



NÁRODNÁ BANKA SLOVENSKA
EUROSYSTEM



FINANCIAL STABILITY REPORT MAY 2016

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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 af-

ected 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), which primarily reports on 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 its Analysis of the Slovak Financial Sector.



OVERVIEW

FAVOURABLE DEVELOPMENTS IN THE DOMESTIC ECONOMY SUPPORTED FINANCIAL SECTOR STABILITY

Financial sector stability in Slovakia in 2015 was supported by the gradual acceleration of domestic economic growth, amid increasing growth in investment, real wages and corporate sales, as well as falling unemployment. Strong domestic demand was the main driver of that growth, supported by the absorption of EU funds and increasing household consumption. Despite a drop in public investment, the favourable trend is expected to continue in 2016.

CERTAIN RISKS IN THE EXTERNAL ENVIRONMENT REMAINED PRESENT AND IN SOME CASES INCREASED

In evaluating the situation in the external environment, it is important to note the mounting risks that may affect economic growth or financial market developments. Macroeconomic conditions deteriorated towards the year-end, in both advanced and emerging market economies (EMEs). Although the euro area economy is stable at present, its nominal growth rate is low. Nor is it expected to pick up significantly any time soon, given that the strong stimuli to household consumption and exports from falling oil prices and depreciation of the euro's effective exchange rate will be gradually fading. Euro area growth is currently supported mainly by the ECB's monetary stimuli, which were further augmented in March 2016. Meanwhile, the environment of extremely low interest rates is contributing to price bubble risk and is compressing banks' interest and profit margins. In some countries there is the additional factor of high non-performing loan (NPL) ratios in banks' balance sheets. EU financial stability is facing not only economic risks, however, but also increasing political risks. At the same time, investor sentiment towards EMEs in general and China in particular deteriorated sharply in the second half of 2015, as these countries faced the consequences of rampant corporate debt, unsustainable economic models, an oil industry slump and currency devaluations.

In both the middle of 2015 and beginning of 2016 financial markets experienced significant

asset price turbulence brought on mainly by the spillover effect of financial market turmoil in China and the unconvincing responses of the Chinese authorities to that situation. It therefore appears that the foundations for rebuilding confidence in financial markets are somewhat fragile at the moment, and that implies an increasing risk of further turbulence in the period ahead.

RETAIL LENDING DEVELOPMENTS REMAIN A KEY TREND IN THE BANKING SECTOR AND ARE HAVING A MARKED IMPACT ON THE PROPERTY MARKET

Although credit growth slowed slightly in 2015, the overall amount of new loans remained close to historical highs. Housing loan growth was the principal component of the overall increase, and for five years now its rate in Slovakia has been by far the highest in the EU. The credit growth in 2015 was boosted by a marked drop in interest rates, which, along with favourable trends in the macroeconomy and property market, provided a stimulus on both the demand and supply sides. Although credit standards were the target of NBS recommendations aimed at preventing any escalation in risk arising from imprudent lending practices, the figures indicate an elevated concentration of loans that have an LTV ratio at the 90% level. The credit quality of the retail loan portfolio continued to improve in 2015.

The strong growth in retail lending is at the same time associated with one of the risks to stability in the Slovak financial sector, namely the increase in household indebtedness. Household debt in Slovakia is among the highest in central and eastern Europe, and its growth rate is the highest in the region. Furthermore, household debt in Slovakia is relatively concentrated by international standards, mainly in certain age groups. In the breakdown of household debt by income group, the heaviest concentration of debt is among median-income households, while in other countries it is more concentrated among the highest-income households. The growth in housing loans is also linked to trends in the property market. Prices in the market



for existing flats increased in 2015, and their growth rate (in nominal terms) reached a post-2008 peak at the beginning of 2016, exceeding not only the European average but also inflation in other prices and wages in the economy. This trend was broadly based across regions and flat sizes. It was related to both properties offered on the market and those actually sold. As regards the structure of the property market, the number of flats up for sale fell during the period under review.

Going forward, the housing loan market may be affected significantly by a legislative amendment, in force from 21 March 2016, which markedly limits the maximum fee that may be charged for loan prepayments made outside the interest-rate resetting process. The result could be a sharp rise in competition within the housing loan market and in the rate of refinancings, thus adding further downward pressure on banks' interest margins. Furthermore, this change may lead to the emergence of certain risks to financial stability in the banking sector. In particular, it could incentivise banks to provide housing loans with the shortest possible initial rate fixation periods, which in turn would heighten the potential adverse impact on borrowers of any future increase in interest rates.

RETAIL LOAN GROWTH IN 2015 WAS JOINED BY GROWTH IN LOANS TO NON-FINANCIAL CORPORATIONS

In addition to growth in retail loans, 2015 saw a pick-up in lending to non-financial corporations, supported by increased demand for loans from firms (due to further interest rate reductions) and, to a lesser extent, by a moderate easing of bank lending conditions. The upward trend in corporate credit growth slowed slightly, however, in the first months of 2016. The main cause of that slowdown was loan prepayments whether in the form of full repayments which reduce the debt burden or loan refinancing with funds from other financial sectors.

THE MACROPRUDENTIAL POLICY RESPONSE TO CREDIT GROWTH

The countercyclical capital buffer (CCB) rate remains at zero per cent, under the Bank Board's rate-setting decision of 26 April 2016. Given the backdrop of relatively strong retail loan growth and consequent acceleration in household

debt, as well as increasing lending to the corporate sector, it was stated alongside the decision that the Bank Board will consider raising the CCB rate at its next rate-setting meeting in July 2016.

Meanwhile, an NBS decree is being drafted to implement into law the principles contained in NBS Recommendation No 1/2014. This decree will include the recalibration of certain parameters and create a legal framework for supervising whether the provision of housing loans is compliant with prudential rules.

THE RISK ASSOCIATED WITH THE PERSISTING LOW INTEREST RATE ENVIRONMENT IS ONE OF THE PRINCIPAL RISKS TO THE FINANCIAL SECTOR AS A WHOLE

Banks and pension funds are expected to be the institutions most severely affected by enduringly low interest rates. The impact of low rates on the banking sector is being channelled mainly through the housing loan market. The interest income on these loans was in the past the main source of banks' profits, but the marked narrowing of interest margins since 2015 has reduced this income and that trend is set to become even more pronounced. The interest income from consumer loans will therefore gain in significance, although the interest rates on these loans are also falling. Overall, therefore, if current trends are maintained, the banking sector's profits may be expected to fall over the next several years.

Low interest rates have already had a noticeable impact on pension funds. Supplementary pension funds (managed by SPMCs and constituting the third pillar of the pension system) have seen a sharp drop in their interest income from bonds and bank deposits – the most stable contributors to their returns. To compensate for the impact of this trend, the risk exposure of supplementary pension fund portfolios has been increased, in particular by extending the duration of the bond component and by increasing the equity component. Even more pronounced developments have been observed in pension funds managed by PFMCs (constituting the second pillar of the pension system). The effect of falling interest income on the portfolios was fully offset by increasing their duration, but at the cost of increasing their risk exposure (especially during 2015).



Hence in the recent period pension fund portfolio have become more sensitive to financial market developments. In the event of financial market turbulence, this sensitivity may be reflected in more pronounced volatility in funds' returns.

Analysis has shown that the impact of the low interest environment should be less marked on the insurance sector than on banks and pension funds. This is because a significant part of the insurance sector's profit comes from business lines outside traditional life insurance, the part most affected by low interest rates. Furthermore, insurers in Slovakia report a high solvency ratio, which means that the amount of assets in the balance sheet is higher than the amount of technical provisions. Thus returns guaranteed to policyholders may be ensured even with lower income from assets covering the technical provisions. Outlooks indicate that this situation should continue over the next few years, providing there is no significant change in current trends. The most significant current and expected repercussions of the low interest rate environment are summarised in Table 2.

BANKS' CAPITAL RATIOS REMAIN ADEQUATE, BUT THEIR PROFIT RETENTION WILL PROBABLY HAVE TO BE INCREASED IN COMING YEARS

The increase in the aggregate capital ratio of the banking sector has moderated in recent years, since it is sufficiently high and therefore banks can allocate a greater share of their profits to shareholders (in the form of dividends). At the same time, however, owing to the gradual increase in capital requirements in coming years and the related phasing-in of macroprudential policy instruments, the banking sector will be forced to partly reduce profit redistribution in order to maintain current lending growth. Another

reason why banks will have to retain a greater share of their earnings is the above-mentioned downward impact of low interests on banks' profits, which will mean less scope for capital increases.

ALONG WITH FINANCIAL RISKS, REGULATORY RISKS ARE ALSO DEVELOPING

Recent changes in the regulatory regime may also have an effect on financial stability. This concerns different types of risk that may affect the financial sector in various ways. The first risk is that of inappropriate interventions which affect the pricing of financial products and may exacerbate the negative effects of low interests on financial institutions. The principal examples of such interventions are regulations of fees, including the recently implemented change in the regulation of prepayment fees. A second risk is a lack of sufficient regard to the particularities, and differences between, the banking sectors of different countries. The key issue here is, in the context of the banking union, the harmonisation of bank regulation adopted in March 2016 and coming into effect from 1 October 2016, as it has the potential to substantially increase liquidity risk and the risk of an increase in banks' maturity mismatches between assets and liabilities as well as their reliance on support from parent groups. A third risk is heightened uncertainty about the potential impact of adopted measures on the Slovak financial sector. This applies mainly to the minimum requirement for own funds and eligible liabilities (MREL) – part of the EU's bank resolution framework – as a decision on the level of the MREL is still awaited. Slovak banks could also be significantly affected by the tightening of regulatory rules on government bonds, which constitute a major proportion of the sector's balance sheet.



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 regulatory measures and recommendations
Risks arising from the external environment	Macroeconomic developments in the domestic economy and the euro area	Increase in credit risk costs in the event of adverse macroeconomic developments	Slowing growth and risks of further developments in emerging market economies, especially China	Relatively high solvency in the banking and insurance sectors Low oil prices The downward impact of low interest rates on loan repayments Falling credit risk costs in both the retail and NFC sector during 2015 and in early 2016	The capital conservation buffer was implemented in full from 1 October 2014 For systemically important banks, additional capital requirements will be phased in between 2016 and 2018 A non-zero countercyclical capital buffer rate may be applied in response to growth in both retail and corporate loans
		Higher sensitivity of banks to a property market downturn in the event of a worsening economic situation	Rising property prices in all regions Accelerating sales in both the primary market and the market for existing flats, and an increasing share of unfinished flats in total sales Certain specific structural aspects of the Slovak property market – extremely high property-price volatility, low liquidity, the banking sector's relatively high concentration in this market, and the relatively high LTV ratios for new loans (increasing mainly for loans provided at the 90% level)	Drop in new housing loans with an LTV ratio of more than 90% following implementation of the NBS recommendation	Recommendation A (under NBS Recommendation No 1/2014 of 7 October 2014), effective from 1 November 2014 and due to be recalibrated and enacted in law in 2016
	Low interest rates and impact of monetary policy accommodation	Negative impact on the business model of banks and insurers; increase in risk exposure of pension fund portfolios; decrease in interest rates (including long-term rates) with a gradual downward impact on profits over the long-term horizon	Banks: gradually diminishing potential for further household lending growth (owing to rapidly rising indebtedness) and falling interest margins; in the case of retail housing loans, the potential further amplification of this trend due to a significant reduction in the maximum reimbursement of costs for early repayment Insurers: further widening of the gap between returns on assets covering technical provisions and the technical interest rate; one of the EU's highest levels of guaranteed returns under life insurance contracts	Impact on insurers moderated significantly by the fact that asset holdings far exceed technical provisions, as well as by the spread of income sources across insurance lines and products Boost to banks' profits from the gradual pick-up in lending to the NFC sector, and expectations that consumer loans will make an increasing contribution to profits	The Solvency II regime for the insurance sector has been in force since 1 January 2016 and should lead to a significant increase in the risk capital requirement, but not to a marked drop in the solvency margin. Insurers whose solvency ratio turns out to be low should, however, reconsider dividend payments and should strengthen their solvency
		Formation of price bubbles in riskier assets; increasing potential impact on financial markets in the event that central banks unwind their operations	Combination of declines in short- and long-term interest rates and in risk premia increasing risk of a sudden and simultaneous fall in prices of riskier assets (manifested in 2015 and early 2016 in financial market turbulence) Risk further exacerbated by falling liquidity in financial markets	Relatively low exposure of domestic financial institutions to emerging market economies where impact could be most pronounced; nevertheless, increases observed in portfolio durations and in the share of riskier assets in investment funds and pension funds	



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 regulatory measures and recommendations
Risks arising from the external environment	Regulatory environment	Potential easing of regulatory rules for bank subsidiaries of foreign banks in the area of liquidity and large exposures under the banking union	Potential of the abolition of intra-group limits for banking groups and the centralisation of liquidity management in such groups to exacerbate the adverse effects of any sudden deterioration in the group's financial position or sudden liquidity shortfall		
		Risk arising from the implementation of the minimum requirement for own funds and eligible liabilities (MREL)	Continuing uncertainty about how the MREL is to be determined and concerns about insufficient attuning to the specificities of banking sectors funded primarily by customer deposits	Sufficiency of CET1 capital	
		Uncertainty about the impact of a draft amendment to the regulatory rules on government bond holdings of banks and insurers	High share of Slovak government bonds in the asset portfolios of banks and insurers		
Risks arising from the domestic financial market	Household indebtedness	The household sector potentially becoming weakened by its increasing indebtedness, consequently heightening the banking sector's sensitivity to a potential deterioration in the macroeconomic situation	Increasing concentration of debt among certain types of household, mainly owing to the trend of households taking on additional debt through refinancing	The implementation of NBS recommendations has led to tightening of banks' credit standards, including for refinancing that involves increasing the principal	Recommendation F (under NBS Recommendation No 1/2014 of 7 October 2014), effective from 1 March 2015 and due to be enacted in law in 2016
			Household debt-to-income ratio rising faster in Slovakia than in any other EU country	Labour market recovery, real wage growth and increasing household consumption	Recommendations B and E (under NBS Recommendation No 1/2014 of 7 October 2014), effective from 1 March 2015 and due to be recalibrated and enacted in law in 2016 A non-zero countercyclical capital buffer rate may be applied in response to growth in both retail and corporate loans
			Low interest rates giving rise to overly optimistic assessments of households' repayment ability	Fixation of interest rates for longer periods to mitigate the potential adverse impact of future interest rate hikes on lenders	Recommendation C (under NBS Recommendation No 1/2014 of 7 October 2014), effective from 1 March 2015 and due to be expanded and enacted in law in 2016
	Liquidity	Maturity mismatch between assets and liabilities	Widening mismatch between assets and liabilities and a slight decline in liquidity buffers Potential of ongoing harmonisation of regulatory rules under the banking union to result in significant easing of regulatory rules concerning liquidity and in a marked drop in liquid assets in the domestic banking sector	Adherence to minimal regulatory limit for liquid assets; sound funding structure	Amendment of the liquid asset ratio from 1 December 2014. These requirements for the ratio of liquid assets to net outflows are stricter than the rules adopted at the European level The ratio also takes into account the potential spread of risk to investment funds A discussion is taking place about the comprehensive revision of national laws in the area of mortgage bonds, with the aim of making them more effective as a source of long-term funding for banks



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

	Area	Risk	Risk-amplifying factors	Risk-mitigating factors	NBS regulatory measures and recommendations
Risks arising from the domestic financial market	Concentration, financial market interlinkages, and contagion	Relatively high concentration in (part of) the portfolio, or higher intra-group exposure, in certain institutions or funds	Relatively high degree of economic links between domestic firms in the Slovak economy, with the largest firms possibly posing a risk to the solvency of certain banks		Banks should take a prudential approach to assessing economic links between customers and to the management of concentration risk in both their lending and deposit business. Given the systemic importance of the five largest banks, they are required to meet additional capital requirements being phased in from 2016 to 2018.
		Negative consequences of rationalisation measures or strategic decisions implemented in domestic financial institutions by parent undertakings, and contagion risk	Weakened financial position of several parent institutions of Slovak banks, owing partly to geopolitical risks Direct negative impact on banks in Slovakia owing to capital and credit linkages between parent institutions and subsidiaries Potential of ongoing harmonisation of regulatory rules under the banking union to markedly increase the dependence of domestic banks on their parent institutions	Efficiency ratios of domestic banks (especially large ones) still better than the EU average	In the case of certain medium-sized and smaller banks which report the highest risk of intra-group contagion and which were permitted a more moderate large exposure limit, this limit is being gradually tightened.
	Market practices of financial institutions	Potential strategic risk from increasing linkages between financial undertakings and financial intermediaries	Pressure on banks to ease credit standards beyond prudential limits		Recommendation G (under NBS Recommendation No 1/2014 of 7 October 2014), effective from 1 March 2015 and due to be enacted in law in 2016
		Risks arising from intensive price competition in the motor insurance market	Although there is still a risk that the level of premiums in motor insurance will not be sufficient to cover all legitimate expenses, the situation in this area stabilised in the first half of 2015		Price competition in motor insurance should not impinge on the due payment of legitimate insurance claims
		Potential imbalances resulting from asymmetric relationship between financial entities and their customers			NBS assumed responsibility for the supervision of non-bank lenders in 2015 and at the same time significantly increased its supervisory authority in the area of financial consumer protection

Source: NBS.

Table 2 Impact of risks related to the persisting environment of low interest rates

	Actual risk materialisation vis-à-vis portfolio parameters (returns and risk exposure)	Actual risk materialisation vis-à-vis profitability	Significance of overall impact in long term	Factors that may contribute the most to exacerbating the risk impact
Banks	<p>Decline in returns on corporate loans, retail loans and bonds, with returns on retail loans and bonds expected to drop quite significantly further.</p>	<p>Interest income from retail loans – the main component of profitability – has been falling since 2015. This trend will become even more pronounced in coming years. Furthermore, costs related to financing and credit risk are at very low levels and their downward trend is expected to end.</p>	<p>● Major impact</p> <p>Interest income from the household sector accounts for the largest part of banks' profits and its decline may significantly reduce profitability over the long-term horizon.</p>	<ol style="list-style-type: none"> 1. A more marked reduction in retail lending rates in response to lowering of the maximum loan prepayment fee. 2. Regulatory risk – regulations concerning fees; – regulations concerning banks' levy and contribution costs
Insurers	<p>So far only a moderate drop in returns on the bond portfolio. Significant decline in returns expected over the long term, but that will be mitigated by a reduction in the returns guaranteed to policyholders.</p>	<p>Despite falling returns on their assets, insurers still have sufficient revenue to cover increased costs of covering returns guaranteed to policyholders. Therefore low interest rates have not as yet had a significant impact on insurers' profits.</p>	<p>● Medium impact</p> <p>Although returns on assets are expected to fall quite sharply in the medium term, their decline has so far been mitigated, mainly by diversification of revenue sources across insurance lines and by the fact that insurers' high solvency levels are allowing them to have strong asset coverage of technical provisions.</p>	<ol style="list-style-type: none"> 1. Lowering of the solvency ratio. 2. Any significant fall in the profitability of other insurance lines. 3. Low guaranteed returns may dampen demand for saving products, and therefore the technical interest rate will not fall significantly. 4. Fair valuation of liabilities under Stage II of IFRS 4 may, in a low interest rate environment, lead to an increase in the value of liabilities and lower profitability.
Pension funds	<p>Efforts to maintain asset return levels have significantly increased the risk exposure of fund portfolios.</p>	<p>Funds' increased sensitivity to financial market developments was already apparent in 2015 when their returns fell.</p>	<p>● Major impact</p> <p>The sensitivity of pension-point values to any financial market headwinds may be appreciably greater in coming years than in the past.</p>	

Source: NBS.

