



NÁRODNÁ BANKA SLOVENSKA  
EUROSYSTEM



# FINANCIAL STABILITY REPORT MAY 2017

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## FOREWORD

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

Národná banka Slovenska believes that an important aspect of its contribution to financial stability is to keep the public regularly informed about financial sector stability and about any trends which could jeopardise that

stability. Awareness and discussion of such issues is essential, particularly since financial stability is affected not only by financial sector institutions, but also by the behaviour of other non-financial corporations and individuals. Hence NBS publishes a biannual Financial Stability Report (FSR), 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.



## OVERVIEW

### FAVOURABLE TRENDS IN THE GLOBAL ECONOMY

The global economic situation improved in 2016, with favourable effects observed in several areas. Importantly for Slovakia, positive trends were prevalent in the euro area, too. Overall sentiment in the euro area economy picked up particularly strongly. This notwithstanding, the euro area's economic recovery is progressing quite slowly and the economy has still not fully rebounded from previous crises, with the lag particularly marked in certain member countries. The improving macroeconomic situation in 2016 was reflected in the performance of financial markets. Investors' sentiment rallied and their risk appetite increased. Interest rate outlooks began to change, influenced above all by US monetary policy developments.

The Slovak economy mirrored the broader economic upturn. In both the household sector and non-financial corporate sector, the situation improved quite notably. Households benefited mainly from favourable labour market developments.

### FINANCIAL STABILITY REMAINS SUBJECT TO SEVERAL RISKS

The current state of global risks to financial stability is related, among other things, to the future course of economic policy in the United States. Particular concern surrounds the issue of world trade and the potential adoption of protectionist measures that could fundamentally alter the current trade model. In the medium term, the situation in China continues to pose a risk to financial stability, especially given the rising indebtedness of the country's corporate sector. In the euro area, banking sector developments remain the principal source of financial stability risks. Concerns centre on banks' ability to generate sufficient profits in the low interest rate environment. A further risk in several countries is the credit quality of loan portfolios.

### LENDING TO HOUSEHOLDS MAINTAINED STRONG GROWTH

The dominant trend in the banking sector in 2016 was growth in loans to households. The year-on-year increase in the stock of these loans was higher in Slovakia than in any other EU country. The factors contributing to this growth

included: favourable economic trends and an improving labour market situation; low interest rates; rising property prices; and banks' efforts to maximise their lending. It was, however, the sharp drop in interest rates that had the largest impact on credit growth in 2016, as it allowed banks' existing borrowers to take on more debt and attracted new borrowers.

### HOUSEHOLDS' DEBT SERVICING IS BECOMING INCREASINGLY SENSITIVE TO POTENTIAL FUTURE HEADWINDS

The strong growth in household loans is also contributing to a build-up of imbalances. These are currently evident in rising household debt levels and in the property market. Household indebtedness in Slovakia has doubled since 2010 and is now higher than the household debt level in the central European countries. But although the debt of Slovak households is growing sharply, the relative amount of their financial assets is among the lowest in the EU. At the same time, households' high indebtedness is increasing their sensitivity to potential future headwinds. In terms of financial stability, it is important that banks and borrowers alike do not underestimate potential future risks, such as income reduction or loss, an increase in interest rates, or a decline in property prices.

### NBS HAS RESPONDED TO THE EXISTING IMBALANCES AND STANDS READY TO RESPOND TO ANY FUTURE SYSTEMIC RISKS

Národná banka Slovenska, in its capacity as the macroprudential authority in Slovakia, is responsive to market developments in the household credit market. On the one hand, NBS aims to support the smooth provision of loans that will be repaid even in crisis periods, while, on the other hand, it is seeking to ensure that the banking sector has sufficient loss-absorption capacity. Back in 2014 NBS issued several recommendations which at the time served to stabilise the market situation. With effect from 2017, the recommendations concerning housing loans became binding legal provisions, and some of them were further recalibrated. Furthermore, a decree on consumer loans is now being drafted. NBS is actively monitoring household lending trends and,



if imbalances mount, will consider taking further measures.

From August 2017 the countercyclical capital buffer (CCyB) will be set at a non-zero rate, 0.5%, as a response to excessive credit growth. Several indicators suggest that the CCyB rate may have to be raised further in the near future.

#### **LOW INTEREST RATES WEIGHING ON BANKS' PROFITABILITY**

Both falling interest rates and the banking sector's significant reliance on interest income is raising questions about the sustainability of banks' business models. Simulation results for potential and expected developments suggest that banks' profitability will decline in the years ahead, more so among small and medium-sized banks. The low interest rate environment may therefore have implications not only for the sustainability of banks' profitability, but also for the optimal number of banks in the sector.

The factors, other than interest income trends, that will affect actual profit levels in the banking sector include loan-loss provisions. Although these are now reaching historical lows, it appears that even their slight increase could have a relatively significant impact on bank profits.

#### **POTENTIAL RISK CHANNELS IN THE EVENT OF AN INCREASE IN INTEREST RATES**

Signs of potential interest rates increases appeared in financial markets in 2016. Although these signals were largely sourced in the United States, it is important to be aware of the potential effects of interest rate increases on the Slovak financial sector. Such increases could have an adverse impact on borrowers servicing bank loans with short rate fixation periods. This vulnerability is more marked in loans to non-finan-

cial corporations (NFCs) than in loans to households, since a substantial share of NFC loans have an interest rate fixation period of up to one year. As for housing loans, the average initial rate fixation period for them has increased in recent years. In this market, given the strength of interbank competition, the pass-through of rate increases to borrowers is expected to be more moderate. Furthermore, a new NBS decree requires people applying for housing loans to be assessed for their ability to repay the loan under potential higher interest rates. Interest rate increase could also have a negative impact on asset-management segments via asset repricing. Such impact may be most marked in pension funds.

#### **REGULATORY RISKS HAVE A SIGNIFICANT IMPACT ON FINANCIAL STABILITY**

Developments in the regulatory environment have had, and could again have, a significant impact on financial stability. The banking sector's profitability has been notably affected by various regulatory contributions. Small and medium-sized banks are particularly sensitive to such mandatory contributions, which are equivalent to fully 30% of these banks' total profit. In the insurance sector, too, regulatory contributions are eating into profits. Discussions are currently taking place at the EU level on amendments to certain EU directives and regulations which could have a significant impact on the stability of the domestic financial sector. These changes concern mainly the regulation of bank subsidiaries' capital and liquidity requirements, which are the cornerstone of Slovak banks' stability. Any transfer of the obligations to meet these requirements to parent undertakings would be expected to have significant implications for the stability of Slovakia's banking sector.



**Table 1 Principal risks to financial stability in Slovakia**

	Area	Risk	NBS regulatory measures and recommendations
Risks arising from the external environment	Low interest rates and the impact of accommodative monetary policies	Adverse impact on the business models of banks and insurers	The Solvency II regulatory regime for the insurance sector, which entered into force on 1 January 2016 and which is expected to lead to a significant increase in risk capital requirements, but not to a marked drop in solvency margins
		Increase in riskiness of pension fund portfolios	A recommendation to insurers with a low solvency ratio to reconsider making dividend payments and to strengthen their solvency
		Formation of price bubbles in riskier assets	
	Macroeconomic developments in the domestic economy and the euro area	Increasing market risks in financial institutions' portfolios	
		Increase in credit risk costs in the event of adverse macroeconomic developments	A capital conservation buffer, implemented in full since 1 October 2014  An additional capital buffer applied to systemically important banks on grounds of their systemic importance, being phased in between 2016 and 2018  A countercyclical capital buffer rate of 0.5%, applied with effect from 1 August 2017 in response to growth in both retail and NFC loans  An NBS Decree laying down prudential rules for the provision of housing loans, which entered into force on 1 January 2017 and includes a cap on borrowers' repayment ability indicator
Regulatory environment	Higher sensitivity of banks to adverse property market developments in the event of an economic downturn	An NBS Decree laying down prudential rules for the provision of housing loans, which entered into force on 1 January 2017, and includes caps on loan-to-value ratios for housing loans	
	In the context of the Banking Union, potential easing of regulatory rules for bank subsidiaries of foreign banks in the areas of liquidity, capital and large exposure		
Risks arising from the domestic financial market	Household indebtedness	Risk arising from the implementation of the minimum requirement for own funds and eligible liabilities (MREL)	
		The household sector being weakened by its increasing indebtedness and therefore increasing the banking sector's sensitivity to any deterioration in macroeconomic conditions	An NBS Decree laying down prudential rules for the provision of housing loans, which entered into force on 1 January 2017, and includes caps on loan-to-value ratios for housing loans  A countercyclical capital buffer rate of 0.5%, applied with effect from 1 August 2017 in response to growth in both retail and NFC loans
	Liquidity	Maturity mismatch between assets and liabilities	An amendment to the liquid asset ratio requirements, effective from 1 December 2014, which mean that these requirements for the coverage of net cash outflows are stricter than the corresponding rules adopted at the European level  The fact that the liquid asset ratio also takes into account the potential spread of risk to investment funds  A draft amendment to legislation in the area of mortgage bonds, aimed at making mortgage bonds a more effective means of supporting banks' long-term funding
		Concentration, financial market interlinkages, and contagion	Relatively high concentration in (part of) the portfolio, or higher intra-group exposure, in certain institutions or funds
Business practices of financial institutions	Potential strategic risk from increasing linkages between financial undertakings and financial agents	Housing Loan Act effective as of 21 March 2016 – principles of prudent cooperation between financial undertakings and financial agents	
	Potential imbalances resulting from asymmetric relationship between financial undertakings and their customers	In 2015 NBS assumed responsibility for the supervision of non-bank lenders and, at the same time, its supervisory powers in the area of financial consumer protection were significantly strengthened.	

Source: NBS.



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CHAPTER 1

# MACROECONOMIC ENVIRONMENT AND FINANCIAL MARKETS

1



# 1 MACROECONOMIC ENVIRONMENT AND FINANCIAL MARKETS

## 1.1 EXTERNAL ENVIRONMENT

### Key trends in the external environment

- Economic growth is picking up across both advanced economies and emerging market economies.
- The new US administration is a source of positive expectations, but also significant risks.
- Higher interest rates in the United States are spilling over to other regions.
- Weak bank profitability and concerns about public finance sustainability still represent the most significant endogenous risks to the euro area.
- Potential instability in China is one of the most serious risks to the global economy in the medium term.

### BROAD-BASED PICK-UP IN GLOBAL ECONOMIC GROWTH AND A WAVE OF OPTIMISM IN RESPONSE TO ECONOMIC REFORM PLEDGES IN UNITED STATES

**Global economic activity has gradually gained momentum in the recent period.** On current trends, global growth is expected to accelerate from 3.1% in 2016 to 3.5% in 2017, which would be its highest annual increase for six years. The main causes of the world economy's improving performance are the pick-up in manufacturing industry, the accelerating intensity of cross-border trade, and the rebound of commodity prices. On the demand side, these factors were coupled with a recovery in investment activity. These overall trends were accompanied by growing optimism among participants in both the real economy and financial markets. A major cause of the improved sentiment was the arrival of the new US administration, whose economic pledges have given rise to relatively high expectations.

**Economic growth has been picking up across both advanced economies and emerging market economies (EMEs).** The recent perfor-

mance of advanced economies in particular has surprised on the upside. In the second half of 2016 advanced economies, both as a whole and individually, surpassed growth expectations, and this acceleration prompted upward revisions of growth outlooks. In addition, inflation and inflation expectations in advanced countries are increasing after being subdued for a long period.

**Among the improving economic outlooks are those for the euro area.** Even a few months ago the euro area's economic growth for 2017 was projected to slow, but now it is expected to match the rate achieved in 2016, around 1.7%. Overall sentiment in the economy has picked up significantly in 2017, as is evident from a wide range of monthly indicators in the first months of the year. In terms of overall demand, favourable economic trends in the rest of the world, benign financial conditions, and improved sentiment are expected to outweigh the slowdown in real disposable income growth and the fading of the impact of past depreciation of the euro exchange rate.

**This notwithstanding, the euro area's economic recovery is progressing quite slowly and the economy has still not fully rebounded from previous crises, with the lag particularly marked in certain member countries.** This is evident, for example, from the average unemployment rate, which although it has fallen to below 10%, remains far above pre-crisis levels. Similar inferences may be drawn from inflation trends. While headline inflation has recently been rising after an extended period at low or negative levels, core inflation, which excludes energy and food prices, stands at around one per cent and is projected to increase only very slowly. In the light of these facts, the European Central Bank is maintaining a highly accommodative monetary policy stance, without giving any indication as to whether the key ECB rates will be raised from their current historically low levels within the foreseeable future. And although monthly purchases under the ECB's asset purchase programme (APP) have been reduced,



from €80 billion to €60 billion as of March 2017, the term of the APP has been prolonged at least until the end of 2017.

**Financial market developments from the autumn of last year were heavily influenced by the improving macroeconomic situation and by expectations generated by the new US administration's policy plans.** In financial markets, particularly those in advanced economies, investors' sentiment rallied and their risk appetite increased. Prices of equities and other risky assets moved up, while market volatility was approaching multi-year lows. In Europe, bank share prices in particular increased sharply. These trends, however, were in marked contrast with the uncertainty surrounding the course of economic policies.

**Interest rate outlooks began changing from around the second half of 2016.** Initially, their increase reflected the upturn in overall economic performance. Later, however, they came under further upward pressure stemming from the United States. Expectations of growing inflationary pressures in the United States translated into expectations that the normalisation of the US monetary policy would be less gradual than had previously been envisaged. Such views were also supported by decisions of the Federal Reserve System's Federal Open Market Committee

(FOMC). In December 2016 the FOMC increased the target range for the federal funds rate for the second time in the current cycle, by 25 points, a full year after the previous increase, while the third rate hike, by the same margin, followed within a much shorter interval, in March 2017. According to the FOMC's forward guidance, at least a further two rate increases should be expected this year. The Federal Reserve has indicated, moreover, that it could begin the gradual reduction of its balance sheet as early as this year, by not reinvesting maturing debt holdings. The US yield curve has therefore moved up and become steeper. Accelerating increases at the long end of the curve are being supported by rising term premia, which reflect uncertainty about future interest rate movements. Given the close interlinkages between global financial markets, interest rate increases in the United States have to some extent spilled over to other regions, including the euro area.

**THE GLOBAL RISKS TO FINANCIAL STABILITY ARE SIGNIFICANTLY LINKED TO THE FUTURE COURSE OF US ECONOMIC POLICY**

**The new US administration is generating macroprudential and financial risks insofar as uncertainty surrounds its intentions.** Although in certain circumstance such uncertainty could have a more positive than expected impact on the economy, the overall balance of these risks is tilted to the downside. The principal policy areas around which these risks are centred are fiscal policy, trade policy, and financial sector regulation.

**The fiscal stimulus pledged by the US administration could have secondary adverse effects that, especially at the broader global level, outweigh its benefits.** In the short term, if they fail to secure political support, the ambitious reform plans may not be implemented at all, or may be severely curtailed. The result of that would apparently be a slump in equity markets, since the recent firming of equity indices was driven largely by assumptions that economic growth will accelerate and that corporate profits will be boosted by a fiscal stimulus. This risk is further amplified by the fact that the principal US equity index, the S&P 500, has become somewhat detached from its fundamentals in the recent period. European equity markets are not yet showing signs of overvaluation, but any wave of

**Chart 1 Five-year government bond yields (percentages)**



Source: Bloomberg.



adverse sentiment from the United States, coupled with rising risk aversion, would probably spill over to Europe and trigger turbulence not just in stock markets, but in the financial market as whole.

An alternative scenario is that the fiscal expansion is ineffective, bringing a temporary boost to demand but not any long-term benefit to the economy's productive capacity. Since the US economy is, according to most indicators, close to its potential, there is a risk that any further stimulating of demand could lead to overheating and excessive price growth. In that case, the central bank would have to respond with an abrupt tightening of monetary policy, indirectly resulting in the tightening of global financial conditions. The pass-through of higher interest rates to the euro area could complicate economic recovery in euro area countries that are still coping with the legacy of the previous debt crisis. Furthermore, any temporary stoking of demand may spur firms into heavy capital expenditure financed with external funds. The debt burden of the US corporate sector would thus increase from its already relatively high level, and, in the post-boom environment, any deterioration in firms' debt servicing capacity could set off a new wave of instability in the financial sector.

**Another risk to global economic and financial stability lies in the new US administration's reserved stance towards the current model of global economic cooperation and its potential for following protectionist policies.** The policy plans of the new US administration include several measures aimed at supporting domestic production and restricting imports. Among the broad range of measures under discussion are a reassessment of US participation in trade agreements, the imposition of customs duties and tariffs, and tax code adjustments that give preferential treatment to US exports and penalise imports. Were the bulk of that agenda to be implemented, it would clearly weigh on international trade and dampen demand for the goods of many export-oriented countries and regions, whether directly (as in the case of the euro area, which has a trade surplus with the United States), or indirectly, via a slowdown in global economic growth. The indirect channel would gain in significance particularly if any substantial

cracks emerged in the current free trade consensus, with multiple countries entering into a beggar-thy-neighbour spiral.

