



NÁRODNÁ BANKA SLOVENSKA  
EUROSYSTEM

A large, semi-transparent background image showing a 2015 100 Euro coin on the left and a bridge structure on the right.

# ANALYSIS OF THE SLOVAK FINANCIAL SECTOR 2014

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# FOREWORD



## FOREWORD

Národná banka Slovenska produces the Analysis of the Slovak Financial Sector (ASFS) for 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 Macprudential 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 poten-

tial 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.

The last section 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 2014, although in several parts it refers to more recent data, where available. Activities related to the supervision of individual institutions are not covered.



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# ANALYSIS SUMMARY



## ANALYSIS SUMMARY

### **EURO AREA ECONOMIC GROWTH PICKED UP MODERATELY IN 2014, ALTHOUGH RISKS TO FINANCIAL STABILITY REMAIN PRESENT**

Economic growth was based mainly on household final consumption, which in turn was boosted by improvements in the labour market situation (especially in the first half of the year). There was an adverse disinflationary trend and this became more marked later in the year as oil prices plunged. In addition, inflation expectations were declining from the autumn. In March 2015 the ECB responded to this situation by launching a substantial public sector asset purchase programme. This quantitative easing caused the euro to depreciate against the dollar, with a positive impact on euro area exports.

Although the euro area GDP growth is good news for financial stability, several risks remain present. The recovery is still not robust enough, and it is not clear to what extent the growth is contributing to the consolidation of public finances in several indebted euro area countries. The extensive monetary stimulus was at the same time a significant factor behind the search for yield that increased volatility in financial markets. Another downside risk to financial stability is a re-escalation of the debt crisis caused by events in Greece and by geopolitical tensions in Ukraine.

Growth in the Slovak economy was both higher and more balanced than that in the euro area as a whole. As in most European countries, GDP growth in Slovakia was driven mainly by household final consumption. The labour market upturn stemming from this higher growth is a clear benefit to financial stability. Nevertheless, the Slovak economy remains to a large extent dependent on developments in the euro area.

### **GROWTH IN LENDING TO HOUSEHOLDS REMAINED THE DOMINANT TREND IN THE SLOVAK BANKING SECTOR**

Annual growth in retail loans increased in December 2014 to its highest level since the outbreak of the financial crisis, in both percentage and absolute terms. Significant growth was observed in consumer loans with a maturity of more than five years. The year-on-year growth

for consumer loans in total was 20%, the highest figure in the euro area for a third successive year. The outstanding amount of housing loans rose by 13.5%, which was the second highest rate not only in the euro area, but in the European Union (after Belgium). This increase was largely attributable to mortgage loans, and in particular those loans subject to an interest-rate subsidy, which carried virtually a zero rate of interest. With average interest rates on new housing loans falling to an all-time low, there were greater incentives to refinance. Most cases of refinancing involved an increase in the principal. The unprecedented growth in household debt did not yet have an impact on property prices. The outstanding amount of non-performing household loans rose at an increasing pace during 2014. Thanks mainly, however, to the robust growth in new lending, the overall quality of the household loan portfolio remained stable. Positive developments from the view of risk included the lengthening of interest-rate fixation periods and a moderate decline in average loan-to-value (LTV) ratios. In response to the accumulation of risks in the retail lending market, Národná banka Slovenska issued Recommendation No 1/2014 on 7 October 2014.

### **LENDING TO NON-FINANCIAL CORPORATIONS INCREASED MODERATELY DUE TO GROWING DEMAND**

Demand for corporate loans increased moderately over the course of 2014. At the same time, it was not until late in the year that credit standards were eased, only slightly, for the first time since 2010. The average annual growth rate of corporate loans was thus positive in 2014, which represented a notable improvement after their substantial decline in 2013. Nevertheless, performance across sectors was still heterogeneous, and export performance remained at its 2012 level. The amount of non-performing corporate loans was volatile during the year with no significant trends developing.

The share of domestic government bonds in the overall investment portfolio of the banking sector maintained a downward trend, falling to almost 16% by the year-end. On the other hand, banks' investments in debt securities issued by banks and firms increased moderately.



## ANALYSIS SUMMARY

### **MARKET RISKS IN THE BANKING SECTOR STAYED LOW, WHILE LIQUIDITY DETERIORATED SLIGHTLY AND CONCENTRATION RISK REMAINED SIGNIFICANT**

The only increase in market risks was in banks' sensitivity to a possible increase in interest rates. The liquidity position of the banking sector deteriorated slightly during 2014, owing mainly to the strong growth in loans to households and partly also to the decrease in investment in government bonds.

Concentration risks remains a key feature of the Slovak banking sector, with banks reporting high exposure to certain customers or to their own financial groups. The share of banks' total investments invested in domestic government bonds fell during the year.