Notes: In the case of banks and insurers, the stated impact is on institutions, while in the case of pension funds the impact is mainly on the people enrolled in the pension schemes.

The blue section of the rectangular boxes denote that part of the estimated risk impact that has already materialised and is attributable to the low interest rate environment, while the other part represents the risk that is expected in the future. This represents qualitative information based on expert assessments of the results of in-depth studies.



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CHAPTER 1

EXTERNAL CONDITIONS FOR FINANCIAL STABILITY



1 EXTERNAL CONDITIONS RELEVANT FOR FINANCIAL STABILITY

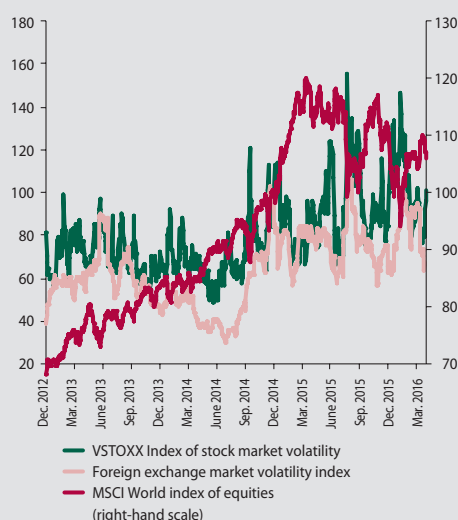
INCREASING RISKS TO FINANCIAL STABILITY AMID DECLINING GLOBAL ECONOMIC PERFORMANCE AND GREATER VOLATILITY IN FINANCIAL MARKETS

The financial stability implications of developments in the external environment during the period under review were predominantly negative. Global economic growth slowed in late 2015 and it is not expected to recover significantly in the foreseeable future. Macroeconomic conditions deteriorated simultaneously in both advanced and emerging market economies. No less importantly, the risks associated with these trends also increased, thus increasing the likelihood of shocks that could result in even more severe economic cooling and threats to the financial system.

The beginning of 2016 saw a renewed bout of severe turbulence in financial markets. It started in the same way as the previous turmoil in the summer of 2015, with a slump in Chinese stock markets and fears of a Chinese currency devaluation. The spillover effects from this development were amplified by the gener-

ally more pronounced sensitivity to economic, financial and political risks across the world and by diminishing confidence in the efficacy of authorities' policies. Falling prices were observed in a majority of riskier assets across the world. Financial investors became more risk averse, while agents in the real economy responded to these events with gloomier assessments in business sentiment surveys. The oil price, too, slumped to multi-year lows. The uncertainty in financial markets began gradually to abate from March and many asset prices rebounded from their early-year slump. The turnaround may have been catalysed by firming expectations of accommodative monetary policy based on recent moves of central banks. After previous stress episodes, however, the foundations on which to rebuild confidence in financial markets are somewhat fragile, implying that even a minor initial impulse has the potential to trigger significant future shocks. A return of financial market turbulence would cause risk premia to rise, make funding more difficult and weaken confidence, thereby exacerbating the conditions that give rise to the negative spiral of falling economic growth, low inflation and increasing debt burdens.

Chart 1 Global equity index performance and selected volatility indicators



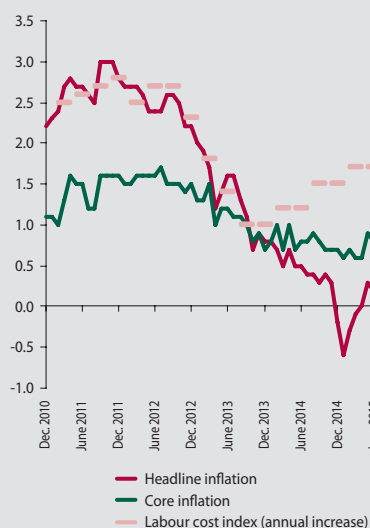
Source: Macrobond.

Note: Normalised: 31 December 2014 = 100.

THE STILL SUBDUED NOMINAL GROWTH IN THE EURO AREA IS A SOURCE OF SEVERAL RISKS TO FINANCIAL STABILITY

Economic growth in the euro area is more stable than it was in previous years, but its upward trend nevertheless stalled again in the second half of 2015. Annual GDP growth remained flat at just above 1.5% and the quarter-on-quarter rate of growth was even slowing down. Although the flash estimate suggests that growth accelerated again in the first quarter of 2016, the durability of this trajectory remains to be seen. The downturn in most monthly leading indicators in past months is a sign of less optimistic outlooks for economic activity. Further militating against a return to stronger economic growth in the short term is the fact that the upward impact on household consumption and exports of falling oil prices and effective exchange rate depreciation will be gradually fading.

Chart 2 Price development indicators for the euro area (percentages)



Source: Eurostat.

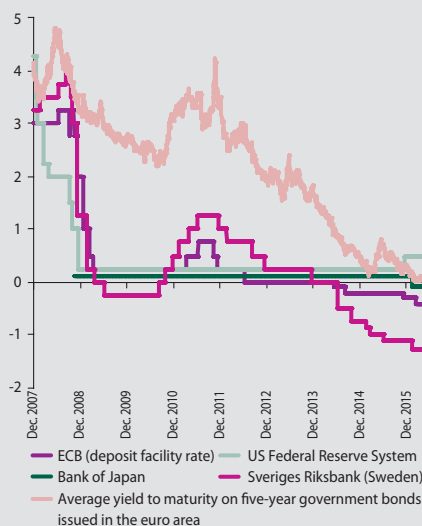
Consumer price inflation in the euro area continued to oscillate around zero in early 2016, and therefore included periods when it was slightly negative. Assuming there are no new shocks, the inflation rate is expected to edge up during 2016 owing to the base effect of energy prices. Given, however, that economic growth is low and that the unemployment rate is therefore falling only slowly, inflation pressures remain muted and core inflation has for a long time been below one per cent. Inflation expectations, too, are lower than they were in the pre-crisis period. The prolongation of disinflationary conditions would, however, be undesirable in regard to both the stimulation of demand and to the necessity of repairing public finances in certain euro area countries and corporate balance sheets.

In response to these trends, the European Central Bank (ECB) decided to augment its monetary stimulus with the aim of meeting its inflation target in the medium-term horizon. Firstly, in December 2015, the ECB reduced its deposit facility rate by ten basis points and extended its asset purchase programme (APP) by six months. Then in March 2016 came a further set of measures: the interest rates on main refinancing operations and on the deposit facility were lowered to 0.0% and -0.4% respectively;

monthly purchases under the APP were expanded by 25%, to €80 billion; and the list of assets eligible for purchase was expanded in relation to the new corporate sector purchase programme. In addition, a new series of four targeted longer-term refinancing operations (TLTRO II) was launched. These operations will allow banks to borrow from their central bank at a maturity of four years. The interest rate on TLTRO II operations will be lower for those banks that lend a specified minimum of the borrowed funds to the real economy, and can be as low as the deposit facility rate prevailing at the time of take-up (which at the time of publication was -0.4%). The effectiveness of these measures will, however, depend largely on the ability of the banking sector to provide sufficient loans and, just as importantly, on the demand for financing from the real economy.

Asset price bubbles remain a long-run risk in an environment of low interest rates. The fact that asset prices fell last year reduced the likelihood that they are now overvalued vis-à-vis economic fundamentals. Nevertheless, the current context of a low interest rate environment and other non-standard measures adopted by central banks is conducive to an increase in demand for riskier assets and the potential emergence of

Chart 3 Key monetary policy rates of selected central banks and European government bond yields (percentages)



Source: Macrobond.



price bubbles. Given developments in the recent period, it may be expected that interest rates in advanced economies will remain low for the foreseeable future.

As well as in the euro area, monetary policy was eased in other European countries and in Japan during the period under review. Key rates of several central banks are negative, and therefore a still expanding share of safe-haven sovereign debt is trading at negative yields to maturity. If their risk appetite continues to pick up as it has done in the past two months, investors will clearly, sooner or later, search for higher yields in spectrum of riskier assets.

In the current conditions of low interest rates, pressure may build on the profitability of those banks, especially in the euro area, that follow a traditional business model. Given that interest income from assets is falling and that banks are unable to reduce their funding costs while interest rates are around zero, interest margins are being compressed. The overall profits of banks are also being squeezed, particularly in those countries where the banking sector follows a more traditional business model with a strong dependence on interest income. The negative impact of low interest rates on the profitability of European banks is further indicated by the share prices of these institutions, as they underperform vis-à-vis headline equity indices. To offset the fall in interest margins, banks would need to rapidly increase the growth rate of their new lending. Although the amount of loans provided by euro area banks has been rising, in year-on-year terms, for some time, the growth rate is no more than moderate and, according to the Bank Lending Survey, demand for loans is not expected to pick up any time soon.

In the context of their weak profitability, European banks still face a serious difficulty in the large volume of non-performing exposures (NPEs) in their balance sheets, which is a legacy of the financial crisis. Although the NPE ratio is being reduced, the pace of its reduction is very slow. In the banking sectors of six euro area countries, the NPE ratio still exceeds 15%. A positive step in this regard is a recently announced initiative in Italy (where most attention on the NPE issue is focused) to clean up banks' balance sheets.

Alongside the purely economic risks to financial stability, are a series of political risks that may also dent it. The most acute of these risks include the migrant crisis and the possibility of the United Kingdom voting to leave the EU. The threat of terrorist acts in European countries is also becoming an increasingly serious risk. Another risk is the lack of agreement on the continuation of the Third Economic Adjustment Programme for Greece, which if not quickly resolved could see a return to situation seen in June 2015.

IN THE UNITED STATES, SLIGHTLY FALLING ECONOMIC GROWTH AND EXTERNAL FACTORS CONTRIBUTED TO THE SLOWING OF MONETARY POLICY NORMALISATION

The economic situation in the United States is relatively stronger by international standards and especially when compared with other advanced economies. The post-crisis recovery cycle is now at an advanced phase in the United States. The US central bank, the Federal Reserve System, therefore decided in December 2015 that the time was right to increase the target range for the key federal funds rate to 0.25% to 0.5%. At the same time, the Federal Reserve indicated that it expected to raise the rate four times in 2016, by 25 basis points each time. In the light, however, of financial market volatility in January and February and of a series of somewhat negative reports on the economic situation, the pace of monetary policy normalisation in the United States is expected to slow in 2016 and recent statements by the central bank indicate as much. Indeed it is widely expected in financial markets that the Federal Reserve will not raise rates at all in 2016. On the other hand, US labour market conditions continue to improve and the point of maximum employment is close to being reached. An upward trend is also observable in the inflation rate. Such contrary trends are complicating the Federal Reserve's decision-making and creating uncertainty not only in the domestic economy, but also, given the special position of the US dollar, in the external environment. In these circumstances, the course of US monetary policy is one of the principal risk factors for the global economy and financial stability.

INCREASING RISKS RELATING TO DEVELOPMENTS IN EMERGING MARKET ECONOMIES

Although economic growth across EMEs had already been gradually cooling for some time,

**sentiment towards EMEs deteriorated markedly only in the second half of 2015.**

A great deal of attention is currently being directed towards EMEs amid growing fears that they could be a source of shocks that spread to the rest of the world. Many EMEs have found themselves in a difficult situation owing mainly to the previous slump in prices of oil and other commodities. This not only reduced the nominal value of their exports, but, via secondary effects, had a downward impact on investment (particularly in natural resource extraction industries) and on domestic consumption. Several countries have seen an appreciable deterioration in the state of their public finances. A second major source of vulnerability in these economies is high indebtedness, especially in the corporate sector, which has built up over the past several years as a result of elevated inflows of cheap money from advanced economies. The average private sector debt-to-GDP ratio for EMEs has almost doubled since 2008 and now stands at around 130%. Furthermore, credit parameters are deteriorating, since the proportion of indebted firms with falling profitability is rising. Therefore amid worsening economic outlooks and falling investor confidence, EMEs have recently been experiencing capital flight. This in turn has led to less favourable financial conditions and, in some cases, to depreciation of domestic currencies. Currency devaluations are exacerbating the debt burdens of firms and governments that have frequently borrowed in foreign currencies. Moreover, several EMEs are facing these headwinds while afflicted by structural problems such as excess production capacity in certain industries or the general unsustainability of their economic models. And although EMEs appear to be more resilient now than during past crises, some of them are beginning to see less room to manoeuvre in terms of fiscal or monetary policy.

China epitomises many of the problems outlined above and, due to its size, is the source of the largest risks.

In addition to having a directly adverse impact on global demand due to the slowdown of its economy, China has in the past year or so been a source or recurring shocks to world financial markets. The heightened sensitivity to events in China reflects concerns about how the ongoing transformation of the country's

economy is turning out. The uncertainty has been further aggravated by the Chinese authorities due to the inscrutability of their currency policy decisions and their unconvincing response to panic in domestic stock markets. The weakening credit quality of corporate loan portfolios, as reflected in gradually increasing non-performing loan ratios, is also a major potential threat given firms' worsening debt burdens and financial situation. China's strong trade links with the rest of the world and its increasing integration into the global financial system are highly conducive to global spillover effects from any problems in the Chinese economy.

On a more positive note, the latest indicators suggest that the situation in EMEs is stabilising and may even be starting to improve. Exporters of mineral commodities in particular are expected to benefit, as prices of oil and other commodities have now rebounded from previous lows. Capital outflow from EMEs has continued, but to a lesser extent than at the time of greatest uncertainty. The pressure on their currencies has also eased, and EME exchange rates have strengthened against the dollar in recent months. One such currency has been the Chinese renminbi, and this favourable trend in conjunction with the Chinese central bank's improved communication of its intentions has largely allayed fears of a targeted devaluation and consequently contributed to the recent calming of financial markets.

A series of government stimulus measures, including increasing the flow of new loans, is expected to be reflected in a cyclical recovery in China in 2016. Improving dynamics have already been appearing in industrial production and in fixed capital investment (especially in infrastructure and real estate). As demand picks up in China, it should provide a stimulus to many other EMEs linked to the country. Thus there are grounds for modest optimism in the short term, but the picture is rather unclear in the long term. This is because the stimulus deployed in China is to a large extent hindering efforts to rebalance the economy; it may even be contributing to the widening of imbalances and to the storing up of potentially more serious problems for the future.



NÁRODNÁ BANKA SLOVENSKA
EUROSYSTEM

CHAPTER 2

DOMESTIC CONDITIONS FOR FINANCIAL STABILITY



2 DOMESTIC CONDITIONS RELEVANT FOR FINANCIAL STABILITY

STABLE ECONOMIC GROWTH IN SECOND HALF OF 2015

The Slovak economy grew at a stable rate of more than 3% in 2015. Economic growth therefore contributed to stability in Slovakia's financial sector. Year-on-year GDP growth accelerated during the course of the year, touching four per cent in the last quarter and so reaching its highest level for five years.

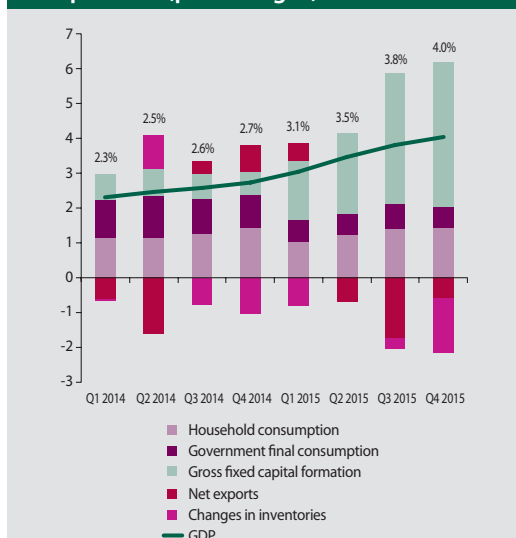
At the same time, changes were observed in the composition of GDP growth. The main driver of the growth was strengthening domestic demand, supported by elevated absorption of EU funds and increasing household consumption. Domestic demand therefore outweighed the negative contribution of foreign demand. The fastest-growing component of domestic demand was investment, which especially in the second half of the year increased its contribution to GDP growth. The acceleration in investment growth was based on the absorption of the remaining EU funds available under the EU's 2007-2013 programming period. Private investment had a positive impact on growth, too. The second half of the year saw an increase in household con-

sumption, which reflected growth in real wages and employment as well as relatively favourable economic sentiment. The government sector also contributed to economic growth in the second half of the year, albeit to a lesser extent than the other components of domestic demand. This increase in government final consumption was largely accounted for by goods and services expenditure related to EU funds absorption and by compensation per employee growth in the public sector.

The Slovak economy is expected to continue growing in 2016, although more moderately than in the previous year.

The slowdown in the growth rate is expected to be caused by stagnation in investment demand, stemming from a drop in EU-funded public expenditure. The fall in government investment should be mitigated to some extent by the initial stages in the establishment of a new car plant in Slovakia and by an increase in private investment. It is assumed that domestic consumption will increase, supported by the continuing upturn in the labour market and related rise in disposable income, as well as by administrative factors (including an increase in the minimum wage, a reduction in VAT on selected foodstuffs, and rebates on household gas bills). Government consumption expenditure is expected to continue making a moderately positive contribution to economic growth. It is also envisaged that foreign demand for Slovak goods and services will pick up slightly and that net exports will consequently have a positive impact on growth. As for the impact of the projected macroeconomic developments on financial stability in 2016, it is expected to be favourable.

Chart 4 Year-on-year GDP growth and its components (percentages)



Sources: SO SR and NBS.

LABOUR MARKET DEVELOPMENTS REMAIN POSITIVE

A corollary of strengthening economic growth has been improving trends in the labour market. The number of people in employment increased by two per cent in 2015, even exceeding pre-crisis growth rates. Rising employment was reflected in a drop in the registered unemployment rate, which by the year-end stood at 10.8% (with just under 300,000 people registered with



labour offices). At the same time, according to the Labour Force Survey (LFS), the number of Slovak citizens working abroad increased in 2015 by 10.5% (or 14,000 people). The average nominal wage in 2015 increased by 2.9%, which, at a time of negative inflation, translated into real average wage growth in the economy. Thus the improving labour market situation supported an increase in private consumption as well as in the savings ratio. Real labour productivity increased in 2015, although only by half as much as real wage growth. If labour productivity growth were to lag real wage growth for an extended period, the competitiveness of the Slovak economy could be adversely affected. Labour market conditions are expected to remain positive in 2016, although employment growth should moderate. The current labour market situation is favourable from a macroprudential perspective, especially in regard to its impact on credit risk. On the other hand, demand for loans is picking up and, as a result, debt level in the private sector is increasing.