#### **BANKING SECTOR DIFFICULTIES AND HIGH PUBLIC DEBT LEVELS CONSTITUTE THE MAIN ENDOGENOUS RISKS TO THE EURO AREA**

**Despite clear progress in its recovery, the euro area banking sector remains a significant risk to financial stability in the region.**

The condition of European banks has improved in recent years; their capitalisation has increased and their reliance on short-term funding has decreased. A sign of the increasing confidence in euro area banks is the ECB's decision not to continue providing them with non-standard longer-term liquidity.

**These improvements notwithstanding, a significant number of European banks are not generating sufficient profit to ensure their stable long-term operation.** Their returns on equity are often not covering the returns on capital required by investors. The key factor reducing bank profits in recent years has been the compression of net interest income in an environment of falling interest rates. The recent steepening of the yield curve indicates that interest margins may have already bottomed out, but to say that the period of low interest rates is now in the past would, in the circumstances, be premature. Both short- and long-term interest rates remain at levels that are extremely low by historical standards. As for the increase in long-term interest rates in recent months, it stemmed largely from external causes; there has not yet been any change in the ECB's accommodative monetary policy stance.

**The cyclical drop in interest income is not the sole cause of the decline in banks' operating profits. Certain banking sectors in particular are experiencing serious structural challenges.** Among the most significant of these is what is known as 'overbanking', which has roots going back to the pre-crisis period. One form of overbanking is excessive banking sector size – whether in terms of the amount of assets or number of banks – which leads to over-concentration and thereby reduces the income-earning potential of individual banks. A second form of overbanking is the existence of overly dense branch networks and hence overemployment,



with a consequent upward impact on operating costs.

**Another structural challenge for the euro area banking sector is the worsening credit quality of loan portfolios.** Although, on aggregate, the non-performing loan (NPL) ratio is gradually falling, it remains more than twice as high as its pre-crisis level. The situation is even worse in certain national banking sectors, eight of which report an NPL ratio of more than 10%. Unless measures are adopted to simplify and hasten the reduction of NPLs in banks' balance sheets, this process will drag on for several more years yet. Banks whose loan books are particularly burdened with NPLs will not be able to provide sufficient financing to the real economy and their capacity for responding to new shocks will be diminished.

**The state of public finances in euro area countries, together with political factors and elevated interest payments, could trigger a new phase of the debt crisis.** Concerted consolidation efforts in recent years succeeded in containing the growth in euro area sovereign debt; nevertheless, public debt-to-GDP ratios remain elevated in several countries. The servicing of that debt is, at present, aided considerably by the low interest rate environment. As mentioned already, interest rates, and in particular long-term rates, could shift upwards and thus further burden public finances. In addition, mounting political risks and uncertainty could dent investor confidence and lead to increases in risk premia on sovereign bonds. At the same time, political fragmentation in the euro area and the increasing emphasis on narrow national interests could stall the reforms necessary for recovery and diminish the capacity for responding to any shocks at the euro area level.

#### ONE OF THE MOST SERIOUS RISKS TO THE GLOBAL ECONOMY IN THE MEDIUM TERM IS POTENTIAL INSTABILITY IN CHINA

**The main risk arising from China is the continuous rapid growth in the indebtedness of the corporate sector.** The Chinese authorities face the long-standing challenge of shifting the Chinese economy from a growth path driven by investment and exports to one driven more by domestic consumption. Part of this rebalancing involves finding an optimal way to reduce

economic growth to levels sustainable over the long term, while avoiding any sudden slump in economic performance. The pursuit of this objective in recent years has been relatively successful, although a certain tendency to give the growth side of the policy preference over structural reforms has been evident. The Chinese economy has so far managed to avoid a 'hard landing', and its growth rate, despite slowing, remains one of the highest in the world. The efforts to ensure extremely gradual growth deceleration have, however, a downside in that corporate debt has ballooned to the limits of sustainability. Hence firms are becoming increasingly sensitive to any slowdown in production, and there is an increasing probability that they will be unable to service their debts, thereby triggering a financial crisis that could have global implications. The spread of crisis in the financial sector would clearly be amplified by the close links between its segments and by the intransparency of relations.

## 1.2 DOMESTIC ENVIRONMENT

### Key trends in the domestic environment

- Slovakia's economic growth is stable, driven mainly by domestic demand but also by foreign demand. Going forward, the investment component of GDP growth is expected to increase.
- The labour market is benefiting from the economy's steady growth.

The Slovak economy maintained a steady growth rate in the second half of 2016, although it was slightly lower compared with a year earlier. The slowdown had been expected, given that GDP growth in the second half of 2015 was boosted by the remaining absorption of EU funds allocated during the previous programming period. The absorption of funds under the new programming period was more moderate in 2016, resulting in a marked year-on-year drop in investment, particularly in the general government sector. Slovakia's GDP growth in the second half of the year was evenly split between domestic and foreign demand. Therefore net trade made a positive contribution to GDP growth, after two years in which its impact had been largely negative.



Exports were the main beneficiary of the gradual growth in foreign demand. Slovak households' consumption increased steadily, as growth in both real wages and employment improved their financial position. As a result of their stronger finances and improving sentiment, households increased their consumption expenditure for a third successive year.

The general government sector had a moderately positive impact on economic growth in the second half of 2016, owing mainly to increases in spending on health care and public sector wages. Slovakia's economic growth in 2016 was the seventh highest in the EU and the fourth highest in the euro area.

Looking ahead, GDP is expected to continue growing at a gradually increasing pace. Both domestic and foreign demand are expected to continue driving growth, but at same time investment should gradually begin making a positive contribution, too, as new car plant investments come on stream, public investment grows, and a major public-private partnership project is realised.<sup>1</sup> The economic upswing is therefore expected to continue, with a favourable impact on households' disposable income and firms' operating profits; the positive output gap will gradually widen. Macroeconomic fundamentals are

thus supporting the expansionary phase of the financial cycle.

**LABOUR MARKET DEVELOPMENTS REMAIN FAVOURABLE, BUT MEETING DEMAND FOR SKILLED LABOUR WILL BE INCREASINGLY DIFFICULT**

**The continuing stability of economic growth is having a favourable impact on the labour market. The number of people in employment at the end of 2016 was a new historical high of more than 2.3 million.** In the second half of 2016 alone, around 30,000 people found work, with the industry and services sectors recording the highest job growth. Despite the number of people employed being the highest recorded over the reviewed years, the unemployment rate ended 2016 at around 9%, still higher than its pre-crisis low. This reflects the continuing growth in the working-age population and in the labour force participation rate, the latter being supported by favourable labour market trends, the raising of the pension age, and an increase in part-time employment.

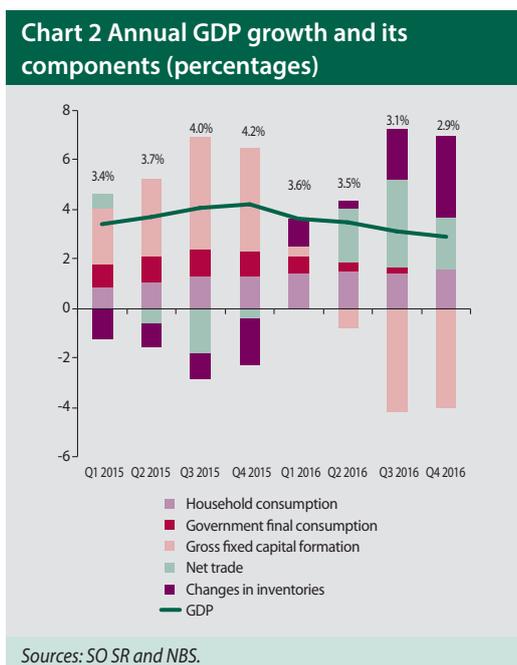
Demand for work is increasing due in part to growth in the national average wage, which in the second half 2016 increased by 3.7%, year on year, to more than €900. With inflation remaining subdued, real wages increased for a fourth successive year. This trend translated into growth in household disposable income and to an improvement in both the financial situation and sentiment of households.

The above mentioned factors strengthened households' demand for both housing loans and consumer loans, as well as their debt servicing capacity. On the other hand, their propensity to borrow also increased.

Going forward, the favourable labour market trends may be expected to continue, albeit more moderately compared with their current levels. This moderation in employment growth is expected to reflect increasing pressures on the labour market and related shortages of skilled labour. At the same time, rising inflation will have a downward impact on real wage growth.

**After three years of stagnation, the price level of goods and services increased.** In the second half of 2016, the year-on-year rate of change in goods and services prices, as measured by the

<sup>1</sup> The construction of a bypass around Bratislava, specifically the D4 motorway and R7 expressway.



**Chart 3 Employment and the unemployment rate in Slovakia**



Sources: SO SR and NBS.

Notes: Employment – according to ESA 2010 methodology, seasonally adjusted. Unemployment rate – according to the Labour Force Survey, seasonally adjusted.

Harmonised Index of Consumer Prices, fell by 0.4%, but in December it turned positive. The annual HICP inflation rate accelerated further at beginning of 2017 and in February reached 1.3%. The upturn in headline inflation was largely accounted for by prices of food and services, as was the acceleration in net inflation excluding automotive fuel prices. Price developments in Slovakia mirrored those in the euro area, where the inflation rate moved close to the target level. Slovakia's inflation rate in coming years is expected to hover close to target.

**NFCs, EXCEPT IN CERTAIN SECTORS, PERFORMED RELATIVELY WELL IN 2016**

The favourable economic climate was reflected in the sales and operating profits of non-financial corporations in 2016, although the situation across sectors was heterogeneous. NFCs' total sales increased, with the highest sales growth recorded in the services, trade, and transport sectors. By contrast, aggregate sales and profits fell in the construction sector and in the IT and telecommunications sector, although these deteriorations were probably the result of firms' strong performance a year earlier, which was supported by the remaining absorption of EU funds allocated during the previous programming period. With the fading of that base effect, the situation in these sectors is expected to pick up, too. The current economic upturn is improving firms' situation, as is reflected in their strong demand for loans, in particular those for investment purposes. Such demand is a sign of firms' favourable expectations for the economy. At the same time, as their financial situation improves, firms have less need to use external funds to finance their operations and so their demand for such funding is falling.

**PERSISTING RISKS ARE MAINLY EXTERNAL**

**The downside risks to Slovakia's economic growth outlook are mainly external.** They concern factors and events that have the potential to reduce external demand for Slovak goods and services, consequently causing exports to be lower than expected and thereby having an adverse effect on the Slovak economy.



# FINANCIAL SECTOR TRENDS AND RISKS

## 2 FINANCIAL SECTOR TRENDS AND RISKS

### 2.1 HOUSEHOLD INDEBTEDNESS INCREASING

#### Key trends concerning household indebtedness

- Household indebtedness has doubled in recent years.
- Both the index of factors that increase demand for household loans and the index of factors that increase banks' supply of the same continue to grow, with interest rates making the largest contribution in each case.
- Falling interest rates have led to the average stock of loans growing faster than the average wage.
- Household indebtedness in Slovakia is among the highest in the region, while the household financial asset-to-debt ratio is the lowest.

**The trend most significant for financial stability in Slovakia continues to be household loan growth. The year-on-year rate of change in the stock of household loans has been continually increasing at record levels in recent years and has for some time been the highest in the EU.**

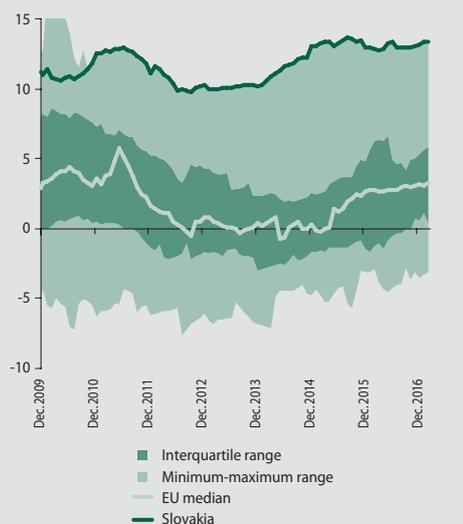
In absolute terms, the year-on-year increase in the outstanding amount of household loans in March 2017 was an all-time high of €3.7 billion (the relative growth was 13.9%). Not only is the growth rate high, but the stock of these loans has doubled over the past three years. Most of the household credit growth is accounted for by growth in housing loans, which at the end of 2016 made up more than 76% of household debt, a far higher share than consumer loans.

As for non-bank lending to households, the annual growth rate for these loans is far lower and their share in total household debt has been steadily falling over an extended period, down to 4.3% at the end of 2016. The share of non-banks in the stock of consumer loans fell to 18%.

#### HOUSEHOLD LOAN GROWTH CAUSED MAINLY BY FALLING INTEREST RATES

**Both the index of factors that increase the demand for household loans and the index of**

**Chart 4 Growth in bank loans to households has for several years been higher in Slovakia than in any other EU country (percentages)**



Source: NBS.

Note: The chart does not include Belgium and Hungary owing to structural changes in the stock of loans in these countries.

**Chart 5 Growth in the index of factors that increase loan supply and demand**



Sources: NBS and SDW.

The demand-side index is calculated as the average of indices of the following: the unemployment rate, interest rates on new housing loans, housing affordability, and the annual rate of change in flat prices. The supply-side index is calculated as the average of indices of the following: interest margins on housing loans, and the non-performing loan ratio for housing loans. Indices indexed to 100 in 2003.

**factors that increase the supply of the same have been increasing.**

The main factors driving household demand for loans are falling interest rates and, to a lesser extent, the improving labour market situation and property prices, which although rising are still favourable relative to household income. The majority of these factors are reaching their limits. Interest rates on new loans and the unemployment rate were hovering close to historical lows in the first quarter of 2017. In the same period, the housing affordability index was close its all-time high and the rate of increase in flat prices reached a post-2008 peak.

**Several imbalances are building up in the property market.**

Flat price growth is being supported by a significant decline in the number of existing flats advertised for sale. This is bringing greater focus on new builds, which now account for more than half of flat sales in Bratislava, the Slovak capital city. In the vast majority of these sales, however, the flats are still unfinished or even only at the planning stage ('on paper').

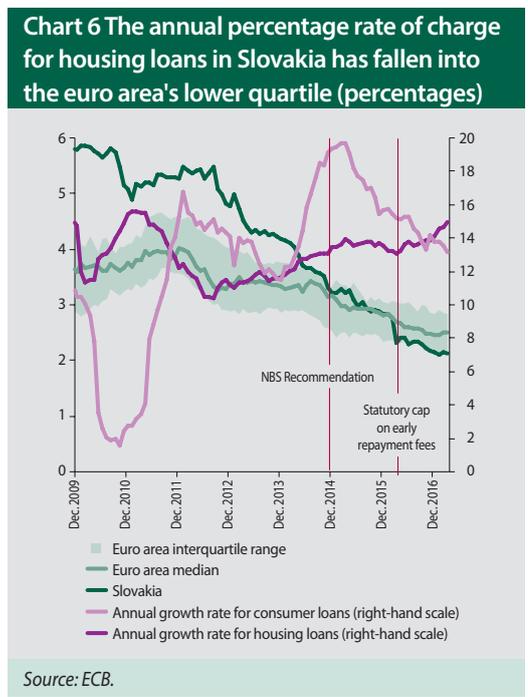
**The index of factors that increase banks' supply of loans includes mainly interest margins and loan portfolio credit quality.**

With their profits falling and loan margins compressed, bank have been under increasing pressure to increase the amount of their lending, while at the same time the high credit quality of their loan books has influenced their perception of counterparty risk. In the first quarter of 2017, interest margins on housing loans reached a historical low while the aggregate NPL ratio for these loans was at its lowest level since 2008. From a finan-

cial stability perspective, it is encouraging that the loan prepayment rate fell in the first months of 2017 to below its long-run average. Lending growth, however, continued to put upward pressure on limits for loan terms and loan-to-deposit ratios.

