NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

Analysis of the Slovak Financial Sector 2016

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FOREWORD

Foreword

Národná banka Slovenska produces the Analysis of the Slovak Financial Sector (ASFS) to meet the needs of the NBS Bank Board, the professional community and the wider public.

As one of the tools for assessing the stability of the Slovak financial sector, the ASFS should also be seen in the context of other NBS publications in this area, particularly the Financial Stability Report and the Quarterly Commentary on Macroprudential Policy, which are published on the NBS website.

The aim of the ASFS is to provide an overview of the current situation and developments in the domestic financial sector and to warn of potential risks. With regard to its systemic focus, the ASFS employs stress testing as a way of assessing the financial sector's sensitivity to various scenarios.

Annex 1 complements the main text by providing charts of selected macroprudential indicators for the principal risk areas in the financial sector.

This edition of the ASFS evaluates the overall condition of the financial sector as at 31 December 2016, although in several parts it refers to more recent data, where available. Activities related to the supervision of individual institutions are not covered.

NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

OVERVIEW

Overview

The euro area economy maintained its favourable path and financial market sentiment rebounded

The euro area's economic growth accelerated in 2016, driven to a significant extent by household consumption. Financial market sentiment also picked up to some extent. As for the downward pressure of the prolonged low interest rate environment on financial institutions' profits and on returns on less risky assets, there were signs that it may gradually be starting to ease. One such sign was the raising of interest rates in the United States and another was the increase in inflation, as well as inflation expectations, in the euro area. At the same time, however, euro area monetary policy remains highly accommodative.

Despite the positive signals and expectations of continuing global economic growth, the euro area's economic trends and financial stability remain exposed to several risks

The principal risks are a sudden increase in risk premia and decline in asset prices, with some assets already showing signs of overvaluation. Another risk arises from the fact that the banking sectors of some euro area countries have been weakened by subdued profits and elevated non-performing loan (NPL) ratios. In addition, several countries are burdened with high private and public debt ratios that could see a return to uncertainty about the sustainability of such debt levels.

In addition to these risks, political risks are gradually mounting

The main political risks relate to how the United Kingdom's withdrawal from the European Union will actually be implemented, to the outcomes of upcoming parliamentary elections in key euro area countries, and to uncertainty about how the new administration in the United States will affect future developments, particularly about the extent of its commitment to protectionist policies. Financial markets have already begun to price in these risks, as is evident from the gradual increase in credit spreads.

Slovakia's economic growth in 2016 was among the strongest in the EU

The sources of Slovakia's economic growth were balanced between domestic and foreign demand. Looking ahead, the investment contribution is expected to turn positive again once the absorption of EU funds rebounds under the new EU programming period. Favourable economic trends had a notable impact on the labour market in 2016 (unemployment fell and real wages grew), as well as on the non-financial corporate sector. The main risks to Slovakia's economic outlook are now external, in the form of a potential decline in foreign demand.

The Slovak financial market's trends in 2016 reflected three significant factors: the sound performance of the domestic economy; rising asset (especially equity) prices in financial markets; and low or further declining interest rates

On the one hand, these factors supported asset growth in most financial market segments. In the banking sector, asset growth was driven by strong demand for loans among both households and non-financial corporations (NFCs). An increasingly salient question is whether the rapid rise in household indebtedness, together with the more recent growth in commercial real estate loans, is sustainable. The net value of assets under management in pension funds and investment funds grew amid the buoyancy in financial markets. In the pension fund sector, asset growth was further supported by growth in wages and employment. On the other hand, the low interest rate environment weighed on the profitability of the banking and insurance sectors through its downward impact on net interest income, a core source of profit in each sector. It also contributed significantly to continuing pressure on the easing of credit standards. In the pension fund and investment fund sectors, investment portfolios' risk profiles maintained their upward trend owing to the low returns on less risky assets and to investors' continuing optimism and risk appetite.

Ongoing retail loan growth was the most significant trend in the banking sector

The recent downward trend in interest rates was one of the main causes of the high demand for loans in 2016. Another significant cause was growth in employment and wages. In the case of both housing loans and consumer loans, their stock at the end of 2016 had

increased by around 14% year on year. Rapid growth in household indebtedness is now one of the principal risks to the stability of the Slovak financial sector. The household debt-to-disposable income ratio in Slovakia is the second highest among eleven countries in the central and eastern European region, and it is the only one that is increasing sharply, its level having doubled during the post-crisis period. Furthermore, the markets in both housing and consumer loans have been significantly affected by the legislative environment. In the case of housing loans, a statutory cap on fees for their early repayment was introduced in 2016 and contributed significantly to the growth in these loans and to the compression of interest margins. As for consumer loans, they remain subject to an interest rate cap set at twice the market average, the result of which, in an environment of falling interest rates and increasing competition, has been a gradual tightening of lending conditions.

Consumer loan trends point to an elevated accumulation of risks

These trends are putting an increasing squeeze on retail loan interest margins, thus forcing lenders to ease lending conditions for retail loans. These trends have been most pronounced in the segment of consumer loans, where not only loan amounts and maturities increased, but so did the share of non-performing loans. The annual default rate for consumer loans has more than doubled since 2012. At the same time, the rise in the NPL ratio stands in direct contrast to the favourable economic trends and fall in interest rates. Such a situation indicates that risks are accumulating in the upswing of the business cycle. The same situation – an increase in NPLs at a time of economic growth – was observed in the Slovak banking sector in the period 2006-07, just before the outbreak of the crisis.

Credit risk in the housing loan portfolio remains low

The net default rate for housing loans remained between zero and slightly negative in 2016 and the NPL ratio for these loans was steadily falling. As a result of an NBS Recommendation issued in 2014, loans with a loan-to-value (LTV) ratio of over 90% have continued to decrease as a share of total housing loans. Although the share of housing loans with an LTV ratio of between 80% and 90% has increased, that share is expected to fall gradually following a measure adopted by NBS in December 2016.

The rapid growth in housing loans is contributing to a build-up of imbalances in the real estate market. Property price growth accelerated in 2016, while a notable drop in the number of existing flats advertised for sale was offset by the rising share of new builds. The market is therefore reaching the point where prospective flat buyers have few options other than to buy an unfinished flat.

Lending to non-financial corporations also increased

Economic growth coupled with improving sentiment is also providing a significant boost to firms' demand for loans as well as to their debt servicing capacity. The year-on-year growth rate in the stock of loans to NFCs was close to 6% in 2016, the fifth highest rate in the EU. Its growth continued to be driven mainly by loans to small and medium-sized enterprises. In contrast to the previous period, investment loans increased as a share of NFC loan growth. The NPL ratio for the corporate loan portfolio continued to fall in 2016.

The growth rate for commercial real estate (CRE) loans increased, but considering the previous substantial losses in the CRE sector, lenders need to maintain a cautious approach

The stock of commercial real estate loans increased in 2016 by more than 10% year on year. Its growth reflected trends in the CRE market, which were similar to those in the residential property market. The occupancy ratio increased sharply and pre-sales of unfinished properties were robust. Thus demand for new commercial real estate is growing, which requires continuing growth in lending to the sector. As a result of this trend, there may be a relatively marked increase in the share of CRE loans in the total assets of banks, as well as in the total assets of other selected financial institutions and funds. Given the heavy losses incurred in the CRE sector during the recent economic crisis, it is important that banks and other lenders take a cautious approach to lending to this sector by setting appropriate credit standards.

The growth in banks' profits despite the low interest rate environment is solely attributable to exceptional factors

As mentioned above, the banking sector's aggregate profit has come under severe pressure from falling interest margins. Although the sector's profit increased in 2016 by 19.8%, year on year, that growth was driven by several one-off and exceptional factors. Excluding their impact, the overall profit dropped by 11%. The sector's total capital ratio increased slightly, to 18%.

The years ahead are expected to bring a further decline in the banking sector's profitability, owing mainly to the downward trend in net interest income. Stress testing conducted for this Analysis shows that the banking sector as a whole should nevertheless remain resilient to headwinds from the economy and financial markets; however, the impact of the adverse stress test scenarios was greater compared with past exercises. Under the more severe of the adverse scenarios, the average total capital ratio of the banking sector falls to 13.2%, leaving a capital shortfall of €65 million (or €177 million if the capital conservation buffer requirement is taken into account).

The insurance sector grew mainly through non-life business

In the Slovak insurance sector, gross premiums written in life insurance, including unit-linked business, declined in 2016, while gross premiums written in non-life insurance increased. The growth in non-life business was driven by the lines of comprehensive motor vehicle insurance and property insurance. Due to strong market competition, however, motor insurance remains loss-making. The insurance sector, like the banking sector, saw its net profit greatly affected by several exceptional factors. The aggregate profit for 2016 was 19% higher than the profit for the previous year, but excluding the impact of the exceptional factors, it was around 9% lower. Furthermore, the sector's future profitability remains exposed to the fact that if exceptional factors are not taken into account, investment income in life insurance will fall to a level that only just covers the returns guaranteed under life insurance contracts.

A major legislative change occurred in the insurance sector in 2016 with the entry into force of the Solvency II regulatory regime at the start of the year. Although the implementation of Solvency II had a major impact on the calculation of solvency ratios and their composition, it did not significantly affect the level of solvency in the Slovak insurance sector. The average solvency capital ratio as at September 2016 was 230%. Several insurers with a higher solvency capital ratio reduced the ratio during the course of 2016.

The net asset value of pension funds increased, as did their riskiness

In the second pillar of the pension system – the old-age pension scheme operated by pension fund management companies – the net value of assets under management rebounded strongly in 2016, after falling in the previous year due to a temporary 're-opening' of the scheme. Similarly robust growth was observed in the third pillar – the supplementary pension scheme operated by supplementary pension management companies – thanks to favourable labour market developments. In both schemes, funds' investment risk profiles also continued to change. Equity pension funds and balanced pension funds recorded an increase in the equity component of their assets. In bond pension funds, both the share and duration of the bond portfolio increased, and consequently so did the exposure to interest rate risk. Investments in bank deposits and in Slovak government bonds fell as a share of pension funds' assets. In the third pillar, the share of lower-rated bonds in the assets of some supplementary pension funds increased. As a result of the buoyancy of financial (especially equity) markets, all types of pension fund recorded positive investment returns in 2016. The highest returns were recorded by those funds with the largest equity components.

The net asset value of investment funds grew more slowly in 2016 compared with the previous year

The slowdown was more pronounced in domestic investment funds, while sales of foreign investment funds were relatively high. One cause of the slowdown was a spate of fund redemptions by institutional investors following the downturn in equity markets at the beginning of the year. By contrast, the inflow of investments from households began to pick up steadily in the second half of 2016. The biggest-selling domestic funds were mixed funds and real estate funds, while the foreign funds that sold best were equity funds. All types of fund registered a positive nominal return in 2016, with equity funds securing the highest returns.

CHAPTER 1

EXTERNAL AND DOMESTIC DEVELOPMENTS RELEVANT FOR FINANCIAL SECTOR STABILITY

1

1 EXTERNAL AND DOMESTIC DEVELOPMENTS RELEVANT FOR FINANCIAL SECTOR STABILITY

EURO AREA ECONOMY SHOWING STABLE PROGRESS AMID FAVOURABLE SIGNALS AND EXPECTATIONS FOR GLOBAL ECONOMIC GROWTH

The euro area economy showed relatively strong resilience to several shocks in the second half of 2016, with its growth rate not only remaining stable but even accelerating slightly. Among the challenges it faced were the United Kingdom's vote to leave the EU, stress in the banking sector, geopolitical events, terrorism, and increasing support for policies opposed to globalisation. All these factors have so far been counterbalanced by long-standing growth-supporting factors, such as the accommodative monetary policy stance, the euro's weaker exchange rate, and the low oil price. Leading indicators for January and February suggest that GDP growth and economic sentiment remained relatively favourable in early 2017 and therefore that the economy's growth trend will be maintained at least in the short term.

Euro area economic growth continued to be driven mainly by household consumption. The combination of relatively robust nominal income growth, low inflation and rising employment had an upward impact on disposable income and consequently supported growth in consumer demand. Investment activity nevertheless remained subdued, therefore acting as a drag on both current economic growth and potential output.

GDP growth outlooks for advanced economies outside Europe have improved slightly in the recent period. In particular in the United States, growth picked up in the second half of 2016 and, as a result of the projected fiscal impulse, is expected to gain even more momentum at least in the near term. As for aggregate GDP growth across emerging market economies (EMEs), it appears to have already begun rebounding from its downward trend of recent years and is expected to accelerate gradually in the period ahead. This upturn should also be supported by a moderate increase in commodity prices. Despite the situation at the aggregate level, however, there is considerable heterogeneity in economic performance across EMEs.

In both the euro area, and other advanced economies, inflation began to accelerate in the second half of 2016, boosted by an upturn in oil prices and a base effect. Inflation expectations, too, began edging upwards. On the other hand, core inflation remained flat, as still high levels of unemployment and the impact of previously adopted structural labour market measures contained inflationary pressures. It is therefore only in the medium-term period that headline inflation is expected to converge sustainably towards its target rate.

DIVERGENCE BETWEEN MONETARY POLICY STANCES IN THE EURO AREA AND THE UNITED STATES; IMPROVEMENT IN FINANCIAL MARKET SENTIMENT

After putting off the move on several occasions, the Federal Reserve System finally decided in December 2016 to raise the target range for the federal funds rate by 25 basis points (after increasing it by the same amount a year earlier). Given the assumption that the new US administration will be introducing expansionary fiscal policy measures, it is expected that the central bank will further raise the base rate with increasing frequency. It is a different situation in the euro area, where the ECB has kept its key rates unchanged and, in the current zero lower bound environment, is not expected to touch them for the foreseeable future. Although the ECB did decide in December 2016 to reduce its monthly purchases under the asset purchase programme (APP), from €80 billion to €60 billion from March 2017, it also decided to prolong the APP at least until the end of 2017.

Global financial market sentiment began picking up somewhat from autumn 2016. Investor risk appetite was sharpened by the improvement in macroeconomic conditions, the reversal of downward inflation trends, and expectations for growth-stimulating policies in

the United States. The pick-up in sentiment was particularly evident in equity prices. Equity indices in Europe recouped the losses made in the first months of 2016, while those in the United States headed towards historically high levels. It is paradoxical, and also something of a warning signal, that the recent rise in equity prices has been accompanied by an increase in the gold price. Rising gold prices are typically associated with periods of elevated stress in financial markets.

Although it remains too early to say whether the long-running trend of falling interest rates has finally ended, recent months have seen rates move upward. This is especially the case at the long end of the yield curve, therefore implying a steepening of the curve. The rise in interest rates has been most marked in the United States, but in the euro area, too, rates have climbed from the historical lows recorded in the first half of 2016.

Uncertainty about future developments continued to mount, particularly following the commencement of the new US administration

While macroeconomic trends and future outlooks have been relatively favourable in the recent period, both at the global level and in a majority of regions, they have been counterbalanced by mounting uncertainty. The main contributing factors to the increase in uncertainty surrounding the foreseeable future developments was the result of the US presidential election and subsequent arrival of a new administration, which is expected to oversee a major change of course in US economic policy both on the domestic front and externally vis-à-vis the rest of the world. To assess the potential impact of the new leadership before its policy details are known is an exercise in pure speculation. What is almost certain, however, is that fiscal stimulus measures will be part of the package. Given that the scope or efficacy of the fiscal measures could be greater than currently projected, there is an emerging possibility that economic growth will surprise on the upside. Over the longer term, though, it is not so clear that such stimulus will have a positive impact on demand. With fiscal expansion coming at a time when the US economy is approaching full employment and inflation pressures are gathering strength, the Federal Reserve could find itself constrained to step up the pace of monetary policy tightening. Such a scenario would cause appreciation of the dollar's effective exchange rate, thereby diminishing the positive demand shock in the domestic economy and posing an even greater threat to many EMEs. In these countries, financial conditions would tighten and capital flight could set in. All of this at a time when the indebtedness of several significant EMEs is reaching elevated levels and an appreciable part of their debt is denominated in US dollars.

Another major way in which the new US administration's expected measures are bringing uncertainty to global economic activity is their departure from the long-standing consensus on free trade. Should US policy take a more radical turn – by, for example, introducing tariffs or adjusting the tax system to penalise imports – the result could be a reduction in global trade and global economic growth, particularly if such an approach sets off a wave of protectionist measures and countermeasures in other parts of the world. The measures intended to protect and support the US domestic market are aimed largely against specific EMEs, but, through secondary effects, they would eventually weigh on the euro area as well.

Chart 1 Equity market indices

Source: Bloomberg.

BESIDES THE LONG-RUNNING RISKS TO ITS ECONOMIC TRENDS AND FINANCIAL STABILITY, THE EURO AREA IS INCREASINGLY EXPOSED TO POLITICAL RISKS IN 2017

Political risks in 2017 will be significant for Europe's economic trends and financial stability. The most important risk concerns how the United Kingdom's withdrawal from the EU will actually be implemented. Although the UK government has set out the broad principles of its exit policy, it is difficult to predict at this stage what the outcome of the UK-EU negotiations will be or the economic ramifications of that outcome for each side. Another political risk lies in the fact that major elections are being held in leading euro area countries including France and Germany, as well as potentially in Italy.

All the above risks, together with other non-economic factors such as geopolitical tensions in several parts of the world, terrorism, and the migration crisis, have the potential to dent the fragile confidence in financial markets. That would lead to increases in risk premia and declines in asset prices, which in some segments are showing signs of overvaluation.

The recent moderate steepening of the euro yield curve is expected to help ease the downward pressure on the profitability of euro area banks. This expectation has in recent months had an upward impact on bank share prices. Nevertheless, banking sectors in general, and those in certain Member States in particular, remain vulnerable, whether to losses on credit portfolios that have fallen in quality or to diminishing operational efficiency. The main focus of attention continues to be Italy. On the one hand, according to market indicators, the Italian banking sector has stabilised following the announcement of plans for a 'preventive recapitalisation'. On the other hand, in a sign of falling confidence, non-resident entities have been pulling money out of Italian banks.

The increase in long-term yields on euro area sovereign debt has to some extent represented a fundamental shift reflecting expectations for key macroeconomic trends. In some countries there is a further factor behind the rising yields, namely the widening of the credit spread over German benchmark bonds. This trend may well be the response of financial markets to a build-up of political risks that could, in extremis, result in the break-up of the euro area. It is worth noting that spreads are rising even on French debt, not only on the bonds of countries most closely associated with the previous euro area sovereign debt crisis. Spreads could come under further upward pressure if an agreement on how to continue the third bailout package for Greece is not reached before the summer, when the country is due to make a major loan repayment.

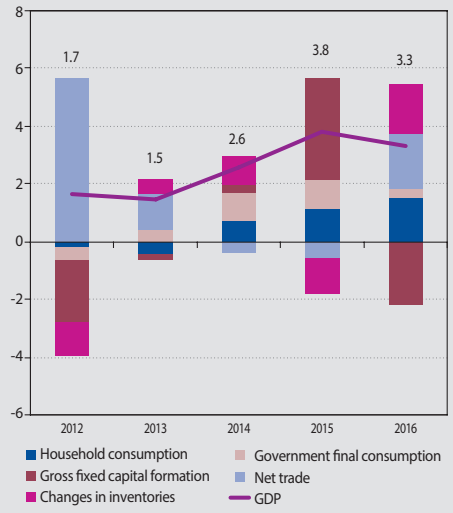
Chart 2 Credit spreads on 10-year government bonds

Source: Bloomberg and NBS.
Note: The spreads are calculated vis-à-vis German government bonds of the same maturity.

SLOVAKIA WAS AMONG THE FASTEST GROWING EU ECONOMIES IN 2016. THE COUNTRY'S GDP GROWTH WAS BALANCED BETWEEN DOMESTIC AND FOREIGN DEMAND. LOOKING AHEAD, THE CONTRIBUTION OF INVESTMENT IS EXPECTED TO INCREASE.

Slovakia's economy grew by 3.3% 2016, which compared with the previous year was around half a percentage point lower. The slowdown had been expected given that the absorption of EU funds was exceptionally high in 2015 and more moderate last year under the new programming period. But despite its slight slowdown, Slovakia's economy recorded the sixth-highest growth in the EU in 2016, with all

Chart 3 GDP growth and its components (percentages)



Source: SO SR and NBS.

components other than investment making positive contributions. GDP growth was balanced between domestic and foreign demand.

The favourable labour market situation and growth in real wages provided a boost to household sentiment and consequently resulted in the highest rate of household consumption growth since 2008. The public sector contributed positively to GDP growth, largely through public wage growth and increased health expenditure.

After two years of contributing negatively to Slovakia's economic growth, net trade had a positive impact in 2016 as export growth exceeded import growth. The low rate of import growth was related to a decline in the volume of EU co-funded investment, following the end of the previous programming period.

The only GDP component that had a negative impact on economic growth last year was investment; it reflected a sharp year-on-year drop in public investment, which stemmed from the cyclical nature of EU funds absorption over the course of one programming period. Private investment growth in 2016 failed to make up for the decline in public investment.

Economic growth in 2016 had a positive impact on the situation in the non-financial corporate sector, as firms increased their income. Corporate sales grew, year on year, in all the major sectors of the economy apart from construction, their decline in that sector probably being related to the reduced absorption of EU funds. With firms improving their financial position and expecting their stable progress to continue, their demand for loans, especially for investment purposes, increased in 2016.

The strengthening economic trends had a supportive effect on the labour market, as the number of people finding work was more than 50,000 higher compared with the previous year. The registered unemployment rate fell for a fourth consecutive year, ending the period at 8.8%. Besides job creation, the factors supporting employment growth include increasing wages across the economy. The average nominal annual wage growth in 2016 was more than 3%, while in real terms, given the environment of falling prices, average wage growth was close to 4%. Labour market developments were therefore a factor behind the growth in household demand for loans. As the financial situation of households was enhanced by disposable income growth, so household confidence indicators picked up and households took out an increasing amount of consumer loans, as housing loans. As a result, overall household indebtedness increased.

The general price level in Slovakia fell in 2016 for a third successive year, by 0.5% year on year. Energy and food prices accounted for most of the decline. In the second half of the year, however, the year-on-year inflation rate became gradually less negative until, in December, it turned slightly positive for the first time in three years. The inflation trend in Slovakia therefore mirrored euro area inflation, which in the second half of last year gradually rebounded from low levels and then accelerated.

Going forward, the Slovak economy is expected to maintain stable growth with gradually rising momentum. Investment is expected to have an increasingly positive impact on that

growth, as new car plant investments come on stream, public investment grows, and a major public-private partnership project is realised.

The projected economic developments are expected to have a favourable impact on firms. The labour market situation should continue to improve, although employment growth is expected to moderate as a result of saturation of the labour market. Real wage growth is also forecast to slow gradually, owing to the impact of projected price growth.

The main risks to Slovakia's economic growth outlook are now external, in the form of foreign demand being lower than expected. This could happen if some countries implement more robustly protectionist policies, if financial problems in certain EU countries' financial sectors crystallise or if geopolitical problems escalate.

CHAPTER 2

INTEGRATED OVERVIEW OF THE FINANCIAL SECTOR

2

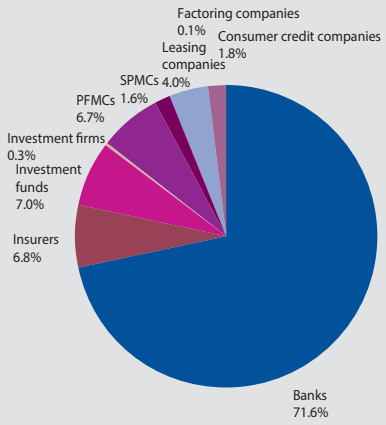
2 INTEGRATED OVERVIEW OF THE FINANCIAL SECTOR

STEADY GROWTH IN THE FINANCIAL MARKET IN 2016

Year-on-year asset growth in the financial market was moderately higher in 2016, at 6%, than in 2015. Most financial market segments recorded appreciable asset growth. Stable economic expansion and its positive effect on both labour market developments and the situation of non-financial corporations (NFCs) supported growth in financial sector assets. Their aggregate value at the year-end exceeded €100 billion for the first time ever.