PRICES FELL FOR A SECOND SUCCESSIVE YEAR

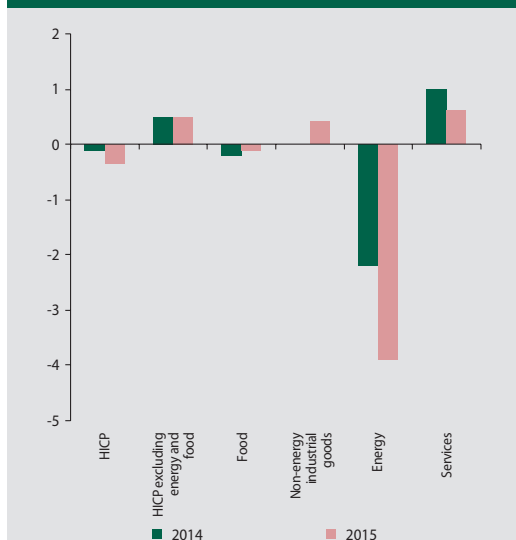
The price level, as measured by the Harmonised Index of Consumer Prices (HICP), fell further in 2015, by 0.3%, in comparison with its decrease in 2014 by -0.1%. The downward pressure on the price level came mainly from the energy and processed food components,

which fell by 3.9% and 0.1% respectively. The annual inflation rate excluding energy and food was positive, at 0.5%. Based on current outlooks, the headline inflation rate is expected to remain negative in 2016, but to a lesser extent than in the previous year. With inflation remaining subdued in both Slovakia and the euro area as a whole, change in low interest rate policy is not expected in 2016.

CORPORATE SALES PICKED UP IN THE SECOND HALF OF 2015

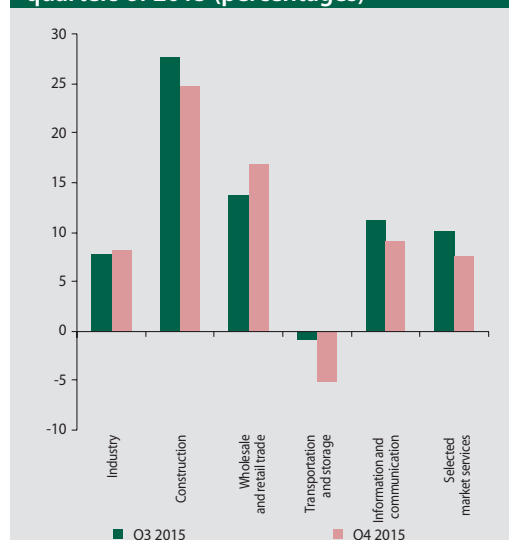
Sales of non-financial corporations (NFCs) increased in a majority of sectors in the second half of 2015, and their annual growth rate accelerated. The strongest, double-digit sales growth was observed in the construction and trade sectors, while somewhat lower sales growth was recorded in the IT and telecommunications sector and in industry. The sales growth in the IT and construction sectors was partly related to the absorption of EU funds. In the transportation and storage sector, sales fell in year-on-year terms. On the assumption that economic growth will be stable in the period ahead, NFC sales are expected to remain favourable in the near term. In those sectors, however, which benefited from last year's elevated absorption of EU funds, sales growth is expected to be more moderate.

Chart 5 HICP inflation and its components
(average annual percentage changes)



Sources: SO SR and NBS.

Chart 6 Year-on-year nominal sales growth
by economic sectors in the third and fourth
quarters of 2015 (percentages)



Sources: SO SR and NBS.



From the financial stability perspective, current and expected developments in the NFC sector are creating a favourable climate, especially because firms are better able to service loans and finance new investment. As a result, lending to the NFC sector is increasing.

Enduringly low interest rates are reducing pressure for public finance consolidation.

Slovakia's general government deficit in 2015 was 2.97% of GDP, which was 0.3 percentage point higher than the 2014 figure and overshoot the budget target of 2.49% of GDP. The worse than expected fiscal performance was largely attributable to non-tax income (dividends and income from emissions trading), to higher spending by central government, local authorities and the health sector, and to financial corrections to EU funds. General government debt

in 2015 fell by 1 percentage point year-on-year, to 52.9%, owing to one-off revenues (income from privatisation and from a 'reopening' of the pension system's second pillar). Due to the low interest rate environment, the cost of servicing the government debt decreased, but so did the pressure and incentive to consolidate public finances.

THE RISKS OF ECONOMIC DEVELOPMENTS TO FINANCIAL STABILITY

A downside risk to the current economic outlook is that foreign demand growth will be lower than expected.

A combination of slower growth in China, difficulties in other emerging market economies, and turbulence in China's financial market may lead to a deterioration in sentiment and decline in global demand, with negative repercussions on the Slovak economy.



NÁRODNÁ BANKA SLOVENSKA
EUROSYSTEM

CHAPTER 3

THE FINANCIAL SECTOR IN SLOVAKIA



3 THE FINANCIAL SECTOR IN SLOVAKIA

3.1 SOLVENCY AND FINANCIAL POSITION OF THE FINANCIAL SECTOR

FINANCIAL POSITION

The financial sector's profitability is influenced largely by the low interest rate environment, though this influence varies considerably according to the type of institution concerned.

Banks have suffered a sharp decline in their yield on assets over the past few years. As a result, the growing trend in interest income came to a halt in 2014 and then turned into decline in 2015. This effect, however, was offset by an increase in bank lending and a decrease in credit risk costs. Insurance undertakings also reported a gradual decrease in their yield on assets, which were moderated somewhat by the diversification of insurance activities across insurance lines and products.

THE RISING TREND IN THE BANKING SECTOR'S AGGREGATE PROFIT HAS COME TO A HALT UNDER THE INFLUENCE OF THE LOW INTEREST RATE ENVIRONMENT

The rate of growth in the banking sector's aggregate profit slowed down at the end of

2015 and during the first quarter of 2016.

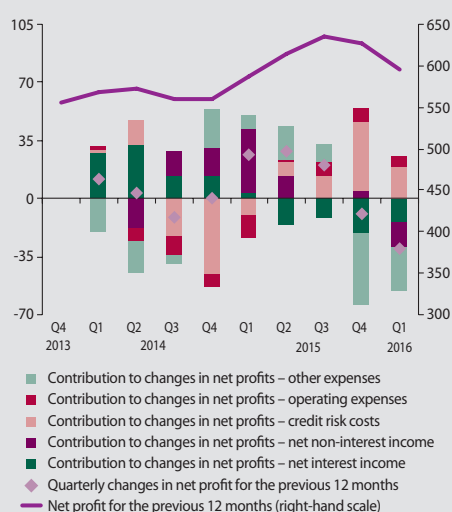
In December 2015, banks recorded a year-on-year rise of 11.7% in their annual profits on an individual basis (5.9% on a consolidated basis), which dropped to 1.6% in March 2016 (Chart 7). Despite this slowdown, the rate of return on the Slovak banking sector's total assets as at 30 September 2015 was the second highest in the euro area and the fifth highest in the European Union as a whole.

From a long-term perspective, the profitability of banks is likely to be affected negatively by the emerging downward trend in net interest income.

In the period from 2005 to 2014, net interest income was the main driver of profit growth in the banking sector. The volume of net interest income increased steadily in that period, except in 2012. Net interest income was also high in comparison with other countries. The ratio of net interest income to total assets recorded in the Slovak banking sector in September 2015 was the highest of any country in the euro area and the fourth highest of any country in the EU as a whole. As a result of the persisting low interest rate environment, which caused a relatively sharp fall in interest rates on retail loans and in returns on securities portfolios, the volume of interest income started to decrease gradually from the middle of 2015. Unlike in 2012, this decrease appears to mark a long-term trend, rather than a one-off decrease. The simulations of possible developments under the current trends in interest rates imply that the rate of decrease in 2016 and 2017 will be relatively slow, but it may accelerate in the following period. These simulations are described in detail in Chapter 3.4 'Risks in the financial sector'.

Returns have also started to decline in the retail sector, which was one of the main drivers of growth in bank profits in the previous period. As Chart 8 shows, the decrease in net interest margins in the household segment intensified in 2015 and at the beginning of 2016. While the fall in lending rates in 2013 and 2014 was largely offset by a fall in deposit rates for households, the accelerating decline in lending rates from 2015 was too great to be fully offset by deposit rate

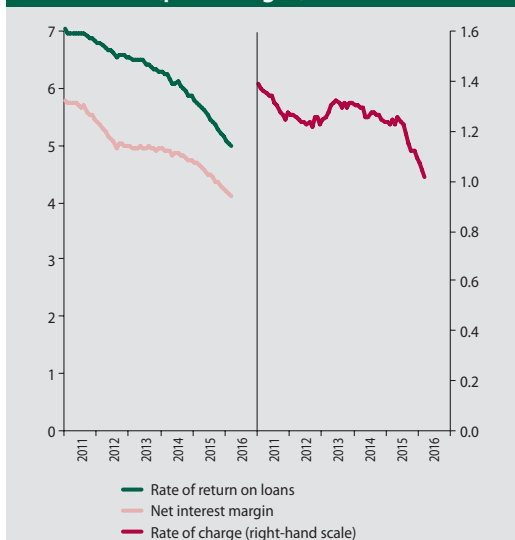
Chart 7 Banks' net profits and their changes by component (EUR millions)



Source: NBS.

Note: The Chart shows the cumulative net profits of banks in the individual quarters, for the previous four quarters, as well as the factors behind their quarter-on-quarter changes.

Chart 8 Rate of return on loans provided to households (percentages)



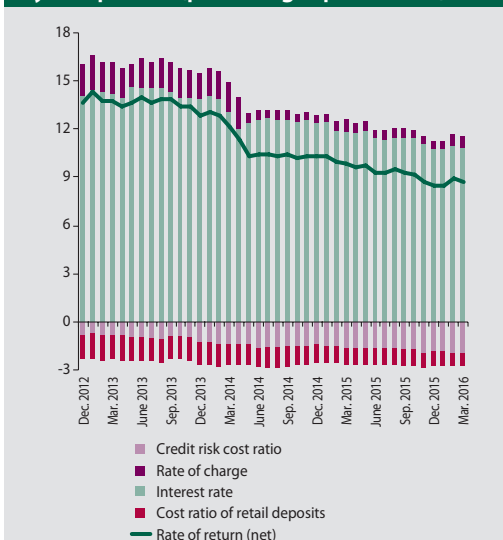
Source: NBS.

Notes: The rate of return on loans is calculated for each month as the ratio of cumulative interest income earned during the previous 12 months to the average volume of loans in this period.

Net interest margin is calculated as the difference between the rate of return on retail loans and the cost ratio of household deposits. The rate of charge is calculated as the ratio of cumulative net charge income earned in the household segment during the previous 12 months to the average sum of loans and deposits in this segment for this period.

The most recent data are for 31 March 2016.

Chart 9 Rate of return on new consumer loans by component (percentages per annum)



Source: NBS.

Notes: The interest rate applies to new consumer loans provided in the given month.

The rate of charge is calculated as the difference between the APRC and the interest rate on new loans.

The credit risk cost ratio is estimated as 80% of the gross increase in non-performing loans (i.e. not reduced by write-offs, sell-offs and reclassification).

The profitability of banks has been positively influenced by a decrease in credit risk costs.

Despite that decrease, the coverage of banks' non-performing loans with provisions has increased this year. The rise in the coverage ratio can be attributed to a smaller increase in non-performing loans, especially in the retail housing loan segment. Regarding the financial results of banks on a consolidated basis, credit risk costs have a negative impact and are the main factor behind the diminishing difference between profits on a consolidated and individual basis (by as much as 50%). The profitability of banks is also adversely affected by an increase in their contributions to the Resolution Fund and to the Deposit Protection Fund.

THE NEGATIVE IMPACT OF THE LOW INTEREST RATE ENVIRONMENT IN THE INSURANCE SECTOR IS MITIGATED BY THE DIVERSIFICATION OF INSURANCE ACTIVITIES.

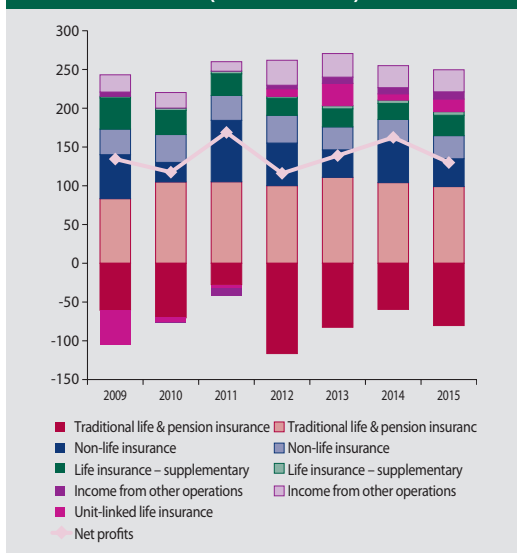
Despite a 20% decline in profits last year and the persisting low interest rate environment, the insurance sector's profitability has remained adequate. The decline in profits in 2015 was caused mainly by an increase in operating expenses, which was related to the imple-

reductions. From the middle of 2015, the rate of charge started to decrease in the household segment, too. This trend is expected to deepen still further in the period ahead as a result of a marked decrease in the maximum permissible charge for the early repayment of loans, which may lead to an increase in competition and a fall in interest rates in this market.

The significance of returns on consumer loans as a component of interest income is increasing in the retail sector.

The share of returns on consumer loans has increased gradually over the past three years, from 26% to 35%, mainly to the detriment of housing loans. The simulations of possible developments as described in Chapter 3.4 'Risks in the financial sector' indicate that this trend will continue at an accelerating pace. As Chart 9 shows, banks still have relatively wide interest margins for new consumer loans despite the continuing decrease in the annual percentage rate of charge (APRC) for new consumer loans, accompanied by a moderate increase in credit risk costs.

Chart 10 Composition of gross profits in the insurance sector (EUR millions)



Source: NBS.

Notes: The individual lines of insurance are illustrated in different colours. A full rectangle illustrates the technical result achieved in the relevant line of business. A hatched rectangle illustrates the financial result achieved in the relevant line of business.

Other operations include active reinsurance, financial results from assets which are not covering technical provisions, other financial income and expenses, as well as income and expenses related to other operations.

The Chart illustrates only insurance undertakings registered in Slovakia as at 31 December 2015.

mentation of Solvency II. The rates of return on assets and on equity have been relatively stable since 2008, fluctuating around 2% and 10% respectively. In 2015, they remained virtually unchanged. The stable level of profitability can be attributed to the diversification of the sources of profits across the individual lines of insurance in the general insurance firms that dominate the Slovak insurance sector.

Insurance firms generate their profits in all classes of insurance, in particular in non-life insurance lines. With a share of roughly 40%, non-life insurance has been the principal source of profit in the last few years, despite its relatively volatile volume ranging between €65 million and €90 million. The second most significant and relatively stable source of profit is 'other income', which contributes about €37 million to the annual profit. The main components are returns on assets that are not covering technical provisions and other financial returns. They are followed by supplementary insurance and traditional life insurance (which includes pension insurance) with

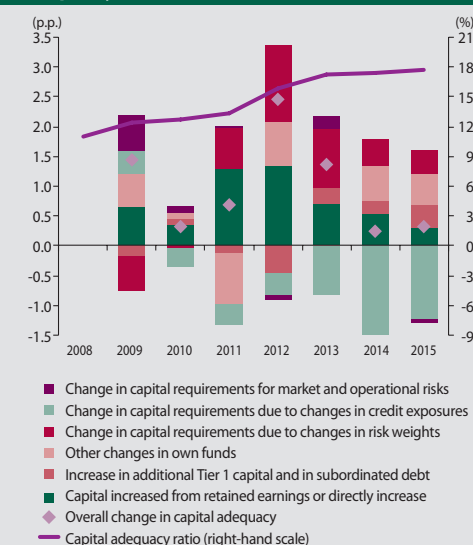
approximately the same contribution to profits (about €30 million per year). While the situation in supplementary insurance is relatively stable, profits in traditional life insurance are declining. The smallest contribution to profits, i.e. about 10%, comes from unit-linked life insurance. It is a significant positive trend that the profitability of unit-linked life insurance firms has been in positive territory since 2012. The low interest rate environment affects the profits of traditional life insurance firms in particular, which account for roughly 15-20% of the total profit. Hence the profitability of the insurance sector as a whole is affected to a lesser extent than in the case of purely life insurance firms. In addition, in life insurance, the profits are well diversified across the sector, i.e. between traditional life insurance, unit-linked life insurance and supplementary insurance.

The profitability of pension and investment fund management companies has been adversely affected this year by a fall in returns on the funds they manage. In year-on-year terms, the average returns on funds have fallen in the sectors of pension fund management companies (PFMCs), supplementary pension management companies (SPMCs) and investment fund management companies. This fall in returns is one of the main factors behind the declining profits of management companies. PFMCs recorded the largest aggregate drop in net profit, 44% year-on-year. SPMCs also saw their profits fall, albeit not as sharply as in 2014. Investment fund management companies compensated the fall in their income from fees and commissions by reducing their operating expenses.

CAPITAL ADEQUACY

The banking sector's aggregate capital adequacy ratio reached 17.7% at the end of 2015, after rising in previous years at a moderating pace. This development was in contrast with the trend seen in 2011-2013, when this ratio increased quite steeply. This was caused mainly by a relatively significant decrease in the share of profits that banks used to increase the volume of their own funds – i.e. not paid as dividends (Chart 11) – which occurred despite a proportion of the dividends paid being returned to banks by the owners in the form of lower-quality own funds (subordinated debt or hybrid instruments).

Chart 11 Factors behind changes in capital adequacy ratios



Source: NBS.

Notes: The columns illustrate the contributions of individual factors to the annual changes in this ratio, which are shown on the left-hand scale in percentage points.

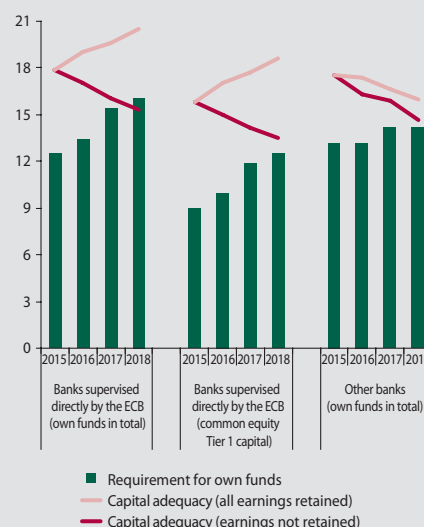
Data on banks that were transformed into branches of foreign banks during the period under review are not illustrated in this chart.

In 2014 and 2015, the easing of certain regulatory rules within the scope of Basel III implementation also caused an increase in own funds. At the same time, the volume of risk-weighted assets increased too, mainly as a result of continued growth in bank lending. The decreasing trend in risk weights, which was one of the main factors behind the increases in the aggregate capital adequacy ratio between 2011 and 2013, has moderated over the past few years, which can be viewed as a positive change in terms of financial stability. The common equity Tier 1 ratio (16.0%) and leverage ratio (8.4%) remained broadly stable over the course of 2015.