**Falling interest rates have further stimulated lending growth, resulting in the average loan amount increasing more than the average wage.**

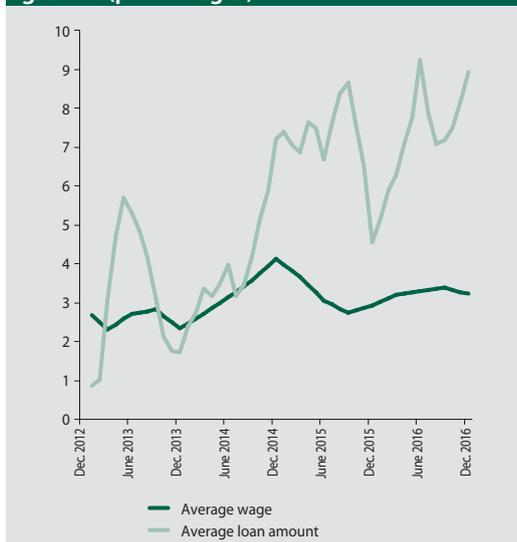
Interest rates on housing loans in Slovakia have been falling since 2012, gradually approaching the euro area median. A key change occurred in March 2016 with the introduction of



**Figure 1 The property market and housing loan market are reinforcing each other's growth**



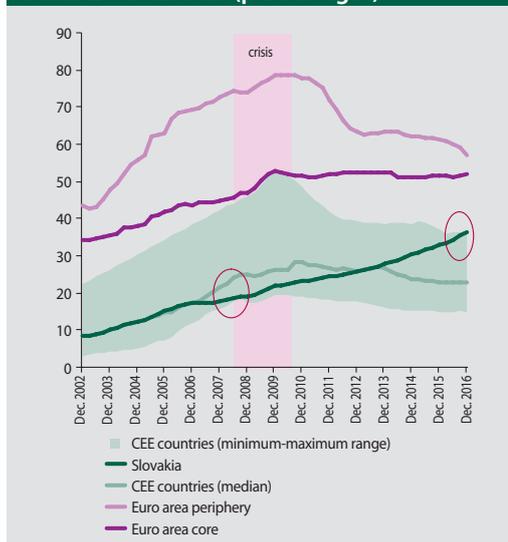
**Chart 7 Annual growth in the average loan amount has been exceeding annual wage growth (percentages)**



Source: NBS.

Note: The vertical scale shows the annual growth rate. The average loan amount is calculated as the ratio of the amount of loans drawn in the given month and the number of loans. In this chart, a five-month moving average is used.

**Chart 8 Growth in the stock of household loans as a ratio to GDP in Slovakia and other EU countries (percentages)**



Source: ECB and Eurostat.

Note: The left-hand scale shows household loans as a ratio to GDP.

a statutory cap on early repayment fees for housing loans. Owing to its retroactive application, the cap substantially increased competition for all existing borrowers, resulting in a sharp drop in housing loan interest rates. This negated the stabilisation effect that NBS Recommendation 1/2014 had been having on the housing loan market, and therefore household debt growth accelerated in March 2016.

The assessment of a borrower's debt servicing capacity is usually based on the instalment-to-income ratio. Given the marked fall in interest rates, existing borrowers have the option either to pay lower instalments or increase their borrowing. Over the past two years the year-on-year rate of change in the average loan amount has been around twice as high as the average wage. This means that, on average, borrowers are using the falling trend in interest rates to increase their borrowing.

**THE RAPIDLY RISING INDEBTEDNESS OF SLOVAK HOUSEHOLDS IS NOW AMONG THE HIGHEST IN THE REGION; SLOVAK HOUSEHOLDS HAVE RELATIVELY LOWER SAVINGS Household indebtedness has continued to increase more rapidly in Slovakia than in other**

**central and eastern European (CEE) countries.** The strong growth in household loans in Slovakia has translated into household debt growth. Measured as the ratio of households' total debt to GDP, household indebtedness in 2016 increased more in Slovakia than in any other EU country. The contrast between the change in the debt-to-GDP ratio in Slovakia and in the EU as a whole was significant, 3.4 percentage points versus -0.7 percentage point.

The long-running rapid upward trend in the household debt ratio has been reflected in the overall level of household debt. In contrast to past periods, it cannot now be said that the strong household debt growth in Slovakia is attributable to the low amount of that debt. On the contrary, household debt is both the fastest growing in the EU and the second highest in the CEE region.<sup>2</sup> In this connection there are two facts important for financial stability. First is the fact that the impact of the Great Recession on the Slovak banking sector in 2009 and 2010 was relatively moderate owing partly to the low (by EU standards) indebtedness of Slovak households. By December 2016, however, their indebtedness was the second highest in the CEE region.

<sup>2</sup> This development is fully in line with the trend that NBS identified in the simulation it carried out for the May 2015 Financial Stability Report.



The second fact is drawn from a comparison with euro area 'core' countries. In 2016 household indebtedness in Slovakia was approaching close to the levels typical for the euro area core countries in the pre-crisis period. These two facts indicate that Slovak households are far more vulnerable now than they were in 2008. Furthermore, unlike in the pre-2009 period, most loans today are pro-

vided without scope for reducing the borrowing rate or extending the term, steps that could help the borrower by lowering the monthly instalment amount. This risk was partly addressed by NBS Recommendation No 1/2014 and by NBS Decree No 10/2016, which requires that new borrowers are assessed for their ability to repay the loan in the event of an increase in interest rates.

### Box 1

#### INTERNATIONAL INSTITUTIONS' ASSESSMENTS OF HOUSEHOLD INDEBTEDNESS RISK IN SLOVAKIA

Besides NBS, a number of international institutions are pointing out the increase in household credit risk in Slovakia. They share the view that the Slovak banking sector is currently exposed to elevated risks associated with rapid retail loan growth. Some even assert that if this risk does not abate, additional measures will need to be taken in the future.

##### INTERNATIONAL MONETARY FUND (IMF)

In March 2017 the IMF published its Staff Report for the 2017 Article IV Consultation with the Slovak Republic<sup>3</sup>, according to which the Slovak banking sector faces risks arising from its considerable exposure to the property market. To maintain the high credit quality of loan books, NBS may have to adopt measures in addition to those it has already implemented, says the report.

##### EUROPEAN SYSTEMIC RISK BOARD (ESRB)

In a report published in November 2016<sup>4</sup>, the ESRB analysed vulnerabilities in the EU residential real estate (RRE) sector and concluded that, in the medium term, there were several EU countries that could be adversely affected by RRE vulnerabilities. The ESRB addressed warnings to several countries in which RRE vulnerabilities were elevated. Slovakia was among the few of those countries that the ESRB decided not to issue with a warning despite the identified higher level of risk, mainly on the grounds that NBS had implemented several measures to mitigate the vulnerabilities and that, at the time of writing the report, the ESRB considered these measures to be appropriate and sufficient.

**In Slovakia, the net financial worth of households has continued to deteriorate, while in most other EU countries it has been improving.** One adverse development in regard to Slovak households' sensitivity to potential economic headwinds is the deterioration in the ratio of their financial assets (mainly bank deposits and investment fund shares/units) to their financial liabilities (mainly bank loans). In Slovakia, in contrast to most EU countries, household indebtedness has been growing faster than household savings. On this measure, the gap between Slovakia and other CEE countries has increased sharply over the past four years. In the event of an economic downturn, households in Slovakia have less scope than households in other EU countries to use savings for debt servicing, and that situation has worsened in recent years.

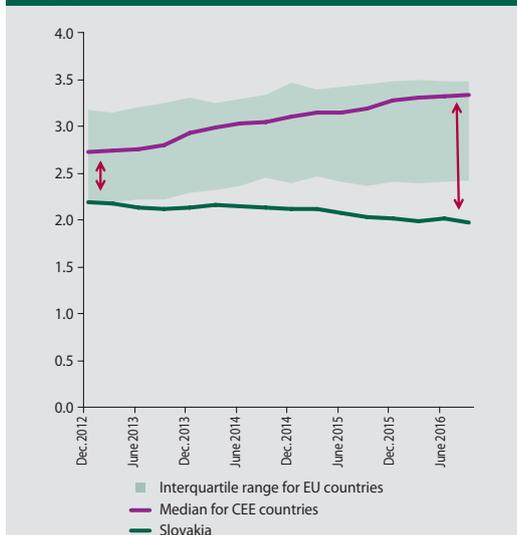
At the same time, however, such aggregated data do not provide information about the dispersion of debt and savings across households, and the liquidity of some types of reserves may be questionable.

A factor that must be taken into account when comparing the indebtedness and net worth of Slovak households with that of households in other EU countries is the structural profile of the domestic economy. Unlike most EU countries' economies, the Slovak economy is marked by higher volatility in GDP, the labour market and the property market. Given Slovakia's combination of a low level of domestic capital and a high proportion of cyclical sectors, the safety threshold for household indebtedness is lower in Slovakia than in the EU on average.

<sup>3</sup> *Slovak Republic: 2017 Article IV Consultation-Press Release, Staff Report and Informational Annex for Slovak Republic (23 March 2017).*

<sup>4</sup> *ESRB: Warnings on medium-term RRE vulnerabilities (November 2016).*

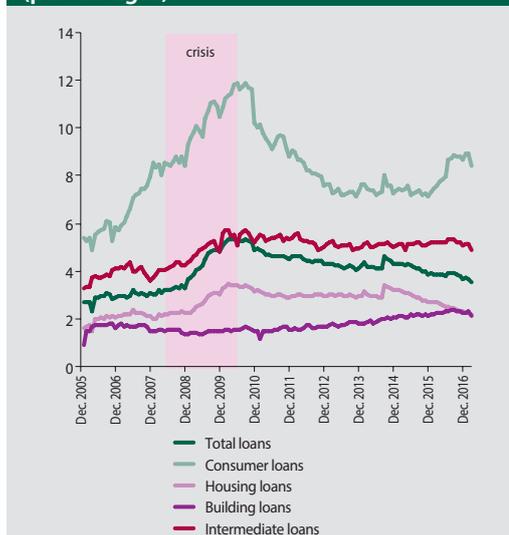
**Chart 9 The declining net worth of Slovak households is in contrast to the EU-wide trend**



Source: Eurostat.

Note: The left-hand scale shows the net worth of households defined as ratio of financial assets to financial liabilities.

**Chart 10 Contrasting NPL ratio trends for consumer loans and housing loans (percentages)**



Source: NBS.

**Despite exceptionally benign economic conditions, the aggregate NPL ratio for consumer loans provided in Slovakia has been increasing.** Falling interest rates and favourable labour market developments have created conditions highly supportive for debt servicing. The net default rate for housing loans is close to zero and

the NPL ratio for these loans is at its lowest levels since 2009. Due in part to this trend, the NPL ratio for total loans to households fell in March 2017, to 3.6%. In the category of consumer loans, however, the net default rate increased appreciably, to more than 3%. This development stems from the easing of credit standards.

**Box 2**

**WHY IS THE CONSUMER LOAN SEGMENT IMPORTANT FOR FINANCIAL STABILITY?**

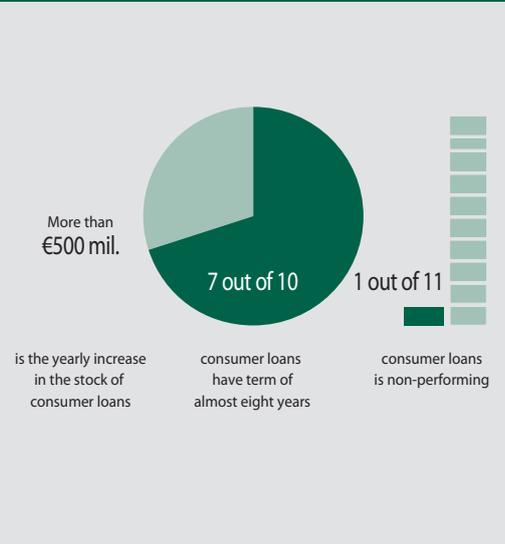
Consumer loans are the second largest segment of the banking sector's retail loan portfolio and their stock has been growing strongly for several years. This growth is not only increasing their significance within the financial sector, but also their potential risks to financial stability in Slovakia.

Consumer loans constitute one of the banking sector's principal income streams. The returns on these loans almost match the returns on the NFC loan book and are also equivalent to more than two-thirds of the income from housing loans. This stems, on the one hand, from in-

terest margins that are among the highest in Europe, and, on the other hand, from rapid growth in the stock of consumer loans. These loans now account for around one-sixth of the aggregate outstanding amount of household loans, and in some banks for almost the entire household loan book. There are even exceptional cases where consumer loans make up more than half of the bank's total assets.

Consumer loans are generally subject to higher credit risk (given their status as unsecured any-purpose loans) compared with housing loans, the leading type of household loan. The

**Chart A Rapid growth in consumer loans, particularly in those with longer terms**



Source: NBS.

nature of consumer loans is reflected in the interest rates applied to them. At present, however, the consumer loan market is experiencing the contrasting trends of falling interest rates and increasing defaults. From the perspective of credit risk management, it is important that interest margins are sufficient to cover the elevated risks associated with consumer loans.

If in future the currently favourably economic situation changes, the default rate for consumer loans could increase still further. There are also several signs of an easing of credit standard for consumer loans, which may be amplifying adverse effects on both the banking sector and borrowers. Stress test results show that elevated NPL ratios for consumer loans may not only reduce banks' profitability, but also cause an appreciable drop in their capital ratios (to below the minimum requirement).

## 2.2 BUSINESS MODEL SUSTAINABILITY OF FINANCIAL INSTITUTIONS

### 2.2.1 IMPACT OF THE LOW INTEREST RATE ENVIRONMENT ON FINANCIAL INSTITUTIONS BUSINESS MODELS

#### Risk assessment summary

- Falling interest rates (particularly on retail loans) will in the years ahead have a negative impact on bank profits.
- The size of that impact will depend mainly on the pace at which the current rapid loan growth eases and on the extent to which competition puts further downward pressure on interest rates.
- Banks are at the same time increasingly sensitive to a potential increase in credit losses, which for the time being are at very low levels. The main risk at present lies in consumer loan developments.

**SLOVAK BANKS' PROFITABILITY IS HEAVILY DEPENDENT ON TRENDS IN NET INTEREST INCOME, WHICH IN THE CURRENT LOW INTEREST RATE ENVIRONMENT IS COMING UNDER INCREASING PRESSURE**

**The prolonged low interest rate environment is having an increasing impact on banks'**

**profitability.** The aggregate net interest margin fell markedly between the end of 2014 and March 2017, from 3.1% to 2.5%, and this trend is expected to continue in the next period. In this context, the sustainability of banks' business models is becoming a more prominent issue, since the models followed by banks in Slovakia rely primarily on a large share of net interest income.

**The risk associated with business model sustainability is here analysed on the basis of an updated simulation of future scenarios.** This risk was analysed in-depth in the November 2016 Financial Stability Report. Developments in subsequent months, however, have indicated certain changes in some trends. These changes concern mostly the notable strong growth in some loan types at a time of favourable economic news and falling interest rates.

**ON CURRENT TRENDS, NET INTEREST INCOME WILL CONTINUE TO DECLINE IN THE YEARS AHEAD**

**The simulation shows banks' profitability falling gradually in both 2017 and 2018.** With the growth in certain types of loan accelerating, however, current trends suggest that the fall in bank profits in 2017 will be somewhat more moderate than indicated in the simula-

**Table 2 Parameter changes in the scenario of banks' profitability up to 2018**

	Year-on-year rate of change in amount	Change in average interest rate, or return, on stock of item
Consumer loans	Gradual decrease from 16.1% to 12.7%	Linear decrease from 10.4% to 6.7%
Housing loans	Gradual decrease from 15.0% to 10.3%	Linear decrease from 2.4% to 1.5%
NFC loans	Gradual decrease from 7.4% to 5.8%	Unchanged at 2.7%
Securities holdings	Zero	Gradual decrease from 2.7% to 1.9%
Household time deposits	Zero	Gradual decrease from 1.2% to 0.4%
Retail deposits / current accounts	Gradual decrease from 19% to 9%	Unchanged at below 0.1%
Deposits of NFCs, financial corporations and non-residents	Zero	Decrease from 0.1% to -0.1% by the end of 2017
Securities issued	Gradual decrease from 10% to 8%	Decrease from 1.7% to 0.8%

**Additional assumptions:**

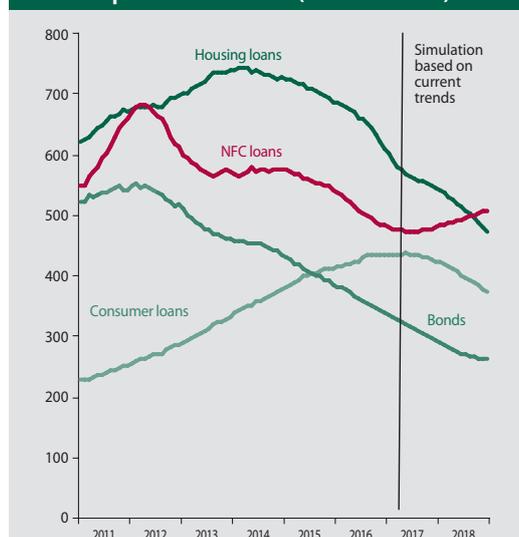
The credit risk cost ratio for retail loans increases slightly, from 0.64% to 0.73%, and for NFC loans it remains unchanged at around 0.62%.

Source: NBS.