### **THE PROFITABILITY OF THE BANKING SECTOR REMAINED FLAT IN 2014**

Although ongoing growth in retail lending contributed significantly to banks' profits, its impact was cancelled out mainly by falling rates of return on loans and increases in credit risk costs, operating expenses, and levies. The total profit of the banking sector remained almost unchanged year-on-year. Banks' capital ratios remained elevated, which was important in terms of the sector's stability. The average overall capital ratio was 17.3%, while the average common equity Tier 1 ratio remained at 16%.

### **NON-LIFE INSURANCE OUTPERFORMED LIFE INSURANCE, AND INSURERS PROFITS INCREASED YEAR-ON-YEAR**

The aggregate profit of insurance companies increased, year-on-year, to 13.3%, thanks largely to the technical result in non-life insurance. Premiums in life insurance fell slightly, owing to decreases in new business and premium prices, as well as to surrenders. In non-life insurance, the situation in motor insurance continued to be difficult. The insurance sector continued to be exposed to the environment of falling interest rates, while other market risks remained insignificant.

### **THE SECOND PILLAR OF THE PENSION SYSTEM HAD A STABLE 2014, THE LAST YEAR IN WHICH ITS ACCUMULATION STAGE EXISTED WITHOUT ANY DISTRIBUTION**

The increase in the total number of savers was attributable entirely to the increase in savers in pension funds focused on higher-risk in-

vestments (in equity and index funds). In the sector as a whole, the pace of asset accumulation accelerated. The broadest trend concerning the composition of pension fund assets was a moderate decline in bank deposits. Equity and mixed pension funds saw a further increase in their equity market exposures, and consequently also in the proportion of assets denominated in foreign currency (especially US dollars). After rising sharply in 2013, the duration of bonds remained at a constant level in 2014. The average nominal return of second-pillar pension funds was among the highest in the history of the old-age pension scheme and the real return showed an even stronger performance. The aggregate profit of pension funds management companies tripled year-on-year, owing mainly to higher income from pension fund performance fees.

### **IN THE THIRD PENSION PILLAR, THE GROWTH RATE IN BOTH THE NUMBER OF PARTICIPANTS AND AMOUNT OF ASSETS UNDER MANAGEMENT WAS HIGHER IN 2014 THAN IN THE PREVIOUS YEAR**

The aggregate composition of assets in third-pillar funds did not alter significantly. At the sectoral level, the duration of the bond portfolio increased slightly, but across individual funds it was heterogeneous. As in second-pillar funds, so too in third-pillar funds, foreign currency assets took up an increasing share of total assets in 2014, and in several funds their share increased to a significant level. The average annual return of third-pillar funds more than doubled in 2014, from the rate in the previous year, to 3.6%. The total profits of supplementary pension fund management companies fell by around one-third owing to reductions in pension fund management fees.

### **IN THE COLLECTIVE INVESTMENT SECTOR, THE UPWARD TREND IN ASSETS UNDER MANAGEMENT CONTINUED FOR A THIRD SUCCESSIVE YEAR**

The majority of the growth in assets under management was accounted for by domestic investment funds. Mixed funds recorded the largest net inflows, closely followed by bond funds. The percentage increase in the net asset value (NAV) of alternative investment funds was the highest in the sector. Real estate funds experienced moderate net redemptions in 2014 after a lengthy period of net sales. As in the previous period, most of the inflows into investment funds came from the household sector. In all fund categories





## ANALYSIS SUMMARY

apart from equity funds, returns were higher in 2014 than in 2013. With an increasing amount of assets under management, the aggregate profits of asset management companies soared by 145%.

**ALTHOUGH THE RESILIENCE OF THE FINANCIAL SECTOR AS A WHOLE IS QUITE HIGH, A NUMBER OF INSTITUTIONS OR FUNDS WOULD BE LOSS-MAKING UNDER STRESS SCENARIOS**

The macro stress testing conducted for this ASFS included two stress scenarios, which tested the performance of financial institutions and funds under adverse developments in the economy and financial markets. In the banking sector, under both scenarios, all banks would maintain a capital ratio above the regulatory minimum, although several of them would not

meet the additional capital conservation buffer requirement. As for the insurance sector under the stress scenarios, in conjunction with adverse developments in insurance risk, it would register relatively substantial losses, although adequate solvency would be maintained. In the sector of second-pillar pension funds and in collective investment sector, the average impact would be relatively subdued given the continuing prevalence of more conservative investment strategies. For several funds with a higher risk profile, however, there would be relatively high losses. The greatest impact of the stress scenarios would be on third-pillar funds, since their exposures to interest-rate, equity, and foreign-exchange risk increased slightly during 2014.



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CHAPTER 1

# MACROECONOMIC DEVELOPMENTS IN REGARD TO FINANCIAL SECTOR STABILITY



# 1 MACROECONOMIC DEVELOPMENTS IN REGARD TO FINANCIAL SECTOR STABILITY

## THE EURO AREA'S MUTED ECONOMIC GROWTH WAS ACCOMPANIED BY A DISINFLATIONARY TREND

After two years of negative performance, the euro area economy returned to growth in 2014. The upturn, however, progressed slowly and its impact on risks to financial stability, although positive, was relatively limited so far.