Owing to a gradual increase in the capital requirements, the banking sector will have to restrict the payment of dividends to some extent in the years ahead. The reason for this is a gradual increase in the combined capital buffer requirement, which is closely connected with the implementation of the individual types of capital buffers. The capital conservation buffer was fully implemented in October 2014. For the five systematically important banks, additional capital buffers will be phased in between 2016

and 2018. The current rate of growth in bank lending indicates that a countercyclical capital buffer may be implemented in 2017. To create a sufficient capital base for the continuing lending growth (10% for retail loans and 5% for corporate loans in year-on-year terms), the banking sector will have to retain part of its profits as a result of the aforementioned increase in the capital requirement. This mainly concerns the largest banks for which the capital requirement will be increased gradually in 2016-2018 on account of their systemic importance, but which have higher profits and more room for increasing their own funds from the profits they generate. In the previous years, some of these banks paid out a large part of their profits to shareholders and only partially replaced these profits with subordinated debt or additional Tier 2 capital. To maintain the aforementioned rate of

Chart 12 Possible scenarios of changes in the capital adequacy ratios and in capital requirements (percentages)



Source: NBS.

Notes: The forecast of possible changes for 2016-2018 was made under the assumption of an annual increase of 10% in retail exposures and 5% in corporate exposures. It was also assumed that banks would achieve profits as were estimated by macro stress testing under the Baseline scenario (see the Chapter on Macro Stress Testing in the Analysis of the Slovak Financial Sector for 2015).

The capital requirement was calculated as the sum of the requirement under Pillar I (around 8%), the part of the requirement under Pillar II that is not covered by the capital conservation buffer, and capital buffers; at the same time, the countercyclical capital buffer rate is expected to be set at 1% for 2017 and 2018. The requirement under Pillar II is expected to be constant.

The aggregated values for the banking sector as a whole were calculated as the average of values weighted by risk-weighted assets.

lending growth, around one-quarter of the total profit generated in 2015-2018 is to be retained at the level of the banking sector as a whole (as estimated on the basis of ratios calculated on an individual basis). Another reason for increasing the share of retained earnings is the fact that the profitability of banks is expected to be adversely affected by the low interest rate environment in the future, which will narrow the room for an increase in own funds. A further consideration is that while the transition to the Basel III regime had an upward impact on the aggregate capital adequacy ratio in 2014 and 2015, its impact was one-off and will not continue in the years ahead. In addition, there is considerable heterogeneity across the banking sector in terms of the level of compliance with capital requirements.

3.2 BANKING SECTOR ASSETS

THE RETAIL LOAN PORTFOLIO HAS REMAINED A KEY SEGMENT OF THE BANKING SECTOR THIS YEAR

Retail lending has continued to grow at a rapid pace, reaching 12.2% year-on-year in March 2016. Although the rate of growth has slowed somewhat in comparison with 2015, the volume of new loans (€2.9 billion) has remained close to its historical high. The significance of retail loans is also indicated by their share in the banking sector's total assets (37%). Their growth is supported by numerous factors, such as falling interest rates, growing competition in the sector, property market developments, and favourable macroeconomic developments as reflected in employment and in disposable household income.

Persistently, the most important component of the retail portfolio is housing loans with an annual growth rate of 13.1% in March 2016. In international comparison, housing loans in Slovakia have been growing far more rapidly than in other EU countries for almost five years (the EU average is 2%), despite a certain slowdown during 2015.

After reaching an all-time high in March 2015, the annual growth rate stagnated for several months, and then slowed somewhat in November. Despite this, the volume of loans has remained close to its historical high.

Chart 13 Annual changes in housing loans



Source: NBS.

Consumer loans, the second most significant component, have also contributed to the strong annual growth, reaching 15.7% in March 2016. Although consumer loans, like housing loans, have recorded a certain slowdown in their growth, Slovakia is still one of the two EU countries with the most rapid lending growth. Faster growth has only been observed in Italy in the last few months. For comparison, the EU average is 6%.

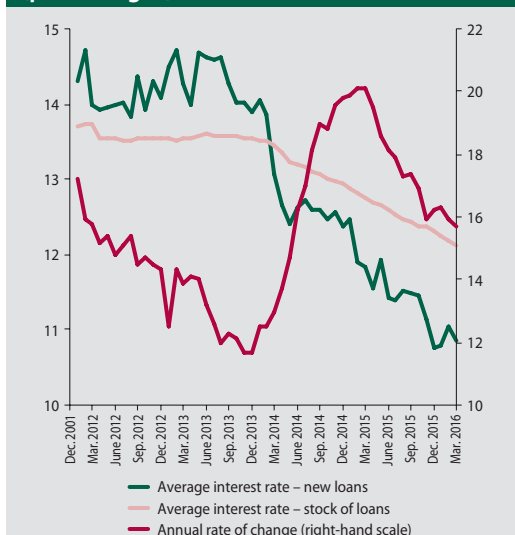
THE DECLINE IN INTEREST RATES INFLUENCES BOTH DEMAND FOR, AND THE AVAILABILITY OF, LOANS; THIS DECLINE IS ALSO SUPPORTED BY THE NEW LEGISLATION ON HOUSING LOAN PREPAYMENT

Interest rates have continued to decline on both main types of retail loans, with housing loans recording a sharper fall in March. Interest rates on housing loans fell to a new historical low at the beginning of 2016, to an average of 2.5% in February, and then dropped to 2.1% in March. This was due to a legislative change enabling housing loan prepayment for a fee of up to 1% of the principal, to which banks reacted with intense marketing campaigns.

After falling in steps in the past, the average interest rate on consumer loans declined smoothly, down to 12.2% in February 2016.



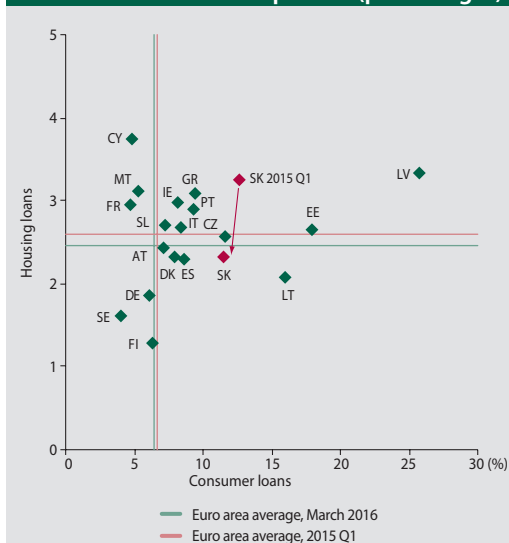
Chart 14 Development in consumer loans (percentages)



Source: NBS.

The average annual percentage rate of charge for housing loans in Slovakia was close to the euro area average in 2015, while that for consumer loans remained well above the euro area average. Hence these loans are more likely to experience a decrease in the future. In terms

Chart 15 Average annual percentage rate of charge for new loans in the first quarter of 2016: international comparison (percentages)



Source: ECB SDW.

Notes: The values 'SK 2015 Q1' and 'Euro area average 2015 Q1' relate to the first quarter of 2015. All the other data are for March 2016.

of returns, consumer loans are more attractive for banks than housing loans, though their volume is much smaller.

With falling interest rates, demand for loans has naturally increased. Besides the falling price of loans, which motivates customers to borrow, an important factor is the debt capacity of retail customers. The falling interest rates, coupled with decreasing loan repayments, have enabled customers to borrow larger loans and allowed new groups of customers to qualify for such loans. The growing demand has also been confirmed by the replies of banks in questionnaires about credit standards.

Falling interest rates have also had a stimulating effect on the availability of loans. Regarding the importance of the retail portfolio, the business model of the Slovak banking sector requires adequate interest income from retail loans. As noted in the chapter on the banking sector's profitability, at times of falling interest rates and decreasing interest margins, banks compensate for their decreasing interest income from individual loans by increasing the volume of their loan portfolio.

CREDIT STANDARDS HAVE BEEN SOMEWHAT TIGHTENED, THOUGH THE AVAILABLE DATA POINT TO INCREASED USE OF MARGINAL LOAN-TO-VALUE RATIOS

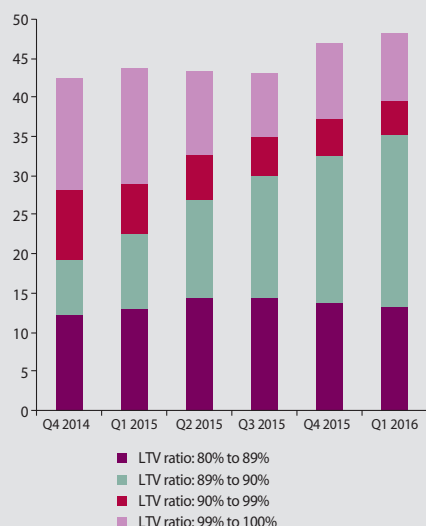
Lending growth is also supported in the long term by the settings of credit standards, though an NBS recommendation¹ has introduced tightening in several areas. In a questionnaire about credit standards, banks pointed to tightening mainly in the first half of 2015. In the following period, credit standards changed only minimally.

An analysis of loan-to-value ratios indicates that banks use marginal values in providing new loans. The banking sector follows the NBS recommendation concerning the loan-to-value (LTV) ratio, but more and more loans are provided with an LTV ratio of 90%, the use of which is not limited by this NBS recommendation. Their share in new loans (except for refinancing loans without a material increase in principal) accounted for more than 22% in the first quarter of 2016. For the time being, practically every second loan has an LTV ratio exceeding 80%.

¹ NBS Recommendation No 1/2014 of 7 October 2014 in the area of macroprudential policy on risks related to market developments in retail lending.



Chart 16 Loans with a loan-to-value ratio of over 80% as a share of new loans (except for refinancing loans without a material increase in principal; percentages)



Source: NBS.

THE CONDITIONS FOR LOAN REFINANCING HAVE BEEN EASED, BUT A LARGE PART OF THE LOANS REMAINS IN THE ORIGINAL BANK

The falling interest rates have remained the primary motivation for loan refinancing. The difference between average interest rates on existing and new loans is diminishing, but

still amounts to almost 0.9 percentage point. It is thus natural that about one-third of the new loans are earmarked for refinancing. As regards housing loans, this share increased still further at the beginning of 2016, mainly in cases where no material increase in principal is applied.

Although loans may be repaid free of charge when the rate fixation period ends, only part of the loans are transferred to other banks. Since banks are keen to retain their customers, they make every effort to create such conditions that provide no incentive for customers to re-finance their old loans. Hence, less than half of the loans are transferred to other banks upon interest rate resetting. In the course of a calendar year, about one-tenth of the banking sector's aggregate loan portfolio is refinanced.

An important change in the loan market is the 1% limit imposed on fees charged for housing loan prepayment at a date other than the end of the rate fixation period. A new law on housing loans entered into force on 21 March 2016. It stipulates the maximum reimbursement for costs incurred by banks in connection with loan refinancing before maturity. The market practice before the adoption of this law was at a level of 4-5%. In addition, the law enables early repayment of 20% of the loan principal free of charge, once a year. This means in practice that the maximum effective fee for loan prepayment may be 0.8%.

Chart 17 Refinancing loans as a share of new loans (percentages)



Source: NBS.

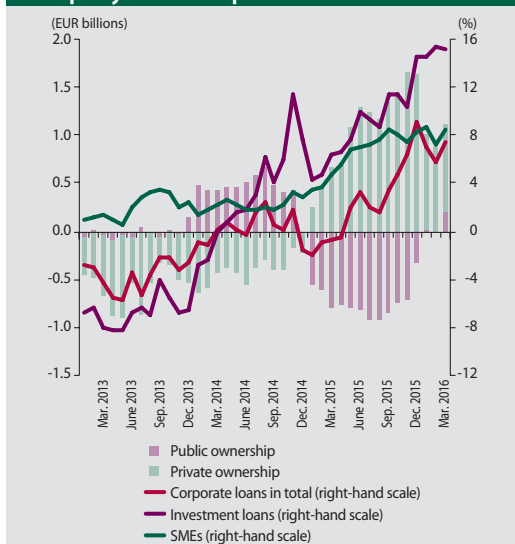
In connection with this legislative change, interest in loan refinancing is expected to increase, but new imbalances may occur, too. As supposed, an effective fee of 0.8% is too low for banks to cover the costs they incur in connection with early loan refinancing (see Chapter 3.1). In order to avoid losses, banks may be motivated to provide loans with a shorter rate fixation period, which, however, increases the sensitivity of loan portfolios to a possible rise in interest rates.

THE GROWTH IN LENDING TO THE DOMESTIC CORPORATE SECTOR² HAS MAINTAINED ITS RATE FROM THE PREVIOUS PERIOD

Lending activity in the corporate sector has continued to increase this year, but the structure of this increase has changed. In the first quarter of 2016, the accelerating growth in corporate loans from the previous period slowed,

² Loans to the corporate sector are defined as loans provided to resident firms in Slovakia.

Chart 18 Annual changes in corporate loans and its decomposition by the form of company ownership



Source: NBS.

loans to non-financial corporations however continued to grow, at a pace well exceeding the post-crisis average. Thus, the volume of corporate loans has increased by an average of 6.7% year-on-year. The structure of this increase, however, has changed in terms of the ownership of firms. While the growth in lending to privately owned firms in 2015 offset the relatively steep year-on-year decline in lending to publicly owned firms, the annual rate of change in lending to state-owned firms in 2016 has entered into positive territory. At the same time, the growth in lending to privately owned firms slowed to a relatively significant extent, from 12.3% in the last quarter of 2015 to 6.9% in the first quarter of 2016.

The change in the structure of growth in corporate loans and their rate of change were substantially affected by developments in borrowing from large banks, but the flow of loans within the banking sector varied considerably.

The growth in the outstanding amount of corporate loans has slowed, mainly as a result of an increase in the share of loan prepayments.

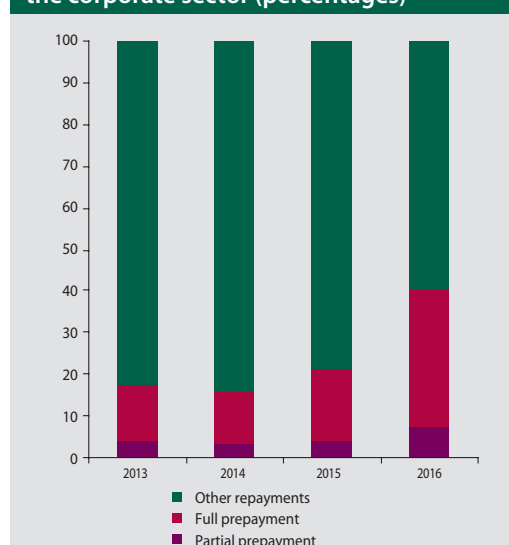
A change in the structure of corporate loan repayments is represented by the growing share of loan prepayments. This trend has been present since the middle of 2015 with gradually increasing intensity, which culminated at the turn of 2015/2016. At

the same time, the inflow of new loans into corporate portfolios has increased in year-on-year terms. These trends indicate that the decelerating rate of growth in the outstanding amount of corporate loans is due largely to the early repayment of part of these loans, in the form of full repayments which reduce the debt burden or loan refinancing with funds from other financial sectors.

A strong component of lending growth this year is investment loans, the annual growth rate of which has accelerated in comparison with the previous period. This development can be attributed largely to positive sentiment in the corporate sector. A sign of improvement in the economic situation is the stable growth in the volume of loans provided to small and medium-sized enterprises. The volume of credit lines provided followed the trend observed in the volume of loans, i.e. growth with weakening intensity.

From the perspective of individual sectors, bank lending has remained broadly unchanged this year. The growing trend in loans has continued in most sectors, especially, as in previous period, in manufacturing, commercial real estate, energy supply, transport and storage. After a short period of growth at the end of 2015, the volume of loans in construction has continued to decline. This is the most significant factor that has restrained lending growth to the corporate sector.

Chart 19 Structure of loan repayments in the corporate sector (percentages)



Source: NBS.



Demand for loans is rising under the influence of economic developments and the low interest rate environment. Banks have also recorded an increase in corporate loans this year as a result of growth in demand, across all maturities and firm sizes. Banks expect similar developments in the next quarter. The main factors affecting demand for loans are the level of interest rates and, to a lesser extent, the need for debt restructuring.

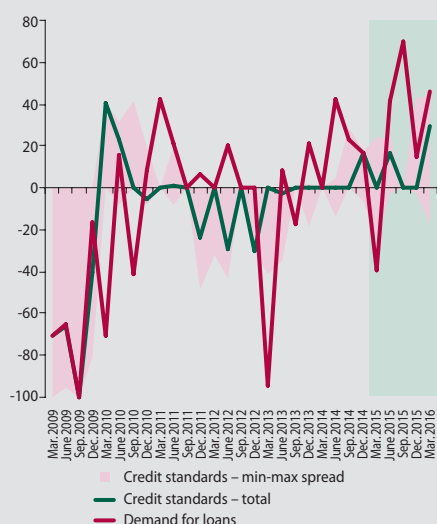
Another important factor behind the growing demand for corporate loans is the positive trend in the domestic economy and its good prospects. The situation in Slovakia's main trading partners has remained relatively stable, too. These trends have led to positive developments in sales in practically all sectors, as well as in exports. The last few months have seen a modest improvement in the economic sentiment indicator for the domestic economy.

The availability of loans is still under the influence of competition and of the sound economic performance. The gradual easing of credit standards has continued into 2016. Banks tend to apply eased credit standards to loans

provided to large firms in particular. The easing of lending conditions has been achieved mainly through a reduction in interest margins and the amount of loans. By contrast, non-interest charges have increased. Banks expect similar trends in the next quarter, too. The main factor affecting the easing of credit standards, besides the positive perception of the economy, is the persisting competitive pressure within the banking sector.

Under the influence of the low interest rate environment, the average interest rate on the stock of corporate loans has continued to decline this year. The rate of decline increased gradually until end-2015 and remained at that level throughout the first quarter of 2016. As a result of this trend, interest income from corporate portfolios decreased, too. This could be partly due to the growing share of loan prepayments. Interest rates on new loans rose, but this rise took place mostly in rates for loans of over €1 million provided by selected banks. Interest rates on new loans of up to €1 million continued to fall. In the European context, average interest rates on the outstanding amount of loans are still above the EU average.

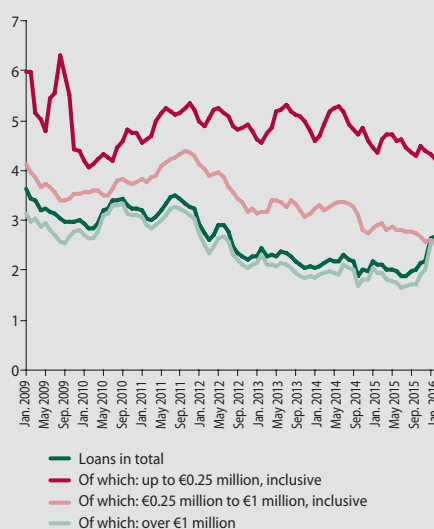
Chart 20 Demand and supply developments in corporate loans (percentages)



Source: NBS.

Note: A positive value denotes an increase in demand/ easing of credit standards. A negative value denotes a decrease in demand / tightening of credit standards.