The banking sector, which constitutes more than two-thirds of the financial sector, accounted for the majority of the sector's asset growth in 2016. The pace of asset growth in the banking sector has fluctuated above 5% since mid-2014. That stable growth is largely accounted for by the amount of lending, which has increased substantially in recent years due to the effect of favourable macroeconomic trends, improving economic sentiment, and a prolonged period of low interest rates. The insurance sector's asset growth in 2016 was lower than the banking sector's, and did not exceed 2%. In the investment fund sector, asset growth slowed in 2016 after its notably high rates in the previous two years. Total assets of investment firms fell slightly in value in 2016, apparently in consequence of low interest rates. Leasing companies saw their assets increase thanks to the gradually improving financial situation of both NFCs and households. As for consumer credit companies, asset growth was driven mainly by increased lending to non-residents. Pension fund management companies (operating the second pillar of the pension system) were the financial market segment that had the strongest asset growth in 2016. The net value of the assets under their management rebounded strongly in 2016, after falling in the previous year due to a temporary 're-opening' of the second pillar. This growth benefited from labour market buoyancy, which in the recent period has included an upward trend in both employment and the average wage across the economy. Similarly robust growth in assets under management was reported by supplementary pension management companies (operating the third pillar of the pension system). Factoring was the only financial market segment in which aggregate assets fell significantly, by fully one-quarter in year-on-year terms. This was caused, however, by one factoring company ending its operation. Adjusting for that effect, the net amount of assets in the sector increased moderately.

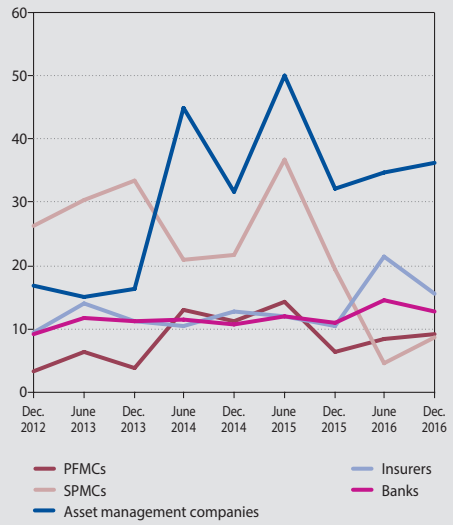
Chart 4 Distribution of assets and managed assets in the Slovak financial market (percentages)



Source: NBS.

Most financial market segments increased their aggregate profit in 2016, but a major cause of that growth was one-off factors. The favourable impact of macroeconomic developments on the labour market and financial situation of NFCs, together with improving sentiment and stable outlooks, was conducive to profit generation in the financial sector. Nevertheless, the increase in the banking sector's aggregate profit was entirely attributable to one-off income. Abstracting from such income, the banking sector's profit declined in 2016. In fact, banks saw their business model come under increasing pressure last year and that pressure is expected to intensify going forward. In the insurance sector, too, one-off income was the driver of its size-

Chart 5 Return on equity in financial market segments (percentages)



Source: NBS.

able profit growth. As a result, the sector's aggregate return on equity reached its highest level in the post-crisis period. Excluding one-off income, however, the aggregate profit growth was only half as high. PFMCs managed to increase their profits last year mainly through cost savings. In the previous year, by contrast, the PFMC sector registered a profit slump caused mainly by reduced income from returns on assets. In the investment fund sector, the aggregate return on equity was slightly higher at the end of 2016 compared with a year earlier.

Improving trend in the quality of all credit portfolios other than the consumer loan portfolio

Looking at retail loans, the default rates for housing loans and consumer loans followed opposite paths during the period under review. As for home savings banks, their loan default indicators showed no change. The net default rate for housing loans remained between practically zero and slightly negative in 2016, while the net default rate for consumer loans increased sharply. This was reflected in the non-performing loan ratio for consumer loans, which rose to levels not seen since the turn of 2008/09, the period following the outbreak of the financial crisis. As for the credit portfolio of home savings banks, its quality ranks between that of housing loans and consumer loans, neither deteriorating, nor benefiting from the favourable economic conditions.

The favourable trends in the portfolio of NFC loans continued in 2016, supported by both firms' sales growth and low interest rates. The inflow of new non-performing loans declined, while the number of non-performing loans that were reclassified as standard increased. This improvement was broad-based across all sizes of firm and across economic sectors, although there continued to be quite notable heterogeneity in default rates.

Portfolio risk profiles increased in all financial market segments

The trend of increasing risk exposure in the Slovak financial sector continued in 2016, and was even somewhat broader compared with 2015. This trend was most pronounced in interest rate risk. In the portfolios of all the sectors under review, the average duration of assets – a proxy for interest rate risk – increased. In the previous year, average duration increased only in sectors focused on asset management (the PFMC, SPMC, and investment fund sectors), but in 2016 it increased also in the banking and insurance sectors. Exposure to interest rate risk increased the most in the two defined-contribution pillars of the three-pillar pension system. In all sectors apart from insurance the increase in duration stemmed from lengthening of the maturity profile of the debt securities portfolio.

The increase in exposure to equity risk was also broad-based. The only sector in which it did not rise was banking, where the long-run average share of equity investments in total assets is not even half a percent. As with interest rate risk, it was the pension sector that registered the largest increase in exposure to equity risk. In absolute terms, the highest exposures to equity at the end of 2016 were in the SPMC sector (third pillar of the pension system), investment funds, and unit-linked life insurance products.

As regards foreign exchange risk, the picture was somewhat less clear. The average open foreign exchange position increased among banks, insurers, and PFMCs, albeit only slightly in each

case. By contrast, decreases in exposure to foreign exchange risk were recorded in the SPMC sector, investment fund sector, and unit-linked life insurance, i.e. the same sectors which at the beginning of 2016 had reported some of the highest exposures to that risk.

Bonds issued in Slovakia continued to decline as a share of financial institution asset portfolios

The most notable change in the geographical breakdown of financial institutions' debt securities holdings was the decline in the share of domestic, especially government, bonds. The same trend was observed in 2015 with the difference that then it was broad-based across all financial market segments, whereas in the year under review it was confined to the second and third pension pillars and to the banking sector.

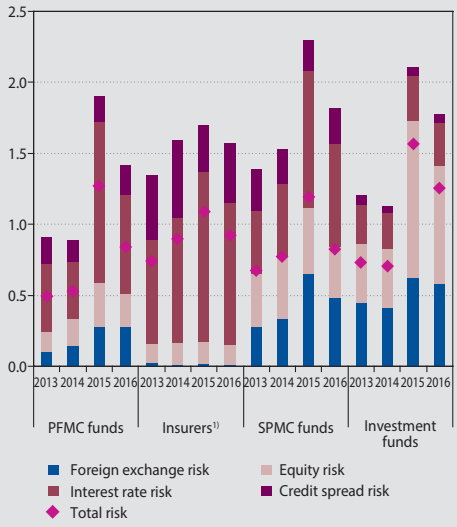
Only in the SPMC sector was the change in the geographical breakdown of bond holdings such that may imply a decline in the credit quality of these investments. In the aggregate portfolio of SPMC-managed pension funds, the exposure to lower-rated euro area countries, particularly Italy, Spain and Ireland, increased in 2016, from 3% to 8%. In the aggregate portfolio of PFMC-managed pension funds, bonds from emerging market countries rose only marginally as a share of the net asset value, and did not exceed 4%.

Value-at-Risk decreased amid lessening volatility in financial markets

Although portfolio risk profiles increased across the financial sector in 2016, the sector's global exposure as measured by Value-at-Risk (VaR) fell appreciably in all the segments under review. This apparent anomaly is explained by the fact that financial market volatility was lower at the end of 2016 than at the end of 2015. The decomposition of the global exposure into its components indicates that its decrease was largely attributable to reduced exposure to equity risk, general interest risk and, to a lesser extent, foreign exchange risk. Only exposure to credit spread risk increased year on year, and it did so moderately.

Investment funds continued to register the highest average risk exposure, as they, on average, have the highest equity component and the largest open foreign exchange position. In other sectors, the levels of global exposure are comparable and largely comprise interest rate risk, whether general or specific. Exposure to equity risk and foreign exchange risk was very low in the PFMC sector and, even more so, SPMC sector, in contrast to the situation in the insurance sector.

Chart 6 VaR across financial market segments (percentages)



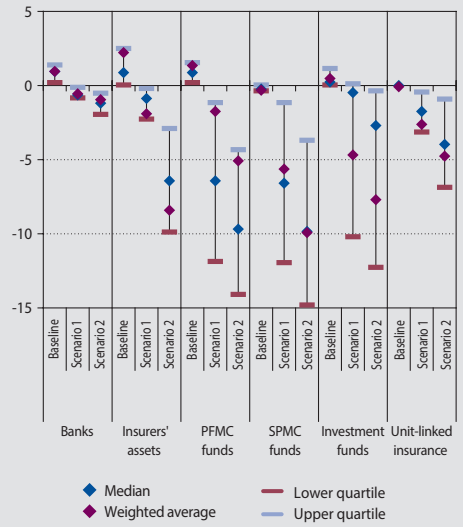
Sources: NBS, Bloomberg and internet.
Notes: The left-hand scale shows the percentage share of total assets (or NAV). VaR was calculated as the worst expected loss over a period of 10 working days at a confidence level of 99%.
1) The figure for insurers does not include assets covering unit-linked insurance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

The resilience of financial institutions to potential headwinds from the real economy and financial markets was assessed using macro stress testing

The exercise tested the financial system's resilience under one Baseline scenario and two adverse scenarios, the second of which, Scenario 2, assumed a more severe downturn in the real economy and adverse developments in financial markets. A detailed description of the stress test scenarios and the results are provided in Chapter 6.

The increasing risk profile of pension funds was shown also in the stress test results. In the second pillar in particular, pension funds have in recent

Chart 7 Distribution of the impact of macroeconomic scenarios on the financial sector (percentages)



Sources: NBS, RBLG, ECB and Bloomberg.
Notes: The chart shows quartiles of the estimated profit/loss-to--asset ratio resulting from the application of the respective scenarios as at 31 December 2017.
In the case of banks, the quartiles refer to the ratio of the total estimated net profit for the two-year period under review to net assets as at 31 December 2016.
The data for insurance companies include only the change in the fair value of assets and impact of insurance risks on their profitability. The stress testing does not include assets covering technical provisions for unit-linked insurance policies as well as the impact on the value of the liabilities of the insurance companies.
Values are given as a percentage share of total assets (or NAV).

years become more exposed to any financial market headwinds. Adverse scenarios have an even higher impact on third pillar funds (managed by SPMCs), where losses can be double of those incurred by second pillar funds. The main reason for this is that the average equity component in the third pillar portfolio is far higher than that in the second pillar portfolio, and in recent years it has gradually approached the level of the average equity component in the assets of investment funds. The stress test results for the pension sector show a marked drop in interest income, which in the past constituted a relatively stable component of these funds' overall income. The investment fund sector, too, is quite hard hit under the adverse scenario, although the results vary significantly across different types of fund. Insurers also make losses under the adverse scenarios, with the aggregate loss under Scenario 2 comparable with the losses in the third pension pillar and investment fund sector.

CHAPTER 3

THE BANKING SECTOR

3

3 THE BANKING SECTOR

3.1 TRENDS AND RISKS IN THE BANKING SECTOR'S BALANCE SHEET

3.1.1 LOANS AND CREDIT RISK

THE RETAIL SECTOR

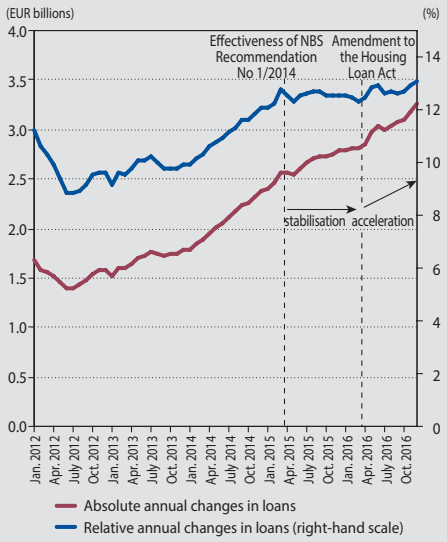
THE GROWTH IN HOUSING LOANS REACHED NEW HIGHS IN THE YEAR UNDER REVIEW

The annual rate of growth in retail loans fluctuated between 12% and 13% over the course of 2016. The volume of loans in this sector increased by a total of €3.3 billion during the year. A new historical high was recorded in virtually each month of the year. At the same time, the rate of lending growth accelerated somewhat in comparison with 2015 and the beginning of 2016, when the absolute increase in loans stabilised to some extent.

Lending for housing purposes was materially affected by a legislative change capping the fee for early loan repayment at up to 1% of the principal, with effect from 21 March 2016. This resulted in a certain slowdown in the rate of lending growth at the beginning of 2016, followed by a gradual acceleration starting in April. The growth in lending was driven primarily by refinancing with an increase in principal, which, thanks to competition, led to a fall in the price of loans. The improved price conditions also generated an increase in demand for new loans. Despite this development, the annual rate of growth in housing loans did not fall below 13% during 2016; and only in December slightly exceeded 14%.

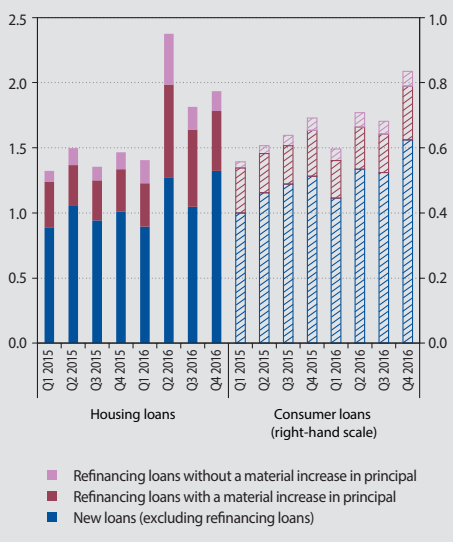
Narrowly specialised types of housing loans suffered a decrease in their market share. Mortgage loans as a subsegment of housing loans grew at a pace of around 10% year on year, showing a gradually slackening tendency. The growth rate of lending by home savings banks slowed from almost 5% at the beginning of 2016 to 2% in the second half of the year. The persisting rapid growth in housing loans continued to be driven by other loans provided for housing purposes, which grew over the second half-year period at a pace exceeding 18% year-on-year. The share of these loans in total housing loans ended the year at 65%, reflecting their long-running upward trend. The share of mortgage loans decreased to 25% and the share of loans provided by home savings banks to 10%. As for banks'

Chart 8 Annual changes in loans to households



Source: NBS.

Chart 9 New housing loans and consumer loans in the banking sector (EUR billions)



Source: NBS.

shares in the housing loan market, changes occurred in spring 2016 and these became somewhat entrenched.

The average interest rate on new housing loans also reacted to the introduction of a statutory cap on early repayment fees for these loans and to the consequent rise in competition in the sector. It declined by 0.5 percentage point between February and April 2016, and, despite a certain correction, did not move back above 2%. The annual percentage rates of charge (APRC) were similarly affected, though not so swiftly. They decreased for all the main types of housing loan. The difference between the average interest rates on the stock of loans and on new loans fell to 0.7 percentage point, representing a four-year low.

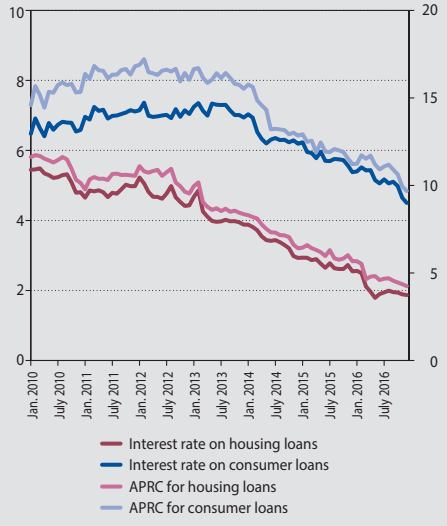
Fully two-thirds of housing loans are provided with a maturity of more than 25 years. Refinancing loans are granted with somewhat shorter maturities, mainly those without a material increase in principal. Národná banka Slovenska limits the maturity of all but a small share of such loans to 30 years. Some banks are exceeding this limit with their longer-term refinancing loans.

The share of loans with a loan-to-value (LTV) ratio of over 80% increased to 49% of the volume of new loans[1] as at the end of 2016. In the case of refinancing with an increase in principal, the share of loans with an LTV ratio of over 80% was about eight percentage points smaller than in the case of new loans. At the turn of 2014/15, this difference amounted to 12 percentage points. As from January 2017, loans with an LTV ratio of over 80% are required by law to constitute no more than 50% of new loans. Loans with an LTV ratio of over 90% decreased considerably in the year under review and thus comfortably met the maximum share requirement.

Consumer loans grew sharply during 2016, in terms of both volume and maturity

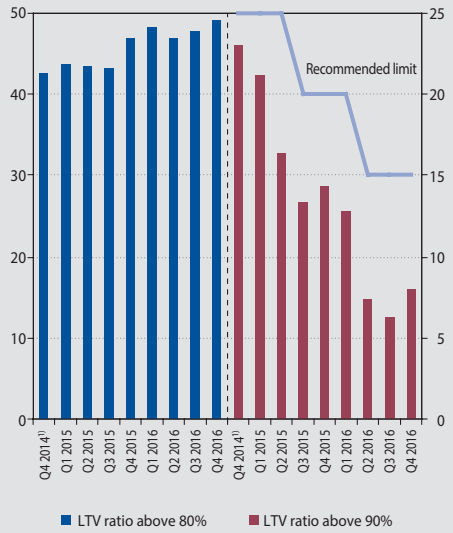
The annual rate of growth in consumer loans slowed in relative terms, while remaining virtually unchanged in absolute terms. The rate of relative growth slowed during the year, from almost 16% to 13.8% in December. In absolute terms, consumer loans continued to grow, by roughly €550 million. This was persistently the most rapid growth in consumer loans within the euro area. New lending in this sector was increasingly dominated by consumer loans with a maturity of over seven years (the recommended limit is eight years), with that share increasing from about 60% to more than 70% in two years. The share of refinancing loans in new loans ex-

Chart 10 Annual percentage rates of charge and lending rates for new housing loans and consumer loans (percentages)



Source: NBS.
Note: APRC – annual percentage rate of charge.

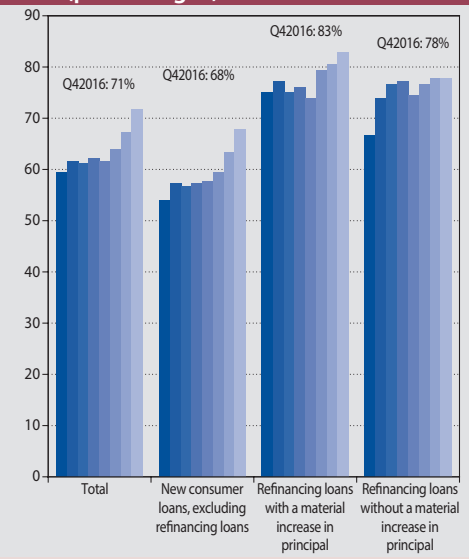
Chart 11 Loans with an LTV ratio of over 80% and over 90% as a share of new loans (percentages)



Source: NBS.
Note: 1) The data for Q42014 cover only November and December 2014.

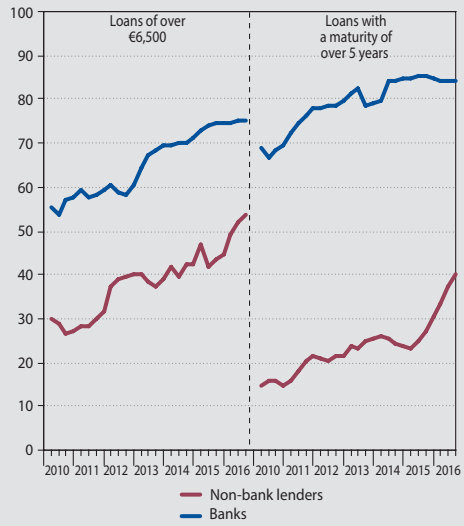
1 *The loan-to-value analysis was based on data on new loans, excluding refinancing loans without a material increase in principal.*

Chart 12 New consumer loans with a maturity of over seven years as a share of new loans (percentages)



Source: NBS.
Note: The individual columns illustrate the quarters of 2015 and 2016, arranged chronologically from left to right.

Chart 13 Large consumer loans and consumer loans with long maturities as a share of new loans (percentages)



Source: NBS.
Note: The data are given as three-month moving averages.

ceeded 80% in the last quarter of 2016. This was in line with the long-term trends that deepened still further.

The average lending rate reached 9.0% in December 2016, while the APRC fluctuated around 9.7%. Despite falling steadily, the average interest rate on the stock of loans remained 1.5 percentage points above the average rate for new loans.

The banking sector's dominance over the non-bank sector in consumer financing increased still further during the year. While the non-bank sector's portfolio stagnated in volume (€1.2 billion), that of the banking sector grew steadily over the past two years (by €1.1 billion per year). Thus, the market share of non-bank consumer loans decreased to 22% in December 2016.

Looking at consumer loans provided by banks and non-bank lenders, the share of new large consumer loans with long maturities[2] increased in the year under review, though the price of these loans remained broadly unchanged. In the non-bank sector, both parameters showed lower but steeply rising values. This was due to developments in hire-purchase financing, rather than to developments in leasing where such loans are normally granted.

With the departure of several non-bank lenders, the concentration of the non-bank loan market increased in the year under review. Two-thirds of this market was controlled by three large lenders; the remaining lenders had an individual market share of up to 10%.

Other types of retail loans have long had only a marginal impact on the rate of change in the stock of retail loans, and their volume has remained unchanged for the past two years. These loans included overdraft facilities, revolving loans, credit cards, and other loans. In aggregate terms, they amounted to €2.3 billion, i.e. 8% of the stock of retail loans as at December 2016.

In the regular bank lending survey, banks reported that they had made only minor changes in their credit standards in 2016; a tightening of credit standards was reported by smaller banks. Nevertheless, there was a broad-based increase in demand for all types of loans, boosted by consumer confidence (which was closely connected with employment, discussed in Chapter 1 'External and domestic developments'), low interest rates, refinancing, and the prospects for the real estate market. Banks expected a tightening of credit standards in the period ahead and a modest increase in demand for loans.

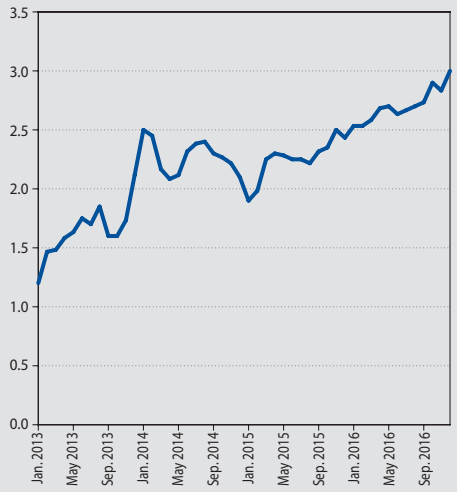
2 *As in the APRC reporting, these were loans of over €6,500 with a maturity of over five years.*

The share of intermediated housing loans increased during the year under review, with the leading financial intermediaries accounting for a roughly equal share. The share of intermediated loans increased from 46% at the beginning of 2015 to 54% in the last quarter of 2016. This was a result of a gradual increase taking place in several banks. Around half of the intermediated loans came from intermediaries with a market share of less than 0.3%. The share of unsecured intermediated loans remained insignificant.

Retail loan portfolio defaults show different trends

The difference between the trends observed in non-performing housing and consumer loans continued to widen in 2016. By December 2016, the non-performing loan (NPLs) ratio for housing loans had decreased to 2.3% (if loans provided by home savings banks are excluded, the share falls to 2.0%). The net default rate of housing loans had not deviated markedly from zero for more than a year. Like the share of NPLs, this indicator would have been more favourable with adjustment for the effect of home savings banks. Excluding home savings banks, the net default rate would have remained negative since September 2015. The default rate of loans provided by home savings banks stood at 0.7% during 2016, while NPLs accounted for 4.8%. In the long term, both values were persistently higher than in the case of other housing loans.

Chart 14 Net default rate for consumer loans (percentages)



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

By contrast, the NPL ratio for consumer loans had been growing for more than a year before it reached 8.8% in the autumn of 2016 (7.1% in December 2015). By December 2016, it had decreased somewhat, by 0.2 percentage point. The steep and steady rise in the net default rate stabilised at around 3.0%.

The marked increase in the NPL ratio for consumer loans was in contrast with the favourable economic conditions. Credit quality indicators pointed to a deterioration in loan portfolios at a time of historically low unemployment and lending rates, and with strong competition in the sector conducive to relatively simple loan portfolio consolidation. The increased loan default rate in 'good times' indicates that these loans were provided under overly relaxed lending conditions.