Notes: The most recent data available are for March 2017. The scenario covers the period from April 2017 to December 2018.

tion conducted for the November 2017 Financial Stability Report. The most notable acceleration is in housing loans, with the year-on-year rate of change in their stock having gradually increased from 13.1% in March 2016 to 15.0% in March 2017. At the same time, the rate of decrease in interest rates on these loans, particularly strong in the second and third quarters of 2016, has moderated recently. The stock of consumer loans has also increased quite significantly, with the annual growth rate exceeding 16% between July 2016 and March 2017). Such

trends imply that the current rate of decline in net interest income from retail loans will ease. On the other hand, it is not likely that current credit growth rates can be maintained over the longer term while maintaining current prudential credit standards. The simulation therefore assumes a moderate slowdown in the pace of retail loan growth, as well as a continuing decline in interest rates, which, owing to interbank competition, could be considerable (especially in the case of consumer loan interest rates).

**Chart 11 Simulation of future interest income paths until 2018 (EUR millions)**


Source: NBS.

**BANKS BECOMING MORE SENSITIVE TO CREDIT RISK**

The overall trend in banks' profitability will depend not only on the rate of decline in interest income from retail lending, but also on credit risk developments. The simulation indicates that the decline in interest income from retail lending will be greater in 2018. The rate of that decline will, however, be determined by, on the one hand, the rate of slowdown in credit growth, and, on the other hand, the degree of interbank competition and its impact on the pace of interest rate cuts. A second significant factor is the potential increase in credit risk costs. Credit risk cost ratios for housing loans and NFC loans are currently at historical lows, while those for consumer loans are rising. It is questionable whether these low costs can be sustained over the longer term. The assumption that has the greatest impact on the simulation results is an increase in the credit risk cost ratio for retail loans, from 0.64% to 0.73%. This assumption was

included due to the long-running downward trend in the cost ratio, notwithstanding the fact that the default rate for retail loans began rising again in 2016 (see Chart 27). The simulation shows the negative impact on banks' profitability of an increase in the riskiness of the retail loan book, especially the consumer loan portfolio. The results also show the increasing sensitivity of profitability to such an increase, with even a small increase having an appreciable impact. This finding is further supported by the results of macro stress testing. Depending on how these factors evolve, the banking sector's aggregate profit in both 2017 and 2018 is expected to fall, year-on-year, by between 10% and 20%.<sup>5</sup>

**THE SIMULATION SHOWS A GREATER ADVERSE IMPACT ON LESS SIGNIFICANT BANKS**

**The low interest rate environment is having an even more marked impact on less significant banks, which generally have lower profitability.** The simulation shows significant banks maintaining their return on equity (ROE) above the average for the Banking Union. By contrast,

**Table 3 The simulation of future ROE paths shows that less significant banks are more greatly affected by the low interest rate environment**

ROE	2016 (excluding exceptional effects)	2017	2018
Significant banks	13.1%	10.8%	8.4%
Less significant banks	3.0%	4.0%	1.9%

Source: NBS.

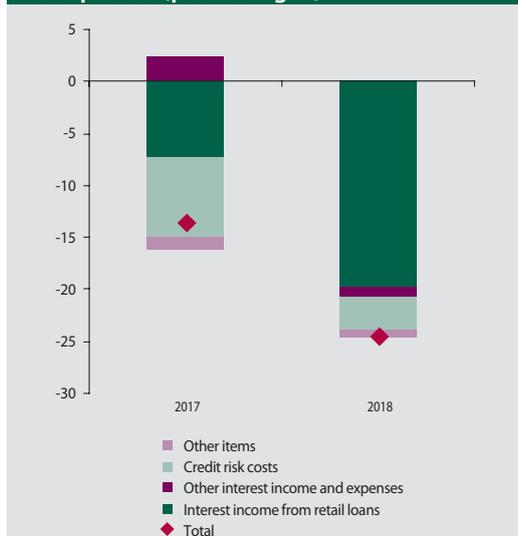
the sustainability of less significant banks' business models is gradually coming under greater pressure, since their low interest rate margins are further compressed by the problem of rising credit risk costs.

**2.2.2 RISK OF INCREASES IN INTEREST RATES OR RISK PREMIA**

**Key findings:**

- The possibility of interest rates rebounding appears more likely than before
- The financial situation of customers (particularly NFCs) that have a higher share of financing through bank loans could be adversely affected by an increase in instalment amounts.
- The scope for an increase in customer interest rates will probably be affected by market competition, especially in the provision of housing loans.
- Returns on pension funds, including guaranteed pension funds, are facing headwinds.
- By transferring some of the bond holdings of guaranteed pension funds (second pillar) to the held-to-maturity portfolio, the impact of those headwinds is being substantially mitigated.

**Chart 12 The continuing decline in interest income from retail loans may have a negative impact on profits in the next period (percentages)**



Source: NBS.

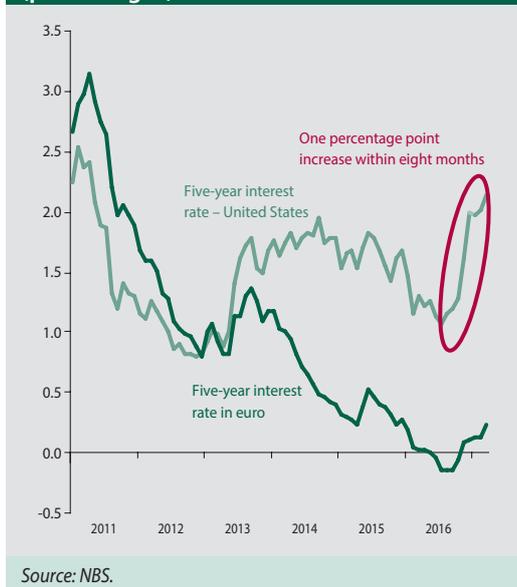
Notes: The chart shows the simulated year-on-year change in aggregate profit before tax and the most significant contributions to that change. The chart does not include data for foreign bank branches. The change in the profit for 2017 is calculated vis-à-vis the profit for 2016 less one-off and exceptional effects. If not adjusted for those one-off and exceptional effects, the simulated profit for 2017 is 36% lower than the actual profit for 2016.

**THE PROBABILITY OF AN INCREASE IN INTEREST INCREASES (ESPECIALLY LONG-TERM RATES) HAS INCREASED**

**Several developments in financial markets are signalling a potential rebound in interest rates.** Although interest rates in the euro area remain subdued, five-year swap rates in the United States increased by one percentage point from

<sup>5</sup> The change in the aggregate profit for 2017 is calculated vis-à-vis the profit for 2016 less one-off and exceptional effects.

**Chart 13 Long-term interest rates in the United States have begun rising sharply, while those in the EU remain low (percentages)**



July 2016 to March 2017. This development suggests that any future rebound in interest rates could be relatively rapid. Furthermore, euro area inflation increased significantly in the first quarter, and inflation-linked swap prices also rose, signalling an upturn in inflation expectations. Hence the likelihood that low interest rates in the euro area may end and rates begin rising again is increasing.

**AS FOR BANKS' NON-FINANCIAL CUSTOMERS, NFCs MAY BE THE MOST EXPOSED TO THE DIRECT RISK OF AN INTEREST RATE INCREASE**

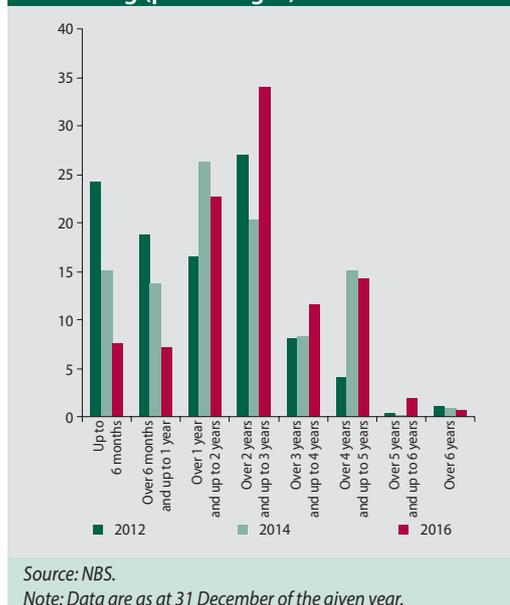
**Fixation periods for lending rates on NFC loans remain short, while those for housing loan rates are lengthening.** The impact that an increase in interest rates in financial markets has on banks' borrowers is affected by several factors. One factor is whether the borrower has a loan with a fixed or variable rate. In the latter case, another factor is the length of the fixation period of the variable rate. The most important factor for households is the interest rate fixation period on housing loans. Consumer loans typically have a much shorter term and an interest rate fixed for the lifetime of the loan. According to available data, the average interest rate fixation period for housing loans has increased since 2012.

While at the end of 2012 43% of housing loans had a residual interest rate fixation period of up to one year, by the end of 2016 that share had fallen to just under 15%. Over the same period, however, the share of loans with a residual fixation period of over two years and up to five years increased from 39% to 60%. This means that any sudden change in market rates should pass through to the majority of borrowers only with a sizeable lag.

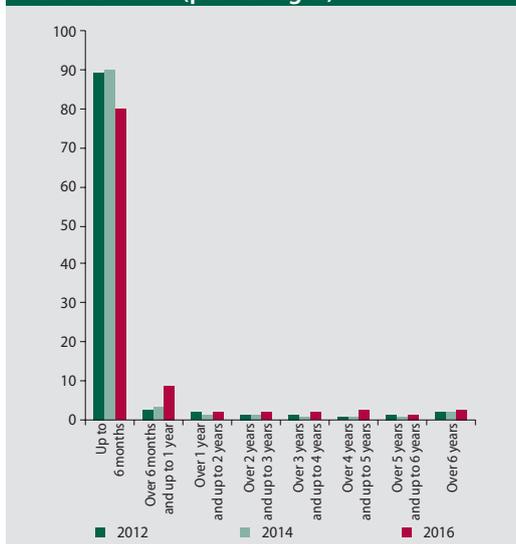
Among NFCs, by contrast, around 90% of investment loans have a residual interest rate fixation period of up to one year, and most of these have a period of up to six months. No significant change in the average rate fixation period has been recorded over time. It may therefore be assumed that NFC loans would be directly affected by an increase in market rates and that the pass-through would be immediate.

**While interest rates on NFC loans remain linked to market rates, the link between housing loan rates and market rates has been less noticeable in recent years.** Another factor that affects the interest rate sensitivity of customer loans is the extent to which the lending rate is linked to a market interest rate (an interbank rate or government bond yield), i.e. the extent of the pass-through between the market rate and the customer interest rate.

**Chart 14 The average interest rate fixation period for housing loans is gradually increasing (percentages)**



**Chart 15 The average interest rate fixation period for investment loans to NFCs remains short (percentages)**



Source: NBS.

Note: Data are as at 31 December of the given year.

On the basis of an econometric analysis<sup>6</sup> (see Box 3 for details), a relatively significant historical relationship can be demonstrated between interest rates on new NFC loans and interbank rates. This relationship is observed in both the pre-crisis and post-crisis period with only a slight change between the two. The analysis results show that, in general, the pass-through of interbank rates to interest rates on new loans is de facto full and relatively rapid.

Since interbank rate trends across maturities were somewhat similar during the reviewed period, it is difficult for the analysis to determine the specific interbank rates to which the lending rates were linked during the period. Based, however, on individual estimates and information about residual interest rate fixation periods for NFC loans, it may be assumed that the interbank rates in question are shorter term, i.e. between one month and six months. This assumption is further supported by information on the linking of NFC lending rates to market rates as at March 2017, since this information for the recent period is now available from the Register of Bank Loans and Guarantees. According to that data, around one-third of NFC loans (mostly to small and medium-sized enterprises) have a fixed interest rate and half of them have an interest rate linked to

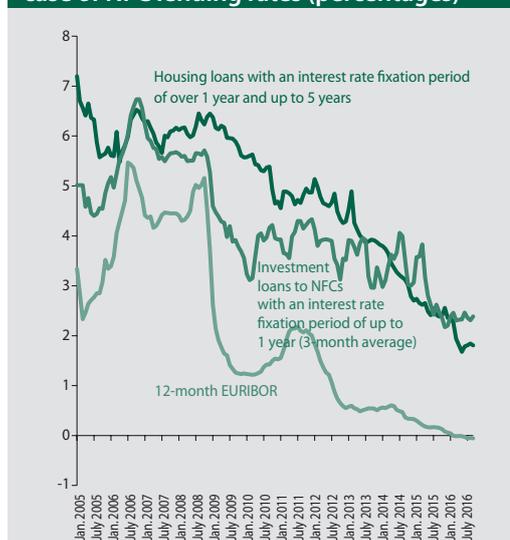
EURIBOR (mostly to the one-month or three-month month rate).

**As for interest rates on new housing loans to households, such a relationship is less clear.**

Up until approximately the 2009–2012 period, a relationship could be observed between customer rates and interbank rates or government bond yields (in the case of the latter, this relationship was most evident between rates on loans with an interest rate fixation period of 1 to 5 years and yields on 3-year and 5-year government bonds); in the subsequent period, however, this relationship has been minimal or non-existent. This discontinuity is assumed to stem from increasing competition in the domestic housing loan market and from structural changes, for example the introduction of a statutory cap on early repayment fees for housing loans.

This means that while the pass-through of an increase in short-term market rates to most NFC lending rates is expected to be almost full and relatively rapid, the pass-through to housing loans is more questionable and will depend to a large extent on the degree of market competition in the domestic banking sector. At the same time, however, borrowers' resilience to interest

**Chart 16 Relationship between customer interest rates and market rates has in the recent period been more pronounced in the case of NFC lending rates (percentages)**



Source: NBS.

6 Since detailed information about the historical contractual linking of customers' interest rates to market rates is not available, their relationship is reviewed using econometric analysis.



rate risk has been supported by an NBS Recommendation and by a subsequent NBS Decree, which by requiring banks to assess housing loan applicants for their capacity to cope with the shock of a two per cent rise in interest rates is containing delinquency growth associated with interest rate risk.

**THE IMPACT OF MARKET RATE INCREASES ON BANKS' NET INTEREST INCOME IS EXPECTED TO DEPEND ON THE DEGREE OF COMPETITION, PARTICULARLY IN THE HOUSEHOLD LOAN MARKET AND, TO A LESSER EXTENT, IN THE HOUSEHOLD DEPOSIT MARKET**

**The impact of interest rate increases on banks' interest income will depend mainly on the degree of competition in the household loan market.** As mentioned in the previous section, any increase in market rates, and

especially short-term market rates, would be expected to pass through fully and quite rapidly to the great majority of rates on NFC loans. As for the pass-through of such an increase to the bond portfolio, it would also be relatively straightforward, since the coupon income on bonds that have a variable rate linked to a reference market rate will gradually increase in line with that rate. The question remains: to what extent will banks take market rate risk into account when providing new housing loans or re-setting the interest rate on such loans, or when providing new consumer loans? While competition may be containing interest rates on new loans, the current lengthening of the average interest rate fixation period may present a contractual obstacle to the quick transmission of market rate developments.

**Box 3**

**ECONOMETRIC ANALYSIS OF THE RELATIONSHIP BETWEEN CUSTOMER INTEREST RATES AND MARKET INTEREST RATES**

An error-correction model was used to analyse the potential long-term relationship between customer interest rates on new loans and new deposits and market interest rates. In the case of new loans, the following products were included in the analysis:

- housing loans (to households) with an interest rate fixation period of up to one year;
- housing loans (to households) with an interest rate fixation period of over one year and up to five years;
- operating loans (to NFCs);
- investment loans (to NFCs) with an interest fixation period of up to one year;
- loans in the category 'other NFC loans' with an interest rate fixation period of up to one year.

The potential explanatory variables used in this analysis were as follows:

- three-month and 12-month interbank rates (BRIBOR up to end-2008; EURIBOR from 2009);
- three-year, five-year and ten-year yields on Slovak government bonds.

Error-correction equations were estimated separately for the periods 2005–2009, 2005–2012, 2005–2016 and 2010–2016.

In the case of new deposits, the following products were included in the analysis:

- household sight deposits;
- household savings deposits;
- household time deposits with an agreed maturity of up to one year;
- NFC sight deposits;
- NFC overnight time deposits;
- NFC time deposits with an agreed maturity of up to seven days;
- NFC time deposits with an agreed maturity of up to one year.

The potential explanatory variables used in this analysis were interbank rates (BRIBOR up to end-2008; EURIBOR from 2009) with the following terms:

- overnight;
- one month, three months, six months, and nine months;
- twelve months.