Chart 21 Interest rates on new corporate loans broken down by the size of loan (percentages)



Source: NBS.



Both the residential and office segments of the commercial real estate sector exhibits signs of growing optimism, though lending to this sector is weakening. Demand growth in the residential segment has continued this year, with some of the trends strengthening, such as the growing number of flats sold or the increasing share of 'flats on paper' in the total number of flats for sale. The number of new flats on the market has remained comparable with that in the previous period.

Lending to the commercial property sector has slowed in contrast with the level of sentiment in this sector. The volume of loans increased year-on-year by an average of 5% in the first quarter of 2016, compared with 7.5% in 2015. This change was caused by a downturn in lending activity in some banks. Developments in the volume of loans provided to this sector, however, still vary considerably across the banking sector.

The volume of loans provided to non-resident non-financial entities has continued to decrease this year. The moderating year-on-year growth and subsequent decline in these loans began in the middle of 2015 after a relatively long period of strong growth (starting in 2011). The banking sector's total exposure amounts to approximately €2 billion. The aforementioned decline was evenly spread across the banking sector, when most banks reduced their exposure to non-financial entities from abroad. Such loans, however, are relatively concentrated in several banks.

INVESTMENT IN DOMESTIC GOVERNMENT BONDS HAS CONTINUED TO FALL IN VOLUME

The composition of securities portfolios is determined by the developments taking place in their components. Such portfolios comprise mostly domestic government bonds. However, the share of these bonds in total assets is decreasing gradually. A marked decrease was recorded in the first quarter of 2016 (from 14.7% at the end of 2015 to 13.3% at the end of March 2016). The majority of large and medium-sized banks reported a decrease in the volume of Slovak government bonds, mainly because an issue from 2010 matured in February 2016. A large

Chart 22 Domestic government bonds as a share of total assets and their annual rate of change in February 2016 (percentages)



Source: NBS.

part of this volume was not replenished by investment in new securities.

The volume of investment in foreign securities and bonds issued by domestic banks has continued to grow this year, by €100 million during the first three months (due exclusively to mortgage bond investments). The volume of investment in domestic corporate bonds and foreign bank bonds has decreased in year-on-year terms.

The breakdown of foreign government securities portfolios by country of issuer shows that the volume of Italian bonds has continued to grow this year, while that of Polish bonds has fallen. Foreign government bond investments, however, are concentrated in several banks. The share of Italian government bonds increased from 6.5% at the end of 2015 to almost 8% at the end of March 2016. Over the same period, the share of Polish government securities dropped below 2%.

The proportions of individual types of portfolios have remained virtually unchanged. Banks still hold the greater part of their investments in held-to-maturity portfolios, which account for almost 55% of the overall securities



portfolio. Their available-for-sale portfolios account for roughly 40%.

3.3 FUNDING SOURCES OF THE BANKING SECTOR

The domestic banking sector is still characterised by a sound funding structure. In the recent period, some EU institutions and banks have identified a worsening trend in funding conditions, especially in market-based bank funding. Domestic banks, however, are not affected directly by this trend, owing to their relatively stable customer deposit base, which has not experienced any marked fluctuations even at times of increased financial market volatility. The ratio of retail loans to deposits has remained virtually unchanged, below 100%, which means that the banking sector is able to finance its activities without entering the financial markets.

The banking sector's liabilities are dominated by customer deposits, with household deposits continuing to grow and corporate deposit growth recording a gradual slowdown. In the

long term, customer deposits account for more than 70% of the sector's total liabilities, with the main components being household and corporate deposits. In this context, the continuing annual growth in customer deposits can be viewed as a positive trend. The rate of this growth reached 9% at the turn of 2015/2016, and was followed by a modest slowdown in the first quarter of 2016. Deposit growth was stimulated by sight deposits and saving deposits, while time deposits fell in volume on a year-on-year basis.

The main factor in that growth was household deposits, which continued growing in year-on-year terms, while corporate deposits experienced weakening year-on-year growth as a result of a deepening decline in time deposits. In the recent period, the volume of deposits has also increased in other sectors, which, however, represent a relatively volatile source of funding. The volume of deposits increased despite the falling interest rates, which led to a decrease in the cost ratio of deposits. Interest rates on corporate deposits fell more considerably, when the annual rate of change in these deposits was twice as high as the rate for household deposits.

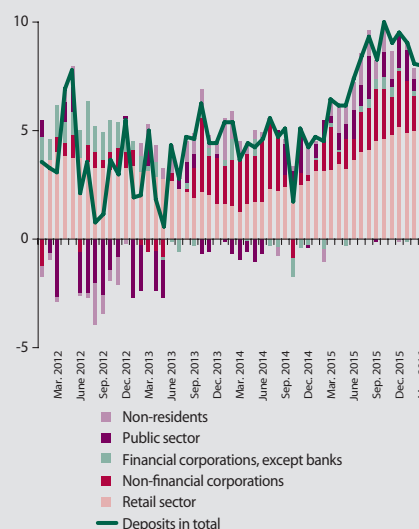
Chart 23 Loan-to-deposit ratio and ratio of customer deposits to total liabilities (percentages)



Source: NBS.

Note: The values shown in the Chart were calculated from the average values for the last six months ending with February 2016.

Chart 24 Annual rate of change in deposits and its decomposition by sector (percentages)



Source: NBS.



Funding is also obtained through the issuance of debt securities, primarily of mortgage bonds. Mortgage bonds accounted for almost 90% of the total volume of securities issued in 2015 and their volume remained virtually unchanged in the first quarter of 2016, too. In the first quarter 2016, the total volume of mortgage bonds issued increased by almost 10% year-on-year, as at the end of 2015. The mortgage bond portfolios of banks are still dominated by fixed-coupon bonds (almost all MBs issued in 2016 were fixed-coupon bonds), complemented by issues with a floating coupon linked to the 3-month or 6-month EURIBOR. The average coupon rate has fallen considerably this year, owing partly to a decrease in the average maturity in comparison with 2015. The spread between coupon rates and domestic government bond yields has continued to increase at a modest pace.

Interbank market operations and funding from the ECB represent only secondary sources of funding for domestic banks. Funding from these sources represents a relatively volatile balance sheet item for the banking sector, serving primarily for short-term liquidity management, or as compensation for other volatile balance sheet items. The growing trend in the volume of loans provided to foreign banks has continued into 2016, but this trend takes place almost exclusively in banks' intragroup transactions.

3.4 FINANCIAL SECTOR RISKS

RISKS ARISING FROM PERSISTING LOW INTEREST RATE ENVIRONMENT

The prolonged period of low or falling interest rates is one of the most significant risks from the view of stability in the Slovak financial sector. Many of the effects of this risk on particular segments of the financial market have been closely examined in previous editions of the Financial Stability Report. In this FSR the focus is on analysing how the low interest rate environment has so far affected the profitability and risk exposure of different financial market segments, and how it may affect them going forward. The aim is therefore to evaluate the materialisation of this risk.

PROLONGED LOW INTEREST RATE ENVIRONMENT WILL HAVE A GRADUAL DOWNWARD IMPACT ON INTEREST INCOME IN THE BANKING SECTOR

In the banking sector, the impact of falling interest rates has been seen mainly in the decline in asset returns. This pass-through has, however, been moderated by an increase in lending and a decline in costs related to funding and to credit risk. In retail business, increasing competition stoked by rising demand and the activity of financial intermediaries has contributed to a relatively marked fall in interest margins and to a reduction in fees, and has put added pressure on credit standards. Although lending has continued to increase strongly, the amount of interest income from housing loans has gradually begun to fall since the beginning of 2014.

For the purposes of this report, potential future trends are estimated using a sensitivity analysis of interest income developments. This analysis is based on two scenarios for changes in the stock as well as interest rates of different types of loan in the retail and corporate portfolios. Income from housing loans and consumer loans in the retail portfolio are estimated separately. Details of the two scenarios are provided in Table 3.

The first scenario used in the sensitivity analysis is based mainly on current trends. The annual growth rate of the outstanding amount of both housing and consumer retail loans has been between 12% and 13% in the recent period, during which the average interest rate on the total loan portfolio has fallen almost linearly, by around 0.6 percentage point year-on-year. The first scenario assumes the broad continuation of these trends for the next four years, with the exception of the growth rate of lending, which is assumed to slow gradually to 10%.

The second scenario assumes a more pronounced decrease in lending growth and a greater drop in the average interest rate. The growth rate of loans is assumed to fall, and more so in the case of consumer loans. For housing loans, the interest rate decrease is assumed to be greater; this is mainly due to a legislative change which, from 21 March 2016, markedly limits the maximum fee that may be charged for loan pre-

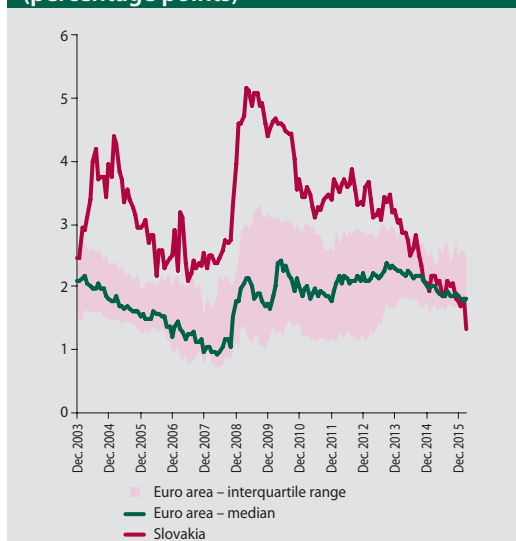
Table 3 Year-on-year changes in parameters of scenarios for potential developments in banks' interest income

	Scenario 1	Scenario 2
Retail housing loans – growth	Gradual moderate slowdown (from 12% to 10%)	Gradual slowdown (from 12% to 8%)
Retail housing loans – change in interest rate	Continuation of current trend Year-on-year decline of 0.6 p.p. Assumed level of interest rate at end-2019: 1.2%	Slightly accelerating rate of decline First two years: year-on-year decline of 0.7 p.p. and 0.6 p.p. afterwards Assumed level of interest rate at end 2019: 1.0%
Retail consumer loans – growth	Gradual moderate slowdown (from 12% to 10%)	More pronounced slowdown (from 12% to 5%)
Retail consumer loans – change in interest rate	Continuation of current trend Year-on-year decline of 0.6 p.p. Assumed level of interest rate at end-2019: 9.8%	Accelerating rate of decline Year-on-year decline of 0.9 p.p. Assumed level of interest rate at end-2019: 8.7%
Loans to NFCs – growth	Growth rate maintained at 5% (the same level as in February 2016)	
Loans to NFCs – change in interest rate	Constant interest rate at level of February 2016 (2.9%)	
Bond portfolio	Funds from maturing bonds are reinvested in bonds yielding 0.8%	

Source: NBS.

payments made outside the interest-rate resetting process (to 1% of the outstanding amount of the loan). This change may increase the rate of refinancings and therefore also competition

in the housing loan market. Developments in interest margins on new loans are also pointing to a potentially sharp drop in average interest rates in the retail loan portfolio. As Chart 25 shows, this margin is not only falling significantly, but may, by international standards, have undergone a structural change in the past two years, with the respective interest rates decreasing far more in Slovakia than in other euro area countries. After being above the third quartile for a long period, the margin has fallen to below the first quartile.

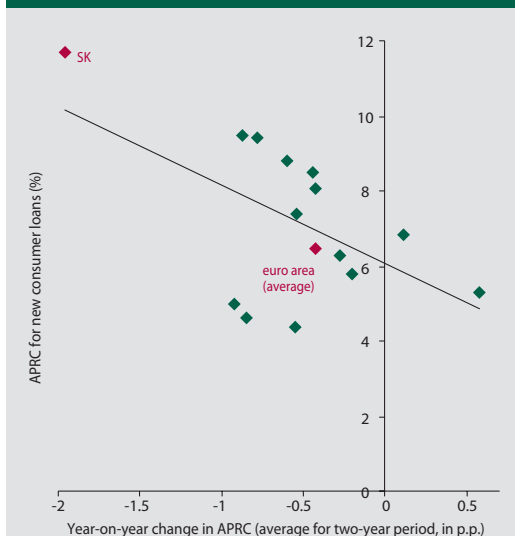
Chart 25 International comparison of the interest margin on new housing loans (percentage points)


Source: ECB.

Notes: The interest margin is calculated as the difference between the average interest rate on new housing loans and the average interest rate on all (retail and corporate) deposits. The cut-off date for the data used in the chart is 31 March 2016.

The decrease in interest rates on consumer loans is assumed to accelerate, based mainly on an international comparison of current levels and trends in the annual percentage rate of charge (APRC). As Chart 26 shows, the APRC on new consumer loans is significantly higher in Slovakia than in other euro countries (with the exception of the Baltic States) and its rate of decrease in Slovakia is far higher than the euro area average. It may therefore be assumed that the current trend of falling interest rates on consumer loans will continue in coming years as a result of gradual convergence towards the euro area average, as previously happened with interest rates on corporate loans and retail housing loans. Furthermore, the increasing importance of consumer loans to banks' profitability may heighten competition and accentuate the downward trend in interest rates.

Chart 26 Average APRC for new consumer loans in euro area countries and its annual changes



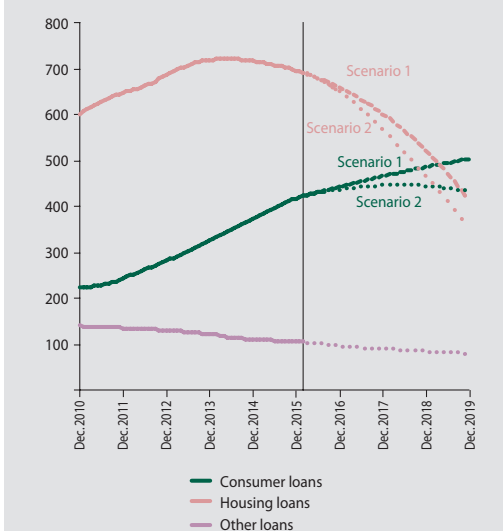
Source: ECB.

Notes: APRC - annual percentage rate of charge (including interest and fees).

The chart does not include the Baltic States, which have far higher APRCs for consumer loans (between 16% and 27%).

Data are as at 29 February 2016.

Chart 27 Interest income in different retail loan categories and scenarios for potential trends in the period 2016-2019 (EUR millions)



Source: NBS.

Notes: The chart shows the cumulative interest income for the previous 12 months as at the given month.

The vertical line marks the latest period for which data are available (February 2016).

Details of the two scenarios are provided in Table 3.

On these assumptions, interest income from housing loans may fall sharply in the years ahead. The results of the impact of the above scenarios on interest income in retail business are shown in Chart 27. The simulation results imply mainly that the decline in interest income from housing loans, which began back in 2014, continues and becomes far more pronounced, even under the assumption of maintained credit growth at the level above 10% (scenario 1). The principal cause of that decline is a gradual drop in the average interest rate on housing loans, which under scenario 1 is assumed to decrease from 3.5% in February 2016 to 1.2% by the end of 2019. The simulated developments are affected mainly by the pace at which the interest rate falls and to a lesser extent by the growth rate of loans.

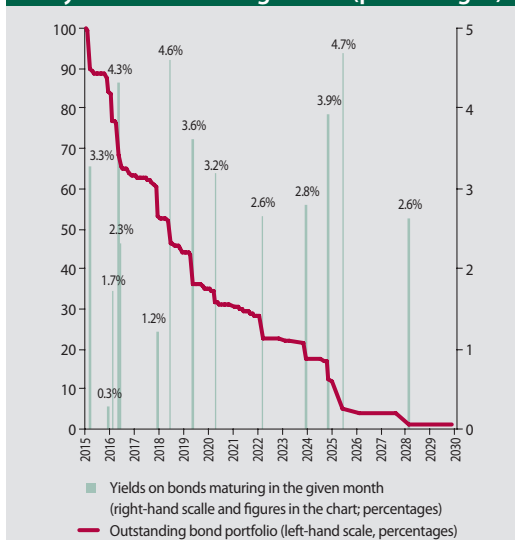
Interest income from consumer loans is expected to become more significant. Interest income from consumer loans, after its relatively strong growth in the recent period, is expected to continue growing despite the assumption of a further decline in the average interest rate (sce-

nario 1). The key factor in this case, however, is the annual growth rate of the loans. An appreciable further slowdown in that growth could gradually end the upward trend in interest income (scenario 2).

Interest income from securities has been falling since 2012 and will continue to decline in coming years. As Chart 29 shows, interest income from securities has declined by around one-third since 2012, with the banking sector having reduced its securities holdings by some 10% in that time and with the average rate of return on these holdings having dropped from 3.8% p.a. to 3% p.a. Nevertheless, this rate of return is still considerably higher than current returns in the securities market. The average market yield on ten-year Slovak government bonds for the 15 months from January 2015 to March 2016 was around 0.8% p.a.

Interest income will fall mainly because the funds from bond redemptions will be reinvested in lower-yielding assets. Approximately half of the banking sector's current bond port-

Chart 28 Maturity timeline for bond holdings of the Slovak banking sector and the yields on maturing bonds (percentages)

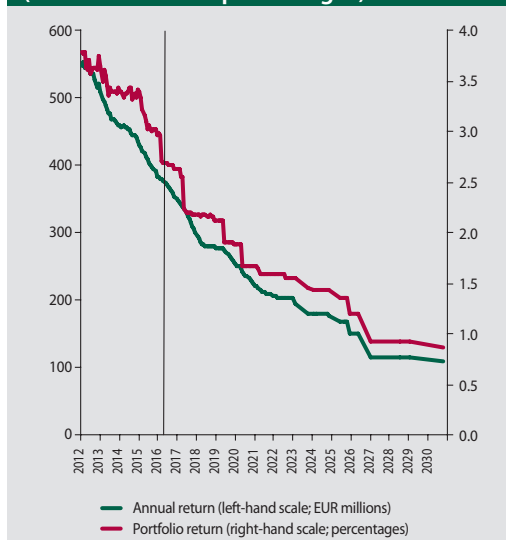


Source: NBS.

Notes: The left-hand scale shows the share of the outstanding bond portfolio as at 31 December 2015.

The right-hand scale shows the average yield on maturing bonds in the given month where the volume of bonds maturing in that month constitutes more than 2.5% of the portfolio as at 31 December 2015.

Chart 29 Projection for interest income from securities and their returns (EUR millions and percentages)



Source: NBS.

Notes: The left-hand scale shows the cumulative interest income from the debt securities portfolio for the previous 12 months as at the given month.

The right-hand scale shows the average effective interest rate of the portfolio as at each month.

It is assumed that the funds from bond redemptions are reinvested in ten-year Slovak government bonds yielding 0.8% p.a., which is the same as their average return for the period from January 2015 to March 2016.

The vertical line marks the latest period for which data are available (February 2016).