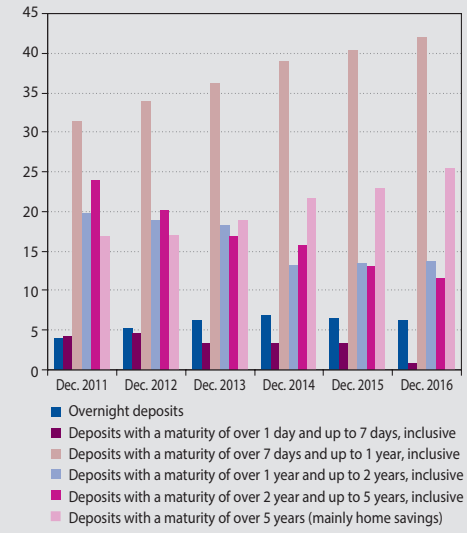
The volume of retail deposits increased, despite the falling interest rates

The accelerating annual growth rate of retail deposits started to slow gradually in July 2016, and reached 8.7% at the end of the year. The overall rate of return on retail deposits dropped to 0.5% year-on-year.

The slowdown in the growth rate of retail deposits took place mostly in time deposits, whose annual rate of decline accelerated to -4.7% between June and July 2016. This was connected with the sharp decline in interest rates in that period. The average rate fluctuated around 1.2% at the beginning of the year and around 0.7% at the year-end. This fall was analogous to the decline in interest rates on housing loans.

The maturity breakdown of time deposits underwent changes during 2016. Overnight deposits maintained their market share, but other deposits with maturities below seven days virtually disappeared from the market. Deposits with a maturity of one year (the dominant category) strengthened their market position, as did deposits with a maturity of over five years, which were almost exclusively home savings. The market share of other maturities decreased during the year. The market shares of deposits are illustrated in Chart 15.

Chart 15 Time deposits broken down by maturity as a share of the outstanding amount of time deposits



Source: NBS.

At the same time, sight deposits continued to grow at a fast pace, reaching 19.2% year on year in December 2016. For the first time, interest rates on new sight deposits dropped to 0.0% at the end of the year. The increase in this category of deposits can be explained by the low incentive for customers to keep their financial assets in time deposits.

Deposits redeemable at notice grew at a fast but fairly volatile pace, fluctuating between 16% and 19% year on year. Interest rates on these deposits decreased, too, but to a lesser extent than those on time deposits. Thus, the deviation from the rate offered for such deposits diminished on a year-on-year basis, from 0.6 percentage point to 0.2 percentage point. In view of this development, the stock of time deposits is expected to decrease in the near future.

THE RESIDENTIAL PROPERTY MARKET

THE RISE IN PROPERTY PRICES ACCELERATED UNDER THE INFLUENCE OF CONTINUING OR INTENSIFYING TRENDS FROM THE PREVIOUS PERIOD

The market in existing flats was dominated by a broadly based and accelerating price increase, accompanied by a decrease in the number of flats advertised for sale. The prices of existing flats offered for sale rose in the last quarter of 2016 by more than 10% year on year, while the prices of flats sold increased by 12%. The trends across regions and the types of flats remained broadly homogeneous during the year. They were identical in terms of both the unit price of a flat (EUR/m^2) and its total price. The number of flats for sale in the individual regions decreased year on year by as much as a quarter or a half. Compared with the stable figure for 2014, the number of flats for sale in certain regions (Žilina and Trenčín) dropped to one-third in 2016. The sharpest fall was recorded in the number of one-room flats and flatlets.

The average floor space of flats for sale continued to grow by about 1m^2 per annum. In the Bratislava region, where the strongest growth had been recorded in previous years, the average floor space of flats stabilised at 77 m^2 in the first half of 2016, before decreasing slightly in the second half-year period.

Besides the number of flats offered for sale, the number of flats for rent decreased, too, especially in 2016. The decrease in the number of flats for sale was not accompanied by an increase in the number of flats for rent. This trend was not a result of a first-home purchases phenomenon, since the number of prospective

Chart 16 Rate of change in the average price of existing flats and the number of existing flats advertised for sale

Source: NBS.
Note: The number of flats is given as a three-month moving average.

first-home buyers (i.e. people aged 20-39) is in the recessionary phase of the (demographic) cycle. Therefore the decrease in the number of flats for sale could be explained by the accelerated purchases of flats before the expected rise in property prices or by speculative purchases made to profit from the price increase.

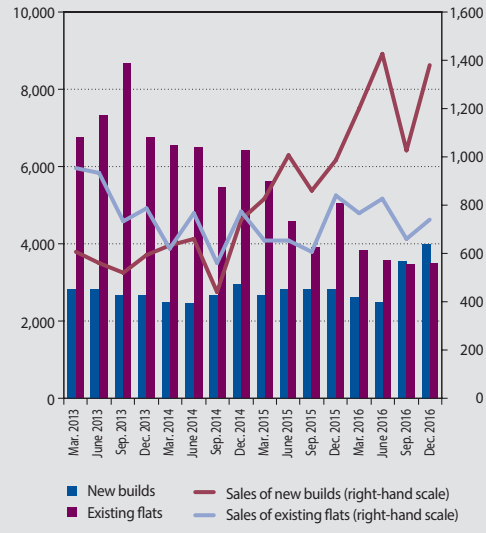
The drop in the number of existing flats advertised for sale led to increased demand for new builds in Bratislava[3]. The structure of the residential property market in Bratislava was dominated by two conflicting trends. On the one hand, the number of existing flats for sale decreased as a result of a drop in the number of new advertisements for existing flats, while sales of existing flats remained relatively stable. On the other hand, the number of new builds offered for sale increased to a significant extent in the second half of 2016. Sales of new builds grew at a rapid pace, too. As a result of these trends, the share of new builds (sold or offered for sale) in the capital city's residential property market increased in the year under review.

The selling prices of new builds rose steadily during the year, at a pace of slightly above 8%. The rise in the price of new flats was broadly based across the districts of Bratislava and the size categories of flats. Price developments were determined by the inflow of new residential projects to the market, because new projects provide a large part of the flats offered for sale and, with their prices exceeding the average price of flats offered for sale, represent a key factor in the general price increase. This situation was supported by a steeper rise in the price of unfinished flats, compared with the price growth of finished flats.

Activity in the market in new builds increased gradually, with some of the trends indicating a further marked rise in demand. The market in new builds in 2016 was characterised by growing optimism among all the parties involved. This optimism was greatly supported by the improving economic and labour market situation, and by the favourable trend in housing financing. The main indicator of burgeoning demand was a growing trend in the number of flats sold, which increased during 2016 by almost 40% compared with the figure for 2015. People bought predominantly unfinished flats, which as a share of flats sold reached almost 90%. The speed of property development sales[4] accelerated, too. Almost 80% of the developments put on the market in 2015 were sold within one year. In the case of developments from 2013 and 2014, almost 60% of were sold out.

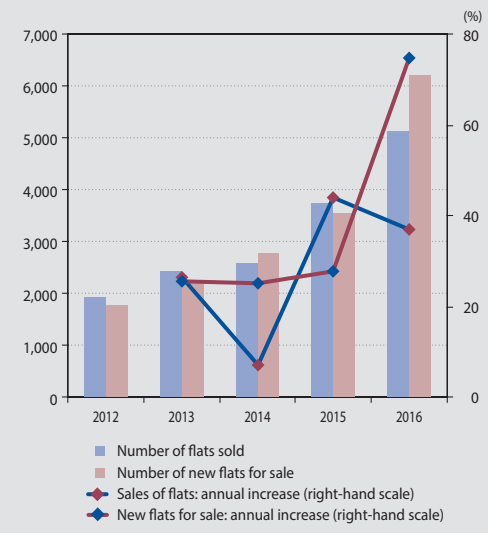
Supply reacted to the buoyant demand with an increase in the number of new flats, but became more sensitive to potential shocks. In

Chart 17 Structure of the residential property market in Bratislava (numbers of flats)



Source: NBS, Lexxus and CMN.

Chart 18 Rate of change in supply and demand in the market in new builds



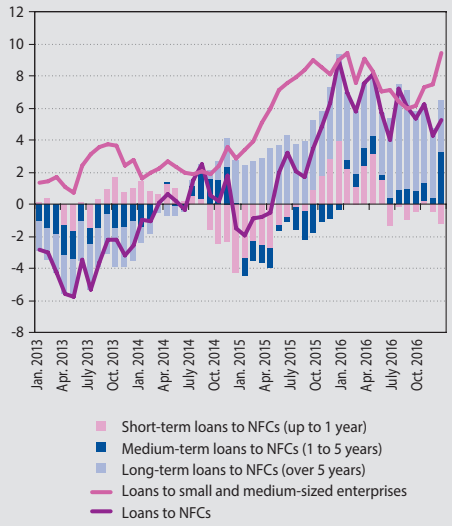
Source: NBS and Lexxus.

3 Data on new builds from the residential property market are available only for Bratislava.

4 The ratio of pre-sold flats to the total number of flats available for sale in a property development project at a given point in time after the flats were first marketed.

response to the situation in the market in new builds, property developers substantially increased the number of new flats offered for sale in the second half of 2016. In that period, twice as many flats were put on the market as in 2015. Overall, 74% more flats were offered for sale in 2016 than in the previous year. As a result, some of the trends in demand moderated temporarily, for example the speed of sales in the first months after the market placement, which slowed moderately for developments from 2016. On the other hand, the dominant share of unfinished flats in the total number of flats offered for sale increased still further. Thus, prospective flat buyers had few options other than to buy an unfinished flat. The growing intensity of trends on the demand or supply side increased the sensitivity of the property market to shocks in economic developments or interest rates.

Chart 19 Contributions of loans by maturity to the annual rate of change in the stock of loans (percentages)



Source: NBS.

THE NON-FINANCIAL CORPORATIONS (NFC) SECTOR

Lending to the NFC sector grew under the influence of favourable economic developments and low interest rates

The volume of loans to NFCs continued to grow in 2016. This growth was driven mostly by investment loans and loans to small and medium-sized enterprises. Lending to the NFC sector was relatively stable in volume terms throughout the year. The annual rate of lending growth fluctuated around 6% and ended the year at 5.3%. The economy's sound performance supported the continuity of strong growth in loans with a maturity of over five years, which were mostly investment loans. These loans were the main driver of growth in the corporate loan portfolio, the average rate of which exceeded 10% in 2016. Overall, the average maturity of corporate loans increased, as loans provided with a maturity of up to one year showed a gradually decreasing pace, while loans with a maturity of over one year followed the opposite trend. The decline in short-term loans was probably connected with the fact that, owing mainly to sales growth, firms had less need to seek external financing sources for business operations.

The breakdown of NFC loans by size of firm was dominated by various trends. The annual rate of growth in lending to small and medium-sized enterprises (SMEs) slowed to 6% in the middle of the year, but then accelerated to 9% as at the end of the year. On the other hand, the annual rate of growth in lending to large NFCs slowed during the year, to 1% in December. The volume of loans provided to large NFCs was fairly volatile during the year, which was due largely to the relatively small number of such firms.

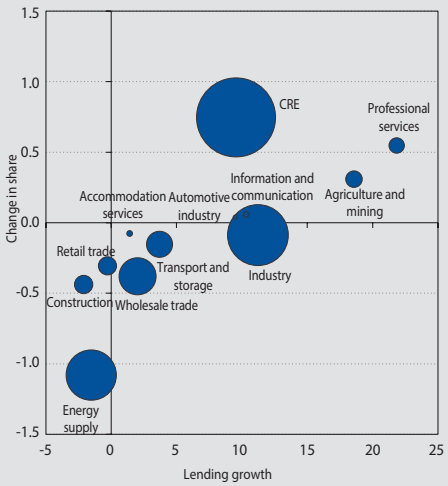
Loans to private sector NFCs continued to dominate the corporate loan portfolio, and their annual growth rate was broadly similar to that of the overall portfolio. Lending to state-owned NFCs intensified during 2016. However, the past developments in the growth rate of loans to state-owned NFCs show substantial volatility.

Lending to the NFC sector was rather concentrated within the banking sector and in individual economic sectors. The overall growth in corporate loans was concentrated in several economic sectors. Lending to the manufacturing sector continued to grow (a long-term trend) and ended the year with an increase of around 6%. Thus, loans provided to manufacturers accounted for a significant part of the growth of the corporate loan portfolio. The stock of corporate loans was influenced most significantly by the situation in the commercial real estate (CRE) sector, which grew by more than 10%. The long-

term growth in lending to the CRE sector gradually strengthened the leading position of that sector in terms of its share in the overall loan portfolio. The growth in corporate loans was also supported considerably by developments in agriculture and in administrative and support service activities. The complicated developments following the completion of absorption of EU funds under the previous programming period continued in the construction sector, where the volume of loans decreased rapidly during most of the year but then recorded a year-on-year increase at the end of December.

Most banks recorded an upturn in their lending activity in the NFC sector, though this upturn varied in intensity across banks. Three of these banks recorded a marked increase in their NFC loan portfolios, which was strongly reflected in the total stock of NFC loans. The growth in NFC loans in the domestic banking sector far exceeded the average growth recorded in other EU countries. Corporate loans grew at a faster pace only in four countries (the Czech Republic, Latvia, Estonia and Luxembourg), while the average growth rate in the euro area as a whole was slightly negative.

Chart 20 Lending growth by economic sector and changes in the share of individual sectors (percentages)

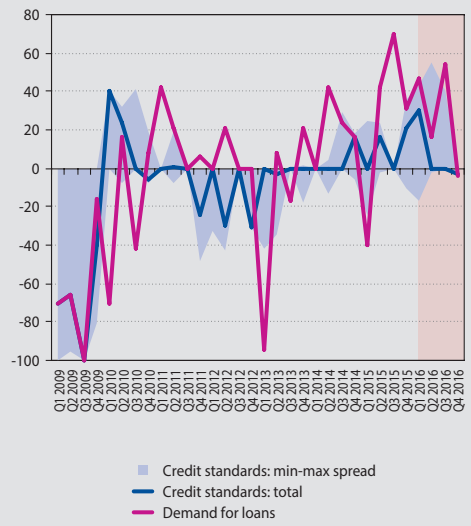


Source: NBS.
Notes: The horizontal scale shows the average annual rate of lending growth for the second half of 2016.
The vertical scale shows the changes in the share of economic sectors in total loans to NFCs (average for 2016H2, compared with the same period of 2015).
The bubble size corresponds to the share of economic sectors in total loans provided to NFCs.
CRE – real estate activities; Professional services – professional, scientific and technical activities.
The chart does not cover 'Administrative and support services activities' with a growth rate of 52% and a share of 3.8% in total loans, representing a change of 1.2%.

The demand side of the loan market was influenced by optimistic sentiment and the low interest rate environment. The main driver of demand for loans was growth in the domestic economy. The positive sentiment in the NFC sector was a result of improving foreign trade and growing sales, though sales showed weaker dynamics than in the previous year (Chart P24). Developments in sales remained relatively homogeneous, with most sectors experiencing sales growth. In the construction sector, the annual rate of change in sales turned negative after a short period of growth. The economic sentiment indicator rose, too, mainly as a result of a rise in the confidence indicator in services and manufacturing, as well as in the consumer confidence indicator (Chart P23). The situation was further underlined by developments in investment loans and loans to SMEs, which grew at a relatively stable pace, exceeding the EU average. Demand also remained unchanged, at the level of the previous period. It should, however, be noted that demand rose relatively steeply over the last two years.

The cost of borrowing from domestic banks remained at a similar level, or fell slightly, across all loan size categories. The average interest rate on new loans fluctuated around 2%. This development, coupled with an increase in early loan repayments, caused another modest fall in the average interest rate on the stock of loans. In this case, the average rate fell to 2.6% as at end-December 2016, from 2.83% as at the end of the previous year. When compared with other EU countries, however, the average interest rate on the stock of loans was above the EU average. Higher rates were only recorded in some of the southern euro area countries and in Ireland. Interest rates on new loans were also higher in the domestic sector. At the same time, the difference between lending rates offered to large corporations and to small and medium-sized enterprises remained relatively significant, reaching 1.5 percentage points in 2016. This was due to the relatively high interest rates on small loans, among the highest in the euro area.

Chart 21 Changes in demand for, and supply of, NFC loans



Source: NBS.
Note: A positive value denotes an increase in demand / easing of credit standards. A negative value denotes a decrease in demand / tightening of credit standards.
The chart shows the min-max spread of banks' credit standards.

Banks left their credit standards unchanged, at the level of the previous period. This was due partly to the developments seen in the previous periods, when, starting from 2014, credit standards were eased on several occasions following a rise in demand for loans. In the context of growing optimism in the economy, accompanied by burgeoning demand for loans, the lack of change in credit standards can be perceived positively.

The situation in the commercial real estate sector continued to provide grounds for optimism in 2016. However, some of the indicators showed values similar to those recorded in the pre-crisis period.

Demand in the residential property segment continued to grow in the form of an increase in the number of flats sold. In response to developments on the demand side of the market, property developers had increased their activity over the last two quarters and offered for sale a record number of new, but unfinished, flats. With the rise in demand, the price of new flats increased, too. The residential segment is discussed in more detail in the subchapter 'The residential property market'.

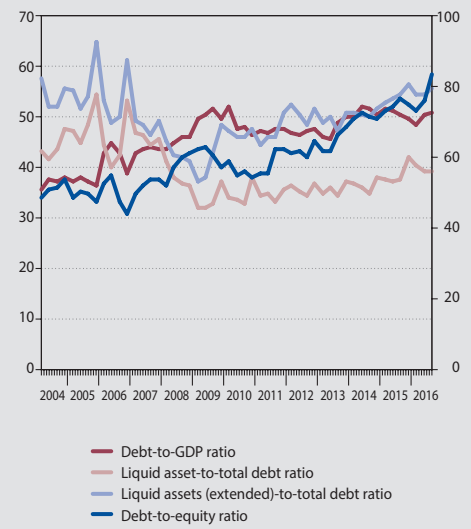
The trends observed in the office segment pointed to a marked increase in demand. The improving situation in the economy created favourable conditions for NFCs and stimulated their demand for commercial premises, which was reflected in the growing size of leasing activity. The vacancy rate in the office segment decreased progressively in 2016 and reached a historical low of 6.6% at the end of the year. The increased demand was also reflected in the large number of pre-leased property developments expected to be finished in 2017. On the other hand, the growing number of developments under construction increased the potential impact of economic shocks on this market. A similar situation is present in the case of industrial and logistic parks and retail premises. The mounting demand was accompanied by a year-on-year fall in prime yields in all segments of the CRE sector, which, along with the stable rental rates, indicated a rise in commercial real estate prices.

In several cases, however, these trends signal imbalances in the growth phase of the CRE cycle, as were observed in the period 2007-08. This phase saw a marked increase in demand, but supply is not sufficiently elastic to follow demand as a result of a construction delay. The consequent rise in the occupancy rate of premises exerted pressure for a price increase. For these reasons, it is important that banks and other lenders take a cautious approach to lending to this sector by setting appropriate credit standards.

The NFC sector's total debt continued to grow in the year under review

Besides increasing its indebtedness during the period under review, the NFC sector became more sensitive to potential economic headwinds. The growth in loans received from domestic banks was accompanied by growth in a majority of other liability items in the NFC sector. Thus, the total volume of external funding increased in 2016. Looking at this volume in relation to annual sales (Chart P33) or GDP, a relatively stable or gradually improving trend can be observed in the debt servicing ability of firms. This trend was, however, driven by economic growth and the continuing decline in interest rates on existing loans. Abstracting from

Chart 22 Changes in the financial position of the NFC sector (percentages)



Source: NBS.
Note: Liquid assets include currency and deposits. Extended liquid assets include currency, deposits, short-term securities and loans.

the effect of falling interest rates, the credit burden increased in the second half of the year (Chart P30). This was because the negative effect of lending growth exceeded the positive effect of sales growth. In addition, the debt-to-equity ratio reached a new high, and thus NFCs became more sensitive to adverse economic developments.

On the other hand, a positive development was the liquid asset growth resulting from the improving situation in the NFC sector. This upturn was strongly supported by deposit growth in the sector. The ratio of liquid assets to total debt rose slightly in year-on-year terms, despite an increase in the NFC sector's total debt. The change in the structure of corporate debt in the form of an increase in the share of long-term debt is expected to reduce the risk of refinancing in the event of bank lending shocks.

Exposure to non-resident NFCs increased in 2016

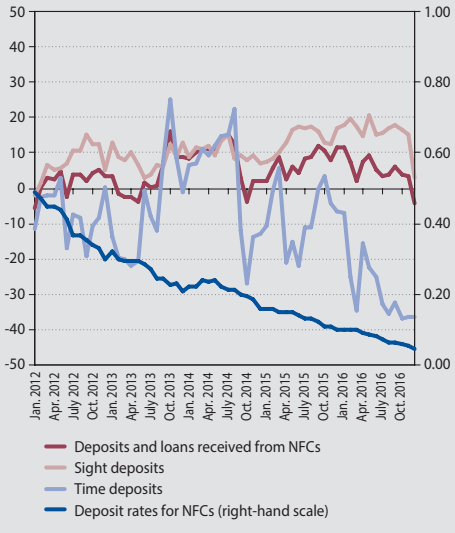
The volume of loans provided to non-resident NFCs increased to more than €2 billion during 2016. The situation in the banking sector varied considerably, in terms of both the rate of change in these loans and their ratio to loans provided to resident corporate sector. The increase in exposure to non-resident NFCs was concentrated among large banks.

The improving financial situation of NFCs was reflected in their deposits

The volume of funds NFCs kept in domestic bank accounts continued to grow. Corporate deposits continued to grow in 2016, but at a slower pace than in the previous year. The average annual rate of change in the volume of deposits exceeded 5%; this reflected their stable growth over the whole year except December, when the rate of change dropped to -4.5%. As in previous years, overall deposit trends were dominated by sight deposits. The growth rate for these deposits averaged 16% for the whole of 2016, but slowed markedly towards the year-end. The stock of time deposits continued to decline at an accelerating pace, and ended the year with a year-on-year fall of almost 40% (in volume terms).

Deposit developments reflected the economy's sound performance, and related sales growth in the NFC sector. Non-financial corporations deposited their surplus funds in bank deposit accounts despite the low interest rates offered. The average interest rate on sight deposits remain close to zero (a long-term trend), while the average rate on time deposits was slightly below 0.3%. Falling interest rates were probably the main cause of the sharp decline in the stock of time deposits. Instead of investing in these prod-

Chart 23 Stock of NFC deposits (annual percentage changes) and the average deposit rate (percentages)



Source: NBS.

ucts, firms may find it more advantageous to reduce their short-term debt.

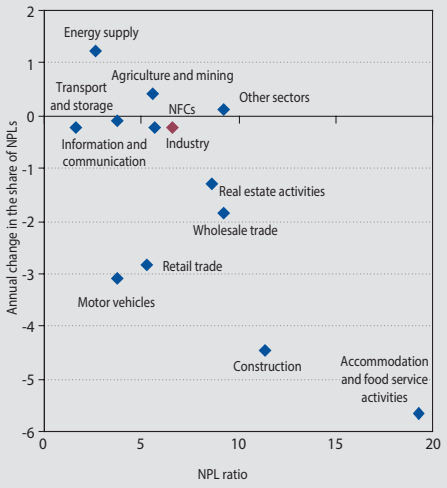
The NPL ratio continued to decrease

The combination of the low interest rate environment and economic growth supported NFCs' debt servicing capacity. That capacity continued to improve in 2016, though at a moderating pace. This trend was influenced by the falling interest rates and rising sales, which reduced firms' credit burden even while their aggregate indebtedness increased. This was positively reflected in credit quality indicators.

The non-performing loan ratio decreased throughout 2016 and ended the year at 6.5% (down from 7.3% at the end of 2015), which was well below the average for the post-crisis period. This development was due mainly to growth in the total stock of NFC loans, accompanied by a relatively sharp fall in the volume of non-performing loans (NPLs). The fall was attributable to the favourable situation in the NFC sector, which resulted in a lower inflow of newly defaulted loans (Chart P28) and an increase in the number of NPLs reclassified as 'standard loans'. At the same time, the amount of NPLs sold off or written off fell slightly during the year. NPL ratios decreased across all loan categories, but most significantly in the category of loans of over €1 million. Loans of over €250,000 and up to €1 million remained the most risky category.

In the breakdown of NFC loans by economic sector, the NPL ratios for most sectors fell in 2016, although the extent of these declines varied quite considerably. As for the main sectors, manufacturing recorded only a modest improvement in this area. Moreover this was only a result of an increase in new loans. A relatively significant deterioration occurred in loans to energy supply firms. By contrast, the CRE sector, the automotive industry, retail trade, construction and accommodation services recorded a marked improvement. In the CRE sector, the improvement was caused primarily by a sharp fall in the volume of NPLs, accompanied by strong lending growth. A one-off decrease in NPLs was reported only by some of the large banks. The CRE sector remained a significant source of potential credit losses, owing in part to the robust growth in bank lending to this sector.

