maturities.

In both the second and third pillars of the pension system, the share of assets denominated in foreign currency increased. This increase was concentrated in those pension funds (second pillar) and supplementary pension funds (third pillar) that have an equity or mixed investment profile. By the end of 2014 foreign-currency investment (excluding derivatives) accounted for more than 20% of the NAV in many of these funds. The bulk of the exposure to foreign currencies was related to the funds' equity investments. The most significant currency in their foreign currency positions was the US dollar.

Equity risk exposure increased in the second pension pillar. This increase occurred in two dimensions. Firstly, equity instruments increased as a share of the total net asset value of equity and mixed pension funds in 2014 by, on average, 6 p.p. among the former and 4 p.p., among the latter. As at 31 December 2014 investments in equities and in shares/units of equity-oriented investment funds amounted to 53% of NAV across equity pension funds and 36% across mixed pension funds, while the figures for individual funds ranged from 31% to 74%. An even higher exposure to equity markets, almost 100%, is observed in index pension funds, which, by definition, track selected stock market indices.

Secondly, the number of pension savers affected by the heightened exposure increased. In 2014 there was growing enrolment in equity and index funds. On the other hand, the proportion of

all savers enrolled in these funds increased only slightly, year-on-year, from 7.7% to 9.4%.

The equity exposure of pension funds is largely indirect, as 83% of it is in the form of investments in investment funds, especially exchange-traded funds. These investments are predominantly in funds focusing on the key global, US and European equity indices. Only around one-tenth of them are in funds oriented to emerging markets or specific economic sectors. The rest of the equity exposure comprises direct purchases of equities, mostly shares in non-financial corporations in advanced countries. This part of the portfolio is sufficiently diversified at both the sector and individual fund levels.

CHAPTER 4

REGULATORY AND LEGISLATIVE ENVIRONMENT

4

4 REGULATORY AND LEGISLATIVE ENVIRONMENT

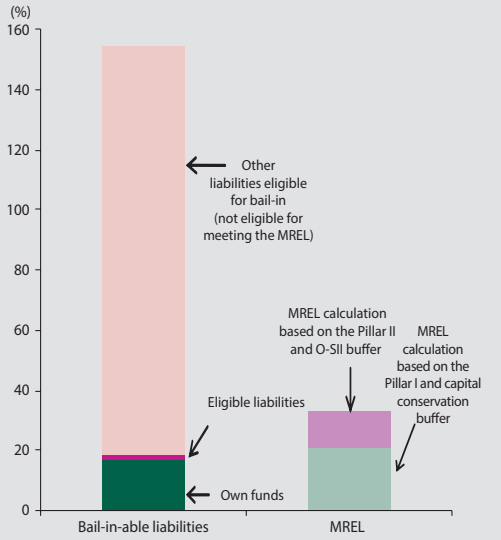
RESOLUTION IN THE BANKING SECTOR

Changes in respect of resolution are one area of regulation that could have a significant impact on the Slovak banking sector[3]. This concerns requirements aimed at ensuring that if the resolution of a failing bank becomes necessary, it can be effected through bail-in – the conversion of the bank's issued bonds and deposits to equity. This means that shareholders and creditors of the bank would participate directly in the resolution, thus avoiding the need to use public funds for this purpose. The implementation of this strategy is contingent, however, on the existence of sufficient amount of liabilities eligible for bail-in. In the case of the Slovak banking sector, the main source of such funding would be customer deposits. Bail-in may not be effected with a bank's mortgage bonds, liabilities to the pension system, or short-term deposits taken from other banks. The capitalisation of covered deposits is allowed, but resulting losses are to be borne by all participants in the deposit guarantee scheme, not just by the bank itself. Regulatory requirements therefore require that a bank's stabile liabilities eligible for bail-in together with its own funds constitute a sufficient share of its balance sheet – this is known as the minimum requirement for own funds and eligible liabilities (MREL).

In order to meet the MREL, Slovak banks may find that they need to change their funding structure. This is because the definition of funds eligible for meeting the MREL is far stricter than the definition of liabilities eligible for bail-in. Covered deposits and deposits that can be withdrawn within 1 year are not eligible for meeting the MREL, although they are eligible for bail-in. This means that although own funds and eligible liabilities in the Slovakia banking sector (excluding foreign bank branches) stand at 154% as a ratio to risk-weighted assets (87% of total assets), liabilities eligible for meeting the MREL stand at only 18.4% as a ratio to risk-weighted assets (10.4% of total assets) (Chart 29). There is also the issue of how to determine the MREL. The final version of the criteria for determining the MREL are not yet available, but under the draft version, released in February 2015[4], the MREL for certain banks could be twice as high as the sum of Pillar I and Pillar II capital requirements and capital buffers[5]. However, according to the current discussions on the revision of these proposals, resolution authorities are expected to have the option to reduce this level. The Slovak banking sector has a relatively large amount of own funds and is not significantly dependent on secured funding; nevertheless, to meet the MREL set as proposed, several banks would have to increase their capital significantly, or issue longer-term unsecured bonds. The MREL is expected to be phased in gradually between 2016 and 2020.

The requirement to take into account capital buffer levels when determining the MREL is, moreover, reducing the effectiveness of macroprudential policy implementation. The reason is that, in deciding on the level of capital buffers, it will be necessary to address also the impact on the level of funds required to meet the MREL, which may significantly constrain the flexibility of decision-making in this area. Furthermore, banks will no longer be able to

Chart 29 Bail-in-able liabilities, the MREL, and MREL coverage



Source: NBS.
Note: Data on the left-hand scale are in per cent of risk-weighted assets.

3 *In particular Act No 371/2014 Coll. on resolution in the financial market and on amendments to certain laws, as amended, which enacted into Slovak law Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment firms of 15 May 2014 (the BRRD).*

4 *European Banking Authority: Consultation Paper: Draft Regulatory Technical Standards on criteria for determining the minimum requirement for own funds and eligible liabilities under Directive 2014/59/EU.*

5 *In the case of the Slovak banking sector, the MREL set so as to cover only Pillar I and the capital conservation buffer would amount to 21% of risk-weighted assets, while if it covered also the O-SII buffer for domestic banks, it could increase to 30% of RWAs.*

use capital buffers to absorb losses in adverse situations without impairing their capacity to continue lending to the economy. Although the original intention behind the countercyclical measures was to ensure that banks are not forced to respond to losses by immediately increasing their capital, the implementation of the MREL will largely thwart that intention, since banks will have to take immediate steps to meet the requirement.

Regulation of non-bank entities

Národná banka Slovenska assumed responsibility for consumer protection in the Slovak financial market. As part of the system of financial market protection, and supporting its stability, measures were also adopted in the area of financial consumer protection and conditions were defined for the conduct of business involving the provision of consumer credits and other loans and credits. At the beginning of 2014 the Slovak Government adopted a *Financial Consumer Protection Strategy*, which outlined changes to the position and powers of NBS in this field. On 1 January 2015, based on an amendment to Act No 747/2004 Coll. on financial market supervision, the responsibility for supervision of financial consumer protection passed from the Slovak Trade Inspection to NBS. Hence NBS is now overseeing financial market participants for their compliance with consumer rights in the marketing and provision of financial services and transactions. As part of its new remit, NBS provides public interest protection of consumer rights and protection against unfair contract terms and business practices; it has the power to impose fines and penalties and to take preventive measures, but it is not authorised to arbitrate contractual disputes between consumers and financial institutions.