Annual GDP growth in 2014 did not exceed one per cent, which was lower than had been expected. For its growth during the year, the euro area economy was reliant on a single pillar – household final consumption. Investment demand and net exports remained virtually unchanged.

Despite its sluggish growth, the economy managed to generate new jobs and to increase employment, more so than during the recovery from the first wave of recession in 2009. As a corollary of this development, the unemployment rate continued to fall in the first half of 2014. This positive trend came to a halt in the second half of the year, and therefore the unemployment rate was still high by the end of December, at 11.4%.

A disinflationary trend was prevalent in the euro area throughout 2014, and it became substantially stronger in the later months as oil prices slumped. In December the annual rate of change in consumer prices turned negative, and in January 2015 prices fell even more sharply, by 0.6%. Although most of the decline in prices was accounted for by the energy component of the consumer basket, core inflation, too, continued to slow moderately and in January 2015 it stood at 0.6%. The situation was further complicated by the fact that from the autumn there was a decline in inflation expectations.

## SEVERAL FACTORS THAT COULD STIMULATE THE EURO AREA ECONOMY HAVE RECENTLY EMERGED

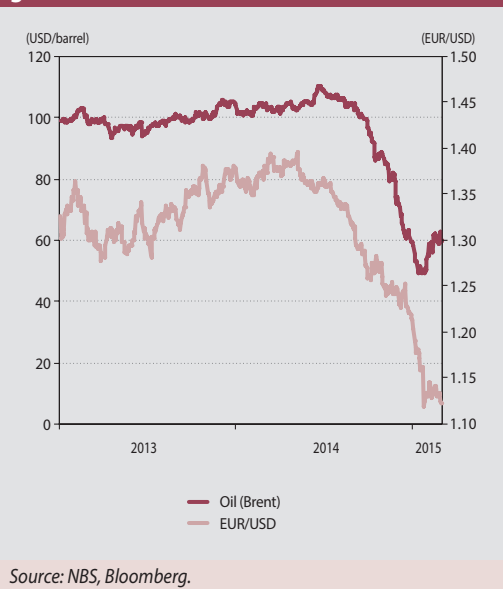
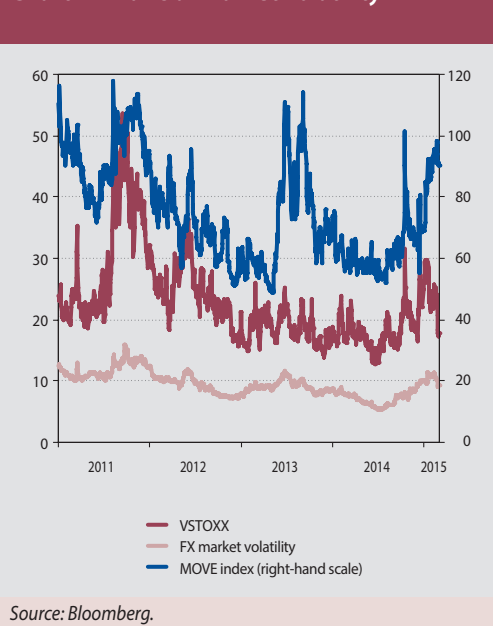
In response to the steady deterioration in the inflation outlook for the euro area, the ECB decided at the beginning of 2015 that it would begin

purchasing significant amounts of government bonds from the beginning of March, in other words to embark on quantitative easing. Although this step had been widely anticipated for some time, the magnitude of the programme – €1.1 billion in securities purchases by September 2016 – exceeded most projections. Hence the reaction from financial markets has so far been positive. In this context there was also an upward shift in market-based measures of inflation expectations.

Monetary stimulus is not the only factor that is expected to boost the euro area economy in the period ahead. Given the position of the euro area as a net importer of energy commodities, the sharp drop in oil prices in the second half of 2014 had a gradually increasing positive impact on economic growth. Through the consequent stimulus to domestic consumer demand, this impact is expected to continue in 2015. On the other hand, this scenario is highly contingent on the fact that the decline in prices induced by cheaper oil will be considered a temporary situation and will not have a secondary impact on wages. At the same time, however, it is difficult to estimate for how long the oil-price stimulus will continue to be a factor. If the stimulus continues only for the short term, the question is what, in its absence, will provide a significant impetus to growth in the euro area economy.

Depreciation of the euro exchange rate against the US dollar and other currencies could again benefit external demand, i.e. the export performance of the euro area, and help to revive the economy. From May 2014 the euro depreciated by around 20% against the dollar, owing to divergent expectations for the direction of monetary policy in the euro area and the United States.

It remains to be seen to what extent it is due to the above-mentioned factors; nevertheless the fact is that the recent period saw the emergence of several positive signs in the euro area

**Chart 1 Oil prices and the EUR/USD exchange rate**

**Chart 2 Financial market volatility**


economy. During summer and autumn 2014 fears were growing of a further slide back into recession, but towards the year-end and early in 2015 sentiment was somewhat brighter. This observation is based not only on rising GDP growth in quarter-on-quarter terms, but also on improvements in several forward-looking indicators. The easing of credit standards by banks and rising demand for loans is also a good sign for a stronger recovery. Furthermore, the ECB's comprehensive assessment of banks helped to strengthen the banking sector's capital position, increase its transparency, and mitigate the pressure to deleverage balance sheets.