Chart 24 NPL ratios for NFC loans broken down by economic sector and their annual percentage changes (percentages)



Source: NBS.
Note: The chart shows average values for the fourth quarter of 2016.

Trends within the banking sector were also relatively stable. The quality of NFC loan portfolios improved in most banks, with NPL ratios decreasing, year on year, by up to 15% in certain cases. In terms of the credit quality of NFC loan portfolios, however, there was considerable heterogeneity across banks.

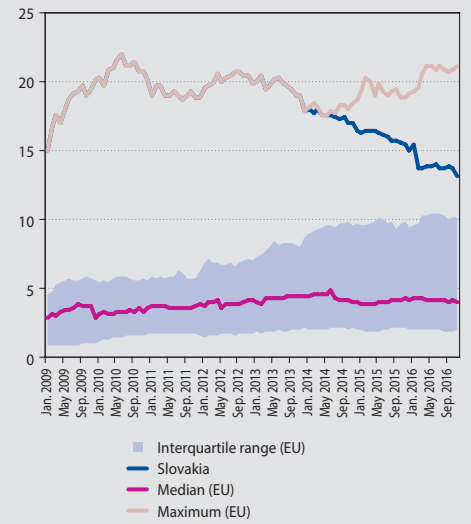
3.1.2 SECURITIES

Investment in Slovak government bonds continued to fall in volume

The total volume of investment in debt securities continued to fall in 2016 (by 5.5% year on year), as did the volume of investment in Slovak government bonds (by almost 9% year on year). As a result, the share of domestic government bonds in total assets decreased to less than 13% in December 2016, from almost 15% in December 2015.

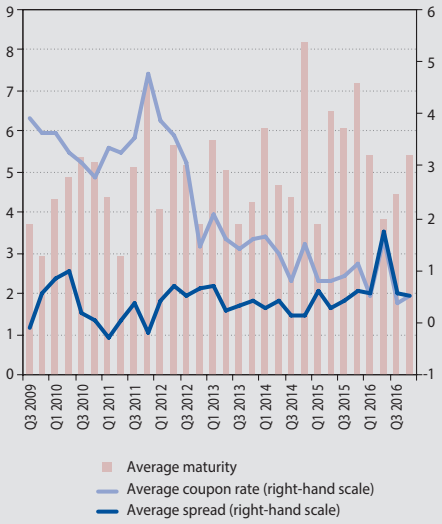
On the other hand, the volume of investment in foreign government bonds and in bank bonds (both domestic and foreign) increased during the year. Investment in foreign government bonds (mainly in Slovenian, Polish, Romanian

Chart 25 Domestic government bonds as a share of total assets in the banking sectors of EU countries (percentages)



Source: ECB SDW.

Chart 26 Average spreads and maturities of mortgage bonds issued



Source: NBS.
Notes: The left-hand scale shows years.
The right-hand scale shows values in percentage points.
Spreads, coupon rates, and maturities are weighted by the nominal amount of mortgage bonds issued.
Average coupon rates and spreads were calculated for mortgage bonds with a fixed coupon.

and Austrian bonds) increased in some banks. Investment in government bonds from these countries still accounted for only a small part of the overall portfolio, both in individual banks and in the sector as a whole. As regards foreign government bonds, Italian government bonds still have the highest share, almost 6%, in the overall portfolio.

Banks issued mostly mortgage bonds over the course of 2016

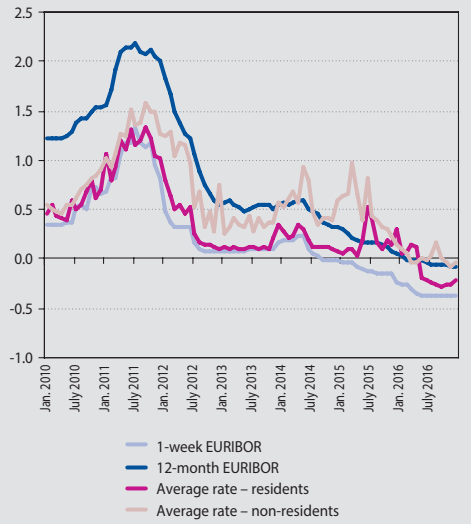
Mortgage bonds have in recent years accounted for most of the securities issued by domestic banks, and their share of those issued in 2016 was 90%. At the aggregate level, in volume terms, the ratio of mortgage bonds issued to mortgage loans provided continued to exceed the 70% requirement.

Banks issued more than 90% of their mortgage bonds with a fixed or zero coupons. Floating-coupon bond issues were, as usual, linked to the three-month or six-month EURIBOR. In terms of yields, fixed-coupon bonds were broadly comparable with Slovak government bonds.

3.1.3 THE INTERBANK MARKET

Central bank and wholesale (interbank) funding constituted a negligible part of the domestic banking sector's financial resources in 2016 as well. Central bank funding accounted for only 1% of the sector's liabilities as at December 2016, and interbank funding for less than 5%. Funds from foreign banks increased by 25% year on year, mainly in November and December 2016. This increase, however, was concentrated among foreign bank branches and was also affected by the transformation of one non-bank entity into a foreign bank branch. Similarly as at the end of 2015, the amount of funds that domestic banks deposited with the ECB increased in December 2016 (from €1 billion in November to €1.9 billion in December), owing probably to the switch of funds granted previously to other group members. The implied interbank market rates followed the trend seen in the EURIBOR throughout 2016. These rates reached negative values during the year in the domestic interbank market, too.

Chart 27 Domestic interbank market rates (percentages)



Source: NBS.
Notes: 'Average rate – non-residents' denotes the average interest rate on interbank deposits received from non-resident banks.
'Average rate – residents' denotes the average interest rate on interbank deposits received from resident banks.
The interest rates were calculated from the stock of short-term loans and deposits received in euro (with a maturity of up to one year), as at the end of each month.
The rates were calculated as an average weighted by the volume of individual transactions.

3.1.4 CONCENTRATION RISK AND LIQUIDITY RISK

THE LEVEL OF CONCENTRATION RISK IN THE DOMESTIC BANKING SECTOR ROSE SLIGHTLY

The domestic banking sector has a relatively high exposure to concentration risk. In the NFC loan portfolio, it is possible over the long term to identify a significant exposures to customers, or groups of closely-linked customers, and these exposures are particularly relevant for certain small and medium-sized banks. This risk remained virtually unchanged during 2016. There was also a concentration of NFC loans in certain sectors, which was slightly more pronounced at the end of 2016 compared with a year earlier, also owing to the previously mentioned growth in lending to the CRE sector. This increase in sectoral concentration occurred only at certain banks. The three most significant sectors by share of NFC loans received were CRE, manufacturing and energy supply, with their combined share slightly exceeding 50%.

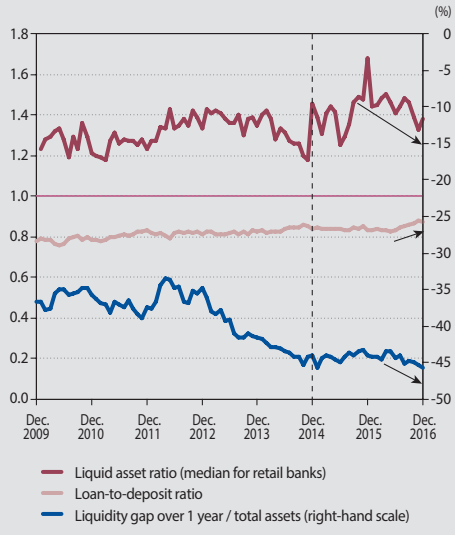
Some banks continue to have relatively high exposures to their own financial groups, although these exposures decreased somewhat over the course of the year.

The liquidity position of banks has long been influenced by two adverse trends: growth in long-term loans and declining investment in government bonds. The most significant factor has been the growth in long-term loans to households, which in 2016 was accompanied by an increase in investment loans to NFCs. Thus, the average residual maturity of the loan portfolio increased still further. The second trend was a gradual decline in investment in debt securities, which constitute the main pillar of liquid assets in the Slovak banking sector.

THE LONG-TERM TRENDS WORSENING THE LIQUIDITY POSITION OF BANKS STRENGTHENED IN THE SECOND HALF OF 2016

Although the two above-mentioned trends have been a long-standing factor in banks' liquidity, their combined effects could pose problems going forward. On the one hand, the growth in long-term illiquid loans is increasing the maturity mismatch between assets and liabilities. On the other hand, the declining investment in bonds is reducing the liquidity buffer that banks need to cover the rising risk of asset

Chart 28 Main liquidity ratios



Source: NBS.
Note: The vertical dashed line marks the effective date of the new liquid asset ratio.

and liability maturity mismatch. This combination of increasing risk and weakening resilience has for a long time been moderated by the favourable loan-to-deposit ratio. As regards liquidity risk at the aggregate level, the availability of stable deposits in the banking sector in sufficient amounts may moderate the liquidity buffer's contraction. The slowdown in the rate of deposit growth in the second half of 2016, which led to a rise in the loan-to-deposit ratio, had a negative impact on banking sector's liquidity.

3.2 FINANCIAL POSITION OF THE BANKING SECTOR

The banking sector's profitability, adjusted for the effects of one-off and exceptional factors, declined during the year under review

The banking sector's aggregate net profit increased by 19.8% in 2016. This increase, however, was caused by one-off and exceptional factors, which are summarised in Table 2. Adjusted for these effects, the sector's profitability declined by roughly 11% year on year. Losses were reported by two banks and six branches of foreign banks.

The negative impact of falling interest rates on banks' profits heightened still further

Interest income from retail housing loans was the balance-sheet item most severely affected by falling interest rates. Although the absolute month-on-month increases in these loans reached historical highs in 2016, the interest income from them decreased by 11%. This decrease took place mostly in the second half of the year, as a result of significant market changes related to the introduction of a statutory cap on the early repayment fee for housing loans (1% of the amount repaid before maturity). Since the fall in interest rates on new loans is only gradually passing through to the average rate for the overall portfolio and to the level of interest income, this factor will be most effective in 2017. The decline in interest income from retail housing loans is expected to accelerate slightly in 2018, before starting to slow down gradually in the following years.

Falling interest rates also slowed the growth rate of interest income from consumer loans. The annual growth rate of this income fell from 8.8% to 4.2% during 2016, despite accelerating growth in the stock of consumer loans. The volume of interest income in this segment is expected to peak in 2017 and then begin falling.

These trends in the retail sector's interest income were only partly offset by a reduction in banks' deposit costs. Thus, net interest income on retail business was slightly lower (by 1%) in 2016 compared with the previous year.[5]

Net interest income also decreased in other sectors, especially in the NFC sector. The decline in the rate of return on corporate loans deepened still further during 2016, from 3.4% to 2.9% year on year. This decline in net interest income was driven, inter alia, by the fact that deposit rates, which in the past had partially compensated for falling returns on loans, dropped almost to zero. In the portfolio of loans to the public sector, deposit rates already fell into negative territory. Income from the securities portfolio continued to show a decreasing tendency.

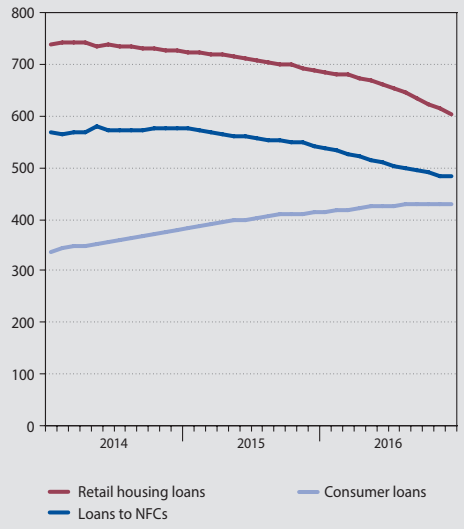
Table 1 Exceptional factors affecting the profitability of banks in 2016

Annual change, adjusted for the effects of one-off and exceptional factors	- 11.2%
Extraordinary dividends received from subsidiaries	+ 16.7 p. b.
Sale of holdings in VISA EUROPE[1)]	+ 11.7 p. b.
Income from extraordinary asset transfers	+ 1.8 p. b.
Other factors	+ 0.8 p. b.
Annual change, not adjusted for the effects of one-off and exceptional factors	19.8%

Source: NBS, websites of banks.
1) More detailed information on this transaction is available in the Report on the Situation and Development of the Financial Market (in the Slovak language only) – H1 2016.

5 For the sake of comparability on a year-on-year basis, the value of net interest income in the banking sector as at 31 December 2016 was reduced by the net interest income of a foreign bank's branch, which was transformed from a non-banking entity to a branch of a foreign bank in 2016.

Chart 29 Interest income in different segments of the loan market (EUR millions)

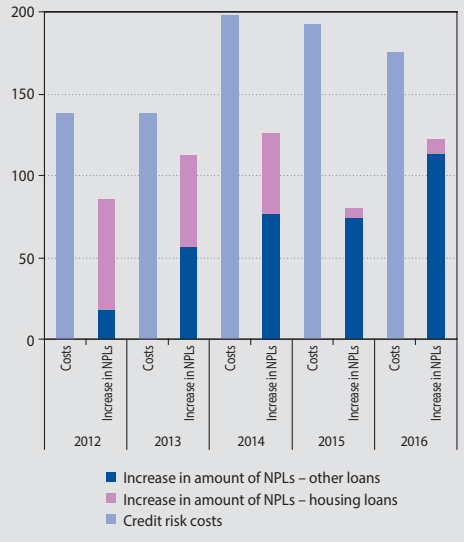


Source: NBS.
The chart shows the cumulative values of interest income in the individual segments of the loan market for the past 12 months. The data cover the entire banking sector, except for a branch of a foreign bank that was transformed from a non-bank entity to a foreign bank branch in 2016.

Favourable trend in credit risk costs

Credit risk costs continued to fall in 2016, though more moderately than in the previous year. Positive macroeconomic trends in the corporate and household sectors therefore helped partially offset the above-mentioned drop in interest income. The main factor was a markedly slower increase in the amount of non-performing NFC loans. On the other hand loan-loss provisioning coverage in the corporate portfolio increased.

Chart 30 Credit risk costs and increases in non-performing retail loans (EUR millions)



Source: NBS.

The retail sector also recorded a fall in credit risk costs. Unlike in 2015, however, credit risk costs in this sector fell despite an increase in the amount of non-performing consumer loans (most consumer loans are unsecured). Nonetheless, loan-loss provisioning continued to exceed the increase in NPLs in this sector, too.

Legislative changes adversely affecting the profitability of banks

Not only did the new statutory cap on early repayment fees for housing loans weigh on the banking sector's aggregate profit, so did the regulatory environment. As a result of an increase in the banking sector's total assets, bank levy payments increased by 9.4% year on year. This increase was partly offset by a decrease in contributions paid to the Resolution Fund. As at the end of 2016, the combined total of bank levy payments, contributions to the Deposit Protection Fund and the Resolution Fund, and supervisory fees accounted for 16% of the aggregate net profit before taxes.

The statutory cap imposed on interchange fees for card-based transactions entered into force on 9 December 2015. As a result, these fees must not exceed 0.2% of the volume of debit card transactions or 0.3% of that of credit card transactions. This represents a marked reduction in these fees (from 0.5% and 1.5% respectively), with a significant impact on the profits of card-issuing banks.

Solvency of banks and leverage[6]

The banking sector's total capital ratio rose slightly in 2016, while banks continued to optimise their capital structures. The aggregate total capital ratio increased from 17.8% at the end of 2015 to 18.0% at the end of 2016. On the other hand, the common equity Tier 1 ratio (pertaining to the highest quality capital) fell from 16.0% to 15.7%. It declined mainly because banks, at a time of rapidly increasing credit exposure, retained only 8% of their 2015 profits as equity. At the same time, however, some of the banks that had paid dividends to parent received back part of these payments in the form

6 *This part of the analysis is based on preliminary data for 31 December 2016, since the relevant reports of banks were not available when the analysis was made.*

lower-quality capital. Thus, the total capital ratio increased.

The leverage ratio also fell moderately. This ratio expresses the proportion of Tier 1 capital to the total (non-risk weighted) amount of exposures. Its value for the banking sector as a whole fell from 8.4% to 8.1% during the year. Nevertheless, all domestic banks have ratios that are more than twice the 3% minimum level laid down in the European Commission's draft amendment of the Capital Requirements Regulation (CRR) of November 2016. That minimum leverage ratio is expected be applied two years after the adoption of CRR amendment.

Capital buffer requirements will be increased further in 2017. Apart from the capital conservation buffer (2.5%), the capital buffer applied to the five domestic banks identified as 'other systemically important institutions' (the O-SII buffer) will be increased from 1% to 2% with effect from 1 January 2017. As from 2017, all banks will also be required to meet the countercyclical capital buffer requirement. As from 1 January 2017, a countercyclical capital buffer (CCB) rate of 0.5% is to be applied to Czech exposures, and as from 1 August 2017 the same rate is to be applied to domestic exposures, too. The CCB rate for Slovak exposures may be increased further in 2018. All banks in Slovakia met their capital requirements in 2016. In order to maintain the growth trend in credit exposures, however, banks will have to restrict their dividend payments to some extent in the years ahead.

CHAPTER 4

THE INSURANCE SECTOR

4

4 THE INSURANCE SECTOR

THE INSURANCE SECTOR[7] CONTINUED TO EXPAND, AND A NEW REGULATORY REGIME WAS INTRODUCED

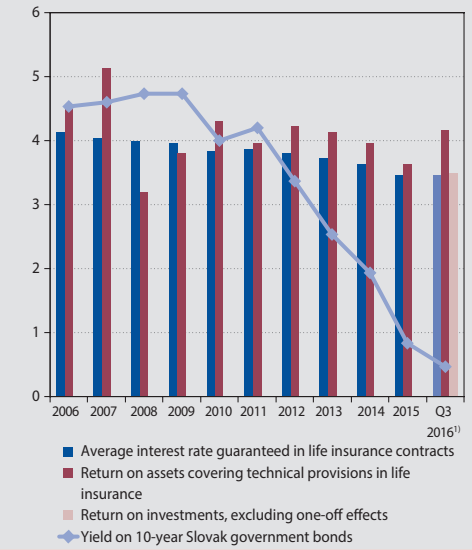
The insurance sector's aggregate net profit for the first nine months of 2016, boosted by one-off effects, stood at €155 million. It was 64% higher than the profit for the same period in 2015 and also exceeded the profit for the whole of that year. A very small number of insurers accounted for more than half of the aggregate result, their profits swelled by dividend payments from subsidiaries. Abstracting from this one-off income, the sector's net profit increased by around 32% year on year, still a marked turnaround from 2015, when the profit was 20% lower year on year. The sector's annualised return on equity in 2016 was 15.5%, while its annualised return on assets was 2.9%.

Technical and financial results in life insurance and non-life insurance in 2016 remained flat or slightly increased. The aggregate technical result in life insurance for the first nine months of 2017 (net of investment income in unit-linked insurance (ULI)) was virtually zero, which compared with the same period in 2015 represented an increase of €28 million. This continued an upward trend, since the negative nine-month result in 2015 itself represented a year-on-year increase of €19 million. The main causes of the 2016 improvement were slower growth in life insurance provisions and a drop in commission costs, which were lower by €6 million year on year. In the 2015, by contrast, commission costs increased by €7.5 million. The financial result (excluding ULI) remained practically unchanged in year-on-year terms, at €77 million. The nine-month financial result for ULI increased from €3 million in 2015 to €27 million in 2016.

The aggregate technical result in non-life insurance and active reinsurance[8] climbed in 2016 by 70%, year on year. The main driver of that growth was an increase of 4%, or €29 million, in gross premiums written. At the same time, transactions with reinsurers contributed significantly to the growth in the technical result.

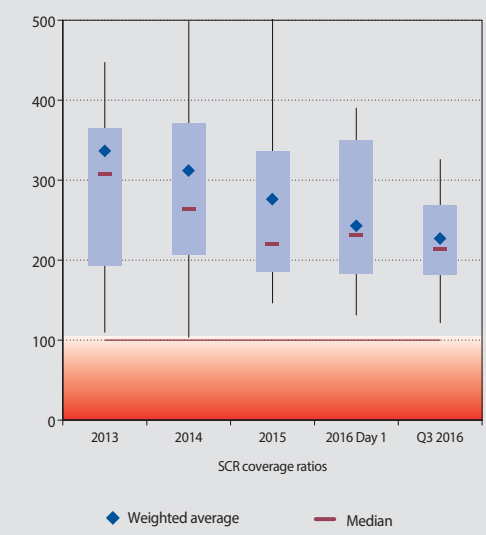
Abstracted from one-off effects (in particular the dividend payments referred to above), investment returns in life insurance only just covered the returns guaranteed in insurance contracts. The aggregate return on investments increased to 4.7%, but stripped of one-off effects

Chart 31 Comparison of guaranteed returns and actual returns (percentages)



Source: NBS.
1) The data for the average guaranteed rate in 2016 are not available and are therefore imputed with the corresponding data for 2015.

Chart 32 SCR coverage ratios in the insurance sector (percentages)



Source: NBS.
Note: The structural SCR coverage ratio is calculated without taking into account expected future earnings.

7 *Given the reporting deadlines for the insurance sector, as laid down in a European Commission Regulation, data for December were not available when this Analysis was being produced and therefore this Chapter analyses the situation up to the end of September 2016.*

8 *Under the Solvency II regime, proportional active reinsurance is reported directly in the specific insurance classes. NBS therefore follows the same methodology in its analyses. Non-proportional active reinsurance is not conducted by insurers in Slovakia.*

it fell to 3.51%; the guaranteed interest rate was estimated[9] to be 3.45%.

The insurance sector continued to meet the solvency capital requirement (SCR) by a comfortable margin. The average SCR coverage ratio changed only slightly during 2016, and its level as at September was 230%. The SCR coverage ratios of individual insurers ranged between 120% and 330%, with the highest ratios showing a decline. As regards the minimum capital requirement (MCR), the sector's MCR coverage ratio fell to 580% as at September 2016. Insurers still easily met the MCR, with their individual MCR coverage ratios ranging between 160% and 860%.

Gross premiums written in life insurance declined; changes in insurance classification

In ULI, gross premiums written fell by a notable 11%, to €146 million, while benefits paid soared by 45%, to €97 million. That increase was largely attributable to a base effect from 2015, when annual amount of these expenses experienced a substantial one-off drop, to €67 million. Net expenses incurred in ULI for the first nine months of 2016 stood at €50 million.

In life insurance other than ULI[10] gross premiums written fell by 2%, to €567 million, while benefits paid fell by 3% to €416 million. Net expenses incurred amounted to €100 million, and technical provisions for life insurance climbed by €31 million.

Under Solvency II, life insurance is divided between insurance with profit participation (52%)[11], ULI (21%), other life insurance (22%), health insurance (5%) and annuities arising from non-life insurance contracts (less than 1%). Health insurance largely corresponds to supplementary insurance under the former regime.

Net premiums earned differed from net premiums written by less than 1%. Reinsurance in life insurance remains insignificant.

Non-life insurance grew; the combined ratio in motor insurance exceeded 100%

Gross premiums written in non-life insurance and active reinsurance[12] increased by 6.5%, year on year, to stand at €788 million. This was partly caused by the new categorisation of insurance under Solvency II, which requires insurers to unbundle supplementary insurance from life insurance contracts and, depending on the nature of the supplementary insurance, reclassify it as either life insurance or non-life insurance.

In motor third party liability (MTPL) insurance gross premiums written remained flat in the first nine months of 2016, after increasing appreciably in 2015. Premiums earned rose by 1.2%. In comprehensive motor vehicle insurance (CASCO), gross premiums written maintained their strong growth trend, increasing by 9.4% year on year. Premiums earned rose by 7.8%. In property insurance, gross premiums written grew by 2.6%, year on year, and premiums earned increased by 2.5%. The shares of these insurance classes in overall non-life gross premiums written were almost identical, at between 26% and 27%.

Other non-life insurance classes that recorded significant changes in gross premiums written were assistance insurance (-25.2%), credit and suretyship insurance (-34.9%), and marine, aviation and transport insurance (+82.2%).

The combined ratio[13] for motor insurance maintained its long-running upward trend, and showed that this class was loss-making as at September 2016. The combined ratios for most other classes were well below 100%. The net combined ratio for motor insurance was 101% as at September 2016 (97% for MTPL insurance; 104% for comprehensive cover). Therefore premiums earned did not cover claims paid. The gross combined ratio is estimated to be 100% for comprehensive cover and 98% for MTPL insurance. After including contributions to Slovak Insurers' Bureau (SIB) and Slovak Ministry of Interior, the combined ratio rises to 108%. The non-life combined ratio has been rising for an extended period, except for a decline in 2015 that resulted from the reversal of a provision for liabilities to the SIB.