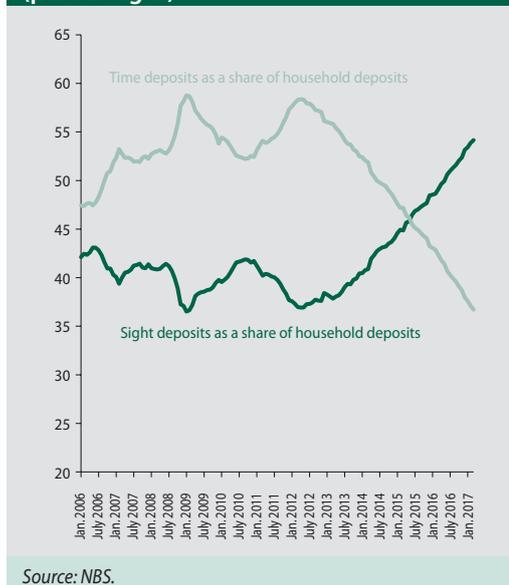
Error-correction equations were estimated separately for the periods 2004–2008, 2004–2016, and 2009–2016.

**In general, deposit rates are reflecting inter-bank rate movements.** The econometric analysis (Box 3) confirmed the existence of significant relationship between retail deposit rates (for both households and NFCs) and interbank rates. In several cases this relationship was observed to have strengthened following Slovakia's entry into the euro area (2009). Such strengthening may be because the links between deposits and EURIBOR are greater than those between deposits and BRIBOR, or because the interbank rates have been less volatile since their slump in 2009 and therefore the estimates are producing better results.

The pass-through of interbank rate movements to deposit rates is slower and generally less complete than to lending rates. Hence any increase in market rates is expected to have only a gradual and partial impact, via deposit rates, on the banking sector's interest expenses. Given, however, the large stock of customer deposits, even a relatively modest increase in interest rates could have a marked impact on banks' interest expenses.

**An increase in deposit rates may be affected also by market competition, particularly in the case of household deposits.** Since interest rates are currently at historical lows, demand

**Chart 18** The share of sight deposits in household deposits is at a historical high (percentages)



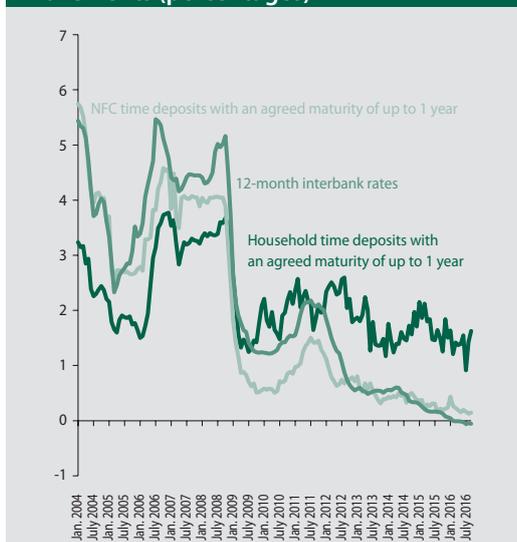
Source: NBS.

for time deposit products is generally low, too, and therefore the share of time deposits in total household deposits is also at an all-time low and the share of sight deposits is higher than it has ever been. If market rates increase, household demand for time deposits may grow, with the result that time deposits increase as a share of total household deposits at the expense of sight deposits. The rising share of time deposits will also push up interest expenses, given that the interest rates on time deposits are generally higher.

A factor that may influence banks in their setting of deposit rates is their liquidity position. Their potential need to maintain long-term funding sources for regulatory purposes could lead to an increase in deposit rates and therefore an increase in interest expenses. This factor, however, is expected to concern only certain banks.

**The impact of an increase in market rates on banks' pricing of bond holdings is expected to be limited.** Banks' bond assets are mostly found in held-to-maturity (HTM) portfolios, where they are not recorded at fair value, and in available-for-sale (AFS) portfolios, where they are repriced directly against capital. Hence if an increase in market rates lowers the fair value of banks' bond holdings, it is not expected to have a significant impact on banks' profitabili-

**Chart 17** Customer deposit rates are generally reflecting interbank rate movements (percentages)



Source: NBS.



ty. Overall, the fact that banks now have almost 60% of their bond assets in HTM portfolios will limit the negative impact that a sudden increase in market rates will have on the bonds' fair value.

The potential immediate impact of the repricing of bonds in banks' AFS portfolios was analysed using the sensitivity test described in the next section. According to its results, such repricing would have a limited impact on banks, with the drop in the bonds' value amounting to between 0.3% and 0.5% of their total assets or between 2.7% and 5.0% of their own funds.

**THE RISK OF A FALL IN THE VALUE OF BOND FUNDS' ASSETS**  
**A sudden increase in interest rates could significantly reduce returns on funds investing in bonds.** When rates increase, bond prices fall. In recent years, moreover, this sensitivity has increased markedly owing to investors' search for yield in an environment of extremely low interest rates. This heightened sensitivity is most pronounced in bond funds of both the second and third pillars of the pension system, including second-pillar guaranteed funds.

**It should be noted that bond fund investments are long-term in nature and therefore any interest-rate related losses on these funds will only be temporary.** The fair value of bonds will increase gradually over the course of several years, reaching their nominal value on redemption. This short-term decline aside, the impact of an interest rate increase on these funds will be favourable from a long-term perspective, since their interest income will gradually increase. It must be added that the extent of asset losses will also depend on whether interest rates rise steadily or abruptly. The main risk lies with a sudden and unexpected increase in rates.

**The impact of interest rate increases was analysed using a sensitivity test.** Scenario 1 assumes that the ECB will end its asset purchase programme (quantitative easing), which is contributing to the increase in long-term interest rates and therefore to the steepness of the interest rate curve. Scenario 2 assumes the same and, additionally, an increase in short-term rates that causes a parallel upward shift in the whole interest rate curve.

**The scenarios are calibrated to show potential developments in the event of an increase in interest rates.** Since long-term interest rates have increased by 1 percentage point within a period of several months, Scenario 1 assumes that they rise by 1.5 percentage points, while Scenario 2 assumes that both short-term and long-term interest rates increase by an additional 0.5 percentage point. The value of bonds investments of pension funds and investment funds may, however, be impaired not only by a general rise in interest rates, but also by an increase in credit risk premia. In order to allow more detailed analysis of exposure to that risk, the sensitivity analysis includes Scenario 3, which assumes that credit risk premia increase to the peak they reached during the euro area sovereign debt crisis. Details of the scenarios are provided in Table 4. All the scenarios assume a sudden increase in interest rates or credit risk premia, since such a development represents the greatest risk to funds' performance.

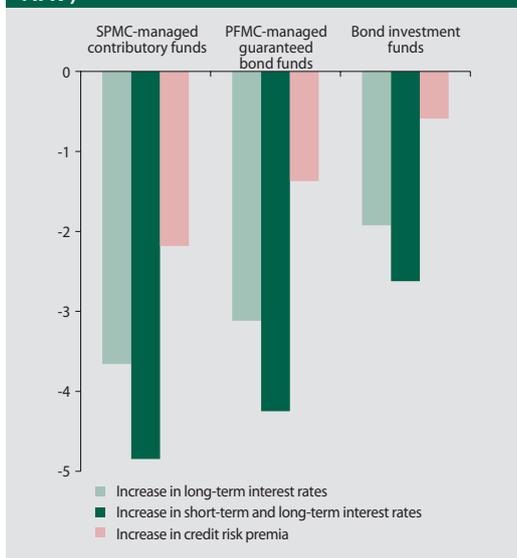
**In these scenarios, the value of bond pension fund assets generally falls by between 3% and 5%, and in some cases even more.** Bond funds are the predominant type of pension fund, both in the second pillar (managed by PFMCs) and in the third pillar (managed by SPMCs). The guaranteed bond funds managed by PFMCs are exposed to a greater decline in returns as well.

**Table 4 Scenario of increases in interest rates and credit risk premia**

Scenario	Scenario description
Increase in long-term interest rates	Short-term interest rates: no change Interest rates for terms of over five years: + 1.5 p.p. Interests for terms of up to five years: linear interpolation
Increase in both short-term and long-term interest rates	Short-term interest rates: + 0.5 p.p. Interest rates for terms of over five years: + 2.0 p.p. Interests for terms of up to five years: linear interpolation
Increase in credit risk premia	Return to peak levels of the euro area sovereign debt crisis (September 2012)

Source: NBS.

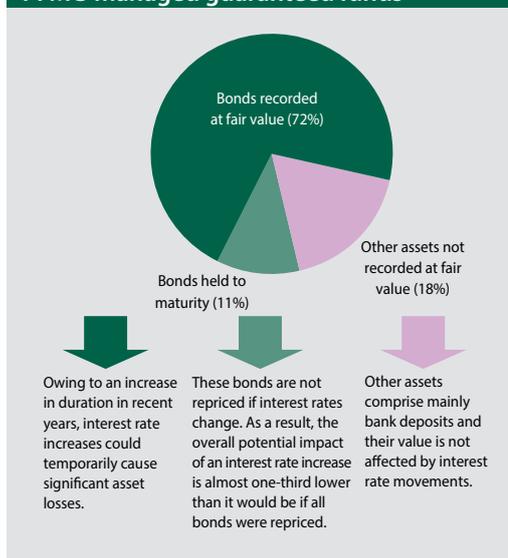
**Chart 19 The highest levels of asset losses under the simulated increases in interest rates and credit risk premia (percentages of NAV)**



Source: NBS.

Note: Details of the different scenarios are provided in Table 4.

**Chart 20 Bonds held to maturity are substantially mitigating the potential impact of an interest rate increase on PFMC-managed guaranteed funds**



Source: NBS.

On the other hand, these funds are generally far less exposed to asset impairment resulting from an increase in credit risk premia, although in some particular funds the loss may be as high as in Scenarios 1 and 2. Chart 19 shows the types of pension funds and investment funds where the impact of those three scenarios is the largest.

**In guaranteed bond funds, the asset losses could be as much as one-third higher if part of the bonds were not recorded at their redemption value.** The bond assets of pension funds and investment funds are typically recorded at fair value, and therefore their value is affected by interest rate movements. In the case of guaranteed pension funds, however, the law allows a proportion of their bond assets to be recorded at redemption value, which is not sensitive to interest rate movements.<sup>7</sup> Although guaranteed bond funds record only 13% of their bond assets in this way, this still substantially mitigates the potential impact of interest rate increases. Under Scenario 1, for example, if no bonds were recorded at redemption value, the asset losses as a percentage of NAV would be higher, on average, by 1.3 percentage points, while under Scenario 2 it would be higher by 1.7 percentage points. Because part of their bond assets are recorded at redemption value, the asset losses of PFMC-managed guaranteed funds in the

event of a sudden increase in interest rates would be lower by around one-third.

**Using the statutory option to record part of the assets of PFMC-managed guaranteed pension funds at redemption value may mitigate the impact of the risk of an interest rate increase.** Not only is the rising risk of an increase in interest rates (especially long-term rates) conducive to the use of this option, so is the fact that the pension scheme is still in the accumulation phase, which, unlike the future distribution phase, does not require the redemption of part of the investment portfolio.

### 2.3 THE IMPACT OF REGULATORY RISKS ON FINANCIAL STABILITY IS RISING

#### Key trends

- Developments in the regulatory environment are affecting the profitability of financial institutions.
- The Slovak banking sector could be significantly affected by proposed legislative amendments to the CRR and CRD IV, and to the BRRD and SRMR.

<sup>7</sup> Bonds may be recorded at redemption value if they are issued by sovereigns that do not have a worse credit rating than Slovakia (for further details, see Article 88b(2) of Act No 43/2004 Coll. on the old-age pension scheme, as amended).



### IMPACT OF REGULATORY CHANGES ON FINANCIAL INSTITUTIONS' PROFITABILITY

**Developments in the regulatory environment are having a significant impact on, among other things, financial institutions' profitability.** The aggregate cost to banks in Slovakia of various direct regulatory expenses (mainly the bank levy and fund contributions) was equivalent to one-fifth of their profit before tax as at 31 December 2016 (excluding one-off effects). Among less significant banks, that ratio was even higher (Table 5).

Banks' profitability, however, is being indirectly affected by other regulatory restrictions, too. The introduction of a statutory cap on early repayment fees for housing loans has substantially amplified the compression of interest margins. Furthermore, the regulatory impact on consumer loan interest rates is also increasing gradually. The rate of charge on these loans may not be higher than twice the market average, which in an environment of falling interest rates is gradually declining. The new minimum requirement for own funds and eligible liabilities (MREL) – designed to ensure that banks' liability structures are sufficient to absorb losses in times of difficulty – may also increase bank funding costs. In addition, a cap on payment card interchange fees entered into force at the end of 2015.

Other financial market institutions are also being affected by regulatory and legislative changes. One significant example is the introduction of an 8% levy on premiums written in all non-life insurance classes (whereas before it was applied to just one class).

### THE EUROPEAN COMMISSION (EC) IS PROPOSING AMENDMENTS TO KEY EU DIRECTIVES AND REGULATIONS

**The EC's proposed amendments to the Capital Requirements Regulation (CRR) and the**

**Capital Requirements Directive (CRD IV), and to the Bank Recovery and Resolution Directive (BRRD) and the Single Resolution Mechanism Regulation (SRMR), could have a significant impact on the Slovak banking sector.** On 23 November 2016 the EC presented a package of legislative reform proposals aimed at reducing risk in the banking sector. The package consists mainly of amendments to the CRR and CRD IV, which concern prudential capital requirements, and to the BRRD<sup>8</sup> and SRMR<sup>9</sup>, which establish the resolution framework for EU banks. This comprehensive package, including several legislative amendment proposals, could have a significant impact on the Slovak banking sector.

As regards prudential capital requirement, the proposals include, among other things, the following:

- the possibility to waive the application of prudential requirements on an individual basis of a subsidiary which has its head office in a different Member State ('cross-border waiver');
- the introduction of a net stable funding ratio (NSFR), and the possibility to grant a waiver from cross-border compliance, not only with the liquidity coverage ratio (LCR), but also with the NSFR;
- the introduction of a binding 3% leverage ratio, defined as Tier 1 capital over a bank's total exposure measure.

It should be noted that the proposed reforms do not at this stage involve the macroprudential policy section of the CRD IV. A review of macroprudential policy is expected to be carried out separately and could likewise have a sizeable impact on the banking sector and financial stability in Slovakia.

As for the resolution framework, the proposals include, among other things, the following:

<sup>8</sup> Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council.

<sup>9</sup> Regulation (EU) No 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010.

**Table 5 The ratio of banks' direct regulatory expenses to their aggregate profit before tax for 2016**

Ratio to profit before tax excluding exceptional effects	Banking sector as a whole	Significant banks	Less significant banks
Bank levy	15.8%	12.9%	24.5%
Contributions to the Deposit Protection Fund	1.4%	1.0%	3.6%
Contributions to the Resolution Fund	3.2%	2.9%	2.3%
Supervisory fees	0.2%	0.2%	0.5%
TOTAL	20.7%	17.0%	30.9%

Source: NBS.



- the introduction of the concept of 'resolution groups' and 'resolution entities', which is expected to improve the framework legislation;
- a new way of calibrating the size of MREL, including the exclusion of the combined capital buffer from the MREL calculation and the introduction of 'MREL guidance' that would give national resolution authorities scope to increase MREL;
- the introduction of an 'internal MREL' applicable to subsidiaries that are part of a resolution group but are themselves not a resolution entity, i.e. to subsidiaries of groups that have a Single Point of Entry (SPE) resolution strategy. It is likewise proposed to allow the internal MREL to be replaced with guarantees provided by the parent undertaking, albeit, at this stage, only in respect of entities established in the same Member State as the parent undertaking.

**What may be seen as these proposals' main risk to the stability of the Slovak financial sector is the combination of the possibility to grant the cross-border waiver for banks and the setting of an SPE strategy for these banks.**

Since the legislative amendments described above are part of a single reform package aimed at reducing banks' risk exposure, it is important to look at their overall potential impact on the Slovak banking sector and the interplay between them. The proposals continue a trend of weakening the position of subsidiaries and 'host' supervisors across the EU. If adopted in the form put forward, these proposals may result in some banks at the individual level being exempted from meeting capital and liquidity requirements and, under SPE strategies, bearing losses made across the parent group. At the same time, these banks (unlike foreign bank branches) will remain covered by the Deposit Protection Fund (the deposit guarantee scheme in Slovakia) and the costs of their possible failure will be borne by domestic depositors and the domestic real economy. This risk is particularly significant currently, when the Banking Union's third pillar has not yet been established. It should be realised, however, that even after the Banking Union has been fully phased in, losses arising from bank failure and financial instability will be largely born by the

domestic real economy. At the same time, under the Banking Union, national authorities are losing the power to prevent subsidiaries from being exempted from capital requirement compliance at the individual level.