The Strategy was further implemented by an amendment to Act No 129/2010 Coll. on consumer credits and other credits and loans for consumers (the Consumer Credit Act). By not later than 31 August 2015 only the entities listed in the creditors' register maintained by NBS[6], even if they have not been subject to NBS supervision, can provide consumer loans. From 1 April 2015 NBS introduced an 'authorisation process' for hitherto unregulated non-bank providers of consumer credits[7]. After receiving their authorisation to provide consumer credits, these entities become subject to NBS supervision. This new authorisation process does not concern banking entities. There are four different types of authorisation that NBS may grant to non-bank providers of consumer credits, and the applicants are required to satisfy the conditions specified in the Consumer Credit Act[8], which differ according to the type of authorisation being applied for.

After the authorisation to provide consumer credits and other credits and loans to consumers becomes valid, the creditors and other creditors become entities supervised by NBS. The NBS supervision will be differentiated as either supervision of compliance with the conditions stated in the authorisation (exercised both off-site and on-site), or supervision of financial market protection.

The amendment to the Consumer Credit Act also introduced, with effect from 30 September 2015, an obligation on creditors whose authorisation from NBS allows them to provide consumer credits in unlimited scope, and on banking entities, to establish one or more registers of consumer credit information and provide data to these registers.

The European Commission's proposal for building a "Capital Markets Union"

On 18 February 2015 the European Commission (EC) published a consultation document entitled "Green Paper – Building a Capital Markets Union[9]". The document is intended to open up a broad public discussion on the establishment of a single capital market in the EU – a Capital Markets Union (CMU). The purpose of the CMU is to make capital markets work more effectively and efficiently, to improve access to financing for all enterprises (in particular SMEs) and investment projects, to increase and diversify sources of funding (and thus reduce reliance on bank financing), to improve the allocation of risk, and to enhance the stability of the financial system. The EC will follow up the Green Paper with an "Action Plan" for putting in place from 2019 the building blocks for the CMU.

Capital markets in Europe today are fragmented and are typically organised on national lines. Capital market based financing in Europe is relatively underdeveloped, and European en-

6 *As at 28 February 2015, a total of 259 entities (creditors and other creditors) were listed in the register of creditors providing consumer credits (including the sub-register of other creditors providing other credits and loans to consumers), and of that number, 25 were banks and foreign bank branches.*

7 *For a transitional period until 31 August 2015, registered creditors may continue to provide consumer credits on the basis of their registration. If, however, by 31 May 2015 they have not applied to NBS for an authorisation to provide consumer credits, their permit to provide such credits will expire by 31 August 2015 at the latest, since, pursuant to Article 25f(3) of the Consumer Credit Act, their registration in the creditors' register will be cancelled as of 31 August 2015.*

8 *Methodological Guideline No 1/2015 of NBS's Financial Market Supervision Unit concerned the submission of application for authorisation to provide consumer credits and other credits and loans to consumers.*

9 *http://ec.europa.eu/finance/consultations/2015/capital-markets-union/index_en.htm*

terprises remain heavily reliant on banks for financing.

The EC has identified several areas in which it aims to adopt effective measures in a short-term horizon. They include the removal of obstacles to capital market access (the review of the Prospectus Directive), widening the base for investors in securities issued by SMEs (by developing both a set of comparable information for credit reporting and credit scoring), building a sustainable high-quality securitisation market, boosting long-term investment, and developing a European private placements market.

To improve access to financing over the long-term horizon, in line with the key areas identified, the EC proposes, for example, alternative funding sources, new infrastructure investment, the implementation of a simplified, common accounting standard for SMEs listed on multilateral trading facilities, the introduction of a common set of market rules, the development of an integrated European covered bond market, standardisation of corporate debt issuance, and environmental, social and corporate governance investments.

In order to make the market more efficient, the EC proposes bolstering the common set of rules (Single Rulebook), increasing the convergence of European supervisory authorities, and developing common data and reporting across the EU. Market infrastructure and securities law are key determinants of the efficiency and ease by which investment can be made. Among other areas identified as preventing capital markets from operating efficiently are the restricted fluidity of collateral throughout the EU, divergence across Member States in legislation relating to investors' rights in securities, aspects of company law (including corporate governance), and differences in insolvency laws and tax regimes across Member States.

NBS identifies with the EC's ideas for establishing an efficient CMU. This objective, however, cannot be achieved without making cost efficiencies and removing the current obstacles to a better functioning capital market. Harmonisation and integration should be a natural process that takes into account the existing legal, commercial and cultural environment.

NBS does not see a need to establish a single supervisory authority for EU capital markets, considering also that national capital markets in the EU are far more fragmented than are national banking sectors.

As regards legislative amendments, the assumption is that the current regulatory framework will be reassessed, revised and simplified, rather than supplemented with other legislative measures. Before any legislative amendments are made, a cost/benefit analysis must be carried out to ensure that there is no increase in the costs and obstacles (legal and otherwise) to market participants. The Single rulebook should be straightforward, effective and less cost demanding.

As for SMEs, NBS supports the EC's initiative to establish a set of comparable information for credit reporting and common accounting standards within the EU, but only if the initiative is supported by the results of in-depth cost/benefit analyses, and if it is clear that the new rules will bring participants in the real economy more benefits that costs.

The CMU is expected to be part of a planned review of European supervisory authorities. The main focus of this review should be supervisory convergence, with particular regard to consumer and investor protection and to the exchange of information, experience and supervisory approaches between national competent authorities.

CHAPTER 5

MACROPRUDENTIAL POLICY

5

5 MACROPRUDENTIAL POLICY

NBS HAS IDENTIFIED A LIST OF DOMESTIC SYSTEMICALLY IMPORTANT BANKS THAT ARE TO BE DESIGNATED AS OTHER SYSTEMICALLY IMPORTANT INSTITUTIONS (O-SIIs). IT PLANS TO APPLY AN O-SII BUFFER[10] AND A SYSTEMIC RISK BUFFER[11] TO THESE BANKS FROM 1 JANUARY 2016.

As the macroprudential authority in Slovakia, Národná banka Slovenska is obliged from 1 January 2016 to identify O-SIIs in Slovakia and may require them to maintain an additional capital buffer. These banks should have a dominant position in the banking sector and also be a significant provider of services to the real economy – through lending and taking deposits, as well as in other ways. The increased capital requirement is intended to bolster the resilience of these banks, thereby enhancing the stability of the financial sector and ensuring that services to the real economy are not disrupted even at times of heightened stress, whether caused by adverse developments in the economy or in financial markets.

The methodology used to identify O-SIIs in Slovakia is laid down in Guidelines issued by the European Banking Authority (EBA)[12]. This methodology determines the indicators that are to be included in the scoring process for the given banking sector and economy, as well as the precise method for scoring individual banks.

Under the EBA methodology, the score for each bank is to be calculated at least at the highest (sub-) consolidation level of the part of the group that falls within the jurisdiction of the competent authority; branches of foreign banks are also to be included into calculations. Since the indicators are defined on the basis of the FINREP methodology and not all domestic banks report the required data on that basis, it has been necessary to use a more precise approximation of these data. For this purpose, the scoring was based on several variants, which differ in the available proxies used to approximate FINREP data, in other words they differ in particular in the source reports for the individual data required to score the defined indicators.

The final scores are relatively robust in respect of the number and ranking of the identified O-SIIs. Based on this methodology and using data as at 31 December 2014, a total of five banks in Slovakia were identified as O-SIIs: Slovenská sporiteľňa, a.s., Všeobecná úverová banka, a.s., Tatra banka, a.s., Československá obchodná banka, a.s. and Poštová banka, a.s.