The combined ratio for property insurance stood at 71%. The only other non-life class in which the combined ratio exceeded 100% was assistance insurance, and it did so in both net (107%) and estimated gross (110%) terms. In the other classes, the combined ratio did not exceed 85%.

The share of reinsurers in gross premiums written in non-life insurance fell slightly, from 31% in 2015 to 29% as at September 2016.

9 The data for the average guaranteed rate in 2016 are not available and are therefore imputed with the corresponding data for 2015.

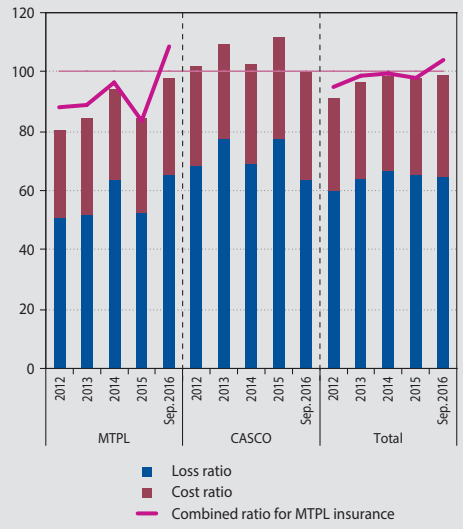
10 Given the new division of insurance lines under Solvency II, the only line of life insurance that can be reviewed separately is unit-linked insurance; the others must be treated on an aggregate basis.

11 The figures in brackets denote the share of gross premiums written as at September 2016.

12 Under the Solvency II regime, proportional active reinsurance is reported directly in the specific insurance lines. NBS therefore follows the same methodology in its analyses. Non-proportional active reinsurance is not conducted by insurers in Slovakia.

13 The transition to the Solvency II regime resulted in a change in the measurement of the loss ratio and cost ratio for non-life insurance. Only the net form of the combined ratio, i.e. net of the reinsurers' share, may be explicitly calculated on a quarterly basis. While this data is appropriate for measuring the contribution to insurers' profitability, it provides incomplete information about overall market trends. Therefore an estimate of the gross combined ratio is imputed. For this calculation, gross operating expenses are estimated from the aggregate value of commissions from reinsurers, divided between segments on a proportional basis. The segments shares in the commissions are as at the end of 2015. Other data are reported explicitly.

Chart 33 Loss ratio, cost ratio and combined ratio for motor insurance (percentages)



Source: NBS.
Notes: Gross operating expenses in 2016 are estimated as the sum of net operating expenses and the share of aggregate commissions from reinsurers'. Sectoral shares in the commissions are as at the end of 2015.
The combined ratio for MTPL insurance is calculated similarly as the combined ratio; the amount of technical claims paid is increased by contributions to the Slovak Insurers' Bureau (SIB) and by changes in provisions for liabilities to the SIB, while the amount of premiums earned is reduced by transfers to the Slovak Interior Ministry.
The data for MTPL insurance until 2015 are adjusted to include carrier's liability insurance, which under Solvency II (post-2015) is included in MTPL insurance.

Differences between the book value and regulatory value of technical provisions; negative technical provisions in certain classes

The aggregate book value of technical provisions in the Slovak insurance sector as at September 2016 was higher, year on year, by 3%, while their regulatory value under Solvency II was lower by 4.5%. Technical provisions must be monitored in terms of both their book value (where the amount of insurance in one period is compared with the amount in another) and regulatory value (used for calculating the solvency ratios of insurance undertakings). The regulatory valuation underwent substantial changes as from 1 January, when the new Solvency II regulatory regime entered into force (Box 1 describes the changes in more detail).

At the end of September 2016 the book value of technical provisions at the sectoral level had increased by 3% year on year. It rose by 5% in life insurance overall, 6% in ULI, and 4% in the aggregate of other life insurance classes. In non-life insurance, the aggregate book value of technical provisions fell by 3%.

The regulatory value of technical provisions was altered significantly by the transition to Solvency II. In terms of their regulatory value under Solvency II, the insurance sector's technical provisions as at September 2016 were 8% lower than their book value. In life insurance overall, as well in ULI and the aggregate of other life insurance classes, they were 7% lower, while in non-life insurance they were 13% lower. Life insurance also saw notable movements of provisions between classes, as some insurers were already in 2016 beginning the administrative process of unbundling classes.

The health insurance class (including active reinsurance) reported technical provisions of minus €86 million. This means that expected future premiums (i.e. unearned premiums) are higher than expected future benefit payments and operating expenses. The difference is therefore an expected future gain for insurers in this class. The amount of this provision is equivalent to 250% of projected premiums written in 2017. This class therefore appears to be highly profitable. A total of six insurers reported negative provisions.

In ULI, a majority (52%) of technical provisions as at September 2016 were invested in government bonds, 30% were invested in corporate bonds. The remaining provisions were spread between cash and deposits (5%), investment funds (5%), real estate investments (4%), equity (3%), and other investments (none exceeding 1%). Changes in the composition of the investment portfolio reflected to some extent the change in valuation method under Solvency II.

Insurance sector investments in bonds and equities are heavily tilted towards domestic issues (accounting for 65.3% of the total). The next best represented countries of origin, with shares of up to 6%, are the Netherlands, the Czech Republic, Austria, France, Poland, the United States, Italy and Luxembourg. Other countries have shares of less than 1%.

Fully 31% of all the Slovak insurance sector's investments are accounted for by Slovak govern-

ment bonds. This partly explains why 54% of the aggregate holdings of bonds and structured securities are assigned to credit quality step 2 (corresponding to rating 'A'). A total of 7% are assigned to step 0, 12% to step 1, 20% to step 3, and 1% to step 4.

Box 1

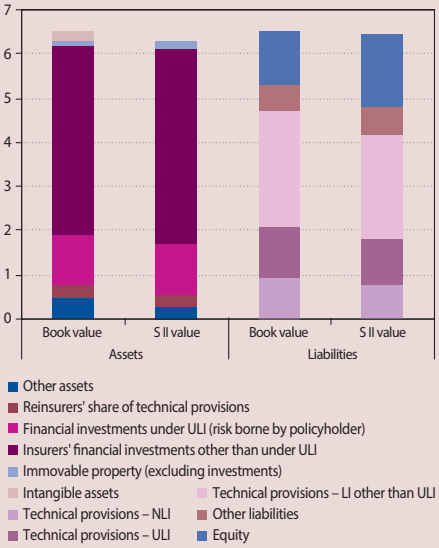
SOLVENCY II REGULATORY REGIME IN FORCE FROM 1 JANUARY 2016[14]

The new Solvency II regulatory regime has overhauled the regulation of the EU insurance sector. Representing an integrated, risk-oriented approach harmonised for the whole EU insurance market, the regime is based on three pillars: i) quantitative requirements, ii) qualitative requirements, and iii) transparency and disclosure. Further details about the changes were provided in NBS's November 2015 Financial Stability Report. Solvency II has also changed the reporting regime for insurance market participants by requiring the replacement of most reporting templates with harmonised templates. As a result of this alignment, insurers reporting to NBS have had their reporting deadlines extended (at the time of writing this Analysis, the most recent data available were as at September 2016). The Solvency II transition in Slovakia is here evaluated by comparing data from insurers' initial reports under the Solvency II regime (as at 1 January 2016) with the data reported under the previous regime as at 31 December 2015.

For solvency assessment purposes, the valuation of assets and liabilities underwent changes in the transition to Solvency II. The value of investments increased and technical provisions fell, with the result that own funds increased. The new regime introduced market valuation of assets and liabilities, including technical provisions. The impact on the balance sheet structure is shown in Chart 4. No major changes occurred on the asset side, with the sector's total assets falling by 1%. The biggest change was a reduction in the valuation of intangible assets, including accrued acquisition costs for insurance contracts, to almost zero. On the other hand, all investments and real estate assets were repriced at fair value (even under the previous regime, however, most investments were priced at fair value). In the current low interest rate environment, their value increased by 4%. Reinsurers' share of aggregate technical provisions fell by 23% owing to the reduction in technical provisions.

On the liability side of the sectoral balance sheet, technical provisions fell by between 11% and 15%, both in life insurance (traditional and unit-linked) and non-life insurance. The main reason for this was the changeover to the calculation of technical provisions on a best estimate basis, meaning the best estimate of future cash flows (claims paid, premiums, expenses, income, etc.) and risk margins. In the calculations of their provisions, insurers now include various risk premia used in the calculation of insurance premiums. Under Solvency II

Chart A The insurance sector's aggregate balance sheet as at 31 December 2015 (EUR billions)



Source: NBS.
Notes: S II value – value under Solvency II.
NLI – non-life insurance; LI – life insurance, ULI – unit-linked insurance.
Financial investments include cash, bank accounts, real estate investments, securities (bonds, equities, investment fund shares/units), derivatives, participating interests in subsidiaries, etc.

14 This analysis of the impact of the new regulatory is taken from NBS's Financial Market Situation and Trend Report – H1 2016, published in September 2016.

these risk premia are immediately factored into the current valuation of provisions, thus having a downward effect on technical provisions. Other factors include the existence of negative provisions (in several insurers, certain types of technical reserves are negative) and the cancellation of surrender value floors. The risk margin is fluctuating at around 6% of technical provisions. At the same time, the low interest rate environment is putting upward pressure on technical reserves, but its impact is not particularly great. It is assumed that when interest rates return to more normal levels, technical provisions will fall further.

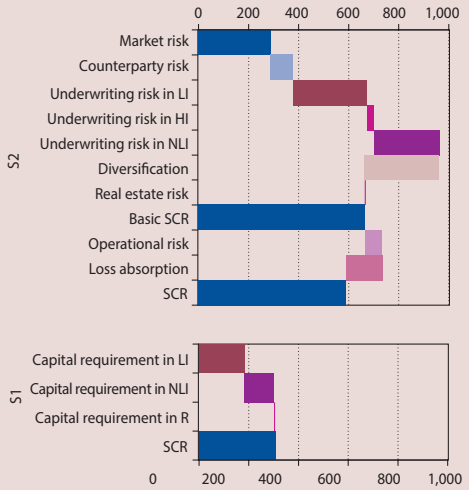
As a result of the balance sheet changes, the surplus of assets over liabilities increased by 32% and eligible own funds increased by 67.5%. The composition of basic own funds did not alter significantly and their aggregate value across the sector stood at €469 million. Fully 99.6% of own funds comprised the highest-quality unrestricted capital – common equity Tier 1. The surplus of assets over liabilities increased to €1.65 billion, and the reconciliation reserve[15] rose from €630 million to €1 billion. The increase in the reconciliation reserve resulted in eligible own funds going up to €1.45 billion.

The higher level of own funds comfortably covers the increase in the solvency capital requirements (SCR). Under the Solvency 1 regime, separate SCRs were calculated in a relatively simple way for life insurance, non-life insurance and reinsurance. The overall SCR was the sum of these three requirements, which as at the end of 2015 amounted to €306 million. Under Solvency II, the SCR calculation is far more sophisticated and includes requirements for market risk, default risk, counterparty risk and operational risk. The sum of these requirements is €1.03 billion.

Since the probability of significant losses arising simultaneously from all risk factors is small[16], the new regime requires that diversification effects be taken into account in the design of each risk module. In our comparison, these effects reduce the SCR by 29%. The loss-absorption capacity of deferred tax claims and technical provisions reduces the SCR by a further 14%, to a final level of €589 million. The SCR under Solvency II is 92% higher than the SCR under Solvency I.

Eligible own funds therefore exceed the SCR by two and a half times, which can be considered a satisfactory solvency margin for the Slovak insurance sector. The margin reported by individual insurers ranges between 1.3 and 3.9 times, meaning that all insurers comfortably meet the SCR. At the same time, all insurers also easily meet the minimum capital requirement, by margins ranging from 1.8 to 9.3 times.

Chart B Comparison of solvency requirements in the insurance sector under Solvency I and Solvency II (EUR millions)



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

15 The reconciliation reserve is the excess of assets over liabilities, less dividends payable, basic own funds, and other adjustments. It includes mainly revaluation differences, current year and previous years earnings, and other reserve and capital funds.

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

CHAPTER 5

FINANCIAL MARKET SEGMENTS FOCUSED ON ASSET MANAGEMENT

5

5 FINANCIAL MARKET SEGMENTS FOCUSED ON ASSET MANAGEMENT

5.1 THE OLD-AGE PENSION SCHEME (SECOND PILLAR OF THE PENSION SYSTEM)

ASSET GROWTH IN PENSION FUNDS DRIVEN BY AN INCREASING AMOUNT OF TRANSFERRED CONTRIBUTIONS

In the second pillar of the pension system – the defined contribution old-age pension scheme operated by pension fund management companies (PFMCs) – the number of savers increased by thirty-three thousand in 2016 to end the year at 1,375,770. The growth rate in the second half of the year was somewhat lower than the rate in the first half and even further behind the rate in the second half of 2015.

The net asset value (NAV) of pension funds increased quite steadily during the course of 2016. By around mid-year, the NAV was matching its historical high, achieved before the previous 're-opening' of the scheme, and by 31 December 2016 it had reached a new record of €6.94 billion. In absolute terms, the funds' aggregate NAV increased by €639 million in 2016, or by one tenth of its level at the start of the year. To compare the pace of funds' asset growth in 2016 with that in 2015 would be misleading given the exceptional outflow recorded in the earlier year as a result of the scheme reopening. Compared with 2014, the NAV growth was slightly lower because the rate of return on pension funds was lower in 2016 than in 2014. However, the amount of 2016 pension contributions was the highest since the previous adjustment of contributions' rates between the two pillars.

Almost two-thirds of pension funds' NAV growth in 2016 was attributable to asset growth in guaranteed bond pension funds. In percentage terms, however, the most marked asset growth was in index pension funds, an elevated 60%. In absolute terms, too, the NAV of index funds increased more than that of equity funds. From a relatively low level two years ago, index funds' aggregate NAV has within a short time already increased up to half that of equity funds. The NAV of mixed pension funds fell, year on year, owing to the dissolution of another fund in this category towards the year-end. The fact that only two PFMCs now manage a mixed fund illustrates the low level of demand for these products in recent years. The stable developments of PFMCs continued during 2016, with only marginal changes in their market shares.

GROWING SHARES OF DEBT SECURITIES IN BOND PENSION FUNDS AND EQUITIES IN EQUITY PENSION FUNDS

Looking at the aggregate NAV of bond pension funds during the period under review, its composition maintained the trend (except for a brief interruption) shown since 2012. The main aspect of that trend is a gradual fall in the relative share of bank deposits and further strengthening of the predominant bond component. The bank deposit component began 2016 at 16% of the aggregate NAV and ended the year at 10%, while the bond holdings increased by four percentage points, to 82%. The trend in most individual bond funds was similar to that at the aggregate level. The trimming of funds' deposit holdings and increase in their exposure to the bond market in recent years appears to reflect PFMC's search for yield in the prolonged low interest rate environment.

The aggregate NAV of mixed pension funds showed a similar year-on-year trend to that of bond pension funds. In the case of mixed funds, however, the changes in composition were not part of a long-running trend, nor were they broad-based across individual funds. As well as an increase in bond holdings and drop in bank deposits, the aggregate changes included a slight rise in the equity component.

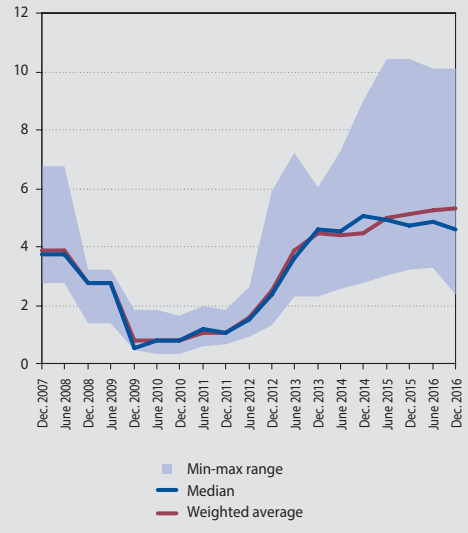
As for equity pension funds, their profiling as growth-focused and higher risk continued in 2016. The equity component of their aggregate NAV increased by six percentage points in the year under review, to stand at just over two-thirds of the NAV. This growth came at the expense of bank deposit holdings and, to a lesser extent, debt securities. Almost all equity funds registered an increase in their equity holdings.

The nominal value of interest rate derivatives in the aggregate NAV of pension funds increased in 2016 from zero to €338 million. These instruments were present only in bond funds and in only a few of them – in the form of interest rate swaps and futures acquired for the purpose of hedging interest rate risk.

THE DURATION OF DEBT SECURITIES HOLDINGS IN BOND PENSION FUNDS CONTINUED ITS GRADUAL INCREASING TREND

The average residual maturity of pension funds' holdings of debt securities maintained its gradual upward trend in 2016, increasing from 5.1 years at the beginning of the year to 5.3 years at the end. This reflected the situation in bond pension funds, all but one of which registered an increase in the average residual maturity of their bond holdings. In most of the equity pension funds, by contrast, the average residual maturity of debt securities holdings decreased slightly. The duration of debt securities holdings mirrored the changes in their residual maturity. The increases in these measures, related to increasing exposure to interest rate risk, did not prevent the average coupon rate on the bond portfolio from declining by two-tenths of a percentage point in 2016, to end the year at 2.3%.

Chart 34 Average residual maturity of pension funds (in years)



Source: NBS.

The average agreed maturity of pension funds' time deposit holdings fell moderately in 2016, although the situation across funds was more heterogeneous. At the same time, the interest rates on these time deposits fell quite sharply. This change was heavily concentrated in the first half of 2016.

The share of domestic assets in the aggregate NAV of pension funds declined in 2016, as also happened in the previous years. In the counterparty breakdown of funds' NAV as at 31 December 2016, Slovak counterparties had a share of 18%, down from 22% at the start of the year. PFMCs reduced funds' domestic exposures mainly through reducing the amount of deposits held with domestic banks and, to a lesser extent, through liquidating Slovak government bonds. This decrease in domestic exposure was partly offset by purchases of domestic bonds not issued by general government. Looking at the geographical breakdown of funds' assets in 2016, it is worth noting that the share of central and eastern Europe declined year on year and that, in the second half of the year, so did Italy's share. On the other hand, debt securities issued by issuers incorporated in emerging market economies and tax havens increased as a share of pension funds' aggregate assets, but still amounted to less than 5% of their NAV.

Pension funds' foreign currency exposure did not change significantly in the previous year, either at the aggregate level or in individual funds. In the aggregate NAV, the average share of assets denominated in foreign currency ended the year at 5% NAV, but in growth-oriented pension funds their share was significantly higher, ranging between 14% and 53%.

17 The profit evaluation is based on preliminary data as at 31 December 2016.

As a result of several episodes of financial market turbulence in 2016, pension-point values in all pension funds other than bond funds showed a certain amount of volatility. Among the different types of pension fund, the highest average annual nominal return in 2016 was recorded by index funds, at 9%, followed by equity funds (7.5%), mixed funds (5%), and bond funds (1.8%).

The aggregate annual profit of PFMCs increased by one-third in 2016, to €14.4 million.[17] This result was achieved even though fee and commission income fell (mainly because income related to funds' performance declined). It reflected reductions in fee and commission expenses and, to a lesser extent, in PFMC's operating expenses. All six PFMCs reported a profit for 2016.

5.2 THE SUPPLEMENTARY PENSION SCHEME (THIRD PILLAR OF THE PENSION SYSTEM)

Record increases in both the number of participants and the net asset value of supplementary pension funds

In the third pillar of the pension system – the defined contribution supplementary pension scheme operated by supplementary pension management companies (SPMCs) – the number of participants increased by more than twenty-four thousand in 2016. This was the highest increase in at least nine years and continued the scheme's trend of rising participation that began at the end of 2013. At the same time, however, the number of people receiving benefits from distribution supplementary pension funds fell for a third successive year.

Also in terms of the NAV of supplementary pension funds, 2016 was a record year for the third pillar, at least for the period since its transformation into today's supplementary pension scheme. The total NAV of supplementary pension funds increased by €164 million, to end the year at €1.71 billion. This all-time high was attributable to the conjunction of, on the one hand, an increasing difference between contributions received and benefits paid, and, on the other hand, the positive returns on funds. These returns accounted for around one-quarter of the overall increase in the NAV.

All supplementary pension funds apart from one distribution fund registered a year-on-year increase in their NAV. The aggregate NAV growth was evenly spread between a group of four large contributory funds that have a balanced investment profile and a group of smaller contributory funds with a different profile. The growth in inflows into balanced funds accelerated significantly in 2016, to 7%, after slowing in the previous year. The amount of assets across other funds, largely growth and conservative funds, increased by one-quarter to continue its strong growth trend.

In growth funds and balanced funds, the equity component of the asset portfolio increased

The supplementary pension funds that registered the biggest change in asset structure in 2016 were growth funds. The share of equity securities in their aggregate NAV increased from 39% to 46%, mostly through purchases of investment fund shares/units and exchange-traded fund (ETF) shares. SPMCs made the bulk of these purchases in the first half of 2016, while recent months have seen them redeeming some of these investments. Bond holdings increased as a share of the NAV of growth funds, by seven percentage points. Almost the entire increase in these funds' exposure to the bond market came through an indirect channel, i.e. purchases of shares/units of investments funds that have an elevated bond component. Such assets previously only had a marginal share in the asset portfolio of supplementary pension funds. The increase in growth funds' holdings of debt and equity instruments occurred at the expense of bank deposit holdings, with their share of the growth funds' aggregate NAV falling from 34% at the end of 2015 to 23% at the end of 2016. Although these changes in asset structure were notable, they were still consistent with the extent of investment-mix changes observed in the growth funds over a long period.

In the aggregate NAV of balanced supplementary pension funds, the equity component also increased, albeit by a relatively modest two percentage points. Its share at the end of 2016 stood at 20%, although it did on occasion exceed that level during the year. Another similarity with growth funds was the increase in holdings of shares/units issued by bond-focused investment funds. But since their outright holdings of debt securities declined, the overall bond market exposure of balanced funds actually fell slightly.

In supplementary pension funds with a conservative investment profile, bank deposits increased as a share of the aggregate NAV, to account for just over one-quarter of the total as at 31 December 2016 (up from 18% at the start of the year). The increase in bank deposits was matched by a drop in the bond component. Likewise in the asset structure of distribution funds, the share of bank deposits increased moderately.

Large supplementary pension funds accounted for an increase in the average residual maturity of the sector's asset portfolios, even while this measure decreased in a majority of the other third pillar funds

As regards the debt securities holdings of supplementary pension funds, the changes in their residual maturity in 2016 were heterogeneous across the sector. On the one hand, in line with its long-run trend, the weighted average residual maturity of the whole sector's debt securities holdings increased by three-quarters of a year, to reach a new historical high of 6.4 years. On the other hand, only a small number of supplementary pension funds accounted for that increase. Several funds registered a decline in this measure, and consequently its median value for the sector as a whole fell. The fund-level increase in dispersion of average residual maturities of debt securities holdings was also quite significant.

The average agreed maturity of all supplementary pension funds' time deposit holdings increased in 2016 by three months, to three-quarters of a year. This increase mirrored the situation in majority of individual funds. All funds that had bank deposits in their portfolio registered decline in interest rates. The average interest rate on these deposits decreased from 0.37% to 0.22% year on year.

SPMCs trimmed the Slovak government bond holdings of supplementary pension funds in 2016, and so their aggregate amount fell by one-quarter. Funds' exposure to German and Czech sovereign debt also fell, but the share of Italian and Spanish government bonds in their NAV increased appreciably.

At the end of 2016 non-derivative assets denominated in foreign currency accounted for almost one-quarter of the aggregate NAV of supplementary pension funds, after their share increased slightly over the course of the year. Their share in growth funds and balanced funds was even higher.

The average annual nominal return on all supplementary pension funds in 2016 was 2.6%. Growth funds reported the highest average return (4.6%), followed by balanced funds (2.6%), conservative funds (0.8%) and distribution funds (0.1%).

The aggregate profit of SPMCs for 2016 stood at €2.3 million, which was 62% lower than their profit for 2015.[18] The aggregate profit fell for a third successive year. The main cause of that drop in 2016 was that income related to funds' performance declined. The negative result was slightly mitigated by a reduction in operating expenses.