**NEW RULES FOR PERSONAL INSOLVENCY**

A number of changes to the personal insolvency regime entered into force in March 2017,<sup>10</sup> with the objective of making personal insolvency more widely available to natural persons who find themselves in a debt trap. The new regime allows any natural person whose assets are subject to execution or similar enforcement proceedings to file for bankruptcy. The situation following the changes is as follows:

- Debts may be settled either through bankruptcy or through an instalment payment plan.
- Under the instalment payment plan, the debtor does not necessarily need to lose his assets but has to pay creditors at least 30% of their claims over a period of five years (unless a longer period is agreed between the parties), and the amount repaid must exceed the potential recovery in bankruptcy by 10%.
- In the case of bankruptcy, the debtor gives up his assets and the court issues a decision on debt relief. The proceeds from the realisation of the debtor's assets are used to settle creditors' claims. Any debt left outstanding at the end of that process is declared by the court to be unenforceable.
- In addition to reducing the insolvency practitioner's remuneration advances, the law amendment introduces changes to speed up the insolvency proceedings.
- The amendment also introduces a so-called 'homestead exemption' (in Slovak: 'nepostihnuteľná hodnota obydlia dlžníka'), meaning that one property of the debtor is protected from claims in the insolvency proceedings, the purpose being to secure some housing for the debtor. The amount that may be exempted in this way is set by a Slovak Government Regulation<sup>11</sup> and should be equal to the minimum amount for which a natural person can arrange accommodation in a one-room flat or similar property in the Slovak Republic for a period of around 40 months.

<sup>10</sup> The changes were contained in an amendment to Act No 7/2005 Coll. on bankruptcy and restructuring (and amending certain laws), as amended.

<sup>11</sup> Regulation No 45 of the Slovak Government of 15 February 2017; the amount is set at €10,000, and the debtor may draw up to €250 of that amount per month.

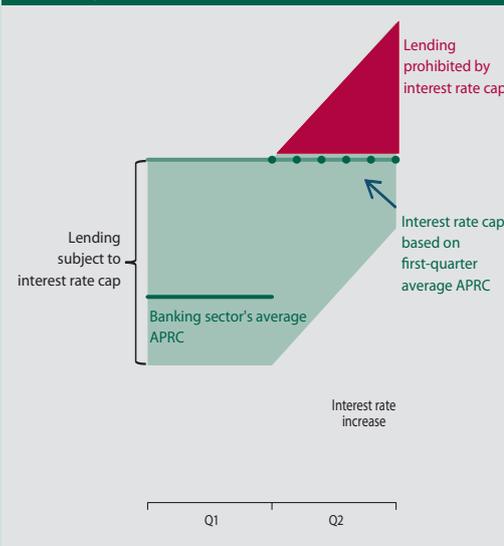
**Box 4**

**INTEREST RATE CAP RISKS NEGATIVE SECONDARY EFFECTS  
IN THE EVENT OF AN INTEREST RATE INCREASE**

A Slovak Government Regulation that sets a maximum annual percentage rate of charge ('interest rate cap') for consumer loans entered into force in 2014. This cap was set at twice the average annual percentage rate of charge (APRC) for loans provided by the banking sector in the previous quarter (the cap is set higher, at 2.5 times the reference level, for finance leases where the instalments include comprehensive motor vehicle insurance). The cap therefore limited lenders' scope for setting lending rates. Lenders retained the right to treat borrowers differentially on grounds mainly of their creditworthiness, and to adjust the APRC accordingly.

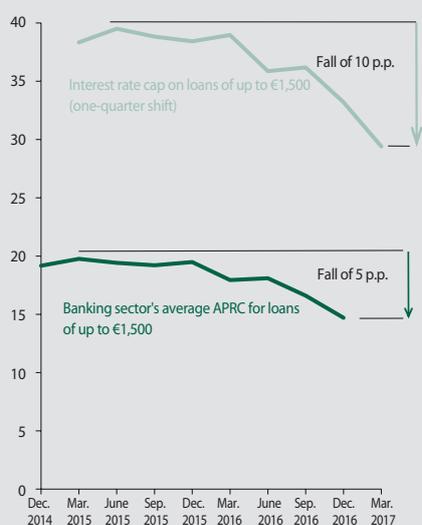
The setting of the interest rate cap at twice the average APRC has, however, secondary effects. If, for example, interest rates fall, the interest rate cap will fall twice as fast as the average APRC (Chart A).

**Chart B The interest rate cap may dampen lending if interest rates increase**



Source: NBS.

**Chart A The interest rate cap for consumer loans of up to €1,500, is falling twice as fast as the banking sector's average APRC**



Source: NBS.

At a certain level, the interest rate cap reduces the provision of highest-risk, i.e. most expensive, consumer loans also in the banking sector. This, however, creates a feedback loop in which the exclusion of the most expensive bank loans reduces the banking sector's average APRC and then in the next quarter reduces the provision of still other loans. Such a loop may ultimately weigh not only on the provision of riskier loans, but also on the provision of standard consumer loans provided by both banks and non-bank lenders.

The overall impact of this mechanism is to narrow lenders' scope for lending and to limit banks' scope for using interest rates for the effective management of consumer loan risk.

Another secondary effect is the curbing of interest rate increases. In other words, if interest rates in the financial sector increase in a given



quarter, lenders are restricted by an interest rate cap that is based on the previous quarter and does not take the rate increase into account

(Chart B). In the event of a sharp rise in interest rates, the negative impact on the provision of consumer loans may even be quite substantial.

## 2.4 LIQUIDITY RISK IS INCREASING

### Key trends

- Liquidity risk is increasing and there is growing reliance on the sufficiency and stability of deposits.
- The loan-to-deposit ratio is rising, and so the banking sector's self-sufficiency in terms of liquidity is falling

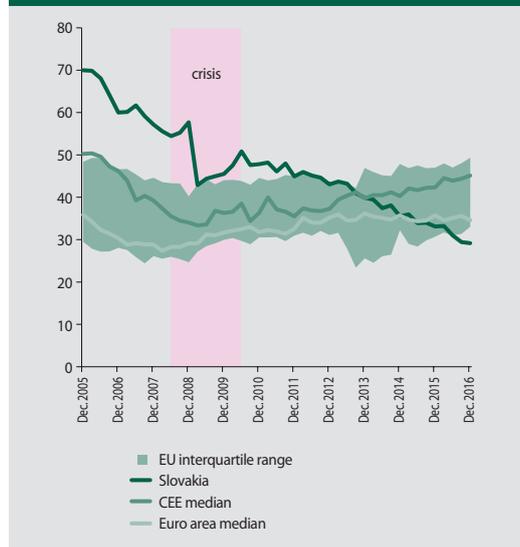
**Liquidity risk in the banking sector has continued to increase, owing to a combination of an increasing maturity mismatch between assets and liabilities and a stagnating stock of liquid assets.** The nature of this liquidity risk is determined by the traditional business model which prevails in the Slovak banking sector. Strong growth in long-term loans to households and NFCs has been the principal cause of the increasing maturity mismatch between assets and liabilities. On the asset side of the balance sheet, the

share of long-term illiquid assets has increased and that of liquid assets has fallen, while on the liability side, the share of short-term deposits, particularly current account balances, has become increasingly dominant. This trend is also evident in an international comparison of the ratio of liquid assets to short-term liabilities. In 2011 this ratio in Slovakia was among the highest in the EU, while in 2016 it was among the lowest.

**The regulatory liquidity coverage ratio (LCR) of the banking sector has deteriorated slightly.** Owing to a combination of stagnation in the amount of banks' liquid assets and an increase in the amount of banks' liabilities that must be covered by liquid assets, the LCR has fallen slightly. This trend is most pronounced among retail banks. With the relative decline in the impact of liquid assets, the banking sector has become more reliant on the stability of deposits, in particular retail deposits. Any shift in the composition of liabilities away from retail deposits and towards other types of deposits would reduce the LCR. The scope for replacing retail deposits with other funding sources is highly heterogeneous across banks, and there are some banks that are relatively sensitive to any outflow of retail deposits.

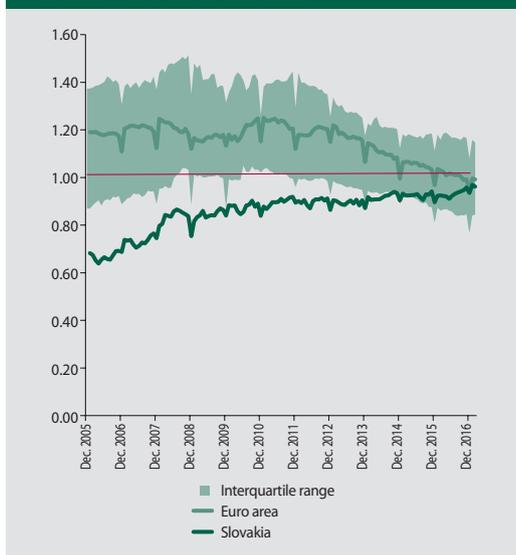
**The loan-to-deposit ratio in the Slovak banking sector has been worsening over a long period of time, and thus the sector's liquidity self-sufficiency has deteriorated.** On the positive side, Slovak banks' short-term liabilities largely comprise deposits of households and NFCs. These are typically more stable than funding from the interbank market and funding from abroad, which are far more significant for banks in other euro area countries than for banks in Slovakia. Slovakia is among the countries in which the banking sector has low coverage of short-term liabilities, although the stability of these liabilities in Slovakia is among the highest in the EU. The increase in the loan-to-deposit ratio in the Slovak banking sector, which in the first quarter of 2017 reached a historical high (over 96%, excluding mortgage bonds) is therefore an

**Chart 21 Ratio of liquid assets to short-term liabilities is falling in Slovakia in contrast to the EU**



Source: ECB.

**Chart 22 Increasing loan-to-deposit ratio reaches euro area median**



Source: NBS.

adverse trend. The increase in this ratio not only raises questions about the stability of banks' funding, but also implies a decline in their overall self-sufficiency in terms of liquidity. Furthermore, while the loan-to-deposit ratio has worsened in Slovakia in the recent period, it has improved in a majority of euro area countries.

## 2.5 LENDING TO NFCs SHOWS FAVOURABLE TRENDS

### Key trends concerning the growth in NFC loans

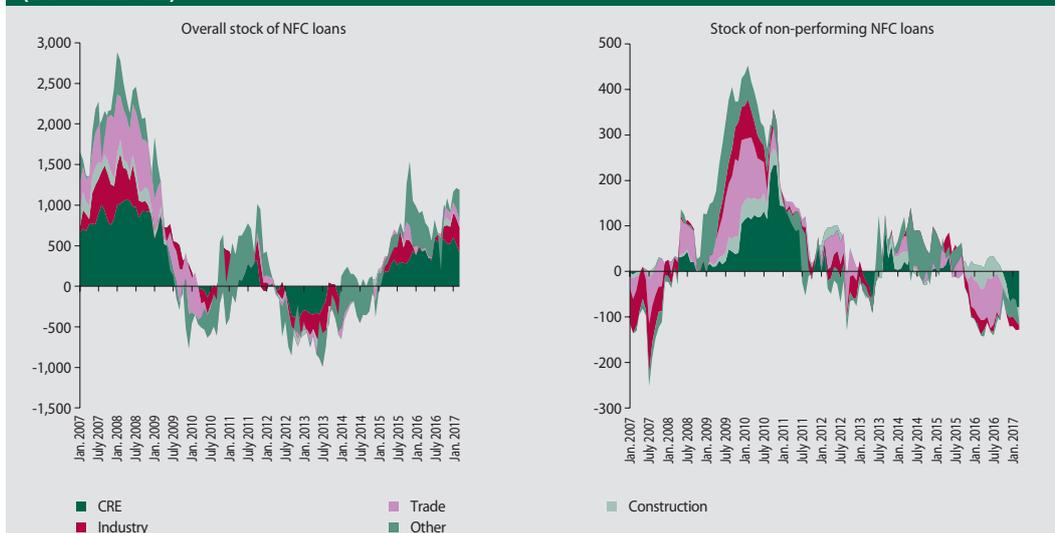
- The growth in the stock of NFC loans accelerated at the beginning of 2017, and the rate was among the highest in the EU.
- The NFC loan growth was underpinned mainly by the favourable macroeconomic situation together with the low interest rate environment.
- In sectoral terms, the main areas of loan growth were industry and commercial real estate (CRE), sectors that are relatively more sensitive to economic conditions.
- Not only have loans from domestic banks increased, so have loans from non-residents, intercompany loans, and corporate bond issuance.

**STABLE ECONOMIC GROWTH AND THE PROLONGED LOW INTEREST RATE ENVIRONMENT HAVE SUPPORTED THE DEMAND FOR, AND SUPPLY OF, NFC LOANS. AS A RESULT, THE STOCK OF THESE LOANS HAS INCREASED SIGNIFICANTLY** Growth in the stock of NFC loans accelerated at the beginning of 2017. After easing slightly towards the end of 2016, the flow of lending to the non-financial corporate sector picked up again in the first three months of 2017. The outstanding amount of NFC loans increased by more than 8% year-on-year, slightly exceeding its post-crisis record. The current growth in these loans is among the highest in the EU, and the rate for the first two months was higher than in any other EU country. Similarly as in the previous period, loans with a term of over five years were the main driver of NFC loan growth, only now supported by loans with a term of over one year. In the breakdown of lending activity by the size and ownership of firms, the strongest growth continued to be in loans to SMEs and loans to private NFCs.

**The strong growth in NFC loans may be related to developments in two significant economic sectors.** Lending to both the industry and commercial real estate (CRE) sectors has been increasing strongly. In the first quarter of 2017 the growth rates for these portfolios were attacking the 15% level. Such a trend heightens the significance of these sectors, which at the same time, and particularly in the case of CRE, are relatively sensitive to economic developments. These sectors, together with construction, wholesale trade and retail trade, accounted for the bulk of both lending growth and credit losses in the 2006–09 period.

**The loan growth was largely accounted for by demand-side factors.** Demand for NFC loans increased in the first three months of 2017, and the period since the early 2015 has seen an almost continuous upward trend in this demand. The low interest rate environment, together with favourable macroeconomic developments and the bright macroeconomic outlook, has, on the one hand, resulted in increasing corporate demand for debt restructuring, and has, on the other hand, supported investment activity in the NFC sector. Interest rates on new loans have remained largely unchanged, while the average interest rate on the stock of NFC loans has continued to decline. It may therefore be conclud-

**Chart 23 Loans to the CRE and industry sectors account for significant contributions to the increase in the overall stock of NFCs loans and in the stock of non-performing NFC loans (EUR millions)**



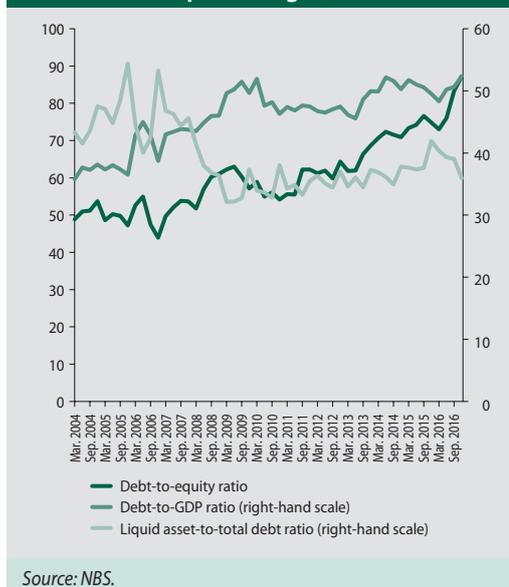
Source: NBS.

Notes: The chart shows year-on-year changes in the overall stock of NFC loans and in the stock of non-performing NFC loans. The CRE category includes loans to the sectors of administrative and support services activities and accommodation activities. Trade includes wholesale trade, retail trade and car manufacturing.

ed that loan demand was affected more by the generally low level of interest rates than by the rate of change in the level alongside the favourable economic situation. Loan supply reflected to a large extent market competition in the banking sector, which in the recent period has been further intensified by pressure on interest income. This competition supported the continuation of the loosening trend in credit standards for NFC loans.

**Besides the growth in loans from domestic banks, the overall volume of external funding has also increased.** Just as the stock of loans from domestic banks has been rising, so loans from abroad and intercompany loans have been recording substantial growth. The NFC sector has, moreover, been increasing its issuance of corporate bonds as another means to funds its activities. Given that all the principal liability items on the NFC sector's balance sheet have been increasing, the overall indebtedness of firms has, naturally, also risen. In 2016 the ratio of the sector's total debt to GDP increased slightly, and has remained relatively stable in recent years. Nevertheless, this measure of the domestic NFC sector's indebtedness is still only half that of the EU average (the respective figures as

**Chart 24 Moderate increase in NFC indebtedness (percentages)**



Source: NBS.

at the end of the third quarter of 2016 were 52% and 110%), and it is also below the average for the CEE region. The domestic sector's leverage ratio (total debt over equity) has increased notably. The growth in this ratio may be attributable

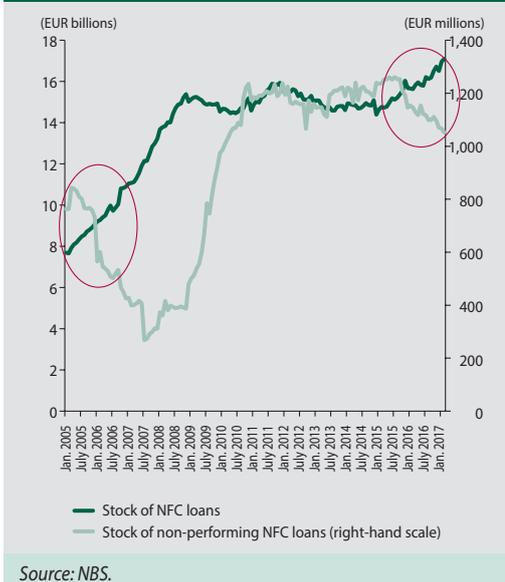
to significant foreign-owned firms. In other CEE countries, the leverage ratio is at similar levels to that in Slovakia.