**WHILE OUTLOOKS FOR THE EURO AREA ECONOMY IMPROVED SLIGHTLY IN THE RECENT PERIOD, SIGNIFICANT RISKS TO FINANCIAL STABILITY REMAIN PRESENT**

The recent flurry of brighter news about macroeconomic conditions cannot be taken as evidence that the euro area crisis is definitely over. Taking into account their past empirical relationships, most indicators, even after increasing, point only to slow forward momentum in the economy. The risk of secular stagnation – entailing low real GDP growth, low inflation or even deflation, and weak productivity growth – is still present. Such a scenario would make it more difficult for highly indebted countries to keep public finances on

a sustainable course. In certain other countries, too, it would hinder the necessary repair of private sector balance sheets.

A second significant risk to financial stability in the euro area is search for yield. In the first half of 2014 in particular, in both European and global financial markets, it was typical to see high demand for riskier assets stemming primarily from expansive monetary policy and an environment of low interest rates. This trend moderated in the second half of the year, when there were several episodes of heightened volatility. These were triggered by, among other things, the problems in the Russian economy and substantial weakening of the rouble. From the beginning of 2015, however, risk appetite in markets began to grow again, after the ECB decided to embark on quantitative easing in the euro area. Following suit, the central banks of certain other European countries also loosened their own monetary policy. The previous year had seen monetary policy easing in Japan and many other emerging countries. Equity indices in Europe climbed sharply and a substantial proportion of bond assets also reached new highs. The amount of bond instruments trading at a negative yield to maturity increased by a record margin. Lower-quality bonds were also strongly in demand and their risk premia

fell close to historical lows. However, the low returns to risk-taking for investors – stemming as they do from accommodative monetary policies rather than economic performance – are not sustainable over the longer-term horizon. The current situation in financial markets is therefore susceptible to significant adjustments. A wave of turbulence could be triggered by adverse economic news in Europe, as well as in other economically significant regions of the world, or by an escalation of geopolitical tensions. Another shock could be any mismatch between the expected and actual trajectory of interest rate increases in the United States.

From autumn 2014, after a lengthy period of relative calm, Greece once again became a centre of attention, its situation threatening a return to the depths of the euro area sovereign debt crisis. Changing political relations in the country cast a spotlight on the issue of government debt write-down and led to renewed speculation about a Greek exit from the euro area. Credit risk premia on Greek government bonds increased significantly, and so there were minimal prospects for market refinancing of Greek sovereign debt. At the same time, Greek banks were haemorrhaging customer deposits. On the positive side, this increase in risk aver-

sion did not spread to any of the other euro area countries hit hardest by the debt crisis in the past. An agreement to extend the ECB's bailout programme for Greece until June 2015 secured a temporary respite; nevertheless, negotiations on a similar new programme will be fraught and may test the resilience of financial markets, with respect not only to Greece but also in the broader context.

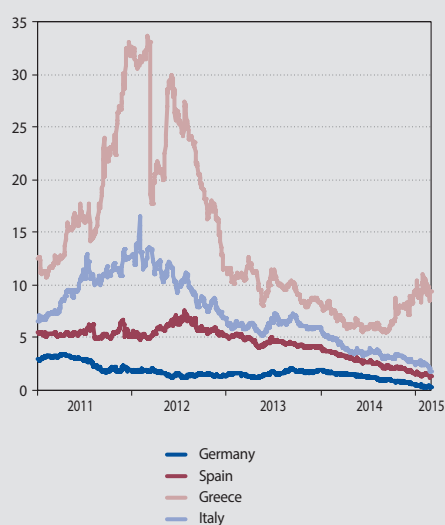
On 15 January the Swiss central bank abandoned its policy of capping the Swiss currency at 1.20 francs per euro. With the end of the intervention, the Swiss franc soared by 18% against the euro, before its appreciation later eased to around 10%. The unexpectedness of this move sparked major turbulence, and not just in foreign exchange markets. The situation settled down quite soon, however, without the disruption to financial stability. Assuming, though, that the EUR/CHF exchange rate remains at its new level for a longer period, the banking sectors of several countries may gradually experience this shock through the credit quality of loan portfolios. This applies to banks in those countries which in the past saw a spate of lending in Swiss francs, such as Hungary, Poland and Austria.

#### THE SLOVAK ECONOMY ENJOYED STABLE AND RELATIVELY STRONG GROWTH IN 2014, BUT MAINTAINING THIS POSITIVE COURSE IS CONTINGENT ON STABILITY IN THE EURO AREA

Slovakia's annual economic growth increased to 2.4% in 2014, from 1.4% in the previous year. The economy maintained steady momentum during the year, as is evident from the constant rates of quarter-on-quarter GDP growth. Therefore the temporary stalling of the euro area's recovery in the second and third quarters did not have an immediate adverse impact on the domestic economy.