5.3 INVESTMENT FUND SECTOR

The net asset value of investment funds distributed in Slovakia continued to grow, albeit more moderately than in previous years

The NAV of investment funds distributed in Slovakia increased in 2016 by €341 million, or 3%, compared with the level at the start of the year. Thus the growth trend in the sector's aggregate NAV was extended to five years. At the same time, however, the growth

18 *The profit evaluation is based on preliminary data as at 31 December 2016.*

rate in 2016, both in absolute and relative terms, was the smallest recorded during that period. The growth rate was half of that in 2015 and only a third of that in 2013 and 2014. Even more pronounced was the slowdown in the growth of customer demand for investment funds distributed in Slovakia. Net sales of investment fund shares/units slumped to less than one-quarter of their 2015 level. The negative difference between the NAV growth rates was, however, reduced by relatively high returns on investment funds during the period under review.

Of the absolute year-on-year growth in the NAV of investment funds, domestic investment funds accounted for €189 million and foreign investment funds for €152 million. This marked a return to the trend, broken last year, where domestic investment funds outperform foreign funds in terms of absolute growth in NAV. Moreover, it happened despite the fact that domestic funds reported one of the weaker results by their historical standards and that the foreign side of the sector had its third best result since 2007.

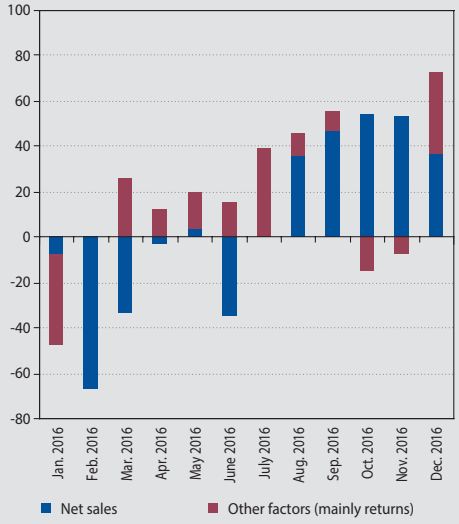
The market shares of asset management companies in the domestic side of the sector became somewhat more balanced. The only asset management company that registered a decline in its funds' NAV was the one with the leading position in the market by that measure. Among the other companies, the increases in the overall NAV of their funds ranged between 3% and 22%. By the end of the first seven months of 2016 the number of domestic investment funds on the market had increased by three compared with the start of the year, but then in the last five months a total of four funds were dissolved.

Redemptions by financial sector institutions had a negative impact on investment funds' NAV early in 2016; inflows from households increased strongly later in the year

The most important factor in the NAV growth of domestic funds during the period under review was the level of nominal investment returns. Net sales made up €85 million, less than half, of the absolute growth in NAV, whereas in previous years they were the main driver of the growth trend.

As regards the net sales of domestic investment funds, 2016 could be divided into three phases. The first three months were marked by elevated redemptions of investment fund shares/units, amounting to more than €120 million in total. Although these redemptions occurred during and just after a global slump in equity prices, it cannot be said that there was a broad drop in demand for these funds. The reported outflow comprised, on the one hand, reductions in cross investments between domestic funds, and, on the other hand, banks' significant redemptions of shares/unit in one particular fund. Households were taking a wait-and-see approach to investment funds in the first half of the year, and their exposure to domestic funds remained broadly unchanged. In the second phase, from April to July, net sales of domestic investment funds mostly fluctuated around zero, except for a brief pick-up in redemptions in June. The impact of a gradual increase in inflows from households was offset by redemptions by financial sector participants. In the third phase

Chart 35 Monthly changes in the aggregate NAV of domestic investment funds broken down by net sales and other factors (EUR millions)



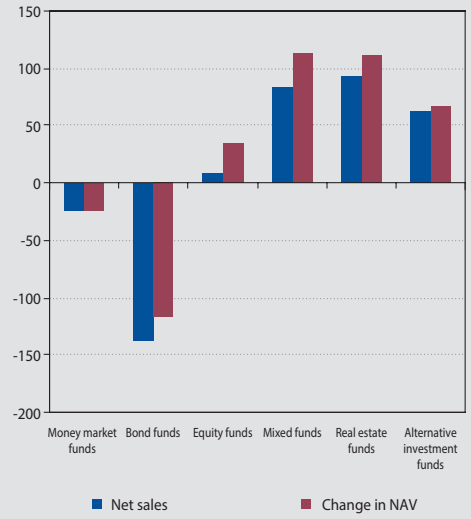
Source: NBS.

lasting from August to end of the year, an upturn in financial market sentiment, supported by economic trends, saw appreciable growth in demand for domestic investment funds. Their net sales in each month were around €50 million, and again they were largely accounted for by household inflows.

IN A CONTINUATION OF THE 2015 TREND, INFLOWS INTO DOMESTIC FUNDS WERE CONCENTRATED IN MIXED FUNDS AND REAL ESTATE FUNDS, WHILE BOND FUNDS REGISTERED A NET OUTFLOW

The two biggest-selling types of domestic fund in 2016 were real estate funds and mixed funds; their net sales were, respectively, €93 million and €84 million. Both categories also registered the highest absolute growth in NAV, slightly over €110 million in each case. For real estate funds, the result represented an acceleration in their growth trend, but for mixed funds it represented a slowdown. The next best selling domestic funds, some way behind, were alternative investment funds; their net sales contributed to an increase of €67 million in their aggregate NAV. The overall NAV of equity funds also increased (by €35 million), due mainly to price changes as net sales were minimal. Bond funds experienced a major slump in demand in 2016. Redemptions of their shares/units were heavily concentrated in the first half of the year, when they amounted to around a quarter of a billion euro. A combination of changing investor sentiment in the second half of the year and positive investment returns moderated the year-on-year decline in these funds' aggregate NAV in 2016, to €116 million. Money market funds reported negative net sales for 2016, as they did for the previous years.

Chart 36 Net sales of domestic investment funds in 2016 and the annual change in the funds' NAV (EUR millions)



Source: NBS.

All the types of domestic fund that reported, on average, a significant change in asset structure recorded a decline in bank deposit holdings. In equity and mixed funds, these assets were replaced with equities and investment fund shares/units. In real estate funds, exposure to the real estate market was heightened, while in alternative investment funds the bond component increased.

As for foreign investment funds distributed in Slovakia, their aggregate NAV also fell slightly at the beginning of the year before returning to its growth trend and accelerating in the last quarter of the year. At the level of fund types, however, the developments in 2016 were somewhat different to those in domestic funds. Equity funds registered by far the highest increase in NAV, at €92 million, followed by bond funds (€28 million). All other types of fund apart from money market funds recorded year-on-year growth in their aggregate NAV, albeit not very significant in comparison with the overall increase in foreign funds' NAV.

The average annual nominal return on all domestic and foreign investment funds distributed in Slovakia was 2.7% in 2016. Therefore their overall performance was better than in the previous year. All types of fund registered positive returns, with equity funds reporting the highest rate, almost 7%, and money market funds the lowest rate, just above zero. The average rates of return for other categories were concentrated in a relatively narrow range between 1.5% and 3.9%.

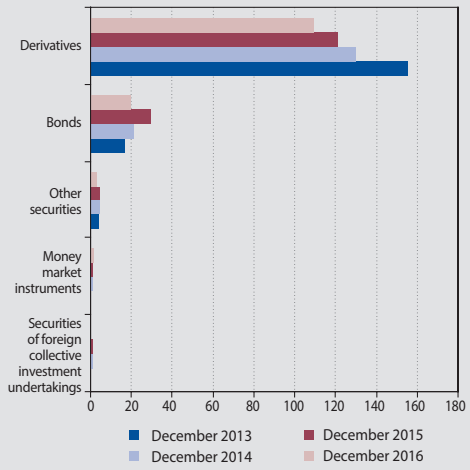
The aggregate profit of asset management companies for 2016 was €19.2 million, which represented a drop of one per cent compared with the previous year. This result, however, was heavily skewed by one company that reported a substantial decrease in profitability. All the other companies in the sector increased their annual profit.

5.4 INVESTMENT FIRMS

Investment firms authorised in Slovakia conducted transactions amounting to €135 billion in 2016, which was around 14% lower compared with the previous year. Trading activity was therefore at its lowest level for at least eight years. The decline was broad-based across all the principal asset classes apart from money market instruments. By far the most traded instruments continued to be derivatives, followed by bonds.

The amount of assets under management in the sector fell in the first quarter of 2016, and while it picked up again in the second half, the increase was not enough to make up for the earlier fall. As at 31 December 2016 the assets under management amounted to €348 million, one per cent lower in year-on-year terms.

Chart 37 Investment firms' overall transactions broken down by financial instrument (EUR billions)



Source: NBS.

CHAPTER 6

MACRO STRESS TESTING OF THE SLOVAK FINANCIAL SECTOR

6

6 MACRO STRESS TESTING OF THE SLOVAK FINANCIAL SECTOR

WHILE THE BASELINE SCENARIO FOR BOTH 2017 AND 2018 ASSUMES ECONOMIC GROWTH OF MORE THAN 3% AND FAVOURABLE TRENDS IN UNEMPLOYMENT, THE ADVERSE SCENARIOS ASSUME A RELATIVELY SHARP CONTRACTION OF FOREIGN DEMAND AND THE DOMESTIC ECONOMY, AS WELL AS ELEVATED FINANCIAL MARKET STRESS

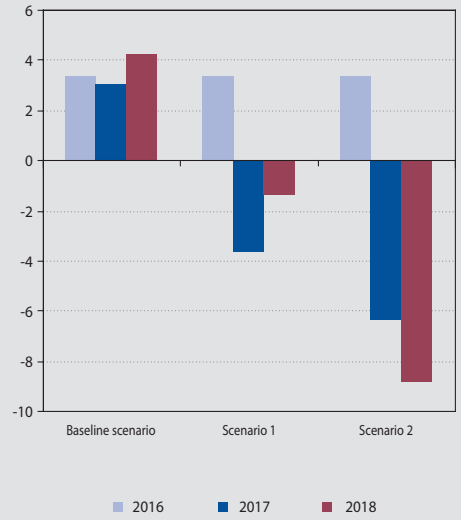
Macro stress testing of the Slovak financial sector was conducted as at 31 December 2016. As in previous such exercises, the stress test covered a period of two years, in this case up to the end of 2018. The resilience of financial institutions was tested under three scenarios.

The Baseline scenario is based on the January 2017 update of NBS's December 2016 Medium-Term Forecast (MTF-2016Q4U). It assumes that real GDP growth will be driven mainly by accelerating private consumption over the projection period. Fixed capital formation continues to slow in 2017, before picking up on the back of an expected recovery in firms' own investment and a gradual increase in the absorption of EU funds. Exports also increase and the inflation rate accelerates gradually, eventually reaching 1.9% in 2018. The unemployment maintains a steady downward trend, falling to 7.9% in 2018.

In the first adverse scenario, Scenario 1, geopolitical risks are assumed to materialise and result in a global economic downturn. In addition, financial markets stress increases. Foreign demand falls sharply, causing the domestic economy to contract. Owing to the structural attributes of the geopolitical shocks, the economy still is not entering an upswing by the end of 2018. Inflation remains subdued throughout the stress test period and unemployment increases.

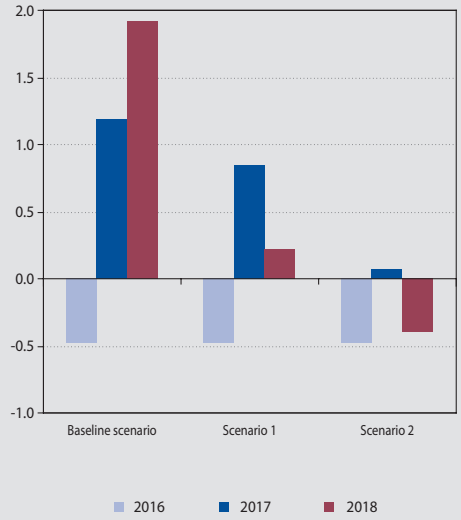
The second adverse scenario, Scenario 2, assumes all the adverse trends of Scenario 1, but they are more entrenched and cause a deeper recession in 2018. The inflation rate is lower compared with Scenario 1, remaining

Chart 38 Real GDP growth (percentages)



Source: NBS.

Chart 39 Inflation (percentages)



Source: NBS.

at low to negative levels throughout the two-year stress test period (reflecting the impact of the recession and of oil prices that are lower than those assumed in Scenario 1). Financial markets stress is also more pronounced.

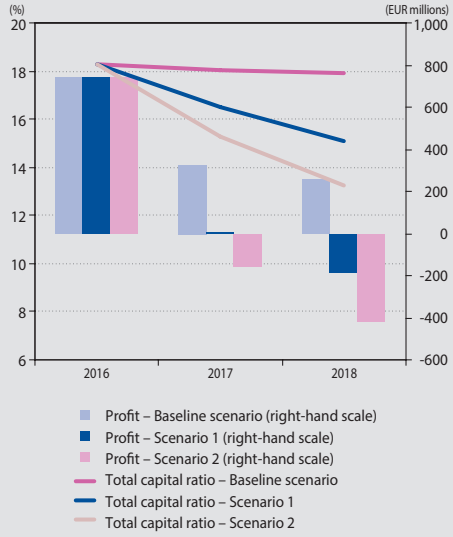
ITS PERFORMANCE IN THE STRESS TEST SUGGESTS THE BANKING SECTOR IS RELATIVELY RESILIENT TO POTENTIAL HEADWINDS FROM THE REAL ECONOMY AND FINANCIAL MARKETS; IT SHOULD BE NOTED, HOWEVER, THAT THE RESULTS DIFFERED QUITE SIGNIFICANTLY FROM PREVIOUS EXERCISES.

In the Baseline scenario, the sector's average total capital ratio falls slightly. This is due to risk-weighted asset growth that reflects an expected increase in lending to the retail sector and to non-financial corporations. As at the end of 2018 all banks exceed the 8% minimum capital requirement, while vis-à-vis the 10.5% requirement, the sector reports a capital shortfall of €16 million (or 0.28% of own funds as at 31 December 2016). In Scenario 1, the sector's average total capital ratio falls to 15.1% by the end of the stress test period, owing to losses reported for 2017 and 2018 by the banks under review and to risk-weighted asset growth.[19]

As at the end of 2018 the sector has a capital shortfall against both the 8% capital requirement (€23 million) and the 10.5% requirement (€92 million). In Scenario 2, the sector's capital ratio falls to 13.2% by the end of the stress test period, owing to increasing losses reported for 2017 and 2018 by the banks under review and to risk-weighted asset growth. As at the end of 2018 the sector has a capital shortfall against both the 8% capital requirement (€65 million) and the 10.5% requirement (€177 million).

Although the sector remains sufficiently resilient, it is worth noting that even the Baseline scenario shows a marked decline in its aggregate profit in 2017 and 2018 (compared with 2016). This decline is assumed due partly to the adjustment for one-off income in 2016 (mainly the sale of holdings in VISA) 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 and an

Chart 40 Profit and total capital ratio estimates under the stress test scenarios



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

Table 2 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%
EUR millions	Capital shortfall vis-à-vis the 8 per cent capital requirement		
2015	0	0	3
2016	0	23	65
EUR millions	Capital shortfall vis-à-vis the 10.5 per cent capital requirement		
2015	0	16	132
2016	16	92	177

Source: NBS.
Note: The 2015 lines give the stress test results as at the end of 2015, and the 2016 give the stress test results as at the end of 2016.

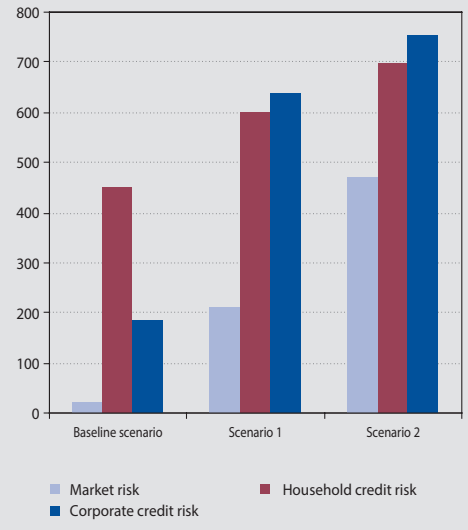
19 Risk-weighted asset growth is based on the assumption of an increase in risk parameters as well as a potential increase in the amount of loans, which is more pronounced in Scenario 1 than Scenario 2. The adjustment of risk-weighted assets is based also on a comparison of top-down and bottom-up stress test results, further details of which may be found in Box 2 of the 2015 Analysis of the Slovak Financial Sector.

assumed further decrease in interest rates (particularly rates on consumer loans). Thus the sector is assumed 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.

This assumption is reflected in the sector's financial results under the exercise. In the Baseline scenario, two banks report a loss for the whole two-year stress test period, and that number rises to 10 in Scenario 1 and to 12 in Scenario 2. The sector as a whole reports a two-year loss of more than €180 million in scenario 1 and almost €570 million in Scenario 2.

In the breakdown of risk losses, household credit risk is the major component in the Baseline scenario, while corporate credit risk has the slightly higher share under each of the adverse scenarios[20]. Market risk losses reach their highest level in Scenario 2, reflecting the assumed increase in sovereign risk and its impact on the revaluation of bond holdings.

Chart 41 Risk losses by type (EUR millions)



Source: NBS.
Note: The chart shows the overall loss for the stress test period.

The insurance sector is resilient even under the adverse stress test scenarios

In Scenario 1, the insurance sector posts an aggregate loss of €226 million for 2017 and its capital falls by 30% (the declines at the level of individual insurers range from 9% to 43%). In 2018, however, much of that loss is recouped with an aggregate profit of €180 million. In Scenario 2, the sectoral loss for 2017 deteriorates to €588 million and overall capital falls by almost 60% (with individual results ranging from 14% to 79%). The sector makes a profit of €2.3 million in 2018.

Stress test results for other segments

As mentioned previously in this publication, the risk profile of pension funds increased in 2016, continuing a long-run trend that stems from the low rates of return on less risky assets. This trend also had an impact on the stress test results, as shown in Charts P53 to P55 in the Annex.

PFMC-managed pension funds (second pillar) in particular have in recent years become more sensitive to potential headwinds from financial markets. The sector's NAV falls by 1.9% in Scenario 1 and 5.4% in Scenario 2, which in the latter case sees pension funds lose all the gains made over the previous two years.

Supplementary pension funds (third pillar) incur even greater losses in the adverse scenarios, up to twice as high as the losses of second pillar funds. The main reason for this is that the average share of the equity component in the third pillar portfolio is far higher than that in the second pillar portfolio, and in recent years it has gradually approached the level of the average share of the equity component in the assets of investment funds. The stress test results for the pension sector show a marked drop in interest income, which in the past constituted a relatively stable component of these funds' overall income. As a result of this gradual shift in investments towards higher-risk assets, in particular equities, the success of pension funds' performance is now increasingly dependent on equity market movements.

20 Substantial losses on corporate loans are assumed owing partly to the expected need to increase provisions for loans already non-performing at the end of 2016 (in response to a deterioration in macroeconomic trends).

The investment fund sector, too, is quite hard hit under the adverse scenarios. The results, however, vary significantly across different types of funds. While bond funds maintain positive returns in scenario 1, and an average negative return on 4% in scenario 2, equity funds record an average negative return of around 20%.

NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

ANNEX 1

MACROPRUDENTIAL INDICATORS

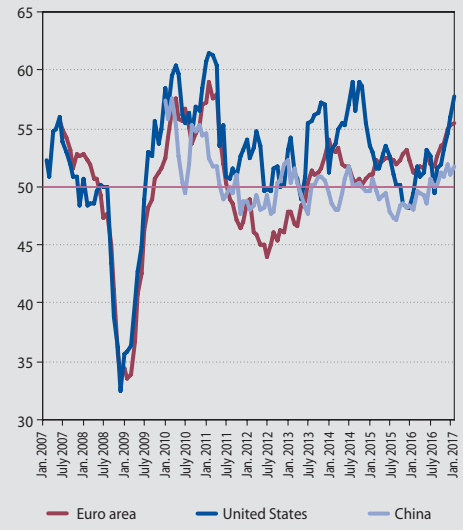
P1

MACROPRUDENTIAL INDICATORS

GENERAL NOTE:
'index: 31 December 2015 = 1' means that the given index was normalised so that its value on the specified date (31 December 2015) was equal to 1.

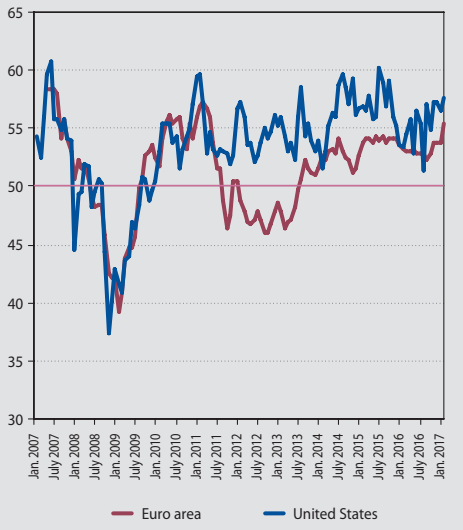
MACROECONOMIC RISK INDICATORS

Chart P1 Manufacturing Purchasing Managers' Index (PMI) in selected economies



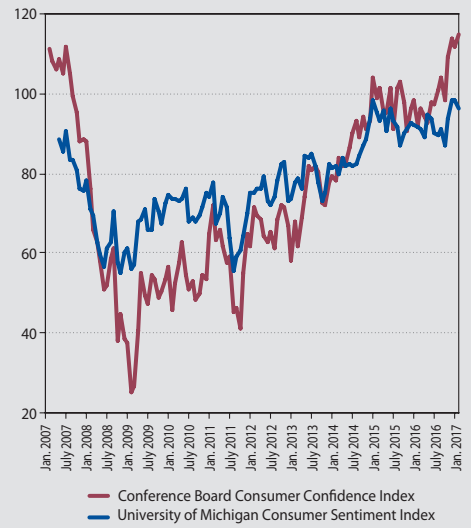
Source: Bloomberg.
Note: The indicator is defined in the section 'Glossary and abbreviations'.

Chart P2 Services Purchasing Managers' Index (PMI) in selected economies



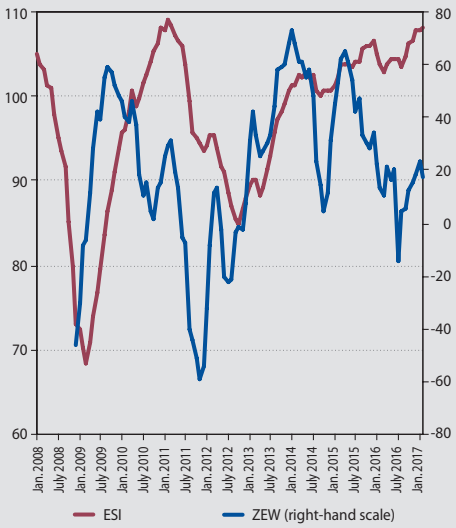
Source: Bloomberg.
Note: The indicator is defined in the section 'Glossary and abbreviations'.

Chart P3 Consumer confidence indicators in the United States



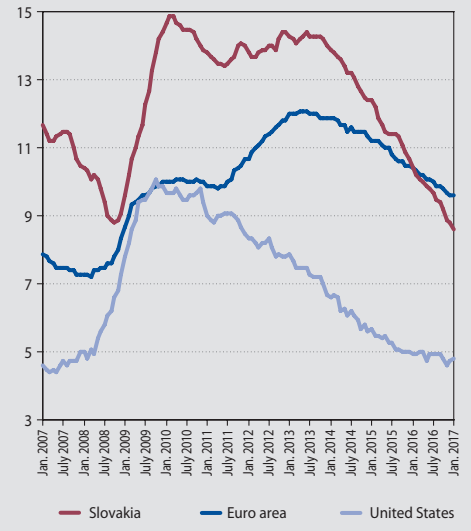
Source: Bloomberg.
Note: The chart refers to US consumer confidence indices produced by two different institutions.

Chart P4 Economic sentiment indicators in the euro area



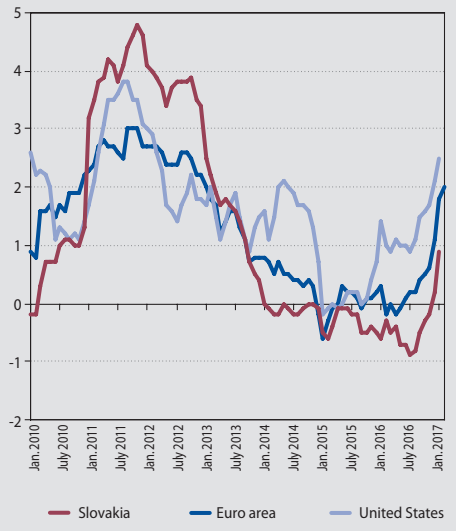
Source: Bloomberg.
Note: The indicators are defined in the section 'Glossary and abbreviations'.