**STRONG GROWTH IN LENDING TO THE CRE SECTOR HAS REFLECTED THE CONTINUING UPWARD TREND IN SENTIMENT ON BOTH THE DEMAND AND SUPPLY SIDES**

**Sentiment in the CRE sector has remained favourable, while several trends indicating an expansionary phase of the CRE market cycle have become more pronounced.** Economic growth in the recent period has been driven by both foreign and domestic demand, and this trend has been apparent also in the CRE sector. Favourable labour market conditions and low interest rates have improved sentiment on both the demand and supply sides of the residential segment of CRE sector, as robust sales of new builds have been accompanied by a substantial inflow of new property developments or of new phases of existing property developments. Growing household consumption has also had a positive impact on the retail segment of the CRE sector. The NFC sector's strong performance has supported demand for office space and logistics centres. Amid upward trends in the CRE sector, prices of commercial real estate have continued to rise, causing a decline in yields on investment in the CRE sector. Nevertheless, investment in CRE continues to offer appreciable yields and therefore represents an attractive opportunity for investors. The investment inflows into the sector in 2016 far surpassed the previous peak recorded in the pre-crisis period, and, on current trends, the level of investment activity is expected to be maintained in the next period. Several trends therefore imply that the CRE market is in the expansionary phase of the cycle.

**In line with the favourable sentiment in the CRE sector, the stock of loans to this sector has been increasing.** Its average year-on-year increase so far in 2017 has been almost 15%. This growth has spread across most of the banks active in sector. In addition to significant banks, medium-sized banks also have an important position in lending to the CRE sector.

**Chart 25 Credit risk costs are showing a marked procyclical trend**



Source: NBS.

**THE NON-PERFORMING LOAN RATIO FOR NFC LOANS HAS CONTINUED TO FALL SHARPLY, AS IS HOWEVER TYPICAL FOR THE EXPANSIONARY PHASE OF THE ECONOMIC CYCLE**

**The NPL ratio for loans to non-financial corporations has continued to fall significantly amid the improving economic situation.** By the end of the first quarter of 2017, the NPL ratio had fallen to a post-crisis low of just above 6%. Its long-running downward trend is accounted for by both growth in lending activity and a marked drop in the outstanding amount of non-performing loans.

A falling NPL ratio is, however, what would be expected during an economic expansion. At a time of sound macroeconomic developments, the situation of NFCs is also picking up. As a result, their debt servicing capacity is increasing and, despite an increase in firms' indebtedness, the default rate for NPC loans is falling and the amount of repayments on previously non-performing loans is increasing. The rate of change in the stock of non-performing NFC loans is, however, highly sensitive to economic developments. Following its sharp drop in the pre-crisis period, the stock of NPLs almost tripled over a two-year period.



NÁRODNÁ BANKA SLOVENSKA  
EUROSYSTEM

CHAPTER 3

# FINANCIAL SECTOR RESILIENCE

3

## 3 FINANCIAL SECTOR RESILIENCE

### 3.1 FINANCIAL SECTOR'S PROFITABILITY AND CAPITAL POSITION AT SATISFACTORY LEVELS

#### 3.1.1 FINANCIAL POSITION OF THE FINANCIAL SECTOR

##### Key trends in financial institutions' profitability

- Compression of net interest income, the main component of banks' profitability, increased significantly in 2016.
- Consolidated profitability fell slightly, despite one-off effects and the continuing fall in credit risk costs.
- The profitability of insurers in 2016, like that of banks, was significantly supported by one-off factors and would have declined in their absence.

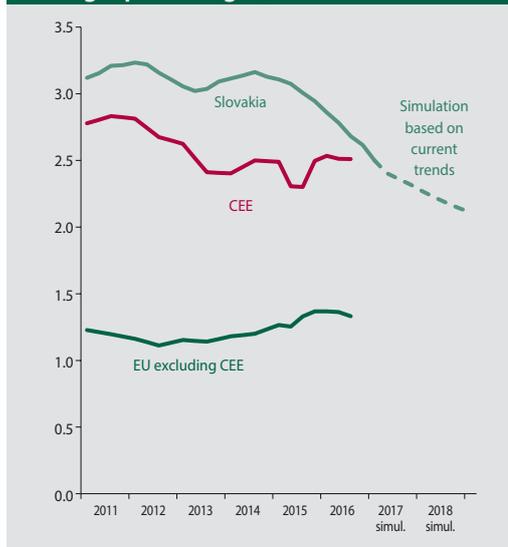
#### COMPRESSION OF NET INTEREST INCOME CONTINUED

**The banking sector's consolidated net profit for 2016 fell, year-on-year, by 1.8%.** Part of the profit was accounted for, however, by one-off income from disposals, in particular the sale of holdings in VISA company.<sup>12</sup> That income aside, the aggregate consolidated profit fell, year-on-year, by 15%.<sup>13</sup>

#### The drop in net interest income had the largest negative impact on profitability.

The amount of net interest income for the 12 months to December 2016 fell, year-on-year, by 5.2%, and for the same period to March 2017 it declined even more, by 5.6%.<sup>14</sup> Although banking sectors in other euro area countries are also exposed to declining levels of net interest income, the rate of decline in Slovakia is higher than that in any other CEE or EU country. Even though credit growth is far lower in the euro area than in Slovakia, the average drop in net interest income in the euro area was only 3.5%. In the years ahead, moreover, its level in the euro area is expected to pick up, while its level in Slovakia is more likely to fall further.

**Chart 26 The net interest margin is falling sharply, but remains above the euro area average (percentages)**



Sources: NBS and ECB.

Note: The net interest margin was calculated as the share of net interest income in total assets.

**Net interest margins are falling sharply.** Net interest margins in the Slovak banking sector came under notable downward pressure in 2015 and 2016, with one of the most significant causes being the decline in interest rates on housing loans. A further decline in these rates is to be expected in the months ahead. Due to the decline, the sector's average net interest margin (net interest income as a share of total assets) has gradually fallen to below the median for the CEE region. And although the net interest margin in Slovakia remains higher than the median for non-CEE EU countries, it should be noted that the banking sectors in those countries offset the lower margin with a higher share of non-interest income.

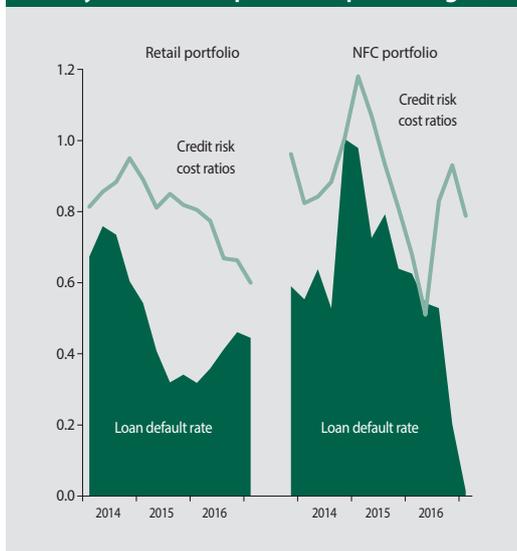
**Profitability has, however, been supported by a drop in credit risk costs.** Credit risk costs in the aggregate retail loan portfolio have been falling for an extended period. That trend is expected to end in the period ahead, since the loan default rate began to pick up in 2016, particularly in the

<sup>12</sup> Details of this transaction may be found in the Financial Market Situation and Trend Report – H1 2016.

<sup>13</sup> In the analysis of banks' profitability, it is common to evaluate the profitability at the individual level. Owing to one large intragroup transaction, however, this figure for 2016 has low relevance.

<sup>14</sup> The amounts were adjusted for the impact of a foreign bank branch commencing operation in Slovakia in 2016.

**Chart 27 The credit risk cost ratio is falling mainly in the retail portfolio (percentages)**



Source: NBS.

Notes: The default rate denotes the net increase in non-performing loans as a share of the aggregate average stock of loans over a 12-month period, before deducting write-offs and sell-offs of NPLs.

The credit risk cost ratio denotes the sum of loan-loss provisioning costs and NPL write-offs/sell-off costs as a ratio of the aggregate average stock of loans over a 12-month period.

consumer loan portfolio. At the same, however, the default rate for NFC loans fell significantly in 2016 and its downward trend continued in the first quarter of 2017. Although loan-loss provisioning costs for such loans have not fallen appreciably, a several banks did release some of their credit risk provisions in the first quarter of 2017. These releases were the main cause of the year-on-year increase in the banking sector's profitability in the first quarter of 2017; that increase was 20%, but would have been only 6% without that contribution.

#### THE INSURANCE SECTOR'S AGGREGATE NET PROFIT FOR 2016 WAS BUOYED BY ONE-OFF FACTORS

The profitability of insurers in 2016, like that of banks, was significantly supported by one-off factors and would have declined in their absence. The insurance sector's aggregate net profit for 2016 increased, year-on-year, by 19%, but if one-off contributions are excluded, it would have fallen by around 9%. The life insurance outlook shows greater risk. Abstracted from the one-off factors referred to above, investment returns in life insurance fell in 2016 to a level that

only just covered the returns guaranteed in life insurance contracts.

**Most pension fund management companies (second pillar of the pension system) and asset management companies (investment fund sector) reported an increase in profit in 2016, while supplementary pension management companies (third pillar) saw profits fall.**

On the one hand, the main driver of growth was an increase in returns on funds holding a higher proportion of equities; this accounted for profit growth in most of the asset management companies in the investment fund sector. On the other hand, returns on funds investing mainly in bond and money market instruments had a negative impact on the aggregate profit of PFMCs, which nevertheless managed to increase their profitability on the basis of cost savings. As for SPMCs, however, their aggregate profit fell markedly in year-on-year terms.

#### 3.1.2 SOLVENCY AND LEVERAGE

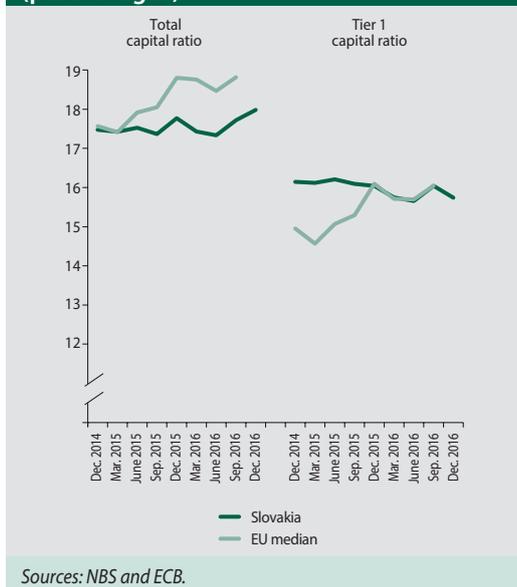
##### Key solvency trends in the banking sector

- The Slovak banking sector historically had a high total capital ratio by EU standards, sound quality in its capital structure and a favourable leverage effect.
- In recent years, despite strong loan growth, banks have been using capital in excess of regulatory requirements to increase dividend payments, and therefore the sector's capital ratio has fallen to below the EU median.
- Banks' will in future be required to tighten their dividend policies, and some of them have already begun to do so.

#### THE BANKING SECTOR'S SOLVENCY AND LEVERAGE RATIOS ARE SATISFACTORY, BUT THERE IS CLEARLY A NEED TO CURB DIVIDEND PAYMENTS

The banking sector's total capital ratio increased moderately in 2016. Even so, it remained slightly below the EU median, with the gap having widened marginally compared with 2015. Slovak banks have decided on relatively high dividend pay-out rates, while their aggregate total capital ratio has remained flat, in contrast to the ratio increases observed in a number of EU countries. Of its 2015 earnings, the Slovak

**Chart 28 The banking sector's total capital ratio remains below the EU median (percentages)**



banking sector retained only 8% as Tier 1 equity. The elevated trend in the dividend rate continued in 2016. As their capital ratios drew closer to the regulatory minimum level, some banks were prompted to raise their capital during the course of 2016, which had an upward impact on the sector's total capital ratio.

**The quality of the sector's capital nevertheless remains above the EU average.** The own funds of Slovak banks have historically consisted mainly of highest-quality common equity Tier 1 (CET1) capital. CET1 capital currently accounts for 90% of banks' total capital (the EU median is 88%). By international standards, the CET1 capital ratio is therefore at a more favourable level than the total capital ratio and is hovering at around the EU median.

**In the years ahead, the dividend payout rate will have to be reduced to some extent.** Although the banking sector's capital adequacy has remained broadly stable in recent years, the level of capital requirements has been gradually increasing, owing mainly to the phasing-in of new capital buffers as a means of implementing macroprudential policy. With the exception of the countercyclical capital buffer, which is dependent on the phase of the financial cycle, no other capital requirements are expected to be

increased. However, the total capital ratios of several banks are encroaching on the regulatory minimum. In order to maintain lending growth, some banks will be constrained to tighten their dividend policy significantly. It is encouraging that certain banks have already taking steps in this direction.

**Despite falling slightly, the leverage ratio remains sufficiently high.** Over the course of 2016 the ratio fell from 8.4% to 8.1%, which is still far higher than the proposed regulatory minimum ratio (3%) and the EU average (4.7%). The proposed implementation of a leverage ratio requirement is aimed at containing the risk associated with excessively low risk weights in certain countries. The Slovak banking sector is not exposed to this risk however, and therefore will not be affected by the introduction of such requirement.

#### SOLVENCY RATIOS IN THE INSURANCE SECTOR REMAIN SATISFACTORY ALSO AFTER IMPLEMENTATION OF THE SOLVENCY II REGULATORY REGIME

**The Solvency II regulatory regime that entered into force on 1 January 2016 has had a major impact on the calculation of insurers' solvency ratios, but on the whole has not significantly affected the level of solvency.** The new regime has overhauled the calculation of the solvency capital requirement (SCR) for insurers. Nevertheless, the insurance sector's average SCR coverage ratio remains far higher than the regulatory requirement, and as at September 2016 it stood at 230%. A number of insurers that have a higher SCR coverage ratio opted to lower it in 2016.

#### 3.1.3 MACRO STRESS TESTING OF THE SLOVAK FINANCIAL SECTOR DEMONSTRATED BANKS' RESILIENCE UNDER ADVERSE SCENARIOS

**STRESS TESTS DEMONSTRATED THE FINANCIAL SECTOR'S RESILIENCE, ALTHOUGH IN COMPARISON WITH PREVIOUS EXERCISES, THE SECTOR SHOWED INCREASED SENSITIVITY TO NEGATIVE SHOCKS**

**The resilience of the financial sector to potential headwinds from financial markets and the real economy was tested as at 31 December 2016 using macro stress testing.<sup>15</sup>**

The test covered a period of two years and employed three scenarios: a Baseline scenario and two adverse scenarios. The Baseline scenario

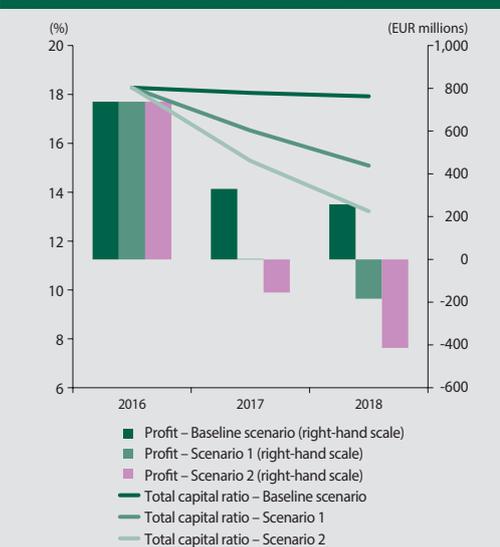
<sup>15</sup> A detailed description of the macro stress test is provided in NBS's Analysis of the Financial Sector – 2016.

assumes a favourable domestic economic situation, a drop in unemployment, and an inflation rate increasing towards its target level. The first adverse scenario, Scenario 1, assumes a materialisation of geopolitical risks with resulting contraction of the domestic economy, an increase in unemployment, low inflation, and elevated financial market stress. Scenario 2 makes the same assumptions, only to a greater extent.