For the first time since the financial crisis, the main driver of Slovakia's GDP growth was household final consumption, following a marked increase in households' real disposable income. The purchasing power of households was boosted both by accelerating nominal wage growth and, significantly, by the lack of change, on average, in consumer prices. Another factor was the increase in consumer confidence.

Chart 3 Yields to maturity of 10-year government bonds (%)



Source: Bloomberg.



Although total exports for 2014 as a whole increased in comparison with the previous year, their quarter-on-quarter trend after the first three months was downward. By contrast, investment demand picked up, owing significantly to investment in publicly-funded infrastructure projects. The increase in fixed capital formation was probably related to a turn in the corporate credit cycle.

Economic growth during the period under review was sufficient to have a positive impact on labour market indicators. Employment increased by 1.1% year-on-year, which translated into the net creation of 25,000 jobs. Employment growth was spread across a wide range of sectors, but not construction. This development was reflected in the average unemployment rate, which fell from 14.2% to 13.3%.

Economic growth is expected to accelerate further in 2015, according to NBS's Medi-

m-Term Forecast, to reach close to three per cent. This increase should be supported by the supply-side drop in oil prices and consequent upward impact on households' real disposable income. It is positive news for Slovakia that its largest trading partner, Germany, recorded higher than expected economic growth in the fourth quarter of 2014. Looking at sentiment indicators in Germany, it appears that the country could again become the engine of euro area growth.

As for expectations of increased growth in the Slovak economy, their realisation is contingent on the situation in the euro area, irrespective of the relative decline in external demand as a factor of growth. If some of the above-mentioned risks to the outlook for the euro area were to materialise, Slovakia would very likely be affected, also indirectly through business sentiment and consumer confidence.



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CHAPTER 2

# INTEGRATED OVERVIEW OF THE FINANCIAL SECTOR

## 2 INTEGRATED OVERVIEW OF THE FINANCIAL SECTOR

### ASSET GROWTH INCREASED IN MOST FINANCIAL MARKET SEGMENTS

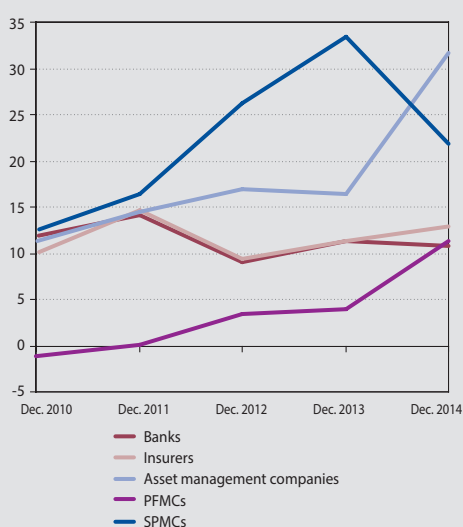
In terms of asset growth, 2014 was the best year since the beginning of the financial and economic crisis. The increase was strongest in the first half of the year, when, for the first time ever, all segments of the financial market achieved positive annual growth in assets or assets under management. The favourable trends are largely related to developments in the household sector. The rapid increase in household debt, particularly in the form of housing loans, expanded banks' assets. In addition, lending to non-financial corporations increased in 2014, by its largest margin since 2012. Meanwhile, households' accumulation of financial assets boosted growth in assets managed by collective investment undertakings, in life insurance technical provisions, and in bank deposits. Households also increased their financial assets in both the second and third pillars of the pension scheme.

### THE POSITIVE ASSET TRENDS TRANSLATED INTO PROFITS

In all financial market segments, activity growth had a positive impact also on the profits of finan-

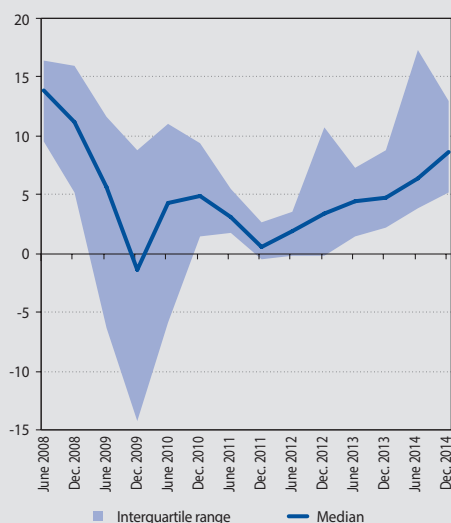
cial institutions. In the context of developments in recent years, average return on equity (ROE) remained at a healthy level.

Chart 5 Return on equity (%)



Source: NBS.