Chart P5 Unemployment rates in selected economies (percentages)



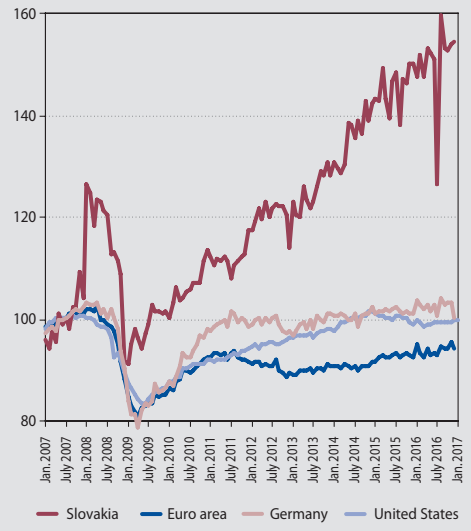
Sources: Eurostat and Bureau of Labor Statistics.
Note: Seasonally adjusted.

Chart P6 Consumer price inflation in selected economies (annual percentage changes)



Sources: Eurostat and Bureau of Labor Statistics.

Chart P7 Industrial production indices in selected economies

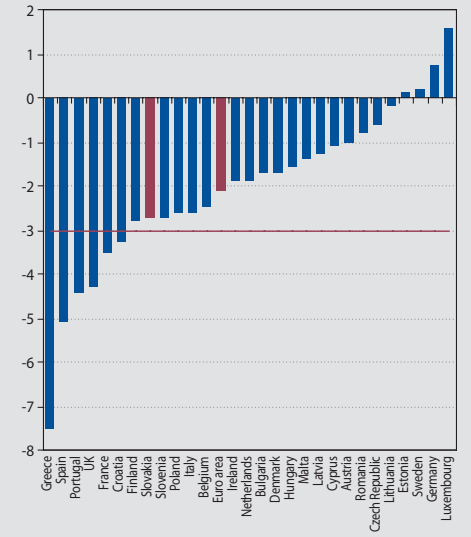


Sources: Eurostat and US Federal Reserve.
Notes: Rebalanced (average: 2007 = 100); seasonally adjusted.

Chart P8 Retail sales indices in selected economies

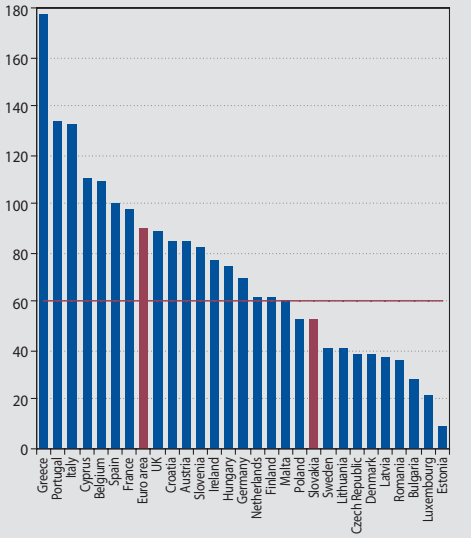
Sources: Eurostat and US Department of Commerce.
Notes: Rebalanced (average 2007 = 100); seasonally adjusted.

Chart P9 General government balances of EU countries in 2015 (percentages of GDP)



Source: Eurostat.

Chart P10 Gross government debt of EU countries in the third quarter of 2016 (percentages of GDP)



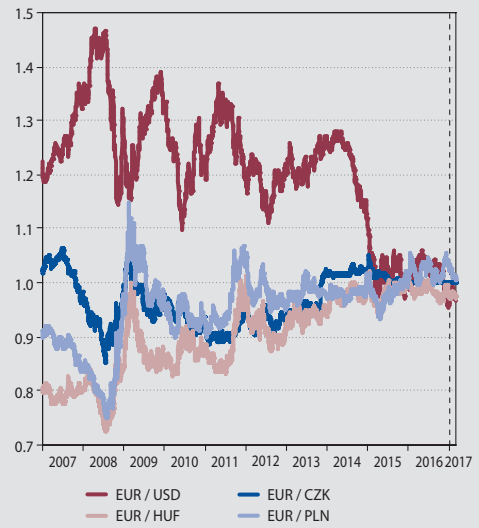
Source: Eurostat.

FINANCIAL MARKET RISK INDICATORS

Chart P11 Price commodity indices (31 December 2015 = 1)

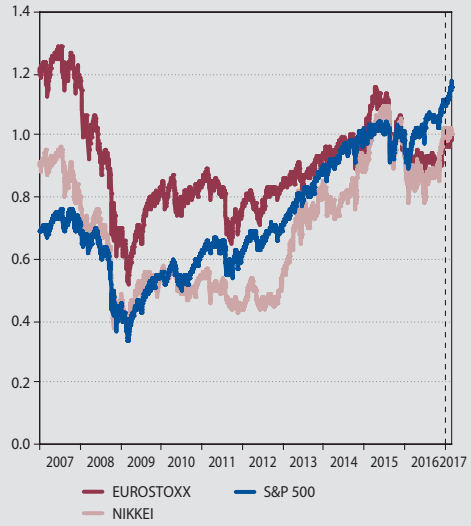
Sources: Bloomberg and NBS.

Chart P12 Exchange rate indices (31 December 2015 = 1)



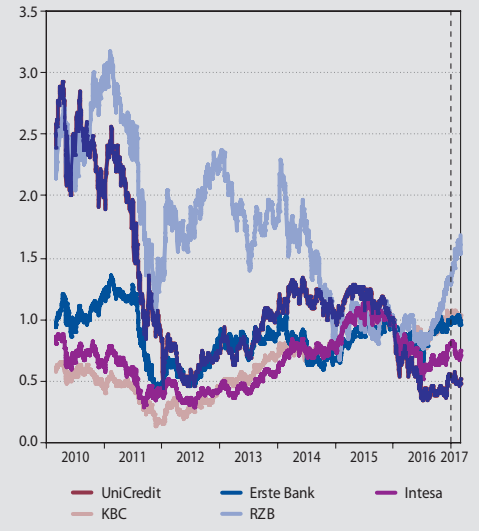
Sources: Bloomberg and NBS.

Chart P13 Equity indices (31 December 2015 = 1)



Sources: Bloomberg and NBS.

Chart P14 Share price indices of the parent institutions of the five largest domestic banks (31 December 2015 = 1)

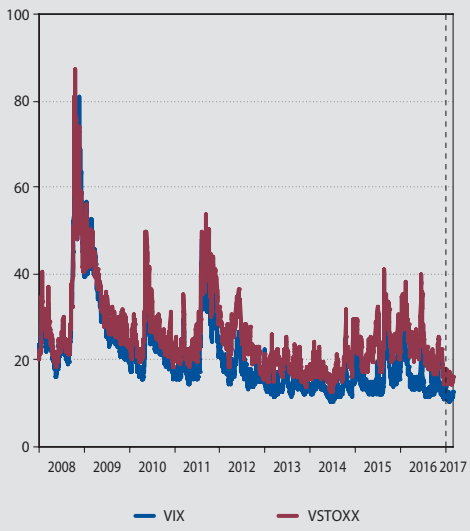


Sources: Bloomberg and NBS.

Chart P15 Yield curve slope in selected economies (percentage points)

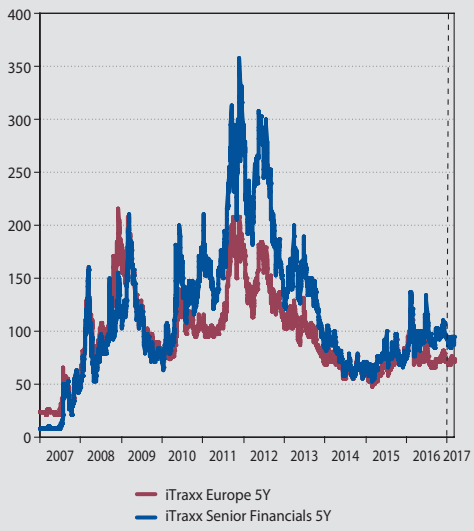
Sources: Bloomberg and NBS.
Note: The yield curve slope is expressed as the difference between the yield to maturity on 10-year and 3-month government bonds.

Chart P16 Volatility of equity indices



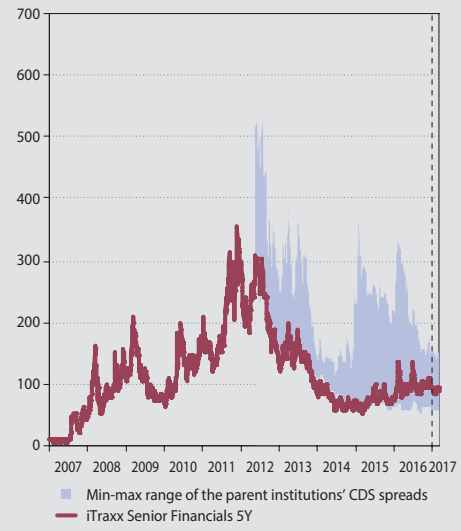
Source: Bloomberg.

Chart P17 CDS spread indices (b.p.)



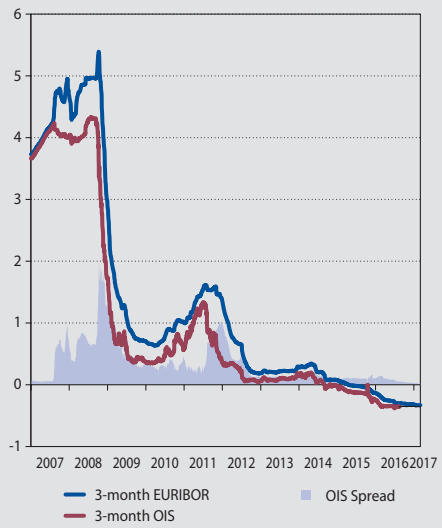
Sources: Bloomberg and NBS.

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



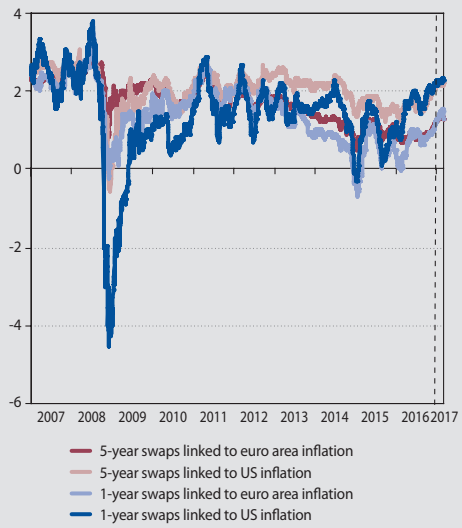
Sources: Bloomberg and NBS.

Chart P19 Three-month rates and the OIS spread (percentages; percentage points)



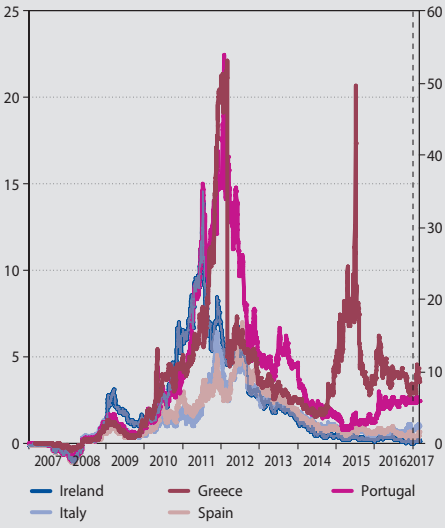
Sources: Bloomberg and NBS.

Chart P20 Inflation-linked swap prices (percentage points)



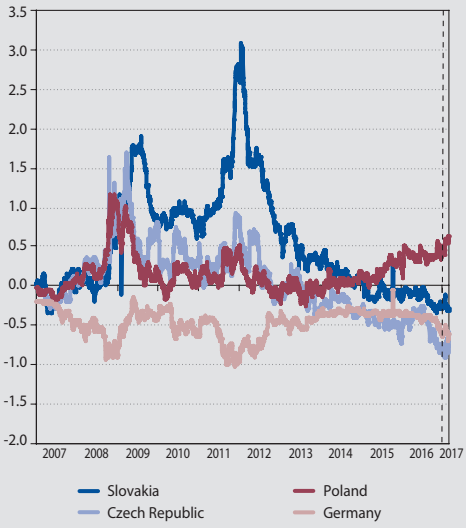
Sources: Bloomberg and NBS.
Note: The inflation-linked swap price is defined in the section 'Glossary and abbreviations'.

Chart P21 Credit spreads on 5-year government bonds issued by lower-rated countries (percentage points)



Sources: Bloomberg and NBS.
Note: The left-hand scale shows difference between the yield on 5-year bonds issued by the given countries and 5-year OIS rates, representing a 5-year interest rate on high-rated bonds.

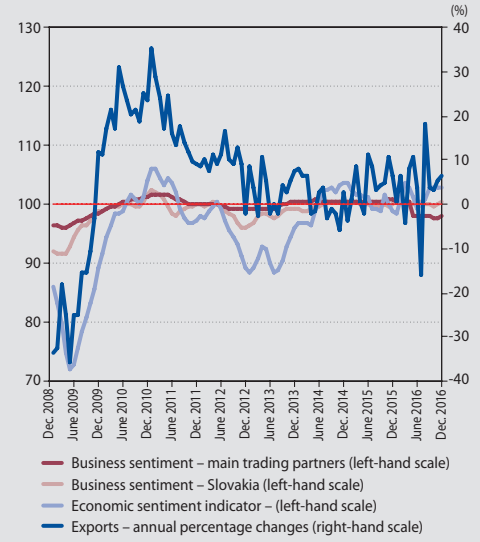
Chart P22 Credit spreads on 5-year government bonds issued by selected central European countries and Germany (percentage points)



Sources: Bloomberg and NBS.
Note: The chart shows the difference between the percentage yield on 5-year government bonds denominated in the domestic currency of the given country and 5-year swap rates for the respective currency.

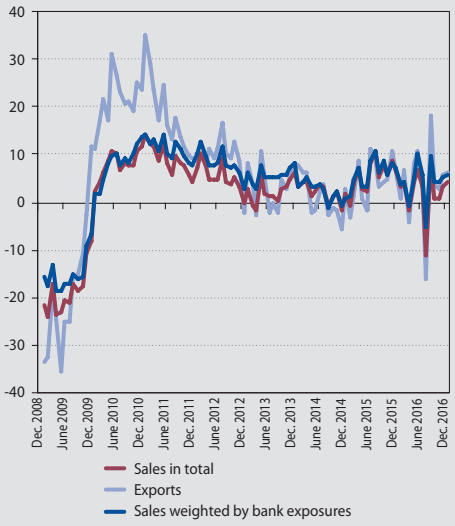
CORPORATE CREDIT RISK INDICATORS

Chart P23 Exports and the business environment



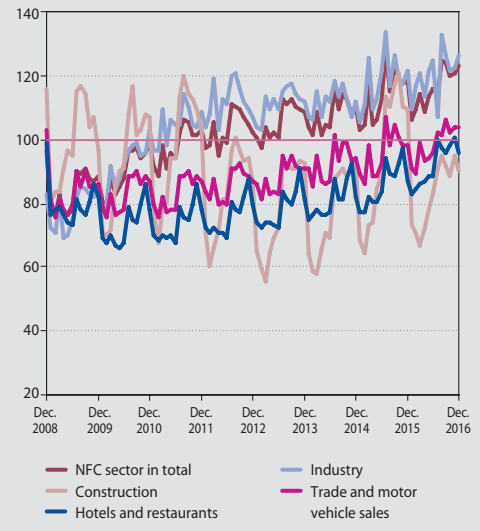
Sources: NBS, OECD and SO SR.

Chart P24 Exports and NFC sales (annual percentage changes)



Sources: SO SR, OECD and NBS.

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

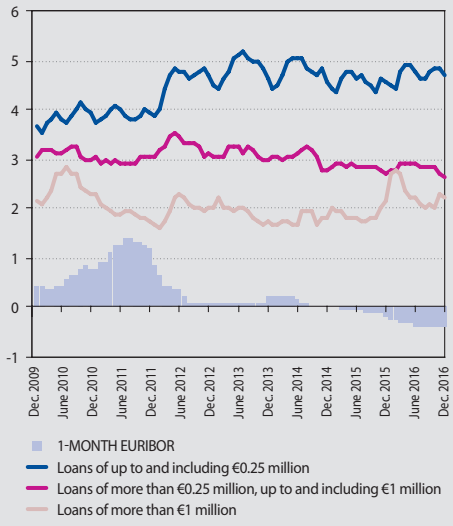


Source: SO SR.

Chart P26 NFC loans and sales (annual percentage changes)

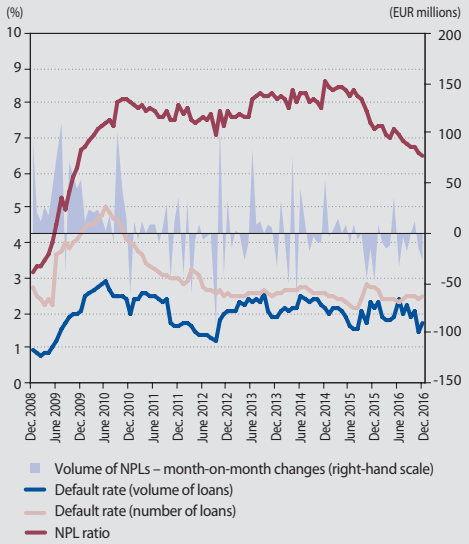
Sources: NBS and SO SR.

Chart P27 Interest rate spreads on new loans to NFCs (percentages)



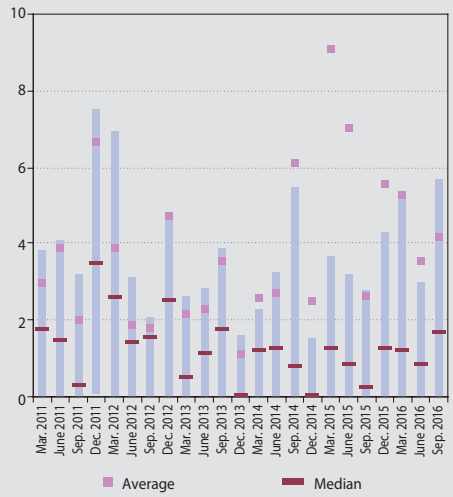
Sources: NBS and EBF.
Note: The spread is defined as the difference between the monthly EURIBOR rate and the average rate on new loans in the respective category.

Chart P28 Non-performing loans (NPLs) and default rates



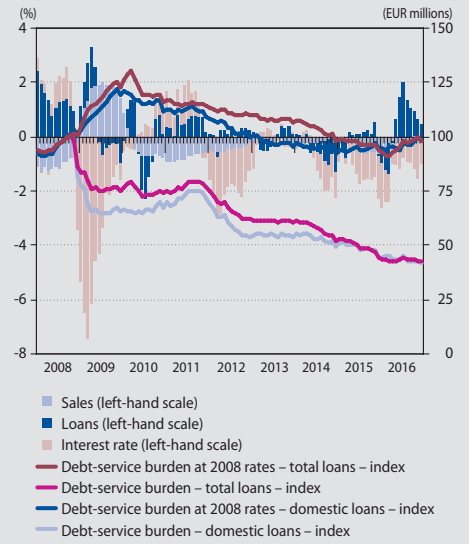
Source: NBS.
Note: The default rate denotes the number/volume of loans that defaulted within a horizon of one year to the number/volume of non-defaulted loans at the beginning of the one-year horizon.

Chart P29 Loans at risk (percentages)



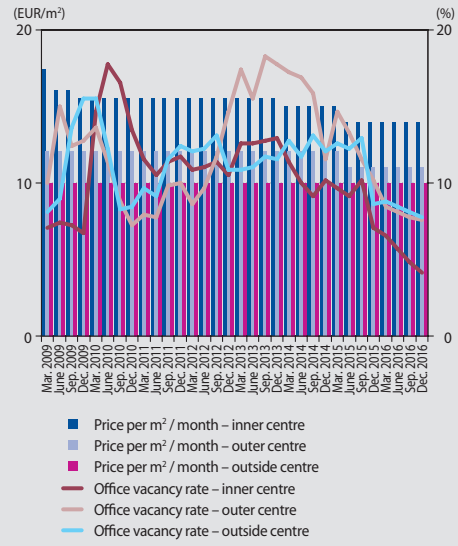
Source: NBS.
Note: The chart shows interquartile ranges.

Chart P30 The debt-service burden and its components



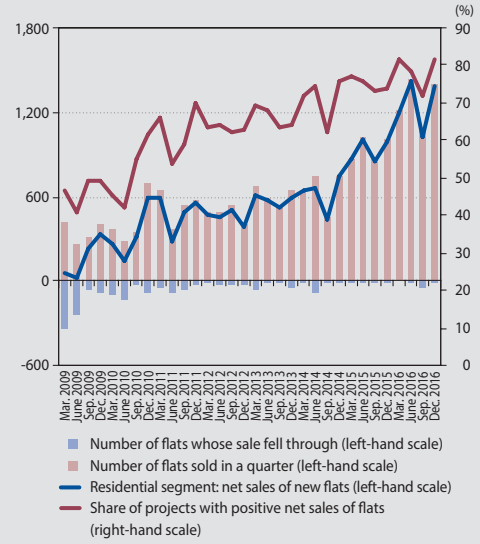
Sources: NBS and SO SR.

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



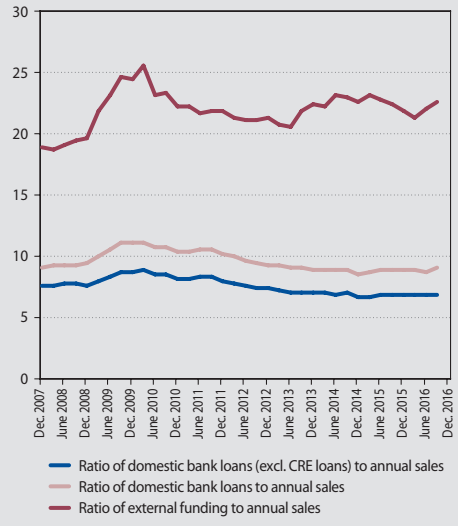
Source: CBRE and NBS.
Note: The chart shows prices and vacancy rates in Bratislava.

Chart P32 Commercial real estate: sales in the residential segment – new flats



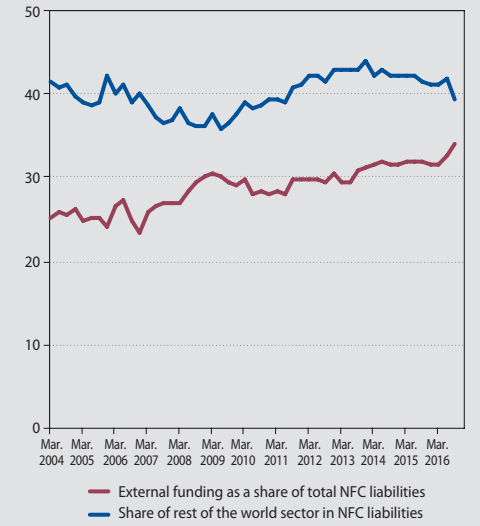
Sources: Lexxus and NBS.
Note: The chart shows developments in Bratislava.

Chart P33 Comparison of NFC balance sheets and sales (percentages)



Sources: NBS and SO SR.
Note: CRE – commercial rate estate.

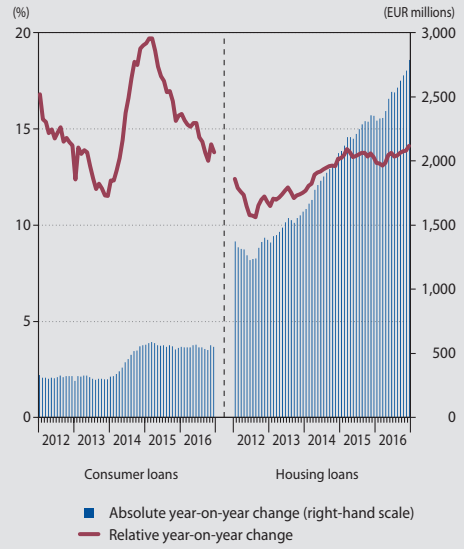
Chart P34 Structure of NFC liabilities (percentages)



Source: NBS.