NBS has discretion, not an obligation, to require that the identified banks maintain an O-SII buffer and systemic risk buffer. In proposing to exercise that discretion, NBS has regard to the structural characteristics of the Slovak banking and financial sector as well as the Slovak economy. The banking sector is by far the largest segment of the Slovak financial sector, with its share amounting to 70% at the end of 2014. Moreover, the banking sector is virtually the only segment that provides external sources of financing to the real economy. In both the banking sector and financial sector as a whole, concentration is relatively high. The assets of the identified O-SIIs as a share of total assets in the banking sector stood at 70% at end-2014. These banks (O-SIIs) have a dominant combined share of the retail lending market (74% at end-2014); they account for a significant share of bond issuance (88% of the total outstanding amount of mortgage bonds as at end-2014), and they hold a large proportion of overall covered deposits (70% at end-2014). In addition, these banks hold the vast majority of domestic government bonds held by Slovak banks (88% at end-2014), and 25% of the issued government bonds.

Since the Slovak banking sector is oriented mainly to financing of the domestic economy, structural systemic risks arise also from Slovakia's position as a small and open economy, sensitive to trends in the global economy and in the country's principal trading partners. In addition, the sector is marked by concentration risk related to lending to non-financial corporations, which likewise stems from the structural character of the domestic economy.

10 Pursuant to Article 33d(5) of the Banking Act.
11 Pursuant to 33e(1) of the Banking Act.
12 EBA/GL/2014/10: http://www.eba.europa.eu/documents/10180/930752/EBA-GL-2014-10+%28Guidelines+on+O-SIIs+Assessment%29.pdf

The combined buffer requirement for each bank has been set so as to reflect the bank's relative systemic importance as determined by its overall score. To avoid a disproportionately high burden for banks, the combined buffer requirement in Slovakia has been capped at 3%, which is the highest level set in other EU countries that are already applying the O-SII buffer and/or systemic risk buffer.

Despite the aim of setting the O-SII buffer as high as possible, at 2% of risk-weighted assets, it seems that this level will not be sufficient and that therefore a systemic risk buffer will also have to be applied. A key argument for applying systemic risk buffers alongside O-SII buffers is the fact that four of the identified O-SIIs are subsidiaries of foreign banking groups. This means that the maximum O-SII buffer requirement in Slovakia may be further restricted in the event that an O-SII or G-SII buffer requirement is applied to any of these groups.

All of the banks concerned currently have far more than the required amount of own funds, and therefore neither they, nor the financial sector as a whole, are expected to be adversely affected by the application of the O-SII buffer and SRB. Nevertheless, given that the application of these buffers has the sole purpose of increasing the banks' resilience and should in no case be detrimental to their lending activity, it is proposed that the buffers be phased in gradually. The minor impact of the buffers' application on the capacity of the banks to lend to the real economy (especially with the buffers being phased in) has been demonstrated by macro stress testing of the Slovak financial sector at the end of 2014. According to the stress test results, the largest banks make a profit over the next two years even under an adverse scenario. Thus the banks are assumed to be able to maintain their high capital ratios while at the same time providing loans to the real economy. Since all the banks identified as O-SIIs focus mainly on the domestic economy, the application of the buffers is not expected to have any serious cross-border repercussions.

Chart 30 Settings of additional capital buffers for O-SIIs (%)

Source: NBS.
Note: Capital buffers are given as percentage of the risk exposures.

Table 3 Settings of additional capital buffers for O-SIIs

Bank	From 1 January 2016	From 1 January 2017	From 1 January 2018
Všeobecná úverová banka, a.s.	1% O-SII buffer	2% O-SII buffer	2% O-SII buffer + 1% SRB
Slovenská sporiteľňa, a.s.	1% O-SII buffer	2% O-SII buffer	2% O-SII buffer + 1% SRB
Tatra banka, a.s.	1% O-SII buffer	1.5% O-SII buffer + 0.5% SRB	1.5% O-SII buffer + 1% SRB
Československá obchodná banka, a.s.	1% O-SII buffer	2% O-SII buffer	2% O-SII buffer
Poštová banka, a.s.	1% O-SII buffer	2% O-SII buffer	2% O-SII buffer

Source: NBS.
SRB – systemic risk buffer.
Note: The combined O-SII buffer and SRB requirement for Tatra banka, a.s. is capped at 2.5% of risk-weighted assets. Since the minimum level of the SRB, if applied, is 1% (pursuant to Article 33e(2) of the Banking Act), it is proposed to set the O-SII buffer requirement at 1.5% and the SRB requirement at 1%. The SRB requirement for Tatra banka, a.s. in 2017 has been set at 0.5%, pursuant to Article 33e(9) of the Banking Act, which allows the buffer requirement to be phased in by increments of 0.5 percentage point.

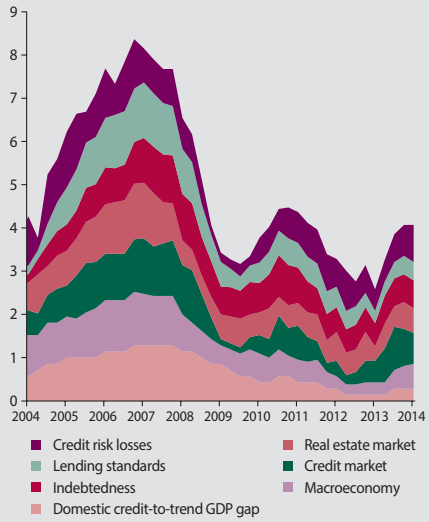
NBS DECIDED TO LEAVE THE COUNTERCYCLICAL CAPITAL BUFFER RATE UNCHANGED AT 0%

On 28 April 2015 the NBS Bank Board took its regular decision on the setting of the countercyclical capital buffer rate; it decided to keep the rate at 0% based on information available as at 31 December 2014. At that time, the main feature of the domestic credit market was the heterogeneity between the household and corporate sectors. The annual growth rate of corporate debt was fluctuating around zero, and therefore lagged behind sales growth in the corporate sector as well as behind GDP growth. Looking at the composition of corporate debt, the issuance of bonds in particular had a positive impact, with their share of the aggregate debt increasing from 8% to 11%. Lending to households, and in particular housing loans, increased. Its growth rate was among the highest in the EU and far exceeded growth in households' gross disposable income. The heterogeneity between the corporate and household portfolios is also apparent in the credit-to-GDP ratio, which for household lending is not only positive but approaching the recommended threshold for triggering an increase in the countercyclical capital buffer rate.

Chart 31 Deviation of the credit-to-GDP ratio from its long-term trend (%)

Source: NBS, SO SR.

Chart 32 Cyclogram



Source: NBS, ŠÚ SR, CMN.
Note: The left-hand scale shows values corresponding to the percentile of the historical distribution of the respective indicator. The methodology is described in the following article: Rychtárik, Š, "Analytical background for the counter-cyclical capital buffer decisions in Slovakia", Biatec, Vol. 22, No 4, Národná banka Slovenska, Bratislava, 2014.

The overall financial cycle is therefore not yet at elevated levels. In the fourth quarter of 2014, the main increases were in indicators of household credit and household debt, as well as in indicators of macroeconomic developments.

NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

SPECIAL TOPIC

SPECIAL TOPIC

ASSET AND LIABILITY MATURITY MISMATCH IN THE BANKING SECTOR – ASSESSMENT OF TRENDS AND RISKS

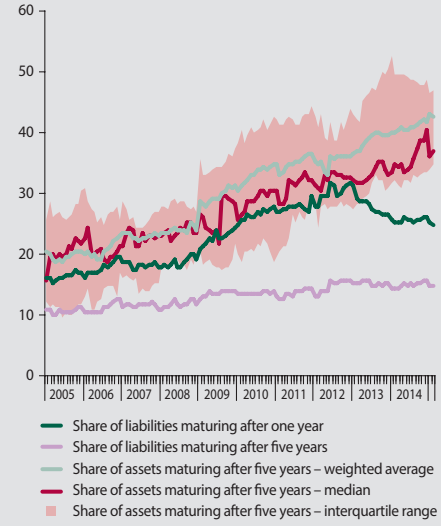
THE MATURITY MISMATCH BETWEEN ASSETS AND LIABILITIES IS ONE OF THE MOST IMPORTANT RISKS AND ITS SIGNIFICANCE IS INCREASING

Asset and liability maturity mismatch in banks is a risk directly related to their business strategy. The risk arises because in order to finance lending to customers and the purchase of securities at relatively long maturities (particularly long in the case of housing loans), banks use mostly customers' current accounts and time deposits, which have significantly shorter maturities. In the Slovak banking sector, asset and liability maturity mismatch is one of the most significant risks and, in comparison with other banking sectors abroad, it is has a number of specificities. Thus in the Special Topic, we are taking a closer look at this issue.

In the traditional model of banking, maturity mismatch risk materialises only in exceptional crisis situations related to the large-scale withdrawal of customer deposits. This is because banks, in managing maturity mismatch risk, rely heavily on the stability of customer deposits, owing to which their effective maturity far exceeds the contractual maturity. This means that customers ordinarily keep a large part of their funds in current accounts or short-term time deposits in banks for longer time. Such funds constitute what are known as banks' primary funds. However, this does not necessarily apply to the far more highly volatile wholesale funding obtained from the interbank market, the Debt and Liquidity Management Agency (ARDAL), and large firms. The banking sector in Slovakia has an advantage over many counterparts in other countries in that it has a relatively high proportion of primary funds. On the other hand, any crisis of confidence in the banking sector could leave individual banks exposed to a substantial outflow of primary funds. Hence banks hold part of their assets in the form of marketable assets (especially government bonds) that may be liquidated even before their contractual maturity.

The asset and liability maturity mismatch in the Slovak banking sector has been increasing over an extended period, and this adverse trend was even more pronounced in previous years. The increasing maturity mismatch stems largely from the gradual upward trend in the share of assets that have a residual maturity exceeding five years. As Chart 33 shows, that share has more than doubled over the past ten years. This trend, present in all banks, is closely related to the rising share of retail housing loans. Since the same period did not see a significant increase in the share of liabilities with a maturity of more than five years, the maturity mismatch between assets and liabilities increased. As can be seen in the Chart, however, for the period up to 2012, the increase

Chart 33 Assets and liabilities with a residual maturity of more than five years (%)



Source: NBS.
Note: The left-hand scale shows the different categories of assets and liabilities as percentage shares of the balance sheet total of the banking sector.
The stated maturity represents the residual contractual maturity. Assets and liabilities of unspecified maturity (for example, equity, non-performing loans) were taken to be assets and liabilities with a maturity of more than five years.
The distribution indicators for the share of assets maturing after five years (the median and interquartile range) are calculated only for those banks and foreign bank branches whose assets as a percentage of the total assets of the banking sector amounted to at least 1% at the end of 2014.

in the share of assets with a maturity of more than five years was to a large extent matched by liabilities maturing after more than one year. However, this trend changed, and from 2012 there was a gradual downward trend in the share of these liabilities, owing mainly to greater customer demand for current and short-term accounts than for longer-term products.

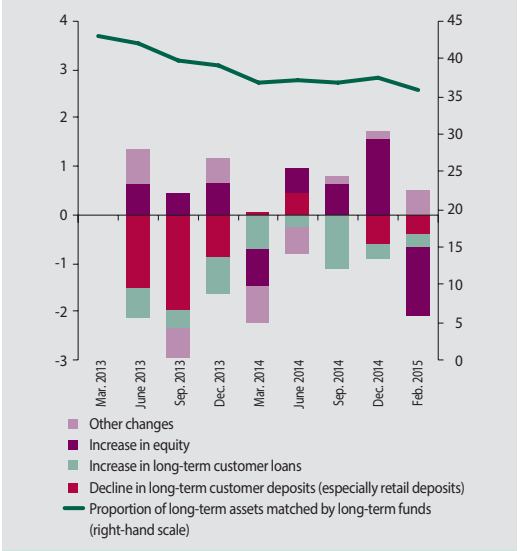
The maturity mismatch is particularly marked at longer maturities. As Chart 34 shows, maturity matching of assets and liabilities is decreasing most markedly at maturities of more than one year. In the past two years, maturity matching in these categories has, in relative and absolute terms, fallen to levels below the long-term average. It is also evident from the Chart that the extent of the asset and liability maturity mismatch is due in large part to investments in securities (i.e. banks purchased for their portfolios a significant amount of securities that have a long residual maturity). In the case of the Slovak banking sector, however, these securities comprise mainly liquid assets (government bonds in particular) which may, if required, be quickly sold or used as collateral in repo transactions. Thus the adjusted maturity mismatch between assets and liabilities (net of these securities) is significantly more favourable.

The increasing maturity mismatch was caused mainly by the combination of an increase in long-term loans and a decrease in long-term deposits. Chart 35 shows the gradual decline in the matching of long-term assets to long-term liabilities from 2012, along with its main causes. The most significant factor was the decline in the share of long-term customer deposits (especially retail deposits), which was considered to be pronounced even back in 2013. This trend was based largely on falling returns on time deposits in an environment of low interest rates, which prompted many retail customers to switch their funds to current accounts or collective investment products. Lending activity provided another major factor behind the decline in the matching of long-term assets and long-term liabilities, with the retail loan portfolio maintaining relatively strong growth. The overall trend was, however, mitigated by a gradual increase in own funds (except during the first quarter, when dividends were paid).

Chart 34 Maturity mismatch for different categories of maturities (%)

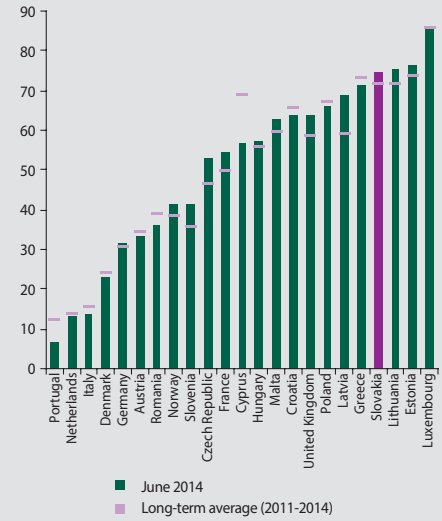
Source: NBS.
Note: The left-hand scale shows liabilities of the maturity on the horizontal scale as a ratio to assets of the same maturity.
The solid colour denotes the ratio of liabilities to assets of the same maturity, including securities.
The light colour denotes the ratio of liabilities to assets of the same maturity, excluding securities.
The horizontal line shows the ratio of liabilities to assets of the same maturity, excluding securities, for the period 2010 to 2014.