**In the adverse scenario results as at end-2016, the banking sector continued to show satisfactory resilience, although the differences vis-à-vis the previous stress testing results were relatively significant.** In the Baseline scenario, the assumed increase in lending to the retail and NFCs sectors and the consequent increase in risk-weighted assets causes a slight drop in the average total capital ratio. In Scenario 1 and Scenario 2, the sector's average total capital ratio falls to, respectively, 15.1% and 13.2%, by the end of 2018. The sector's capital shortfalls against both the 8% and 10.5% capital requirements are higher compared with the previous stress test results (see Table 6 for details).

It should be noted, however, that even the Baseline scenario now shows a relatively marked decline in the banking sector's aggregate profit in 2017 and 2018. This decline is assumed owing partly to adjustments for one-off income in 2016 (mainly the disposal of holdings in VISA compa-

**Chart 29 Banking sector shows satisfactory resilience in adverse scenarios**



Source: NBS.

Note: Total capital ratios as at end-2016 are adjusted to include the assumed impact of capital increases.

ny) and partly to a substantial drop in net interest income. In the Baseline scenario, net interest income falls by €100 million in 2017 and by a further €80 million in 2018. Its decline stems largely from an assumed slowdown in lending growth as well as an assumed further reduction in interest rates (particularly rates on consumer loans). The sector is thus expected to have less capacity to generate net interest income, which, as its main source of income, is a key component of its capacity for building up capital buffers to absorb unexpected losses.

**Table 6 Comparison of stress test results as at end-2015 and end-2016**

	Baseline scenario	Scenario 1	Scenario 2
	Total capital ratio at the end of the two-year period		
2015	17.2%	15.2%	13.9%
2016	17.9%	15.1%	13.2%
Capital shortfall vis-à-vis the 8% capital requirement			
2015	0	0	3
2016	0	23	65
Capital shortfall vis-à-vis the 10.5% capital requirement			
2015	0	16	132
2016	16	92	177

Source: NBS.

Note: The 2015 rows show the stress test results as at end-2015 and the 2016 rows show the stress test results as at end-2016.

### 3.2 MACROPRUDENTIAL POLICY RESPONSIVENESS

#### Key trends

- Accelerating credit market trends are increasing the likelihood of an increase in the countercyclical capital buffer rate.
- Capital requirements for systemically important banks are falling.
- Measures concerning consumer lending are being prepared.
- A Decree on housing loans entered into force in the first quarter of 2017.



### 3.2.1 NBS RESPONSE TO STRONG FINANCIAL CYCLE UPSWING

#### MACROPRUDENTIAL POLICY HAS BEEN RESPONDING TO THE FINANCIAL UPSWING

#### The Slovak banking sector is at present exposed to a relatively strong growth trend.

Positive economic growth, an improving labour market situation, a low interest rate environment and falling interest rates are all contributing to a significant financial cycle upswing. Although such a phase of the cycle is favourable in several ways, it also tends to be accompanied by a build-up of risks that in future may lead to imbalances of varying degrees of significance. Looking at countries (in particular Spain and Ireland) that previously experienced a strong financial cycle upswing followed by a slump in the domestic financial sector and real economy, it is evidently necessary to mitigate any over-expansion of the cycle.

In the context of its macroprudential policy remit, NBS is constantly monitoring financial cycle trends and responds to any emerging imbalances. NBS aims, on the one hand, to prevent the accumulation of systemic risks, and, on the other hand, to build-up the banking sector's loss absorption capacity.

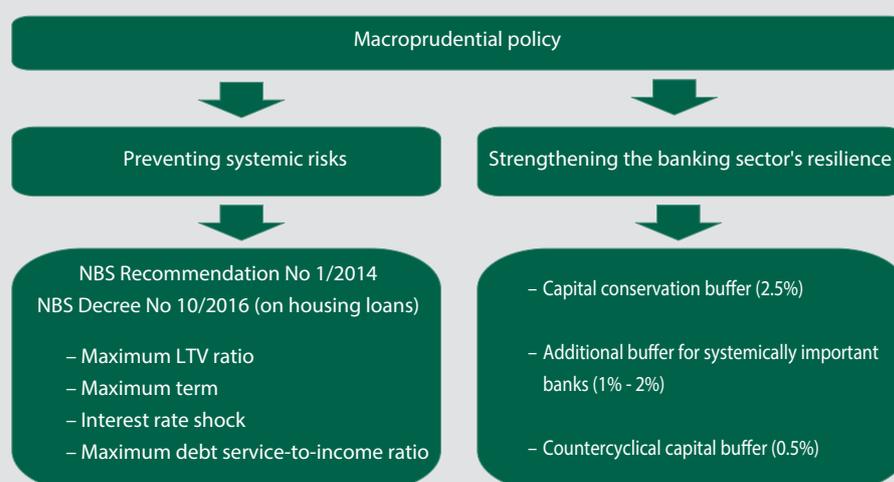
#### Measures to prevent systemic risks have largely focused on the tightening of credit standards for retail loans.

The main aim of these steps has been to maintain sound and sustainable credit growth. The first time NBS acted to support a tightening of standards was in 2014, when it issued Recommendation No 1/2014. The transformation of the recommendations contained therein into NBS decrees should be finalised during 2017, and some of the recommendations' parameters are being recalibrated in the process. It should be noted that the main purpose of these recommendations and their recalibration has been to mitigate structural risks related to overly accommodative credit standards, not to dampen credit growth. The aim is to ensure that each new borrower is, via credit standards, buffered against relevant risks (such as, a drop in income, an interest rate increase, or a fall in property prices). NBS decrees are the means for setting minimum requirements for credit standards, allowing banks, within the mandatory parameters, to tailor their standards to the requirements of their risk profile.

#### NBS has in recent years substantially increased the banking sector's resilience.

The measures taken by NBS have been fully compliant with the principle of building up capital

Figure 2 NBS macroprudential policy responses



Source: NBS.

buffers during ‘good times’ so as to allow scope for loosening during ‘bad times’. In 2014 NBS implemented the capital conservation buffer in full, and in 2015 it activated additional capital buffer requirements for the most significant banks in Slovakia. Next, in 2016, NBS decided to set a non-zero countercyclical capital buffer rate, at 0.5%, with effect from August 2017. As a result, the minimum capital ratio requirement for domestic banks has increased from 8% to 12%–13% (depending on bank size).

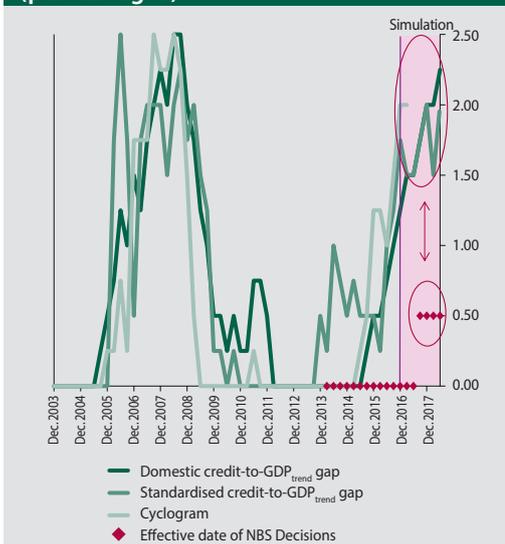
**The implementation of macroprudential measures has been accompanied, however, by a substantial increase not just in structural risks, but also in cyclical risks.** Although the measures taken have prevented further relaxing of credit standards and, in some areas, have resulted in a slight tightening, the changes in stock of retail loans are at historically high levels and continuing to rise, while property prices are also beginning gradually to accelerate. This trend stems mainly from the marked fall in interest rates, which in 2016 was particularly sizeable and among the largest in the EU. The result, however, is increasing risk associated with strong growth in household indebtedness as well as further risks arising from property price growth. NBS is monitoring these trends and will address any potential systemic risks with appropriate measures.

### 3.2.2 MEASURES TO SUPPORT BANKS’ RESILIENCE

#### ACCELERATING CREDIT MARKET TRENDS ARE INCREASING THE LIKELIHOOD OF AN INCREASE IN THE COUNTERCYCLICAL CAPITAL BUFFER (CCyB) RATE

The NBS Bank Board decided in 2016 to set a non-zero CCyB rate, at 0.5%, with effect from 1 August 2017, and it reiterated that stance in a decision of 25 April 2017. The decision to apply a non-zero CCyB rate was largely a response to trends in the household and NFC loan markets – central components of the core indicators for the CCyB. Among these indicators, the domestic credit-to-GDP<sub>trend</sub> gap and the ‘Cyclogram’ have reached post-crisis highs that indicate the need for a further increase in the CCyB rate, with the domestic credit-to-GDP<sub>trend</sub> gap implying a rate of 1.25% and the Cyclogram a rate of 2%. Meanwhile, NBS’s Medium-Term Forecast confirms the favourable economic outlook and maintains projections for continuing growth in lending to NFCs and households. But while all

**Chart 30 Simulation of core indicators for the countercyclical capital buffer rate (percentages)**



Source: NBS.

Notes: The data shown are as at the dates stated on the horizontal axis.

The first non-zero CCyB rate is due to be applied as from 1 August 2017.

In the Domestic credit-to-GDP<sub>trend</sub> gap, only loans provided by domestic banks are included. In the Standardised credit-to-GDP<sub>trend</sub> gap, all debts of NFCs and households are included; the amount of loans NFCs received from non-residents between 1993 and 2003 is estimated on the basis of the amount they received from domestic banks.

the core indicators calculated as at 31 December 2016 supported an increase in the CCyB rate, the entry into force of NBS Decree No 10/2016 provided grounds for a more cautious approach.

**The NBS Bank Board will consider in the third quarter of 2017 whether a further increase in the CCyB rate is warranted by credit market developments.** As regards the NBS Bank Board’s next quarterly review of the countercyclical capital buffer rate, a key factor in its decision will be the annual rate of growth in household loans (13.9%) and NFC loans (7.4%) in the first quarter of 2017. Such an increase in the second quarter would clearly have an upward impact on the credit-to-GDP indicators. The Cyclogram would be similarly affected, since most of its input variables are also showing a rising trend. An example is the annual rate of increase in flat prices, which in March 2017 exceeded 10%. In such circumstances, the current setting of the CCyB rate would be far below the benchmarks implied by the core indicators.

**IN 2017 NBS REVIEWED THE LIST OF OTHER SYSTEMICALLY IMPORTANT INSTITUTIONS (O-SIIs) IN SLOVAKIA AND ALSO THE SETTING OF ADDITIONAL CAPITAL BUFFERS APPLIED TO THEM**

**The 2017 review did not result in any change to the list of O-SIIs.**<sup>16</sup> NBS reviews the list of O-SIIs on an annual basis. These banks are identified on the basis of EBA Guidelines<sup>17</sup> that lay down criteria for assessing the systemic importance of banks in individual Member States. The 2017 review was based on data as at end-2016, and since the O-SIIs identified on that basis were identical to those identified in 2016 and 2015, no change was made to the list of O-SIIs in Slovakia.

Reducing additional capital buffer requirements for these banks helps to bring them into line with requirements in other euro area countries. In 2016 all euro area countries identified O-SIIs and set the corresponding O-SII buffers. This allowed cross-country comparison of O-SII buffer rates.

In applying additional capital buffers to banks treated as significant under the Single Supervisory Mechanism (SSM), NBS aims to uphold the 'level playing field' principle. This means that the capital buffers applied to banks comparable across the SSM should be set at a broadly similar level.

For this reason, it became necessary to adjust additional buffer requirements applied to Slovak O-SIIs, with the recalibration taking into account the following factors:

- in 2017 the additional buffer requirement for each Slovak O-SII is 2%; this level should, from the view of prudential requirements, be maintained at least for the largest banks,

with appropriate lower levels set for the others;

- the recalibrated additional buffer requirements should more closely match those applied to O-SIIs in other euro area countries in order to ensure a level playing field.

The result of the recalibration is that the overall additional buffer requirement for each Slovak O-SII will be reduced by one percentage point with effect from 1 January 2018. The situation will then be as shown in Table 7.

**3.2.3 MEASURES AIMED AT STRENGTHENING BORROWERS' RESILIENCE****DECREE ON HOUSING LOANS SETS MINIMUM CREDIT STANDARDS**

**At the end of 2016 the NBS Bank Board approved a decree laying down provisions on credit standards for housing loans.** Several of the provisions are based on NBS Recommendation No 1/2014, which recommended, among other things, maximum loan-to-value ratios, maximum debt service-to-income ratios, maximum loan terms, and other measures. The legally binding decree added to some of the recommendations, tightened some, and adopted some without any change. Its entry into force was phased in during the first quarter of 2017.

The decree addresses the following standards:

- Loan-to-value (LTV) ratio

**A well-secured loan protects both the borrower and the bank.** In the event of default, the realisation of the property collateral should cover the amount owed, and therefore the borrower need not incur additional liabilities (e.g. wage

**Table 7 Additional capital buffer requirements applied to Slovak O-SIIs as from 1 January 2018**

Bank	Composition of additional capital buffer requirements as from 1 January 2018
Všeobecná úverová banka, a.s.	1% O-SII buffer + 1% SRB
Slovenská sporiteľňa, a.s.	1% O-SII buffer + 1% SRB
Tatra banka, a.s.	0.5% O-SII buffer + 1% SRB
Československá obchodná banka, a.s.	1% O-SII buffer
Poštová banka, a.s.	1% O-SII buffer

Source: NBS.

Notes: SRB – systemic risk buffer.

The SRB is applied only on domestic exposures.

<sup>16</sup> Further information on the identification of O-SIIs and the setting of additional capital buffer requirements for these banks may be found in the following NBS Decisions:  
<http://www.nbs.sk/sk/dohlad-nad-financnym-trhom/politika-obozretnosti-na-makrourovni2/rozhodnutia>

<sup>17</sup> EBA/GL/2014/10:  
<http://www.eba.europa.eu/documents/10180/930752/EBA-GL-2014-10+%28Guidelines+on+O-SIIs+Assessment%29.pdf>



deductions). The bank, for its part, is protected from losses on the loan, and especially from the risk of multiple loans defaulting at the same time.

The decree therefore requires that the collateral pledged for each housing loan must be at least equal in value to the amount of the loan (i.e. the LTV ratio must not exceed 100%) and that banks do not focus their lending on higher-risk loans (i.e. not more than one-tenth of new loans may have an LTV ratio of over 90%, and not more than one-half of new loans may have an LTV ratio of over 80% This share will be tightened to 40% after a predefined time).

While the size of a loan is a precise element of the calculation, the value of the collateral is subject to various factors. To be as accurate as possible in their collateral valuations, banks are required to employ a combination of an external appraiser's valuation, the purchase price of the property, and their internal valuation process.

The regulation of LTV ratios in Slovakia is relatively moderate by international standards. It is common in Europe to find, for example, absolute prohibitions on 100% LTV ratios, or lower limits on the second property that the borrower owns.

- Debt service-to-income (DSTI) ratio

**A housing loan is typically a large liability for the whole household.** Often it is the house-

hold's major fixed expenditure, and its amount should be carefully considered before it is taken. Therefore the assessment of the household's ability to repay the loan must take into account the expenditure on ensuring the minimum living conditions for each member of the household. Furthermore, given the lengthy terms of housing loans, it is necessary to be prepared for an increase in interest rates (the borrower must be assessed as able to service the debt in the event of the borrowing rate increasing by two percentage points) and for other unforeseeable circumstances, such as long-term incapacity for work, redundancy, and other financial difficulties (the mandatory savings buffer is being gradually increased from 5% to 20% of the difference between the borrower's income and expenditure).

The restrictions placed on household borrowing differ between European countries. In some (like Slovakia), the focus is on the size of instalments, while in others it is on the loan-to-income ratio.

- Loan term

**Although a housing loan is a long-term liability, its term has natural limits.** The decree introduces a maximum limit on the term of loans, requiring that not more than 10% of new housing loans have a term of over 30 years and that not more than 10% of new consumer loans have a term of over eight years.



## ABBREVIATIONS

AFS	available for sale (portfolio)
APRC	annual percentage rate of charge
CET1	common equity Tier 1
EBA	European Banking Authority
ECB	European Central Bank
ESRB	European Systemic Risk Board
EU	European Union
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
HTM	held to maturity (portfolio)
LAA	loss absorption amount
LTV	loan-to-value (ratio)
MCR	minimum capital requirement
MREL	minimum requirement for own funds and eligible liabilities
MTPL	motor third party liability (insurance)
NBS	Národná banka Slovenska
O-SII	other systemically important institutions
PFMC	pension fund management company
RCA	recapitalisation amount
ROE	return on equity
SCR	solvency capital ratio
SO SR	Statistical Office of the Slovak Republic
SPMC	supplementary pension management company
SSM	Single Supervisory Mechanism





Box 4

Chart A The interest rate cap for consumer loans of up to €1,500, is falling twice as fast as the banking sector's average APRC 32

Chart B The interest rate cap may dampen lending if interest rates increase 32

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