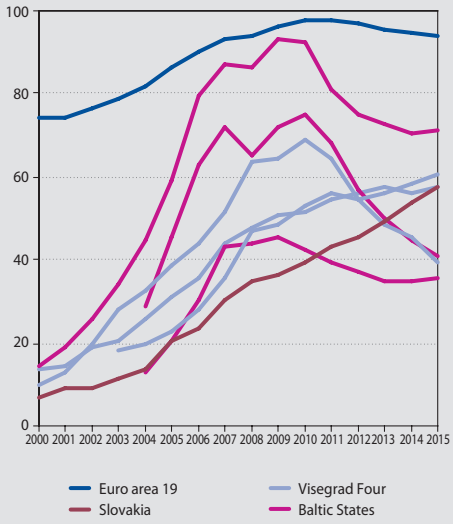
HOUSEHOLD CREDIT RISK INDICATORS

Chart P35 Stock of retail loans (year-on-year changes)



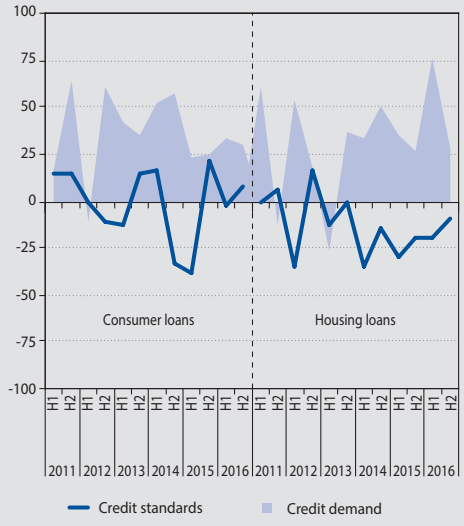
Source: NBS.

Chart P36 Household indebtedness in Slovakia and in selected countries (percentages)



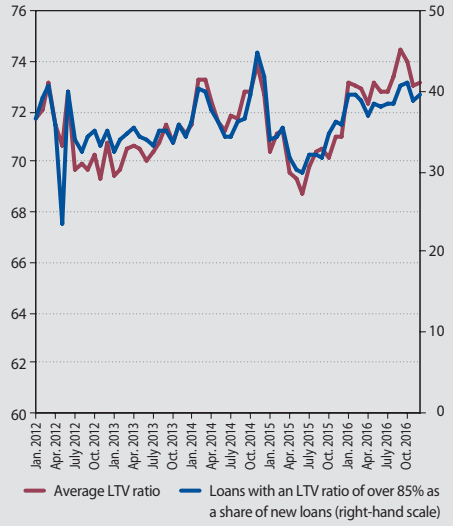
Source: Eurostat.
Note: The indicator is calculated as the ratio of households' total debt to their disposable income.

Chart P37 Changes in credit standards and credit demand according to the bank lending survey



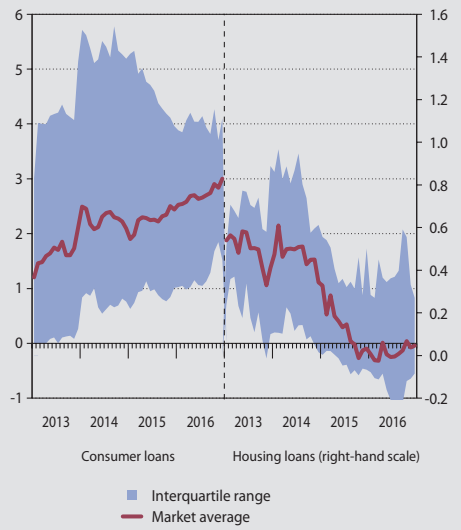
Sources: Bank Lending Survey and NBS.
Note: The data show net percentage shares, with positive values denoting an increase in demand or an easing of standards.

Chart P38 Loan-to-value (LTV) ratio for new loans (percentages)



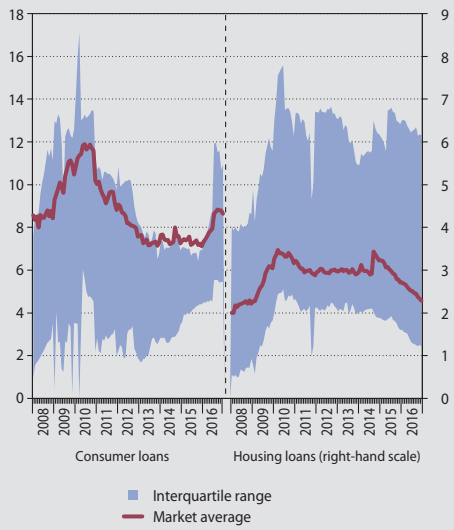
Source: NBS.
Note: The indicator is defined in the section 'Glossary and abbreviations'.

Chart P39 Net default rates on retail loans (percentages)



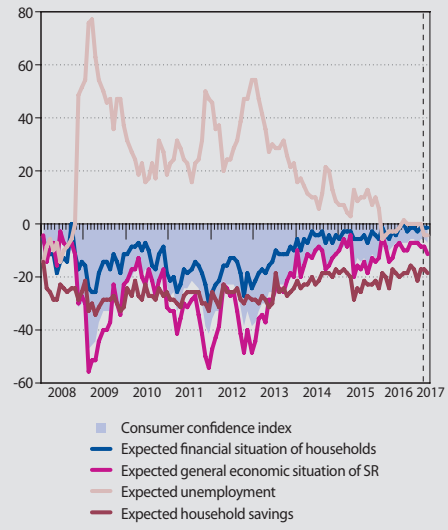
Source: SO SR.
Note: The net default rate denotes the net change in the amount of NPLs over a 12-month period as a share of the outstanding amount of loans at the beginning of the period. The numerator is adjusted for the effect of loan write-offs and sell-offs.

Chart P40 NPL ratios for retail loans (percentages)



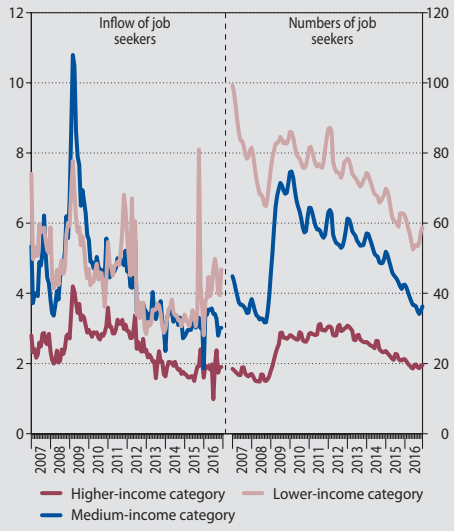
Source: NBS.

Chart P41 The consumer confidence index and its components



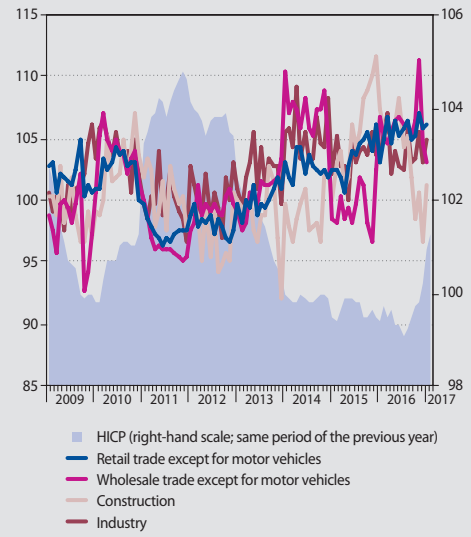
Source: SO SR.

Chart P42 Number of unemployed by income category



Source: Central Office of Labour, Social Affairs and Family of the Slovak Republic.
Notes: The left-hand and right-hand scales show numbers of job seekers in thousands.
The income categories are defined in the section 'Glossary and abbreviations'.

Chart P43 Real wages in selected sectors – index



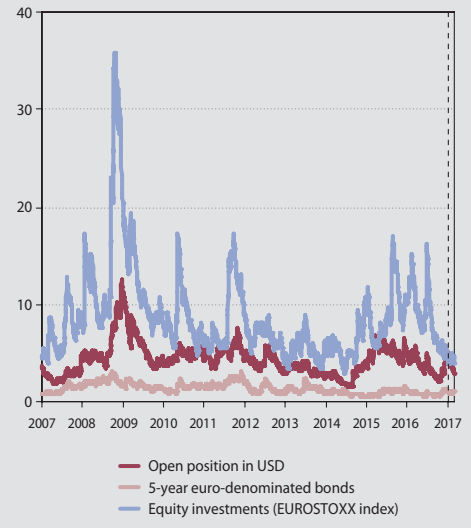
Source: SO SR.

Chart P44 Housing affordability index (31 March 2004 = 100)

Sources: NBS and SO SR.
Note: The housing affordability index is defined in the section 'Glossary and abbreviations'.

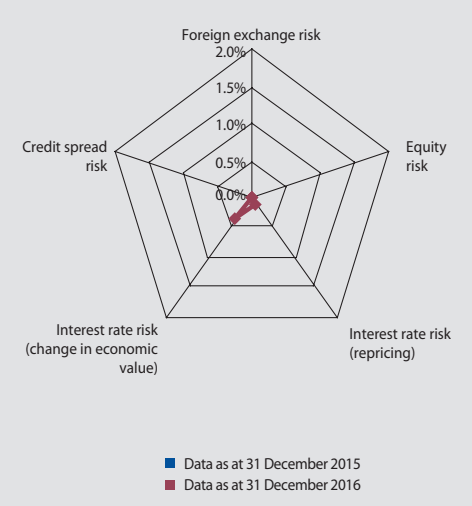
MARKET RISK AND LIQUIDITY RISK INDICATORS

Chart P45 Value at Risk for investments in different types of financial instruments (percentages)



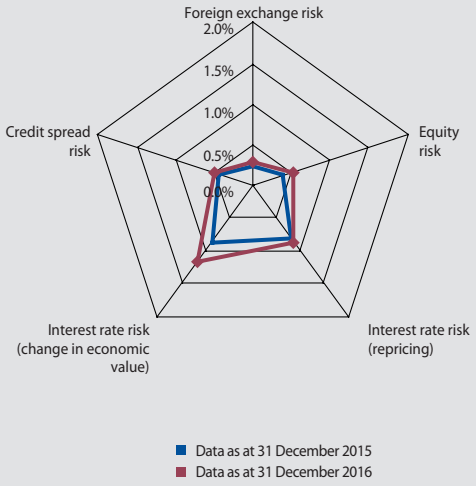
Sources: Bloomberg and NBS.
Notes: The data represent the highest loss (as a percentage of the given investment) that would be expected over a period of 10 days at a confidence level of 99%. This loss was determined on the basis of a risk factor volatility calculation, using exponentially weighted moving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

Chart P46 The sensitivity of the banking sector to different risk types



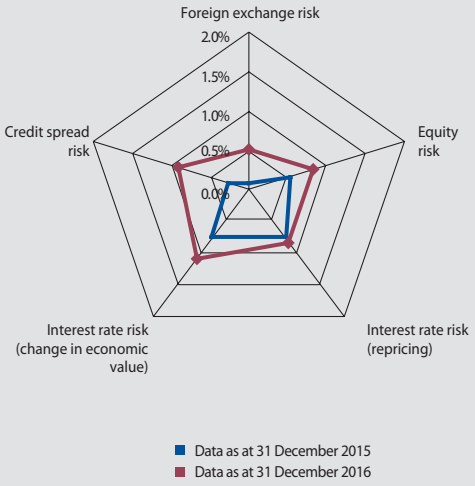
Sources: Bloomberg and NBS.
Notes: The data represent the loss (as a percentage of assets) under each scenario of the sensitivity analysis. The sensitivity analysis is described in more detail in the section 'Glossary and abbreviations'.

Chart P47 The sensitivity of PFMC-managed pension funds to different risk types



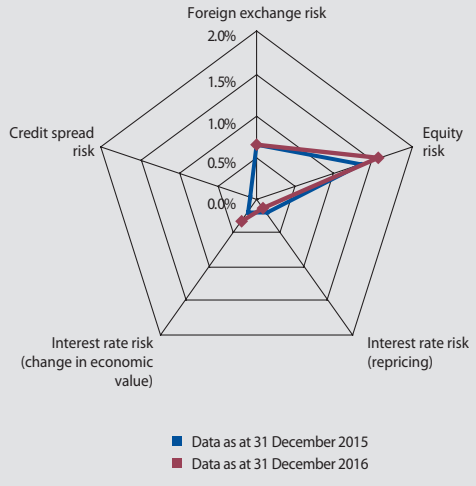
Sources: Bloomberg and NBS.
Notes: The data represent the loss (as a percentage of NAV) under each scenario of the sensitivity analysis. The sensitivity analysis is described in more detail in the section 'Glossary and abbreviations'.

Chart P48 The sensitivity of SPMC-managed supplementary pension funds to different risk types



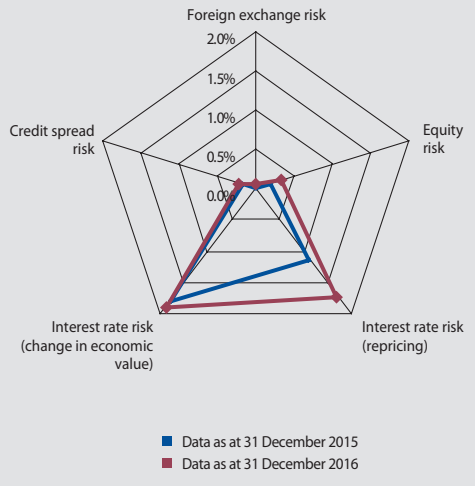
Sources: Bloomberg and NBS.
Notes: The data represent the loss (as a percentage of NAV) under each scenario of the sensitivity analysis. The sensitivity analysis is described in more detail in the section 'Glossary and abbreviations'.

Chart P49 The sensitivity of collective investment funds to different risk types



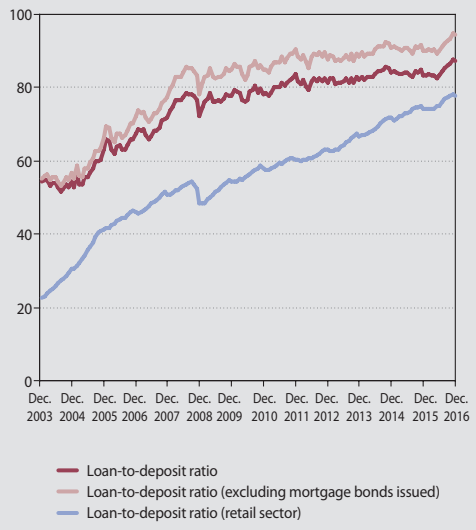
Sources: Bloomberg and NBS.
Notes: The data represent the loss (as a percentage of NAV) under each scenario of the sensitivity analysis. The sensitivity analysis is described in more detail in the section 'Glossary and abbreviations'.

Chart P50 The sensitivity of insurers' assets to different risk types



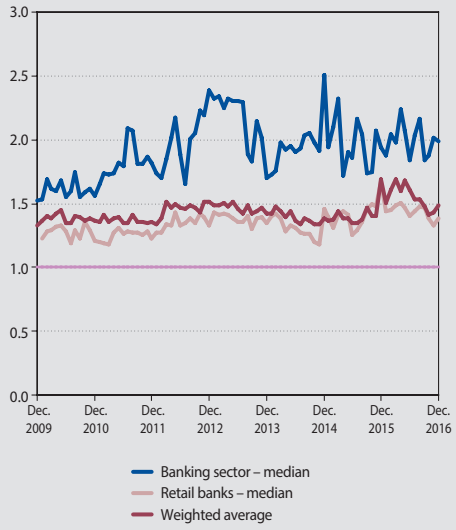
Sources: Bloomberg and NBS.
Notes: The data represent the percentage decline in the value of assets under each scenario of the sensitivity analysis. The sensitivity analysis is described in more detail in the section 'Glossary and abbreviations'.

Chart P51 Loan-to-deposit ratio (percentages)



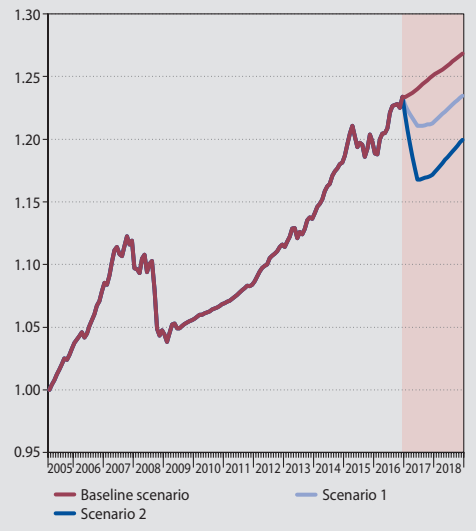
Source: NBS.

Chart P52 Liquid asset ratio



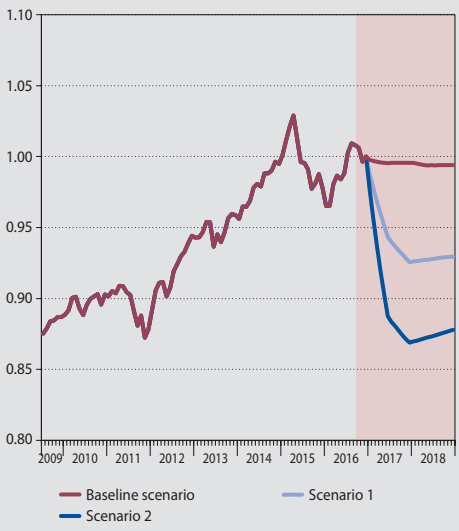
Source: NBS.

Chart P53 Impact of stress test scenarios on PFMC-managed pension funds



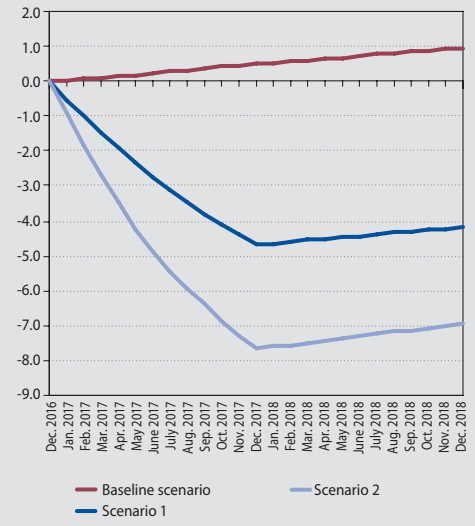
Sources: NBS, ECB, Bloomberg and internet.
Note: The left-hand scale shows the average of the index of the current pension-point value weighted by the net asset value of individual funds.

Chart P54 Impact of stress test scenarios on SPMC-managed distribution pension funds



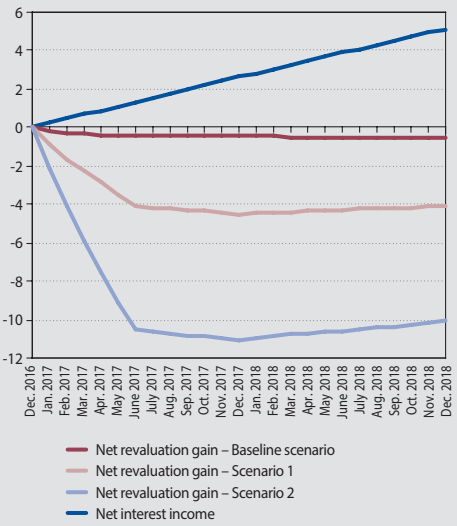
Sources: NBS, ECB, Bloomberg and internet.
Note: The left-hand scale shows the average of the index of the current pension-point value weighted by the NAV of individual funds.

Chart P55 Impact of stress test scenarios on investment funds (percentages)



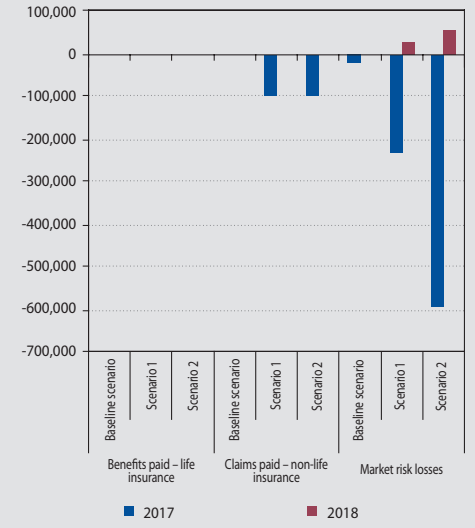
Sources: NBS, ECB, Bloomberg and internet.
Note: The left-hand scale shows the estimated profit or loss as a share of the net asset value weighted by the NAV of individual funds.

Chart P56 Impact of stress test scenarios on insurers' assets



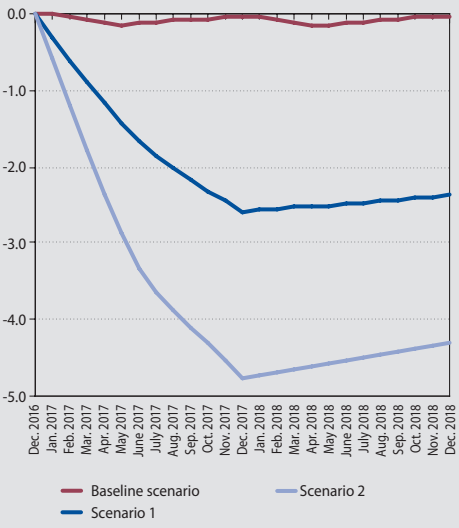
Sources: NBS, ECB, Bloomberg and internet.
Notes: The left-hand scale shows the estimated profit or loss as a share of assets (except for assets covering technical provisions in unit-linked insurance) weighted by assets of individual insurers. The impact of the stress test scenarios on the value of liabilities was not taken into account.

Chart P57Additional expenses incurred by the insurance sector under the stress test scenarios (EUR millions)



Source: NBS.

Chart P58 Impact of stress test scenarios on unit-linked insurance assets (percentages)



Source: NBS, ECB, Bloomberg and internet.
Note: The left-hand scale shows the estimated profit or loss as a share of NAV weighted by the net value of assets covering unit-linked insurance in individual insurers.

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GLOSSARY AND ABREVIATIONS

Glossary

capital ratio – ratio of own funds to 12.5 times the minimum capital adequacy ratio requirement.

combined ratio – the value of claims and expenses relative to premiums earned.

default rate – the percentage of loans defaulting over the period under review.

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

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

interest rate spreads – the difference between lending rates/deposit rates and the respective interbank rates.

leverage ratio – the ratio of Tier 1 capital to the total value of all on-balance sheet and off-balance sheet exposures (not risk weighted).

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

liquidity gap – the difference between assets and liabilities at a given maturity.

loan-to-deposit ratio – the ratio of customer loans to the sum of retail deposits, deposits of non-financial corporations, deposits of financial corporations, and issued mortgage bonds. It indicates the extent to which loans are financed with stable funds from customers. The lower the value, the greater the extent to which loans are financed with customer deposits, and therefore the lesser the extent to which they are financed through the more volatile financial markets.

loan-to-value ratio – the loan value divided by the value of the loan collateral.

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

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

net interest rate spread – the difference between the rate of return on loans (the ratio of interest income to the total amount of loans) and the cost of deposits (the ratio of interest expenses on deposits to the total amount of deposits).

non-performing loans – loans with impairment of more than 50% of their value or with the borrower's payment past due by more than 90 days.

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

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

provisions for unit-linked insurance policies – technical provisions created for life insurance business associated with investment funds in the A4 insurance line.

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

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

Abbreviations

AFS	available for sale (portfolio)
APRC	annual percentage rate of charge
b.p.	basis point
CASCO	comprehensive motor vehicle insurance
CRE	commercial real estate
CDS	credit default swap
EME	emerging market economy
ESI	Economic Sentiment Indicator (European Commission)
ETF	exchange-traded fund
EIOPA	European Insurance and Occupational Pensions Authority
EURIBOR	euro interbank offered rate
GDP	gross domestic product
HTM	held to maturity (portfolio)
IF	investment fund
KZAM	Klasifikácia zamestnaní / Employment Classification
LAR	loans at risk
LTV	loan-to-value (ratio)
MPD	Macroprudential Policy Department
MTPL	motor third party liability (insurance)
NAV	net asset value
NFC	non-financial corporation
NPL	non-performing loan
OECD	Organisation for Economic Co-operation and Development
PFMC	pension fund management company
p.p.	percentage point
RBLG	Register of Bank Loans and Guarantees
ROE	return on equity
RWA	risk-weighted assets
SIB	Slovak Insurers' Bureau / Slovenská kancelária poisťovateľov
SASS	Slovenská asociácia správcovských spoločností / Slovak Association of Asset Management Companies
SPMC	supplementary pension management company
SO SR	Statistical Office of the Slovak Republic
Tier 1/2/3	categories of capital used in the calculation of capital ratios
ULI	unit-linked (life) insurance
ÚPSVa R	Ústredie práce, sociálnych vecí a rodiny / Office of Labour, Social Affairs and Family
VaR	value at risk

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