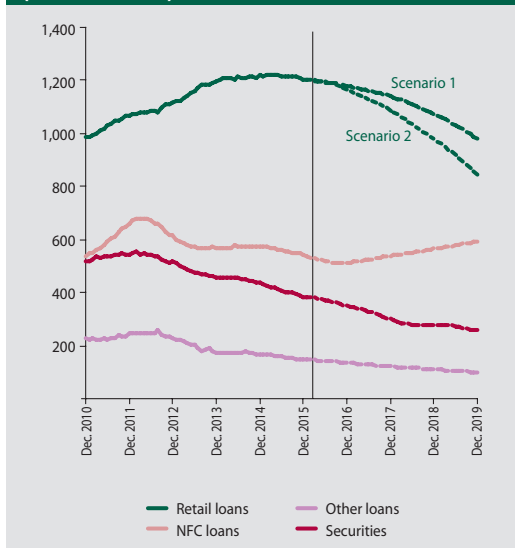
folio is due to mature in the next two years, and almost two-thirds in the next four years (Chart 28). Assuming the continuation of the current low return environment and their conservative investment strategies, banks will fail to find securities matching the yields of the maturing bonds, which in several cases are more than 3%³. In simulating the potential developments in this interest income, it is assumed that the size of the bond portfolio remains constant and that banks reinvest the funds from bond redemptions in ten-year Slovak government bonds yielding 0.8%. This assumption is based on the fact that Slovak government bonds constitute 77% of the bond portfolio and their average weighted maturity is ten years. Under this assumption, as Chart 29 shows, interest income from securities falls in annual terms by around 20% within two years and, with current trends remaining unchanged, down to a quarter of their current value (to €100 million) in the long term.

The simulations imply a gradual decline in interest income, with the decline in interest income from retail business and secu-

rities being partly offset by rising income from lending to non-financial corporations (Chart 30). The simulated increase in interest income from the NFC portfolio does, however, assume no change in the average corporate lending rate and an annual growth rate of 5% for these loans. If developments turned out to be more adverse, interest income from NFCs may also decline. Overall, it may be concluded that the decline in interest income that the banking sector began to experience in the second quarter of 2015 will continue, and probably become more marked, in the years ahead. Looking forward, the composition of interest income could also change significantly, since the share of the income from housing loans, which in previous years has been one of the major components of profitability growth, may fall sharply. Such changes can be expected to exert substantial pressure on banks to adjust their business models and strategies to an altered credit market.

³ For example, Slovak government bond issue no 213 matured in February 2016; it constituted around 9.5% of the Slovak banking sector's bond portfolio as at 31 December 2015 and its yield averaged 3.3%. Slovak government bond issue no 208 matures in February 2017; it constituted around 8.5% of the Slovak banking sector's bond portfolio as at 31 December 2015 and its yield averages 4.3%.

Chart 30 Interest income in different asset categories and scenarios for potential trends in the period 2016-2019 (EUR millions)



Source: NBS.

Notes: The chart shows the cumulative interest income for the previous 12 months as at the given month.

The vertical line marks the latest period for which data are available (February 2016).

Details of the two scenarios are provided in Table 3.

THE INSURANCE SECTOR HAS SO FAR BEEN RESILIENT TO THE RISKS RELATED TO A PROLONGED PERIOD OF LOW INTEREST RATES

The impact of persisting low interest rates on the insurance sector has been most pronounced in traditional life insurance (TLI) business, where insurers have to attain investment returns to cover the returns guaranteed in insurance contracts. The size of the impact is proxied mainly by the duration of liabilities in different insurance lines. The longest duration is usually in TLI business, where the investment risk is borne by the insurer. In TLI business, the average maturity of liabilities as at the end of 2015 was 16 years, whereas in, for example, non-life insurance business it was only 3.7 years. The average maturity of liabilities has, however, been falling in recent years, and in the case of TLI it was 19.7 years back in 2009.

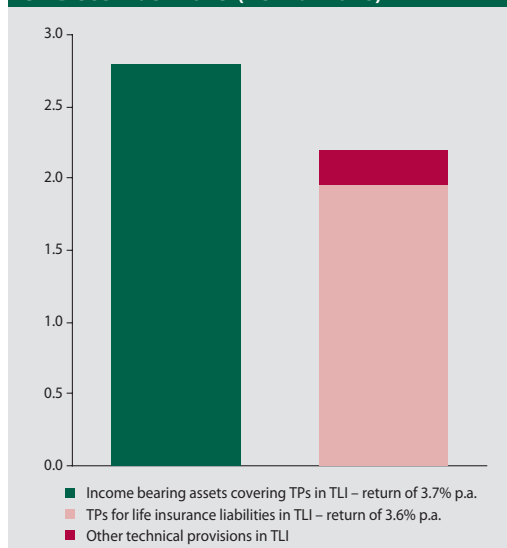
Insurers have so far managed to generate sufficient financial income in TLI, thanks mainly to the structure of their balance sheets (Chart 31). In simple terms, the TLI balance sheet comprises assets covering technical provisions in TLI business and, on the liability side, technical provisions in TLI business.

The majority of the technical provisions are for life insurance liabilities. The change in these provisions over time has been affected by three main factors: the accrual of premiums earned; the payment of insurance benefits; and the technical interest rate allocation⁴. Other technical provisions in TLI business include in particular provisions for benefits, provisions for unearned premiums and other provisions. No guaranteed returns are attributed to clients from Other technical provisions.

Insurers are required to hold assets in an amount at least equal to the value of their technical provisions. Owing to asset price fluctuations, insurers always have a slightly higher amount of assets than technical provisions. The assets exceeding technical provisions for life insurance liabilities therefore generate an additional financial result that may be used in the allocation of returns. It is for insurers to decide to what extent their asset holdings exceed their technical provisions. These additional assets are financed out of insurers' own funds.

The financial result in life insurance business has been falling since 2013, but nevertheless, in absolute terms, still comfortably covers guaranteed returns due to the high asset coverage of technical provisions. The technical

Chart 31 A schema of the aggregate TLI balance sheet in Slovakia as at 31 December 2015 (EUR billions)

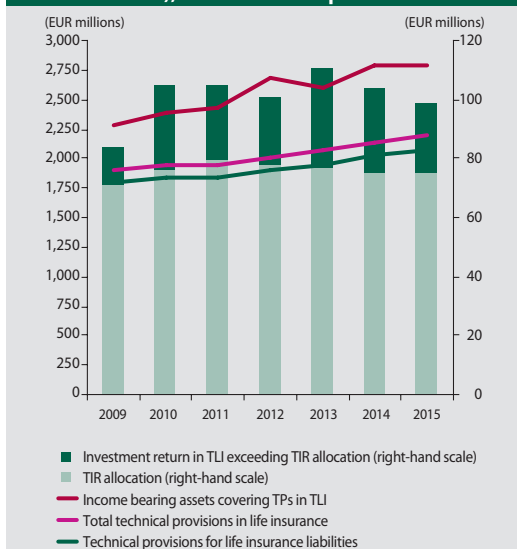


Source: NBS.

Notes: TP – technical provisions; TLI – traditional life insurance.

⁴ The technical interest rate allocation (TIR allocation) denotes the increase in technical provisions for life insurance liabilities as a result of attribution of guaranteed returns under TLI contracts.

Chart 32 Comparison of investment returns, and costs related to guaranteed returns (the TIR allocation), and technical provision trends



Source: NBS.

Notes: TIR – technical interest rate; TPLI – technical provisions for life insurance liabilities; TP – technical provisions; TLI – traditional life insurance.

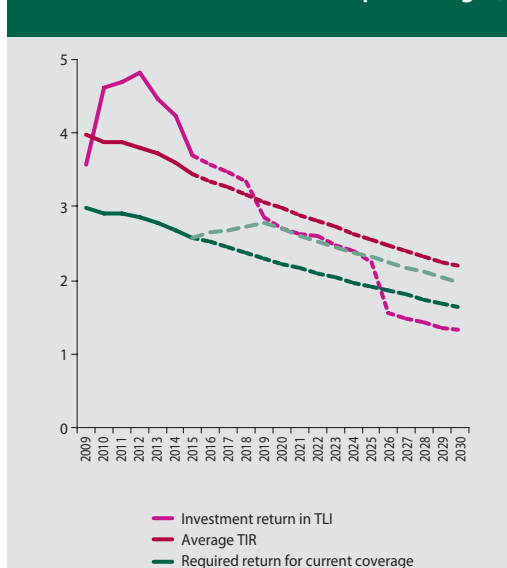
TIR allocation – increase in technical provisions for life insurance liabilities as a result of attribution of guaranteed returns.

The data for all years cover only those insurers that had a registered office in Slovakia on 31 December 2015.

interest rate allocation (TIR allocation) peaked in 2011 at €79 million and has since fallen moderately, down to €75 million in 2015. Investment returns in TLI fell from €111 million in 2013, to €99 million 2015, but still exceed the TIR allocation by a quarter. The main reason that returns exceed the TIR allocation is that the insurance sector's technical provisions in life insurance business were covered by assets at 127% as at end-2015 and technical provisions for life insurance liabilities (not including the deficit reserve created on the basis of a test of adequacy) constituted 90% of the technical provisions in life insurance. The high asset coverage ratio is largely a corollary of the high solvency ratio that Slovak insurers maintain. If solvency ratios decrease closer to the regulatory requirements, the asset coverage of technical provisions will also fall, and therefore so will the financial result in TLI.

Investment returns in TLI business are converging towards the falling TIR, but still remain higher. As new insurance contracts provide for a lower TIR⁵ than older ones that expire or are surrendered, the average TIR in the insurance sector is gradually falling (from 4% in 2009

Chart 33 Trends and forecasts of returns on debt securities in TLI business (percentages)



Source: NBS.

Notes: TIR – technical insurance rate; TLI – traditional life insurance. The data for all years cover only those insurers that had a registered office in Slovakia on 31 December 2015. Data for the period after 31 December are estimates.

Required return denotes such value of returns on assets covering technical provisions in TLI business, that the financial result for TLI investments equals the TIR allocation. Coverage of technical provisions after 2015 is assumed to be the same as at the end of 2015. The light-grey line denotes the estimated required return in the event that the asset coverage ratio for technical provision in TLI business falls to 105% within four years.

to 3.5% in 2015). Investment returns in the insurance sector have fallen gradually since 2010 (except in 2013) and their average rate in 2015 stood at 3.6% per annum. Returns on interest-sensitive instruments (bonds, money market funds, and time deposits), which constitute 93% of the assets covering technical provisions in TLI business, recorded a slightly higher average of 3.7% p.a. Insurers' investment returns are therefore sufficient to cover guaranteed returns without insurers having to maintain a high asset coverage ratio for provisions. Thanks to its high asset coverage of technical provisions, the insurance sector would be able to cover the TIR allocation even with an average investment return of 2.6% p.a.

Insurers are expected to continue earning sufficient investment returns over the next four years thanks to longer duration of the investment portfolio. The asset coverage of the portfolio may ensure sufficient returns for an even longer period. Future trends in returns are affected by several factors. It is assumed that the

⁵ At present the TIR for new insurance contracts is capped at 1.9% p.a. Under the Solvency II regulatory framework there is no limit on the amount of guaranteed returns.

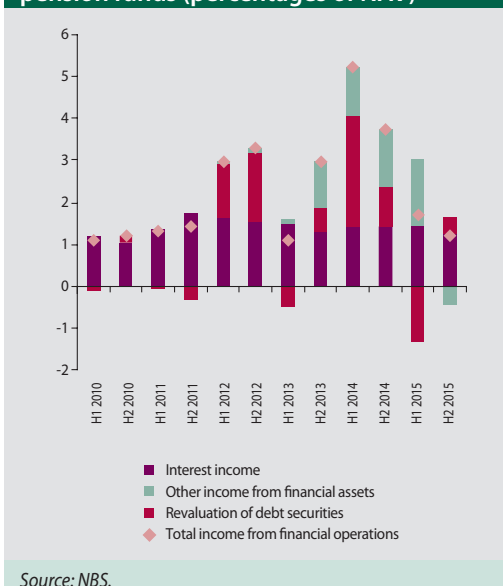
average TIR will continue to decrease in coming years, with the pace of its decrease gradually slowing from the current level of 10 basis points per year. Funds from maturing bonds are assumed to be reinvested in ten-year Slovak government bonds, which yielded, on average, 0.8% for the years 2015 and 2016. On these assumptions, the return on the bond portfolios and the average TIR decrease at about the same rate until 2019, the year that sees the maturity of Slovak government bond no 204, constituting more than 12% of the insurance sector's portfolio as at the end of 2015. Although, according to estimates, the return on the aggregate bond portfolio would be lower than the average TIR from 2019, the financial result remains large enough due to sufficient asset coverage of technical provisions. Even if the asset coverage ratio for technical provisions falls to 105%, the financial result in TLI business is still expected to cover the TIR allocation.

A shortfall in investment returns could arise under a scenario where there is sizeable growth in new policies that include higher guaranteed returns. The situation until 2018 is not expected to worsen even in the case of significant changes in the insurance portfolio. If there is a sizeable increase in new business, insurers will have to increase their investments, and at the current low rates of return that implies a marked drop in the average return. For example, if insurers' investments grow at 2.5% per annum at an average return of 0.8% p.a., the aggregate return falls by around 10–15 basis points. If there is marked growth in new policies that include guaranteed returns above current rates of return in financial markets, and if the asset coverage of provisions falls, insurers may find it difficult even in the medium term to deliver the returns they have guaranteed.

IN PENSION FUND PORTFOLIOS, THE PROLONGED PERIOD OF LOW INTEREST RATES HAS INCREASED BOTH RISK EXPOSURE AND THE VOLATILITY OF PENSION POINTS

In pension funds managed by PFMcs (constituting the second pillar of the pension system), low interest rates have had a significant upward impact on the risk exposure of the aggregate portfolio. As Chart 34 shows, the share of interest income in the net asset value of pension funds remained almost unchanged from 2013 to 2015, from 1.3% to 1.4%, despite a sharp decline in interest rates. It should be noted, however, that

Chart 34 Breakdown of total income from financial operations in PFMc-managed pension funds (percentages of NAV)

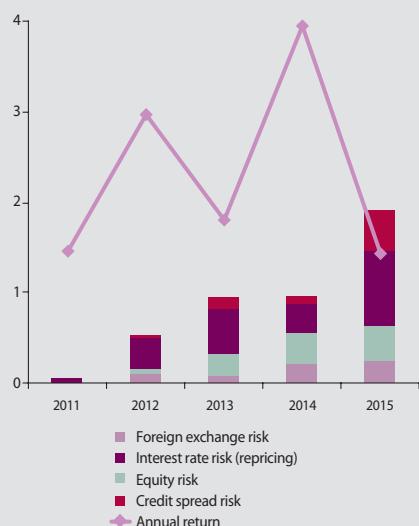


although this component remained stable, its level has for a long time been lower than the interest income component in other sectors of the financial market. This is the long-standing consequence of very strict regulation that has been applied to pension funds before March 2012. In response, however, to a marked decline in market returns on less risky assets, it was necessary to increase the risk parameters of the portfolio.

The increase in risk exposure consisted mainly of an increase in exposure to interest rate risk.

A simple analysis of the sensitivity of pension funds to key risk factors (Chart 35) shows that their risk exposure was negligible in 2011 and then increased significantly in 2012 and 2013, before increasing even more sharply in 2015. This trend was accompanied by an increase in the duration of the bond portfolio, from 0.5 year in 2011 to 4.2 years in 2015 (Chart 36), as well as an increase in the average maturity of bank deposits in the portfolio. In 2015, moreover, funds increased not only their investments in bonds with higher interest rate risk, but also their exposure to credit risk by purchasing bonds issued by lower-rated countries (such as Ireland). Pension funds also saw a slight rise in their exposure to equity risk. It must be added that the increase in the portfolio's risk exposure in 2012 and 2013 stemmed mainly from the easing of regulatory rules. The impact of the

Chart 35 Breakdown of total income and risk exposure in PFMC-managed pension funds (percentages of NAV)



Sources: NBS, Bloomberg and internet.

Notes: Exposures to particular risks are estimated using a sensitivity test for changes in representative risk factors; the test includes four scenarios as follows: equity prices falling by 10%; other currencies depreciating against the euro by 5%; interest rates increasing in parallel by 0.3 percentage point; and credit spreads on bonds issued by Greece, Portugal, Ireland, Spain and Italy increasing by 2 percentage points. The different risk types also include indirect risks to which funds are exposed through investments in investment funds shares/units.

low interest rate environment appeared mainly in 2014 and 2015. The above changes were reflected in the composition of pension funds' income, as shown in Chart 34. In 2010 and 2011 returns on pension funds were accounted for almost entirely by interest income from bond securities, a stable component of the portfolio. Since 2012, however, a significant proportion of the aggregate returns have come from an unstable component, namely income related to the revaluation of securities in the portfolio. Given pension funds' increased risk exposure, it is the unstable component that could have a relatively adverse impact on returns in the event of a sudden escalation of uncertainty in financial markets.

Supplementary pension funds (SPFs) have offset the impact of low interest rates to a lesser extent than have PFMC-managed pension funds, and consequently their interest income has fallen. In SPFs (managed by SPMCs and constituting the third pillar of the pension system), the share of interest income in their aggregate net asset value fell gradually from 2011 to 2015 (from

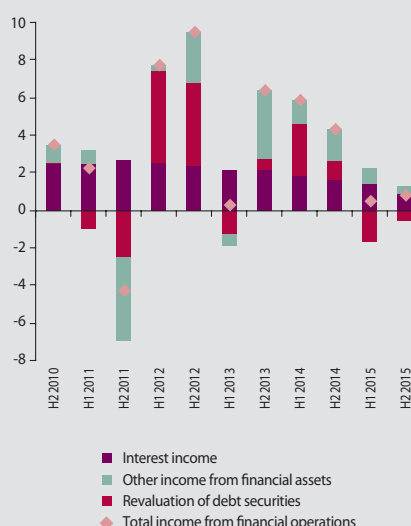
Chart 36 Aggregate portfolio of pension funds and supplementary pension funds in terms of returns (in percentages) and durations (in years)



Sources: NBS and Bloomberg.

2.7% to 0.9%), due mainly to a significant drop in returns on the bond portfolio (from 4.0% to 1.6%). This is shown in Chart 37. The risk exposure of SPFs is now, however, similar to that of PFMC-managed pension funds, since back in 2011 SPFs had a far longer duration and higher equity component than did the second pillar funds.

Chart 37 Breakdown of total income from financial operations in SPMC-managed supplementary pension funds (percentages of NAV)



Source: NBS.

The increased risk exposure of pension funds was also reflected in greater volatility of pension points in 2015.

Financial markets experienced several bouts of heightened volatility in 2015 and early 2016. The turbulence was not as severe as in previous years, but its impact on the volatility of pension funds' returns was more pronounced because the risk exposure of the funds had increased. As Chart 38 shows, in both second and third pillar funds this volatility was significantly higher than in the previous period, and the returns on the funds were lower.

The recent and expected effects of the low interest rate environment on particular financial market segments are summarised in Table 2.