Chart 35 Proportion of long-term assets that are matched by long-term funds (%)



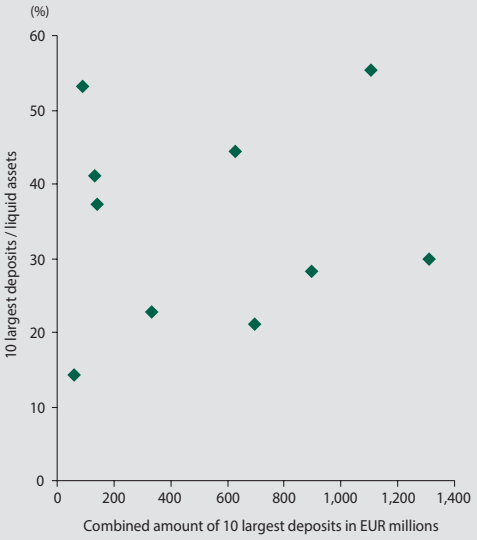
Source: NBS.
Note: Long-term assets and liabilities are assets and liabilities with a residual contractual maturity of more than one year.

Chart 36 Liabilities maturing within one year as a share of the banking sector's balance sheet total – country by country comparison (%)



Source: IMF.

Chart 37 Concentration of deposits in individual banks

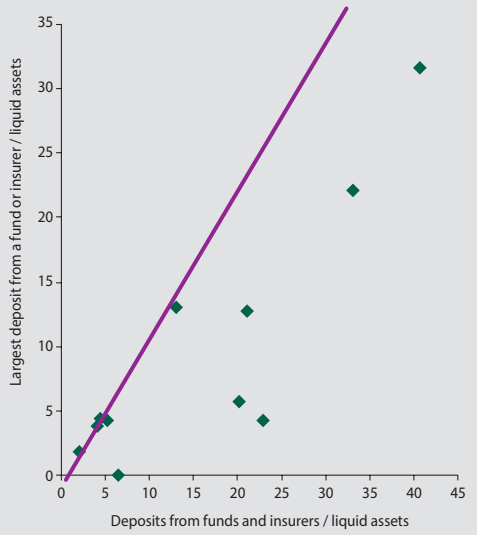


Source: NBS.

Compared with banking sectors abroad, the sector in Slovakia has a high share of short-term liabilities. Short-term liabilities as a share of the banking sector's balance sheet total are higher in Slovakia than in most other EU countries (Chart 36). This implies that the matching of long-maturity assets and long-term liabilities is not only falling, but is also low in comparison with other countries, thus further accentuating the need for a detailed analysis of maturity mismatch risk.

Besides the share of short-term liabilities, another factor contributing to the increased risk is that, in certain banks, deposits are highly concentrated in terms of counterparties or economic segments. Where there is a higher concentration of deposits from particular counterparties or economic segments, the bank is more sensitive to the behaviour of the same. The largest depositors in the Slovak banking sector are typically banks' own financial groups, commercial banks, multilateral banks, investment and pension funds, public sector entities and local authorities, and several large firms (often linked to the utilities sector). As regards the level of deposit concentration and the composition and maturity of deposits, the heterogeneity across banks is significant.

Chart 38 Deposits from funds and insurers in individual banks (%)



Source: NBS.
Note: The left-hand scale shows the largest deposit from a fund or insurer out of all such deposits taken by the given bank, expressed as a ratio to the amount of liquid assets.

In some banks, ten largest deposits make up more than half of the liquid assets, and in certain cases this share exceeds one billion euro. Such combination may heighten the volatility

Chart 39 Impact of liquidity position on banks' corporate credit standards (%)

Source: NBS, ECB.
Note: The vertical scales show the market share of those banks which stated in the Bank Lending Survey that their liquidity position contributed to the tightening of corporate credit standards, less the market shares of those banks which stated that their liquidity position contributed to the easing of these standards.

of funds, and thus it may increase the impact of maturity mismatch risk.

A separate issue is the concentration of large depositors from particular sectors. The sector of pension funds, collective investment funds and insurers is considered sensitive in this regard. It is not only that deposits from this sector often constitute a large amount related to high concentration, but also that the stability of such deposits in a particular bank is often linked to external factors. For example, if the bank were to be downgraded by a credit rating agency, this sector would almost automatically withdraw its deposits from that bank.

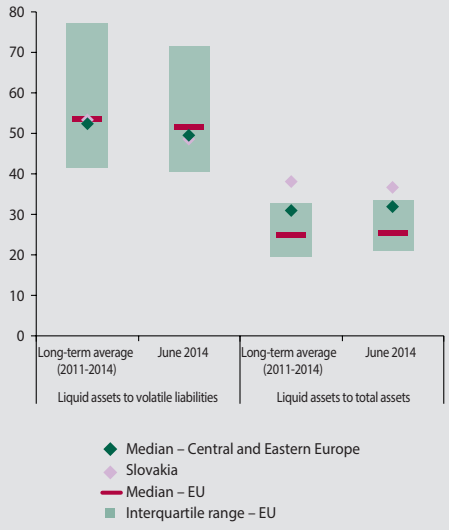
In addition to these trends, the significance of banks' liquidity position is also supported by its impact on the credit market. As Chart 39 shows, in the period when corporate credit standards were being significantly tightened (especially in 2008 and 2009), quite a large number of banks (in both Slovakia and the euro area) indicated that their liquidity position was a significant factor behind the decision to tighten credit standards.

In the Slovak banking sector there are, however, several specificities that mitigate maturity mismatch risk

The analysis above showed the significance of asset and liability mismatch as one of the key risk factors in the Slovak banking sector (from the view of both developments in time and in comparison with other countries). In the Slovak banking sector, however, there are a number of factors that are helping to mitigate this risk.

The first and most important factor is the high liquid asset ratio. This is largely related to the large share of government bonds in the banking sector's portfolio (17%), which is one of the highest in the EU (the euro area average is 6%). Although the average residual maturity of these bonds as at 31 March 2015 was 5.1 years, it is possible, where necessary, to obtain funds by quickly selling them or pledging them in repo transactions. As a result, the ratio of liquid assets to total assets in the banking sector is far higher in Slovakia than in most other EU countries, including CEE countries (Chart 40, right side).

Chart 40 International comparison of liquidity ratios (%)



Source: IMF.
Note: For the purposes of this chart, liquid assets include assets maturing within three months and all liquid securities. Volatile liabilities are liabilities maturing within one year.
A detailed methodology of the calculation of the ratio is given in the following document: "IMF (2006): Financial Soundness Indicators – Compilation Guide".

The volume of these liquid assets is thus able to mitigate the risk related to the high share of short-term liabilities. The ratio of liquid assets to short-term liabilities in the Slovak banking sector is therefore at the median level for other EU countries and for CEE countries (Chart 40, left side).

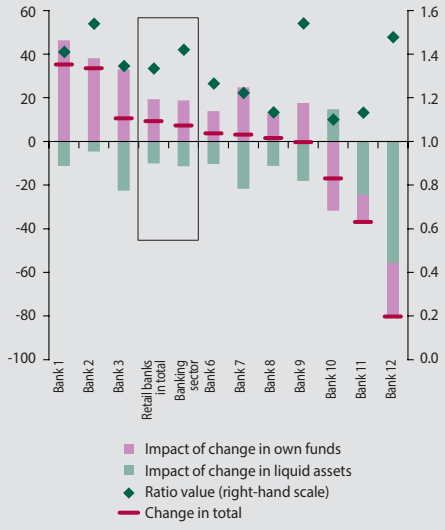
A second factor mitigating maturity mismatch risk is the liquidity coverage ratio (LCR) adopted at the national level. The minimum requirement for this ratio, in force since 2008[13], ensures that banks have sufficient liquid assets to cover their volatile liabilities. As regards compliance with the regulatory ratio, the experience to date is that banks with leading positions in retail activity report, on average, a ratio that is lower than the average for the banking sector as a whole. This is largely explained by the high share of stable, but short-term deposits, which are subject to a relatively higher coefficient. It is therefore important to note the methodological change that came into effect from 1 December 2014. This change resulted into an increase of the ratio for the banking sector. There were also changes in the definitions of liquid assets (tightened) and volatile liabilities (relaxed). The overall impact on the banking sector was driven mainly by easing on the side of volatile funds, in particular a slight reduction in the coefficients for retail deposits.