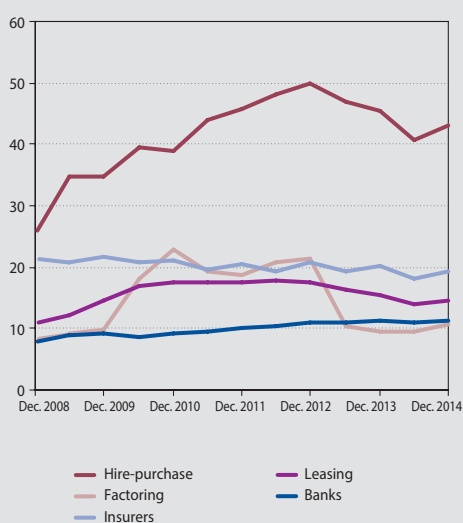
Chart 4 Assets and managed assets in the Slovak financial sector (annual percentage changes)



Source: NBS.

Note: The chart includes assets of, and assets managed by, banks, insurers, collective investment funds, PFMcs, SPMcs, investment firms, and leasing, factoring and hire-purchase companies.

Chart 6 Equity-to-asset ratio in selected financial market segments (%)



Source: NBS.



**Chart 7 NPL ratios and default rates**


Source: NBS.

Note: The percentages at the top of each column denote the amount of loans that became non-performing in the given year as a share of the average outstanding amount of loans in that year.

## HETEROGENEOUS TRENDS IN HOUSEHOLD AND CORPORATE CREDIT RISK

As household debt increased, so too did the amount of non-performing loans (NPLs) in the retail portfolio. Nevertheless, NPL ratios in banks' portfolios remained unchanged. The prospect of an improvement in default ratios is gradually opening up, thanks to positive trends in the domestic economy (including GDP growth and falling unemployment). Interest rate developments remain a key factor in determining the ability of borrowers to repay their loans.

The opposite situation was observed in corporate credit risk. While the amount of loans that became non-performing fell during the year, the overall NPL ratio was higher at the year end. The main cause of that increase was a one-off decline in loans in December 2014.

## EXPOSURE TO MARKET RISKS REMAINED LARGELY UNCHANGED IN 2014, SOME MODERATE CHANGES OCCURRED MAINLY IN INTEREST RATE RISK

The exposures of different financial market segments to market risks were substantially the same at the end of 2014 as at the end of 2013. There were, however, some less significant trends, and these are summarised in Table 1.

**Table 1 Changes in the share of equity, foreign-exchange and interest-rate positions in different segments of the financial market**

	Equities and investment fund shares/units			Foreign-exchange positions			Share of debt securities			Duration of debt securities			Duration of entire portfolio			Residual maturity of debt securities		
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
Banks	0.3	0.4	0.3	0.1	0.2	0.4	23.4	22.3	20.6	3.2	3.6	3.9	1.0	1.1	1.2	4.0	4.5	5.0
Insurers	1.4	2.8	3.4	0.8	0.7	0.4	72.7	74.7	79.7	6.8	6.5	6.8	6.1	5.8	6.1	8.6	8.5	8.6
PFMC funds	6.0	10.3	11.6	2.4	3.1	4.9	68.7	67.4	71.6	1.9	3.4	3.4	1.4	2.2	2.1	2.5	4.4	4.5
SPMC funds	19.2	20	22.6	13.1	8.7	11.6	64.8	66.9	59.6	3.4	3.3	3.5	2.1	2.1	1.7	4.0	4.4	4.8
Collective investment	20.6	23.6	28.9	12.2	15.3	12.8	31.6	25.9	25.4	1.8	2.1	1.8	0.8	0.7	0.5	2.4	2.8	2.7
Unit-linked insurance <sup>1)</sup>	77	74.3	75.8	13.2	11.8	12.2	21.7	21.4	22.9	4.6	4.3	3.4	0.9	0.8	0.6	5.0	4.9	4.2

Source: NBS, Bloomberg.

Note: Values are given as a percentage share of total assets (or NAV) and represent the asset-weighted average for the given group of institutions. Foreign exchange positions are given as a percentage share of assets (or NAV); they were calculated as the sum of the absolute values of the positions for each institution.

Equity positions are given as a percentage share of assets (or NAV); they do not include participating interests in subsidiaries and affiliates.

Durations and residual maturities are given in years.

1) Assets invested by insurers under unit-linked insurance policies.



Several changes concerned mainly interest-rate risk exposure. This can be expressed by duration, since the higher the duration, the more negative the impact of an increase in interest rates. In the banking sector the duration of the whole portfolio has been steadily rising for a long time, hence the gradual increase in the duration of both the securities portfolio and the retail loan portfolio. In the aggregate assets of insurance companies, the share of debt securities increased during 2014 across different categories – government bonds, corporate bonds and mortgage bonds – and consequently the duration of these portfolios rose slightly. In the third pillar of the pension system, the opposite effect was seen in the portfolios of supplementary pension funds (managed by SPMCs), with their duration decreasing as the share of debt securities fell. A decline in duration was also recorded by collective investment funds and by assets covering unit-linked insurance policies, resulting from a fall in the average duration of the bond portfolio.