HOUSEHOLD LOAN GROWTH REMAINED HIGHER IN SLOVAKIA THAN IN ANY OTHER EU COUNTRY

The annual growth rate for loans to households was 12.2% in March 2016. Credit growth has been the highest within the EU for five years in a row. This trend of strong credit growth, higher than in other EU countries, is resulting in the increasing indebtedness of Slovak households. Slovakia is the only EU country in which household indebtedness, as measured by the debt-to-

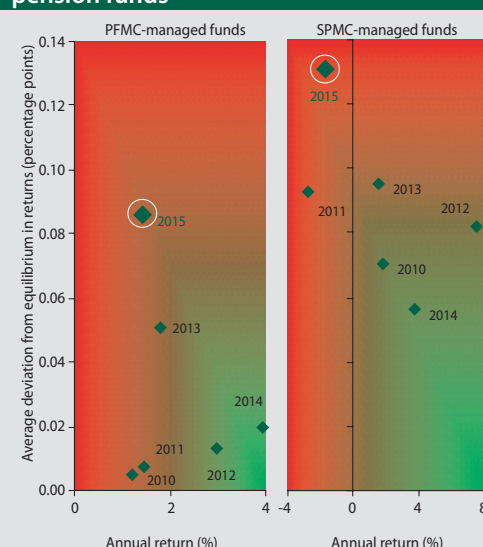
Chart 39 Household indebtedness and household loan growth in central and eastern Europe (percentages)



Sources: Eurostat and ECB.

disposable income ratio, has been rising continuously since 2003. From 2011 to 2015 the increase in household indebtedness in both relative and absolute terms was higher in Slovakia than in any other EU country. This trend was previously supported by the low debt levels of Slovakia households and the scope that provided for strong credit growth. Household debt in Slovakia is among the highest in central and eastern Europe, and its growth rate is the highest in the region.

Chart 38 Changes in the risk return profile of pension funds and supplementary pension funds



Source: NBS.

Note: The average deviation from the equilibrium for returns expresses the volatility of pension-point values during the year. It is calculated as the deviation of the actual pension-point value from the value of the pension point if it followed an even trend during each month of the given year.

Household indebtedness has continued to increase and its concentration may also have become more marked.

At the same time, however, it is difficult to clearly interpret the overall indebtedness of households as measured by their debt-to-disposable income or debt-to-GDP ratio. There is also a difficulty in defining an optimum level for these ratios. Such measurements of household debt have in the recent period been falling in several EU countries, reflecting the fact that their current elevated levels are not sustainable in the long term. The increase in household debt has also turned out to be problematic in regard to economic growth, since indebted households have less scope to increase their consumption. The household sector's debt is not in itself indicative of how the debt is distributed within the sector. Hence it is important to view the household debt ratio also in relation to the potential concentration of debt.

To a greater extent than in other euro area countries, the debt of Slovak households has since 2010 been concentrated in the age groups 16-34 and 35-44 years. Furthermore, Slovak household debt is appreciably more concentrated among median-income than is the case in other euro area countries.

A similar picture emerges from a closer look at median amount of debt. The median debt of all indebted households increased almost twofold between 2010 and 2013, from €3,200 to €6,300. As for the median debt in the age and income groups referred to above, its increase was higher still, which further points to an increase in concentration. At the same time, age appears to be more important than income as a pointer to the level of household indebtedness, as the median debt of the 16-34-year-old age group is around €21,000 while the median debt of the most indebted income group is only around €12,000.

The fact that debt concentration is higher in Slovakia than in other euro area countries implies that banks in Slovakia face a greater degree of credit risk in their lending activity. At the same time, however, it remains to be seen how sustainable is the rate of growth in loans to households, with regard to the demographics of the age groups in question.

THE PROPERTY MARKET REMAINS A POTENTIAL SOURCE OF RISK GIVEN THE CURRENT COMBINATION OF STRONG GROWTH IN HOUSING LOANS AND CHANGES IN THE STRUCTURE OF THE MARKET

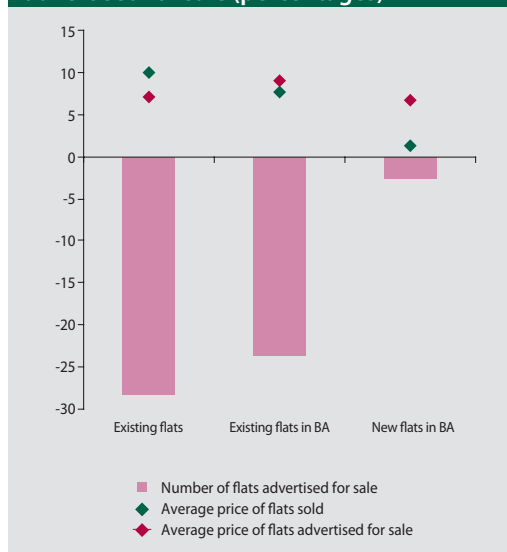
The broad-based upward trend in flat prices in Slovakia continued in the first quarter of 2016. The year-on-year growth in prices of existing flats in the first quarter was more than 7% for flats offered for sales and more than 10% for flats sold. These nominal growth rates are not only the highest observed since 2008, but also significant in terms of inflation in other prices in the economy. The trend in flat prices is particularly notable for being spread across regions and different sizes of flat as well as between flats offered for sale and flats sold.

As for prices of new-build flats in the capital, Bratislava, they are determined more by the particular development project and do not show a clear longer-term trend.

The annual growth rate was higher for flat prices than for average wages for a sixth successive quarter. At the same time, the low interest rate environment had a significant impact on the property market. For eighteen months the relationship between the labour and housing markets worsened, in contrast to the trend observed between 2008 and 2014. This situation was partly mitigated by historically low interest rates that allowed the purchase of more expensive flats for the same monthly repayment. Extremely low lending rates not only allow borrowers to take out larger loans, they also accentuate the nominal difference between yields from financial investments and the expected yields from property investments. There is growing evidence that purchases of second flats for investment purposes appeared to increase during the period in question. Such trends in general, contribute to greater volatility in flat prices.

The increase in risk arising from the property market in 2015 was partly due to changes in the structure of the market. The number of advertisements for existing flats fell quite sharply in 2015 and the first quarter of 2016. This trend was broad-based across regions, towns and flat types. The number of flats sold was higher in that period than in 2013 and 2014. Changes were also

Chart 40 Rate of change in the average price of flats and in the number of flats advertised for sale (percentages)

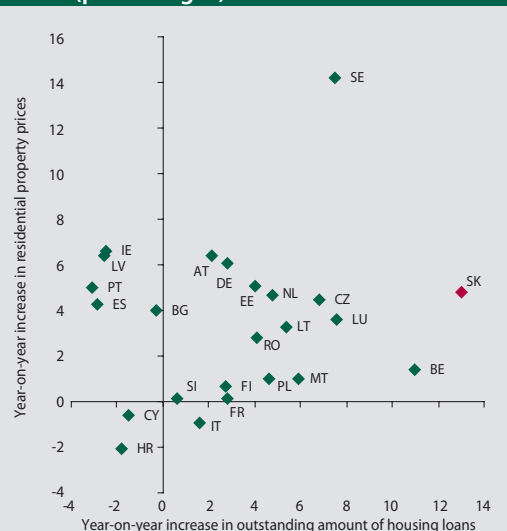


Sources: CMN and Lexxus.

Notes: Changes between Q1 2014 and Q1 2015.

BA – The city of Bratislava.

Chart 41 Rate of change in property prices and in the outstanding amount of housing loans (percentages)



Sources: Eurostat and SDW.
Note: Changes are as at Q4 2015.

Chart 42 Net default rate for retail loans (percentages)



Source: NBS.

Notes: The net default rate denotes the net change in the amount of non-performing loans over a 12-month period as a share of the outstanding amount of loans at the beginning of the period. The numerator is adjusted for the effect of loan write-offs and sell-offs.

observed in the new-build market in Bratislava, the capital city. Although the total number of new flats offered for sale did not change (in contrast to the number of advertisements for existing flats), the proportion of unfinished flats as a share of that total increased substantially (to 83% in March 2016). Of those unfinished flats, around two-thirds were due to be completed in more than 12 months.

The growth in flat prices in Slovakia is among the highest in the EU, and the combination of that fact and the strong growth in housing loans represents a risk. The fact that property price growth in Slovakia is higher than the EU median level does not per se entail an increase in risk. The effect, however, of the combination of accelerating property prices and the robust increase in housing loans remains to be seen. In this regard, the risk in Slovakia appears to be higher in comparison with other EU countries and also with central and eastern European countries.

THE CREDIT QUALITY OF THE RETAIL LOAN PORTFOLIO CONTINUED TO IMPROVE IN 2015. IT IS IMPORTANT, HOWEVER, THAT A RESPONSIBLE APPROACH IS TAKEN TO NEW LENDING

The non-performing loan (NPL) ratio continued to fall during the period under review,

and the net default rate reached historically low levels. The NPL ratio for retail loans fell to 3.9%, its lowest level since March 2009. The decrease was caused mainly by developments in the housing loan segment, since the NPL ratio for consumer loans did not change significantly (it has been just below 8% for three years). The net default rate for the aggregate retail loan portfolio in 2015 was 0.33%, and for housing loans alone it was even -0.02%. This negative figure means that the number of housing loans that defaulted was lower than the number of non-performing housing loans that were recategorised as standard.

The net default rate for consumer loans increased to more than 2.6%, reflecting the situation in large banks where this rate climbed from low levels. In medium-sized and smaller banks, however, the predominant trend in the net default rate in 2015 was downward, albeit from levels ranging from 4% to 7%.

The favourable trends in credit quality stem from several factors. The key factors have for a long period been the decrease in interest rates (and its downward impact on the debt burden of borrowers), the continuing fall in unemployment (the registered unemployment rate fell to below

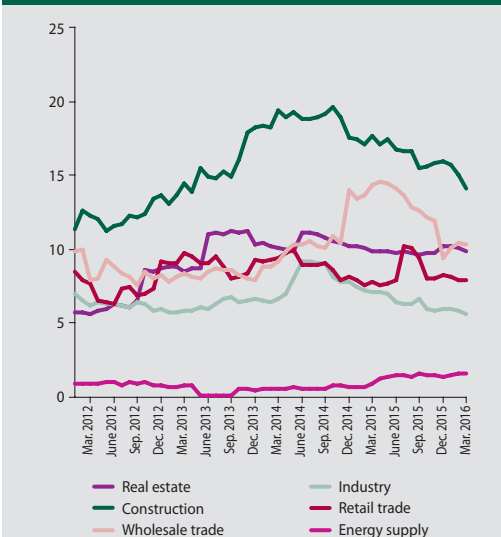
10% in March 2016), and the increase in household disposable income.

Although improving credit quality is positive news for the banking sector, a number of the factors underpinning it could undergo trend changes going forward. Among the most important potential changes are an increase in interest rates or the emergence of economic imbalances related to an increase in unemployment. It therefore remains incumbent on both banks and borrowers to adhere to responsible lending principles.

BROAD UPTURN IN QUALITY OF LOANS TO NON-FINANCIAL CORPORATIONS

The credit quality of the Slovak banking sector's aggregate portfolio of loans to NFCs improved in 2015. The NPL ratio for these loans fell to near 7% in that year, reflecting both a drop in the default rate and a year-on-year increase in the outstanding amount of NFC loans. At the same time, the decrease in the amount of non-performing corporate loans was greater than in any other year of the post-crisis period. This fact was caused largely by the writing-off and selling-off of NPLs, even though the loans involved were not excessive from a long-term view. Another factor supporting the drop in NPLs was an

Chart 44 NPL ratios for loans to different economic sectors (percentages)



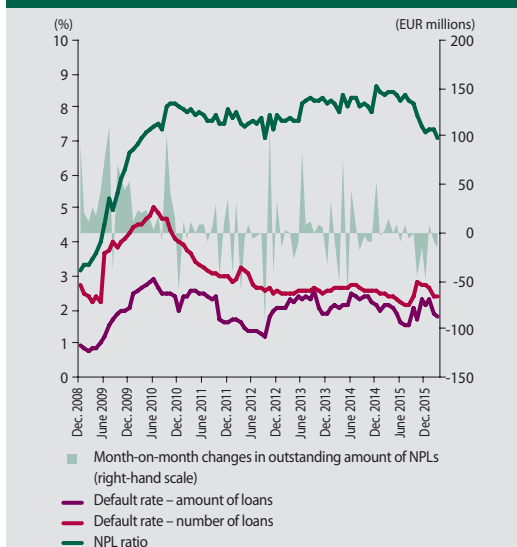
Source: NBS.

increase in the repayment of non-performing loans, or their recategorisation as standard loans. These trends probably ensue from healthy economic conditions. Another appreciable factor was the low increase in newly defaulted loans referred to above. In the breakdown of loans by size, a continuing improvement in quality is also observable in loans to small and medium-sized enterprises, which are approximated by loans of up to €1 million.

As for the aggregate portfolios of loans to particular sectors of the economy, most of them improved in quality in year-on-year terms. The sectors that contributed most to the fall in the overall amount of NPLs and in the NPL ratio were industry, construction and wholesale trade. The opposite trend was observed in the commercial real estate and energy supply sectors, albeit only to a moderate extent. The differences between the credit quality of different sectors nevertheless remained relative sizeable.

The situation in the commercial real estate (CRE) sector remained unchanged. The CRE sector is significant in terms of its share of total loans and NPLs. In this regard, the situation remained unchanged in 2015 and the first quarter of 2016, with no banks reporting an increase in the concentration of CRE loans in their portfolios.

Chart 43 Non-performing loans and default rates



Source: NBS.

Notes: The default rate denotes the number/volume of loans that defaulted within a one-year period to the number/volume of performing loans at the beginning of that period.

Nor was there any significant change in the NPL ratio for these loans, which at the aggregate level fluctuated around 10%. While these trends were broad-based across the banking sector, the heterogeneity between banks in terms of the quality of their CRE loans remained present.

CONCENTRATION LEVELS IN THE DOMESTIC BANKING SECTOR'S LOAN PORTFOLIOS REMAINED LARGELY UNCHANGED

Concentration risk in the domestic banking sector, which is structural in origin, continues to be present in several forms. The first, long-standing form is through significant exposures to particular borrowers or to groups of economically linked borrowers. For some small and medium-sized banks, a default of such borrowers would reduce their capital ratio to below 10.5%. This risk may be further amplified by the indirect links between particular borrowers.

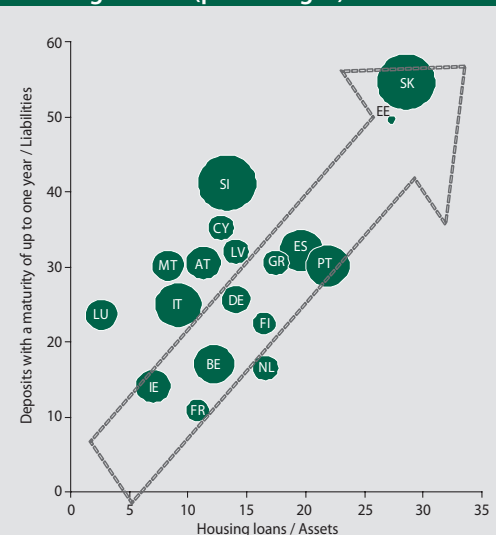
Another form of risk associated with the presence of systemically important borrowers is sectoral concentration, where several economic sectors constitute a significant proportion of banks' corporate loan portfolios in terms of the outstanding amount of both loans in total and non-performing loans. The most significant sectors in this regard are commercial real estate, industry, wholesale trade, and energy supply. At the sectoral level, this risk was largely unchanged, with the sectoral shares of loan portfolios remaining within the bounds of standard volatility.

Concentration risk is also apparent in the sizeable intragroup exposures of certain banks. This form of concentration risk moderated during 2015, as intragroup exposures were reduced or collateralised. Going forward, however, this risk may increase if the option to cancel the limit on large intragroup exposures is exercised in full, as is provided for within the banking union on the basis of an ECB decision issued in March 2016⁶.

ALTHOUGH THE MATURITY MISMATCH BETWEEN ITS ASSETS AND LIABILITIES INCREASED, THE BANKING SECTOR MAINTAINED AN ADEQUATE LIQUIDITY BUFFER

Household loan growth, as the leading trend in the Slovak banking sector in 2015, had a significant impact on liquidity risk during the year. The combination of strong growth in long-term loans (especially housing loans) and deposits with a maturity of up to one year (current accounts in particular) lay behind the in-

Chart 45 Representation of the asset and liability maturity mismatch across euro area banking sectors (percentages)



Source: NBS.

Notes: The bubble size corresponds to the share of government bonds in total assets of the country's banking sector.

The arrow represents the increasing maturity mismatch between assets and liabilities.

creasing maturity mismatch between assets and liabilities. Among all national banking sectors in the euro area, Slovakia's has the largest share of housing loans in its aggregate balance sheet as well as the highest share of short-term deposits.

In comparison with other banking sectors in the euro area, the sector in Slovakia has two specific features in regard to liquidity risk. The first feature is a relatively low and stable loan-to-deposit ratio, which indicates the resilience and sustainability of the sector's balance sheet structure. The second is the high share of government bonds in the total assets, which indicates sizeable investment in liquid assets.

Therefore, on the one hand, the Slovak banking sector has an increasing maturity mismatch between assets and liabilities, while, on the other hand, its banks are maintaining a sustainable balance sheet structure and an adequate liquidity buffer. This equilibrium is determinative for liquidity risk developments going forward. Since the maturity mismatch stems from the sector's traditional business model and is an inherent part of the sector, the focus of liquidity risk management continues to be on maintaining adequate liquidity buffers. The particularity of the Slovak

⁶ Regulation (EU) 2016/445 of the European Central Bank of 14 March 2016 on the exercise of options and discretions available in Union law (ECB/2016/4).



banking sector's business model, compared with other national banking sectors in the euro area, requires a sensitive approach to liquidity buffer management in the sector. The importance of this principle in Slovakia is further heightened by the fact that all of the systemically important banks in the sector are subsidiaries of foreign banking groups.

STRONG INTERLINKAGE BETWEEN FINANCIAL STABILITY AND FINANCIAL CONSUMER PROTECTION

Financial consumer protection is quite strongly linked to financial stability. For the long-term stability of the financial sector, it is important to have equality, or at least balance, in the relationship between financial institutions and their customers. If this is not present, the sector may see a build-up of imbalances (such as: a fall in confidence in financial entities due to the materialisa-

tion of reputational risk; class actions filed against financial entities; or the imposition of sanctions by regulators) with potentially adverse repercussions for the stability of financial institutions.

As of 2015 NBS assumed responsibility for financial consumer protection in Slovakia. Although the history of the relationship between financial consumer protection and financial stability has so far been relatively short, the very establishment of such a function is important for financial stability. It is particularly important to monitor unresolved issues concerning financial consumer protection which may have implications for financial stability. It is worth noting that the financial consumer protection and macroprudential policy units at NBS cooperate closely and are therefore better able to harmonise their activities and objectives.