Although the methodological adjustment resulted in a partial easing of overall liquidity in the banking sector, the current setting of the ratio is mitigating maturity mismatch risk.

The liquidity ratio adopted at the national level is stricter than that adopted at the European level. For the purposes of setting regulatory requirements for the LCR in the Slovak banking sector, Slovakia exercised a national discretion which, pursuant to Article 412(4) of the CRR, allows requirements adopted at the European level to be replaced by national measures by the end 2017. As Table 4 shows, the coefficients applied at the EU level are in several cases less strict. In particular, the implementation of lower coefficients for calculating the amount of outflows with respect to retail deposits would lead to a substantial increase in the LCR. Furthermore, in the case of some categories subject to a preferential coefficient (e.g. transactional retail accounts), the qualitative requirements for classifying deposits in such category are being mitigated. For this reason, and given the above-mentioned significant impact of maturity mismatch risk, Slovakia has retained (and slightly adjusted) the national implementation of the LCR which was in force even before the adoption of the harmonised EU law in this area. As is clear from the above analysis, this step is essential for ensuring that the Slovak banking sector maintains a sufficient amount of liquid assets to cover what in comparison with other banking sectors is a higher share of short-term liabilities.

In addition to the impact of the LCR, the trend increase in the asset and liability maturity mismatch may also be partly mitigated by NBS recommendations on the maximum maturity of retail loans. What is particularly significant in this context is the recommendation not to provide unsecured (mainly consumer) loans with a maturity of more than nine years, which entered into force on 1 March 2015. This limit will fall to eight years in 2016. The main purpose

Chart 41 Change in the LCR in selected banks following the methodological change effective from 1 December 2014



Source: NBS.
Note: Changes are expressed in basis points and are calculated as the difference between the average of the values for the months September–November 2014 and the average of the values for January and February 2015.
The value of the LCR (right-hand scale) is the average value for the months January and February 2015.

13 NBS Decree No 18/2008 of 28 October 2008 on the liquidity of banks and branches of foreign banks and the liquidity risk management process of banks and branches of foreign banks, as amended.

Table 4 Impact of replacing the national LCR with the ratio applied at the European level

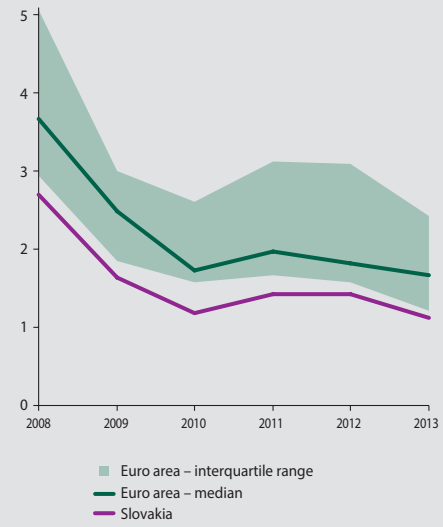
	Coefficient / haircut under the NBS Decree	Coefficient / haircut under the EC Regulation	Impact on the LCR
	(1)	(2)	(3)
Government bonds meeting conditions for liquid assets in euro	0 – 15%	0%	0.04
Inflow from repayment of retail loans	80%	100%	0.01
Inflow from repayment of corporate loans	80%	50%	-0.13
Retail deposits covered by the Deposit Protection Fund (DPF) – transactional accounts and deposits with an established relationship	15%	5%	0.16
Retail deposits covered by the DPF with an agreed maturity of more than 30 days and a high penalty for early withdrawal	5%	0%	0.03
Other retail deposits	25%	10%	0.49
Corporate operational deposits	30%	25%	0.00
Liabilities to ARDAL	100%	40%	0.03

Source: NBS, EC.
Note: The table shows only the most significant categories in which coefficient are changing.
Column (1) shows the value of the coefficient or haircut currently in force under NBS Decree No 18/2008 of 28 October 2008 on the liquidity of banks and branches of foreign banks and the liquidity risk management process of banks and branches of foreign banks, as amended.
Column (2) shows the value of the coefficient or haircut as defined in Commission Delegated Regulation (EU) 2015/61 of 10 October 2014 to supplement Regulation (EU) No 575/2013 of the European Parliament and the Council with regard to liquidity coverage requirement for Credit Institutions.
Column (3) shows the estimated change in the LCR resulting from the change in the respective coefficient or haircut, based on data as at 28 February 2015 (including a schematic element). This estimate does not include the easing of qualitative conditions for the inclusion of deposits in certain preferential categories, which could further amplify the estimated upward impact on the LCR.

of this recommendation is to halt the gradual upward trend in consumer loan maturities; this is caused by borrowers refinancing loans in such a way that the principal is increased while the instalments are kept unchanged with an extended repayment period. Banks are also recommended not to provide more than 10% of their new housing loans at a maturity of more than 30 years.

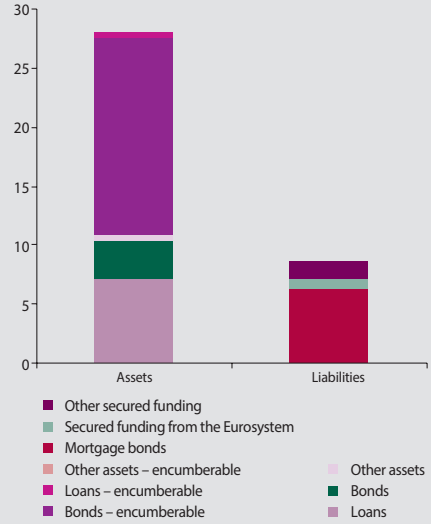
A third factor helping to mitigate maturity mismatch risk is the funding structure. The share of customer deposits in banks' borrowings is as much as 80% in Slovakia, which is higher than in any other euro area country and more than twice the euro area average. On the other hand, Slovak banks issue relatively few debt securities, mainly mortgage bonds. Debt securities issued by Slovak banks with a maturity of more than one year make up 6% of the sector's balance sheet total, while the average share across the euro area is twice as high. It should be noted, however, that although a crisis of confidence in the banking sector could leave Slovak banks more exposed than foreign banks to the risk of an outflow of deposits, the funding structure of Slovak banks has up to now proved to be an advantage. As Chart 42 shows, borrowing costs for banks have long been lower in Slovakia than in other euro area countries. This was the case irrespective of the state of the financial market – whether during calm times; during the crisis related to the impaired availability of funding and increased risk premia for banks (in 2008 and 2009); or during the euro area debt crisis arising from a general increase in risk aversion, particularly to securities issued by euro area periphery countries (in 2011 and 2012). Another advantage of this funding structure is the value of the loan-to-deposit ratio, which despite its prolonged moderately rising trend, remains below 100%, in contrast with the average ratio in other banking sectors in western Europe. The assumption of relatively high stability in retail deposits is also included in the methodology for calculating the net stable funding ratio (NSFR), which treats fully 95% of these funds as stable.