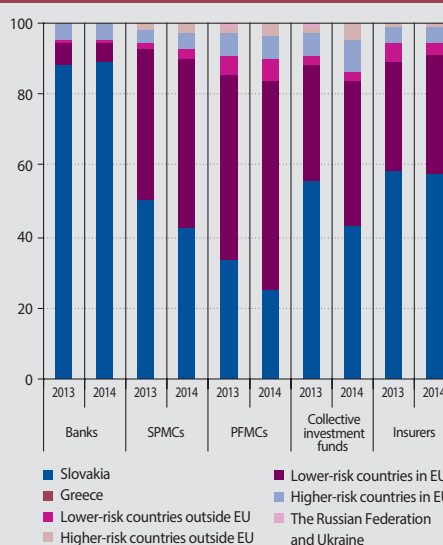
The movements in duration and the heterogeneous approach of different financial market sectors may to some extent be seen as the result of differing strategy: funds adjusting all assets to fair value (particular SPMC funds, investment funds, and unit-linked funds) are attempting, with the reduction in duration, to minimise the negative impact of any hike in interest rates from the current very low levels, since for these types of funds such a development would rapidly cause a marked drop in the value of their assets. Another reason may be that the steepness of the interest rate curve fell by more than 1 percentage point during 2014 (expressing the spread between the ten-year and three-month rate). But for banks and insurers, which have longer-term investment strategies and hold a large part of their bond purchases to maturity, longer-duration bonds offer a higher-yielding investment in an environment of generally low returns.

As for equity risk and foreign-exchange risk, SPMC funds reported a slight increase during the year, on aggregate, in exposure to both. In the collective investment sector, too, exposure to equity risk rose. Looking at PFMC funds, their overall exposure to foreign exchange risk continued to increase moderately, but remains relatively low.

#### EXPOSURE TO COUNTRIES WITH HIGHER RISK REMAINS LOW

As Chart 8 shows, the composition of the bond portfolio, which in all segments of the financial market constitutes a significant part of the overall portfolio, remains conservative with respect to counterparty risk and specifically to the geographical breakdown of counterparties. As for exposure to countries which in the light of recent developments are perceived as relatively more risky (Greece, Russia, Ukraine), in no segment of the financial market did it exceed 0.5% of the value of the bond portfolio at the end of 2014. Exposure to other countries with higher risk both in the EU and outside the EU is also relatively low, however. At the end of 2014, this exposure was highest among SPMC funds, PFMC funds, and collective investment funds, at around the level of 4% of total assets. Furthermore, it increased in these sectors in 2014 owing mainly to an increase in exposure to Turkey. As Chart 8 also shows, exposure to the domestic economy continues to constitute a significant part of the bond portfolio, although among PFMC funds, SPMC funds and collective investment funds, its share of the portfolio decreased in 2014.

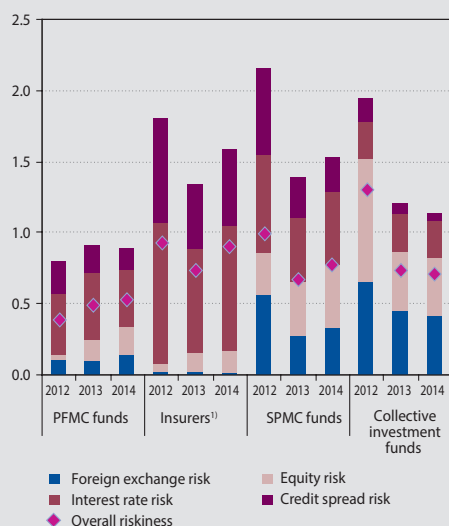
Chart 8 Debt securities portfolio broken down by riskiness of country of issuer (%)



Source: NBS, Bloomberg, internet.

Note: The left-hand scale shows the percentage of debt securities portfolio.

**Chart 9 VaR across financial market segments (%)**



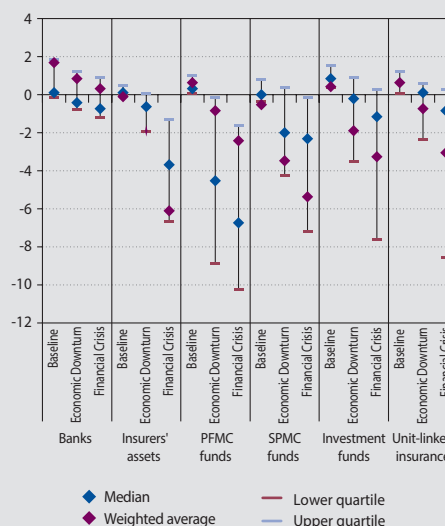
Source: NBS, Bloomberg, internet.

Note: 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 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.

**Chart 10 Distribution of the impact of macroeconomic scenarios on the financial sector (%)**



Source: NBS, RBLG, ECB, Bloomberg.

Note: The chart shows quartiles of the estimated profit/loss-to-asset ratio resulting from the application of the respective scenarios as at 31 December 2015.

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 2014.