Box 1

**FINANCIAL STABILITY AND DIGITAL INNOVATION
IN THE AREA OF FINANCIAL SERVICES**

In recent years digital technologies have been spreading rapidly to the financial services sector. They are being applied in such areas as asset management, data management, investment advice, and information storage, through, for example, mobile, contactless and online payments, or account information. As a result of these changes, the range of financial services on offer is expanding and the financial sector is facing competition in the provision of these services from firms outside the sector. There are multiple factors behind this development, including, for example: the growing appetite for digital solutions; the erosion of public confidence in the banking world in the wake of the 2008 financial crisis; regulatory changes since 2008 aimed at promoting increased standardisation and transparency in financial transactions via encouraging more electronic trading; and substantial developments in the field of storage and data management. These changes are having an impact on traditional banking models and on the functioning of the financial system, bringing not only increased competition into the financial system, but also new risks. In addition to traditional risks such

as credit and liquidity risks, the inroads made by digital technologies into the financial system entail risks related to financial transaction security, cybercrime exposure, and the facilitation of money laundering and terrorist financing⁷. A specific risk is that of virtual currencies, such as bitcoin, which bring a shadow mechanism of money creation into play and the ambition to challenge central banks' monopoly on issuance. Another risk is that new providers of electronic financial services, despite operating under a different funding model, may compete with the traditional financial sector in providing market liquidity. Since such providers are often not subject to the regulatory requirements applicable to the financial sector, they could crowd out traditional market makers. Hence in the event of market fluctuations, the instability of capital could give rise to increased market volatility or even a liquidity shortfall.

At the global level there are now quite intensive discussions on the relationship between digital innovation and financial stability. There is a prevailing consensus on the neces-

⁷ VILLEROY de GALHAU, F., "Constructing the possible trinity of innovation, stability and regulation for digital finance", *Financial Stability Review*, April 2016



sity of adhering to two principles of action:

i) the guaranteeing of payment and transaction security and ii) the adapting of regulations to address the systemic risk arising from the advance of digital technologies in the financial system. With the aim of responding to these risks, a revision of the Markets in Financial Instruments directive (MiFID II) is being drafted and should come into force in January 2018. The revision provides for the authorisation of high frequency trading (HFT) firms (new firms establishing themselves on the market and conducting high frequency

trading on the basis of sophisticated computer algorithms) and for a standardised definition of the tick size, depending on the instruments and their liquidity. The Directive also includes, among other things, pre- and post-trade transparency obligations and liquidity adequacy requirements. The spread of digital technologies in the financial system continues to be a rapidly advancing field in which regulatory initiatives are struggling to keep pace with market developments. The tasks of closing that gap is a priority of international discussions in this area.



NÁRODNÁ BANKA SLOVENSKA
EUROSYSTEM

CHAPTER 4

REGULATORY AND LEGISLATIVE ENVIRONMENT



4 REGULATORY AND LEGISLATIVE ENVIRONMENT

REGULATORY CHANGES IN THE HOUSING LOAN MARKET

The new Housing Loan Act (HLA)⁸ that entered into force on 21 March 2016 will result in a sharp fall in early repayment charges for housing loans. The HLA enacts in Slovak law the Mortgage Credit Directive⁹, the key provisions of which were summarised in the May 2014 Financial Stability Report. In addition to enacting the Directive's provisions, the HLA stipulates that the charge imposed for the early repayment of a housing loan outside the interest-rate resetting process may not exceed the creditor's actual costs or 1% of the amount being repaid, whichever is lower. The financial stability implications of that change are covered elsewhere in this report. This provision may result in many more borrowers refinancing their housing loans, which in turn implies increasing competition between banks and therefore interest rate reductions. That will further heighten the risk of low interest rates adversely affecting the banking sector's profitability.

AN NBS DECREE WILL IMPLEMENT INTO LAW THE PRINCIPLES CONTAINED IN NBS RECOMMENDATION No 1/2014.

One of the most significant legislative changes now being prepared is the transformation of NBS Recommendation No 1/2014 ('the Recommendation') into secondary legislation in the form of NBS Decrees. The effect of this change will be that prudential principles for retail lending will become legally binding and that applies not only for banks but for all financial institutions providing retail loans. The first provisions of the Recommendation that are to be given statutory force are those concerning housing loans. The respective NBS Decree will be issued on the basis of enabling provisions contained in the HLA.

This Decree will include the recalibration of certain parameters and create a legal framework for supervising whether the provision of housing loans is compliant with prudential rules. The purpose of this recalibration is to take into account current developments and changes in the housing loan market. Potential adjustments to the overall framework are now under discus-

sion, and the principal provisions being considered are as follows:

- a requirement that a housing loan may not be provided if it leaves the borrower with an income which, less the amount of the subsistence minimum and repayments on existing loans (taking into account a possible increase in interest rates), does not include a certain amount as a buffer for unforeseen events;
- the introduction of an additional upper limit for the share of loans whose LTV ratio is at the 90% limit in order to restrict further growth in this loan category;
- requirements for creditors to have in place a prudential internal system of collateral appraisal.

HARMONISATION OF OPTIONS AND DISCRETIONS UNDER THE BANKING UNION

ECB decisions concerning the harmonisation of bank regulatory regime could lead to relatively significant easing in some areas of the regime. On 24 March 2016 the ECB published a Regulation¹⁰ and Guide¹¹ whose purposes is to harmonise the large number of options and discretions contained in the current bank regulatory regime. Some of these decisions also imply significant changes for the regulation of the Slovak banking sector, and a potentially major impact on financial stability. The main result may be an easing of regulatory requirements for liquidity risk and concentration risk, each of which is significant from the view of stability in the Slovak banking sector. The principal ECB decisions in this regard are those concerning:

- i) the option of full exemption of intragroup exposures from the large exposure limit for banks;
- ii) the option of centralised liquidity management within individual banking groups (liquidity sub-group), in connection with the easing of regulatory liquidity requirements.

These changes could potentially trigger a significant outflow of liquid assets from the largest Slovak banks to their parent institutions and that in turn would make these banks increasingly dependent on intragroup support. Such dependence would be more acute during crisis periods,

⁸ Act No 90/2016 Coll. on housing loans and amending certain laws.

⁹ Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014 on credit agreements for consumers relating to residential immovable property and amending Directives 2008/48/EC and 2013/36/EU and Regulation (EU) No 1093/2010.

¹⁰ Regulation (EU) 2016/445 of the European Central Bank of 14 March 2016 on the exercise of options and discretions available in Union law (ECB/2016/4).

¹¹ ECB Guide on options and discretions available in Union law.



but it may be precisely at those times when parents are less able or willing to support their subsidiaries.

EUROPEAN DEPOSIT INSURANCE SCHEME (EDIS)

On 24 November 2015 the European Commission published a proposal for a Regulation to establish a European Deposit Insurance Scheme (EDIS) as the third pillar of the banking union¹². EDIS is therefore expected to apply to Member States participating in the banking union, i.e. those that are members of the euro area and those that voluntarily decide to join the banking union. The Commission's proposal for the EDIS Regulation is now being examined by a working group established by the Commission and including participants from all EU Member States.

EDIS is intended to address the problem that national deposit guarantee schemes (DGSs) remain vulnerable to large local shocks. The implementation of EDIS is expected to result in a broader and proportional distribution of risk across the banking union, thereby increasing resilience to future crises, strengthening depositors' confidence in the banking sector, and weakening the interaction between banks and public finances.

It is proposed that EDIS will evolve over the following three stages beginning from 2017.

1. *Reinsurance stage* (first four years) – If a DGS is required to compensate depositors or contribute to resolution, EDIS may cover up to 20% of any resulting excessive loss or liquidity shortfall of the DGS.
2. *Co-insurance stage* (to apply for four years after the end of the first stage) – EDIS absorbs a progressively larger share of the excessive loss and liquidity shortfall of DGSs, from 20% in the first year, to 40% in the second, 60% in the third and 80% in the fourth.
3. *Full insurance stage* – EDIS fully ensures all losses incurred by DGSs in the event of a pay-out or a request to contribute to resolution.

EDIS also includes the establishment of a common Deposit Insurance Fund (DIF) amounting to the equivalent of 0.8% of the covered deposits of participating DGSs. The

DIF is to be financed mainly via ex-ante contributions from banks, with the amount of each bank's contribution depending on the amount of covered deposits of the institution and on its risk profile. The contributions transferred to the DIF will be counted towards the target level for national DGSs, and Member States may set off contributions to the DIF against contributions to the national DGS. The contributions are to be calculated at the national level in the first stage and at the European level in the second stage. The DIF is to be administered by the Single Resolution Board, which from the second stage may require banks to pay ex-post contributions as well.

Národná banka Slovenska supports the initiative to complete the banking union project, while stressing, however, the need for progression and linkage between the different stages. In NBS's view, it is first necessary to complete the banking union's second pillar (still not implemented by all Member States), to issue all of the required technical standards (including MREL requirements¹³ and bridge-financing arrangements for the Single Resolution Fund. At the same time, it is necessary to check whether DGSs are functioning in accordance with the new Deposit Guarantee Schemes Directive (DGSD), which has also not yet been implemented by certain Member States¹⁴.

It is crucial, moreover, that the full implementation of EDIS does not further dilute the powers of national supervisory authorities, that capital and liquidity requirements are not moderated for institutions at the local level, and that the independence of macro-prudential policy-making at the national level is preserved. NBS furthermore requires specification of how the DIF and Single Resolution Fund, in the event of the depletion of their own financial means, could be financed by ECB or the European Stability Mechanism. Other conditions that need to be met before EDIS can be adopted include the harmonisation of the large number of national discretions in the DGSD, in regard, for example, to different levels of deposit coverage, the purpose and financing of national funds in the third stage of EDIS, and risk mitigation in the banking sectors of those countries participating in the banking union.

¹² The first two pillars are the Single Supervisory Mechanism and the Single Resolution Mechanism.

¹³ Minimum requirement for own funds and eligible liabilities.

¹⁴ Under the Directive, the European Commission must by 3 July 2019 submit a report setting out how DGSs operating in the EU may cooperate through a common scheme.



NÁRODNÁ BANKA SLOVENSKA
EUROSYSTEM

CHAPTER 5

MACROPRUDENTIAL POLICY

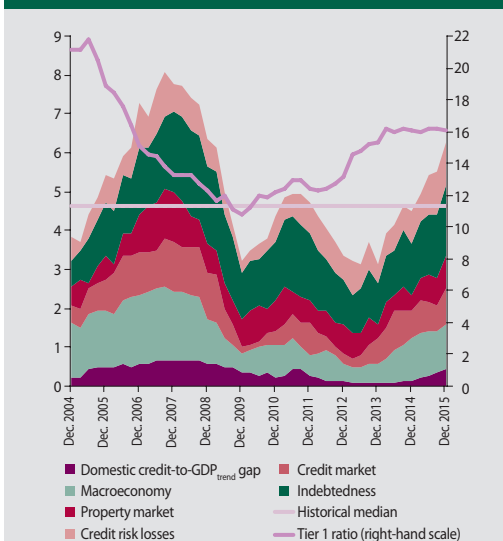
5 MACROPRUDENTIAL POLICY

COUNTERCYCLICAL CAPITAL BUFFER RATE REMAINED AT 0%

In its quarterly review of the countercyclical capital buffer (CCB) rate, the Bank Board of Národná banka Slovenska decided on 26 April 2016 to maintain the rate at 0%. In its summary of the market situation surrounding the decision, the Bank Board noted the growth in loans to both households and non-financial corporations, whereas in previous quarters it had noted the potentially excessive growth in household loans and the absence of any clear trend in corporate loans.

But although private debt increased on a broad front in December 2015, it is not yet deemed strong enough to warrant an increase in the CCB rate. In the meantime, two key ratios reached their highest levels since 2009. The domestic credit-to-GDP_{trend} gap rose to 1.97%, only 0.03% below the threshold implying the application of a non-zero CCB rate. As for the Cyclogram, it has been trending above the median since the beginning of 2015. The increase in its values reflects not only the above-mentioned developments in the credit market, but also rising property prices, house-

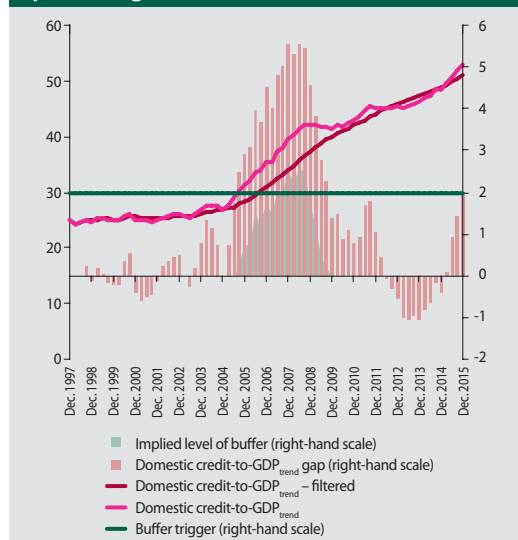
Chart 47 Cyclogram



Source: NBS.

hold indebtedness and extremely favourable trends in credit risk losses. In the latest NBS Decision to maintain the CCB rate at 0% there is also a notice that NBS will consider applying a non-zero CCB rate when the rate is next reviewed in July 2016.

Chart 46 Domestic credit-to-GDP_{trend} gap (percentages)



Source: NBS.

The majority of reference variables for the CCB rate decision were increasing during the period under review. Of particular note were the acceleration in lending to households, the household debt servicing burden, the extraordinary favourable developments in credit risk losses, and the increasing growth in loans to non-financial corporations, exceeding growth in corporate sales. There was also a greater increase in flat prices than in household income, which was reflected in the two principal determiners of the CCB rate (the Cyclogram and the domestic credit-to-GDP_{trend} gap). In several countries with similar credit market developments, decisions have been taken to strengthen the resilience of the banking sector.



POTENTIAL CONSEQUENCES OF INCREASING THE CCB RATE IN JULY 2016

In deciding whether to increase the CCB rate, the principal considerations are the potential effects of such a move on the banking sector

and the credit market. Given the conclusions presented in Chapter 3.1, increasing the CCB rate is not expected to have an adverse impact on either the banking sector or the credit market.

Box 2

THE COUNTERCYCLICAL CAPITAL BUFFER AS A MACROPRUDENTIAL POLICY INSTRUMENT

With regard to the financial cycle, which is the determining factor for decisions on the countercyclical capital buffer (CCB) rate, a general distinction is made between 'good times' and 'bad times'. Good times are characterised by growth in loans and banks' profits, and low credit risk losses, usually against a backdrop of economic growth. It is also during good times that the debt burdens of non-financial corporations and households increase, as banks and their customers perceive risks to be lower. This increases the likelihood that loans will be provided to less creditworthy customers or that unduly large loans will be provided under looser credit standards. In bad times, by contrast, lending growth falls and banks experience falling profitability, which is amplified by losses incurred on the credit portfolio. At the same time, both banks and borrowers become more risk averse. This cyclical nature of the credit market and credit risk was evident in Slovakia during the Great Recession, when losses on loans provided during the lending boom years of 2006-2008 (good times) peaked in 2009 (bad times). It was an example of the principle that 'bad loans are provided in good times'.

The main purpose of the countercyclical capital buffer is to ensure that banks accumulate, during periods of economic growth, a sufficient capital base to absorb losses in stressed periods. It should also be noted that increasing the CCB rate during good times is not generally expected to have an immediate impact on the credit market. This is due to a combination of two factors. The first is that the banking sector's capital ratio is, in practice, rarely close to the regulatory minimum capital requirement, and therefore when the minimum require-

ment is increased (typically by between 50 or 100 basis points, taking effect 12 months in the future), there is no immediate pressure on banks to increase their own funds. The second factor is the concept of macroprudential buffers per se. These are not binding on banks in the way that Pillar 1 and Pillar 2 capital requirements are, but they are still buffers and therefore to the extent that a bank fails to meet the buffer requirement, it is proportionally restricted in the amount of dividends and bonuses it may pay.

On the other hand, the release of the CCB during bad times should prevent banks experiencing a shortfall in the capital required for lending, the situation that would otherwise be typical owing to losses incurred. Such a situation occurred, for example, in the Slovak credit market in 2009 and 2010. The outstanding amount of loans to households increased at a significantly slower pace at that time, while lending to NFCs actually declined. This happened partly because banks substantially tightened their credit standards, stating a shortfall in capital as one of the reasons for the reluctance to lend. This corresponds to the fact that when the financial and economic crisis struck, the Slovak banking sector's aggregate capital ratio was at a historical low. In other words, the banking sector failed during the good times of 2006 and 2007 to build up a sufficient capital buffer that would allow it to ensure the flow of lending in 2009 and 2010.

It is therefore generally the case that where a macroprudential authority increases the CCB rate, its aim is to ensure that good times are used to make the banking sector sufficiently able to absorb unexpected losses on the credit



portfolio. In this way, the authority will also address the above-mentioned problem of the banking sector's capital shortfall during bad times, since the CCB requirement will be released during that period.

In the area of macroprudential policy, the capital instruments applied to the Slovak banking sector, including the CCB, have a further specific dimension. The capital buffers not only affect local banks' loss-absorbing capacity, they also influence their dividend policy vis-à-vis parent institutions. The recent period has seen several banks allocate more than 100% of their profit to dividends and reduce the quality of their capital in the process. Thus, they have converted their existing capital buffer into earnings of their parent institution.

Given the theory behind the CCB, the rate-setting decision for the CCB is based primarily on cyclical indicators. According to the Capital Requirements Directive IV (CRD IV), the principal indicator is based on the deviation of the ratio of credit to GDP from its long-term trend (the credit-to-GDP gap). What is therefore relevant is not the ratio of credit-to-GDP itself, but rather the gap between that ratio and its long-term trend. A positive credit-to-GDP gap is not the result of standard growth in the debt-to-GDP ratio (capital deepening), but rather indicates that this ratio is accelerating. In simplified terms there is a parallel between the use of the credit-to-GDP for macroprudential policy and the output gap for monetary policy. The set of other variables that are significant for CCB rate-setting decisions has been partly harmonised at the EU level in Recommendation ESRB/2014/1, and it includes the following:

a) measures of potential overvaluation of property prices (e.g. commercial and residential real estate price-to-income ratios, price gaps and growth rates);

- b) measures of credit developments (e.g. real total credit or real bank credit growth, the deviation from trend in deflated M3);
- c) measures of external imbalances (e.g. current account balances as a ratio to GDP);
- d) measures of the strength of bank balance sheets (e.g. leverage ratios);
- e) measures of private sector debt burden (e.g. debt-service to income ratios);
- f) measures of potential mispricing of risk (e.g. real equity price growth);
- g) measures derived from models that combine the credit-to-GDP gap and a selection of the above measures.

Member States are recommended to use those of the above variables that are available and relevant in the particular Member State. Given the structure and attributes of the Slovak credit market, the centre of focus for Slovak policy-makers are variables (a), (b), (e) and (f).

At the same time, in accordance with Article 33g(1)(c) of the Slovak Banking Act, Národná banka Slovenska may designate other variables that it considers relevant for determining the CCB rate (Article 33g transposes Article 136 of the CRD IV). It is under this provision that the Cyclogram is used.

In summary, therefore, it may be expected that, in accordance with the legislation in force, rate-setting decisions for the CCB will be based on the following factors:

- a) the standardised credit-to-GDP gap;
- b) the adjusted credit-to-GDP gap, which in the case of Slovakia is the domestic credit-to-GDP_{trend} gap;
- c) the set of variables laid down by the ESRB in Recommendation ESRB/2014/1;
- d) other variables that NBS considers relevant, i.e. the Cyclogram.



ABBREVIATIONS

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



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