Chart 42 External funding costs of the banking sector in Slovakia and in the euro area as a whole (%)



Source: ECB.
Note: The left-hand scale shows the ratio of interest costs to the total amount of banking sector's external funding.

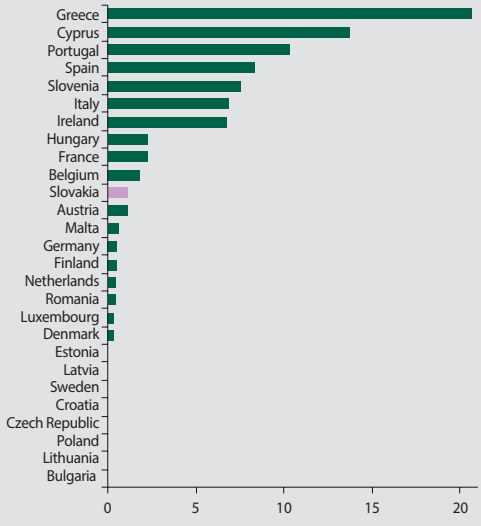
Chart 44 Banks' encumbered and encumberable assets and secured sources of funding (per cent of total assets)



Source: NBS.

The final, fourth key factor is the relatively substantial independence of the Slovak banking sector from external sources of liquidity. Unlike a number of banking sectors in the euro area, the sector in Slovakia is not dependent on funds from the Eurosystem (Chart 43). In the cases when certain banks have participated in refinancing operations, it was usually not because of their liquidity needs. It is also thanks to this independence that the banking sector has surplus collateral which, in the event of adverse development, could be used to obtain liquidity from the central bank.

Chart 43 Share of central bank funds in the total amount of liabilities (%)

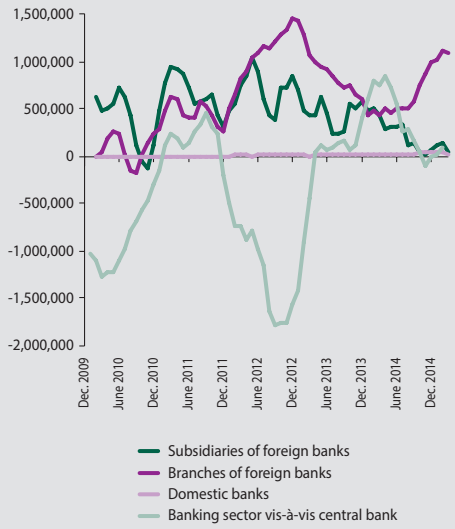


Source: ECB.
Note: The data are the average values for the period 2013– 2014.

Whereas the share of encumbered assets (i.e. serving as collateral) in the banking sector's balance sheet total is 10.8%, the share of encumberable assets eligible as collateral for Eurosystem refinancing operations stands at 17.2%. In most banks the share of eligible unencumbered assets exceeds the share of encumbered assets.

It is a similar situation with the intragroup position of most banks. In contrast with the banking sectors in several CEE countries, foreign banks' subsidiaries and branches in Slovakia tend to be net providers of liquidity, rather than recipients, vis-à-vis their parent groups. It should also be noted, however, that the net creditor position of subsidiaries has been falling towards zero in the recent period. The trend shift from a creditor or neutral intragroup position to a debtor position has continued in most large banks. On the other hand, the liquidity of the Slovak financial

Chart 45 Net intragroup position of different bank types and net position of banking sector vis-à-vis the Eurosystem (EUR thousands)



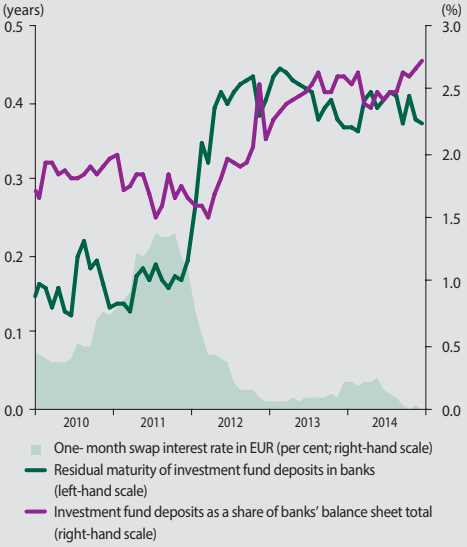
Source: NBS.
Note: The net position is calculated as the three-month moving average of the difference between assets and liabilities.

sector is supported, except during crisis periods, by a functioning interbank market. Although the amount of funds in this market has been gradually falling for an extended period, rates on interbank claims are not higher than rates in interbank markets abroad.

The extent to which funds, especially retail deposits, are stable also depends on the intensity of competition between banks, particularly in respect of their interest rate policy. Where a bank (often a smaller bank or foreign bank branch) increases its retail deposit rates, it may motivate depositors to shift deposits from other banks. Evidence for this effect is detailed in the econometric analysis in Box 4. Thus the increase in competition between banks contributes to greater volatility in banks' primary funds, and therefore also to increased volatility in their market shares. This fact confirms the conclusion that the factor applied to retail deposits in the calculation of liquidity coverage requirements, pursuant to EU law, may be too low for the purpose of the Slovak banking sector.

In assessing the significance of maturity mismatch risk, however, it is also necessary to take account of other features of the banking sector. The first such feature is the position of the banking sector in the economy. In comparison with counterparts in other countries, the Slovak banking sector in ratio to the size of the national economy is among the smaller ones. So although household indebtedness is lower in Slovakia than in western European countries, the share of retail loans in the balance sheet of Slovak banks is higher; it is these loans that are the main cause of the greater maturity mismatch between assets and liabilities. A second factor is the size of what is known as the shadow banking sector, which includes investment and hedge funds, securitisation, and investment firms. This is because advanced economies are now seeing a gradual upward trend in proportion of the maturity mismatch located outside the regulated banking sector. In its Global Financial Stability Report of October 2014, the IMF identified this risk as one of the most significant risks currently facing the global financial system. It is a risk that concerns mainly investment funds, since, on the liability side, they allow investors to make withdrawals on request, while, on the asset side, there is an increasing share of illiquid assets and a risk of increased costs in the event of their sale, particularly under crisis conditions. Across the EU, the shadow banking sector is, approximately, more than 60% of the size of the regulated bank-

Chart 46 Investment funds' deposits at banks



Source: NBS, Bloomberg.
Note: The chart shows only deposits from domestic investment funds in domestic banks.

ing sector, while in the United States the figure is as high as 180%. In the Slovak financial system, however, the size of the collective investment sector is only 8% that of the banking sector, and therefore, in contrast to the situation in other countries, the majority of the asset and liability maturity mismatch is located in the banking sector. It should be noted, however, that in the Slovak financial market, too, the share of the maturity mismatch accounted for by the collective investment sector shows an increasing trend, albeit far more moderate than in other countries. As Chart 46 shows, the sharp fall in short-term interest rates in the second half of 2011 and in 2012 was followed by a marked rise in the average residual maturity of investment funds' deposits at banks, the volume of which also increased as a share of the banking sector's balance sheet total. At the same time, the period 2012 to 2014 saw an increase in the average residual maturity of the securities portfolio of the collective investment sector, from 2.0 years to 2.7 years.

Box 4

ECONOMETRIC ANALYSIS OF THE SIGNIFICANCE OF INTEREST RATE POLICY IN CHANGES IN THE AMOUNT OF RETAIL DEPOSITS

In order to examine the significance of the interest rate policy of individual banks in the month-on-month changes in the amount of retail deposits, a simple econometric analysis was carried out. This analysis was based on a linear regression of the change in the stock of retail deposits (D_t) on a relative value of the current interest rate in proportion to actual average interest rate in the retail deposit market (R_t), and the size of the bank expressed as its share of the retail deposit market (S_t). The regression was made on the basis of panel data, after taking into account fixed and individual effects and three autoregressive terms, for the period from January 2009 to February 2015. The panel regression included data for individual banks and foreign bank branches that were active in the retail deposit market (excluding the home savings segment) during this period. The estimated equation is specified as follows:

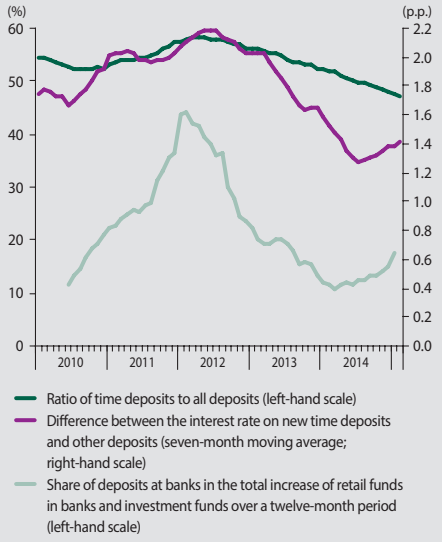
$$D^i_t = C + C^i + C_t + \beta_1 R^i_t + \beta_2 S^i_t + \beta_3 D^i_{t-1} + \beta_4 D^i_{t-2} + \beta_5 D^i_{t-3}$$

All factors in this equation are significant (p-value < 0.01), while the adjusted R^2 has a value of 37%. The most significant factor for the purposes of this analysis is β_1, which may be interpreted as the estimated increase in the amount of retail deposits if the bank's interest rate exceeds the average market rate by 1 p.p. On the basis of the econometric results, it may be estimated that an increase in the bank's interest rate by 1 p.p. above the market average will increase the bank's stock of retail deposits by between approximately €4 million and €8 million (this depends on the size of the bank, with the results indicating that small banks are more flexible). The impact of such a rise on the bank's market share is to increase it by around 0.01 – 0.02 p.p.

CURRENT DEVELOPMENTS IN LIQUIDITY RISK ARE SIGNIFICANTLY AFFECTED BY THE ENVIRONMENT OF LOW INTEREST RATES AND THE PRESENT MONETARY POLICY STANCE

The prolonged low level of both short-term and long-term interest rates is contributing to a decline in the stability of banks' funding sources. Retail deposit rates fell gradually from 2012, with the most marked drop observed in time deposit rates. As Chart 47 shows, the result of this trend was an increased preference of customers to move their funds out of time deposits to current accounts, but also to investment funds. In 2014 the average amount of net sales of investment funds was even around the level of growth in bank deposits, although demand for bank deposits picked up moderately again in the second half of the year owing to the rising gap between interest rates on time deposits and rates on other bank accounts. Nevertheless,

Chart 47 Impact of interest rate movements on the composition of retail deposits



Source: NBS.

only a small part of the outflow from banks to investment funds was returned to the banking sector (Chart 46 shows that investment funds' deposits at banks increased marginally in the recent period). Furthermore, the environment of low interest rates is contributing to an increase in customer demand for loans, including housing loans, which have a longer maturity. In this way, low interest rates are further amplifying the asset and liability maturity mismatch in the banking sector. On the other hand, a positive effect of the extended period of low deposit rates is that customers have a greater incentive to use some of their surplus funds for the prepayment of loans, which has a moderating effect on the maturity mismatch.

The current monetary policy stance is affecting the extent and quality of liquidity risk coverage in banks. The expanded asset purchase programme that the ECB launched in March 2015 (described in Box 1) is focused mainly on the purchase of bonds issued by euro area sovereigns. The portfolio of government bonds constitute the most significant part of the liquidity buffer that banks maintain against maturity mismatch risk. As noted in Box 1, the current monetary policy stance may therefore affect the ability of banks to cover this risk, primarily through the overestimation of government bond prices (as well as other asset prices), through a negative impact on the infrastructure of the government bond market, and though a potential decline in the amount of liquid assets in the event that banks were to sell off government bonds from their portfolios and replace them with other less liquid assets. In all three cases there is also the increasing risk of the impact resulting from the ECB's eventual discontinuance of the asset purchase programme.

Summary

The business model followed by the Slovak banking sector can be described as largely traditional, since it is based on increasing assets via lending to the domestic economy. This lending is fully covered by primary funds in the form of customer deposits. Such a business model results, however, in a high share of short-term liabilities (in comparison with most other EU countries) and a related increase in the asset and liability maturity mismatch, which has been rising over an extended period. In normal times, this is a standard risk for banks, but at times of crisis it could jeopardise their liquidity.

The Slovak banking sector covers this risk with liquid assets, and because their share of the sector's balance sheet total is high by international standards, it reduces the risk to a level similar to that observed in other countries. In order to maintain this situation, however, it is necessary for banks to meet sufficiently prudential liquidity coverage requirements. The key point in this regard is that the Slovak legislation on this matter, in force since 2008, is stricter than the new EU legislation. The EU law brings easier conditions, particularly for the coverage of risk related to retail deposits, which are the most significant source of funding in the Slovak banking sector. This risk is further accentuated by the environment of low interest rates and by certain measures taken by central banks. It is therefore important that the regulatory requirements applied to the Slovak banking sector in this area are not eased to a significant degree.

Given that asset and liability maturity mismatch has been gradually increasing over a long period, support should also be given to other types of measures aimed at mitigat-

ing this trend. One such measure could be, for example, strengthening of the infrastructure through which firms obtain financing from the non-bank financial market – such a measure could be supported by, among other things, the establishment of the proposed Capital Markets Union. Another way could involve measures to expand the options for long-term funding for banks, through, for example, covered bonds.

Abbreviations

BRRD	Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council
CEE	central and eastern European (countries)
CET1	Common Equity Tier 1
CMN	cenová mapa nehnuteľností (Real Estate Price Map)
CRD IV	Directive 2013/36/EU of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC a 2006/49/EC
CRR	Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012
DTI	Debt-to-income
EBA	European Banking Authority
ECB	European Central Bank
EC	European Commission
ESA	European System of National and Regional Accounts
ETF	exchange-traded funds (funds trade which are traded on a stock market and usually tied to a selected financial market index)
EU	European Union
Fed	Federal Reserve System
GDP	gross domestic product
ESI	economic sentiment indicator
IPS	Institutional Protection Scheme
JST	Joint Supervisory Team
LCR	liquidity coverage ratio
LGD	Loss Given Default
LTV	loan-to-value ratio
MiFIR	Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012
MiFID2	Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU
IMF	International Monetary Fund
MREL	minimum requirement for own funds and eligible liabilities
NBS	Národná banka Slovenska
NSFR	net stable funding ratio
MTPL	motor third-party liability (insurance)
PFMC	pension funds management company
ROA	return on assets
SME	small and medium-sized enterprise
SPMC	supplementary pension management company
SR	Slovak Republic
SRF	Single Resolution Fund
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism
SO SR	Statistical Office of the Slovak Republic
ÚPSVaR	Ústredie práce, sociálnych vecí a rodiny (Central Office of Labour, Social Affairs and Family)

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