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.

Values are given as a percentage share of total assets (or NAV).

### THE OVERALL RISKINESS OF THE FINANCIAL SECTOR, AS MEASURED BY VaR, DID NOT CHANGE SIGNIFICANTLY IN 2014

Chart 9 shows that overall riskiness, after taking into account the level of exposure to different risk types as well as the volatility of different risk factors, did not change significantly in 2014 in comparison with 2013. The Chart supports the analysis given above, which identified a moderate increase in risk among PFMC funds in particular, spread across all three types of market risk. The increase in duration in the insurance sector also had a slight upward impact on interest rate risk and credit spread risk in this sector.

### THE IMPACT OF RISKS UNDER ADVERSE SCENARIOS WAS ASSESSED THROUGH MACRO STRESS TESTING

The impact of adverse developments in financial markets and the real economy on different segments of the Slovak financial sector were again assessed using macro stress testing. The stress scenarios envisaged unfavourable developments

in the real economy and, more substantially under the 'Financial Crisis' scenario, in financial markets. A detailed description of the stress scenarios and the results are provided in Chapter 6.

The assumed adverse developments in financial markets are expected, on average, to have the greatest impact on the assets of insurers, particularly owing to the long duration of their bond portfolio and consequently higher sensitivity to interest rate movements, as well as to their sensitivity to credit spread risk. The impact would also be significant on SPMC funds, on average, since in addition to the impact of increases in interest rates and credit spread, falling equity prices will have an appreciable effect on these funds, too. In the case of collective investment funds and unit-linked insurance, too, the fall in equity prices and negative exchange-rate movements are expected to result in significant average losses, while the impact would also be relatively significant in the case of certain PFMC funds.



NÁRODNÁ BANKA SLOVENSKA  
EUROSYSTEM

## CHAPTER 3

# THE BANKING SECTOR



## 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

###### LENDING TO RETAIL CUSTOMERS CONTINUED GROWING

The annual rate of growth in retail loans continued to accelerate during 2014, up to 12.2% as at end-December, representing the highest figure since the outbreak of the financial crisis. The outstanding amount of these loans increased by €2.4 billion in 2014, which was much more than the figures recorded in previous years. This is, inter alia, an important indicator of the level of household debt. All banks and branches of foreign banks reported an increase in their retail loan portfolio.

Loans with an initial rate fixation period of up to one year and a variable interest rate, expressed as a share of new loans, continued to decrease in 2014, to below 10%, representing about one-fifth of the figure for 2009. This trend contributed

to the lessening of the risk arising from a potential rise in interest rates. Retail lending continued to be dominated by loans with a fixation period of one to five years, which accounted for 67% of the total amount of new loans. This can be attributed mainly to the structure of loans offered by banks and to the applicable interest rates. Approximately 40% of the new loans were provided for the purpose of refinancing loans received from other banks.

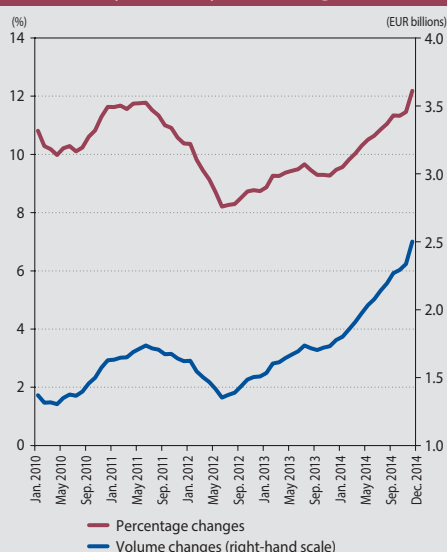
Significant market share changes were only reported by some banks, including large, medium-sized, and small banks. The fluctuation in the market share of new loans from 2013 did not continue in 2014. Approximately 72% of the market was covered by the four largest banks, 21% by small and medium-sized banks, and 7% by branches of foreign banks.

The results of regular questionnaire surveys on credit standards indicate that these standards were broadly tightened in the year under review. Credit standards for housing loans were tightened throughout 2014, to a greater extent than in 2013. The provision of consumer loans was also tightened in the second half of the year, after having been eased somewhat in the first half. Demand had been growing steadily since the middle of 2012 in both loan categories. As for the future, banks expect a further increase in demand and a substantial tightening of credit standards, consistent with the expected response to NBS Recommendation No 1/2014.

###### CONSUMER LOANS INCREASED SIGNIFICANTLY

Consumer loans increased year-on-year by €0.55 billion (20%), representing the steepest increase since the middle of 2009. By comparison, 2013 saw a year-on-year increase of 12%. The accelerated growth in 2014 took place in the category of consumer loans with a maturity of over five years. Consumer loans showed the strongest growth rate within the euro area for the third year in a row. Although such loans had a limited potential to contribute to the emergence of price bubbles in the market, they significantly influenced the level of household debt and the total amount of monthly debt repayments.

Chart 11 Outstanding amount of household loans: year-on-year changes



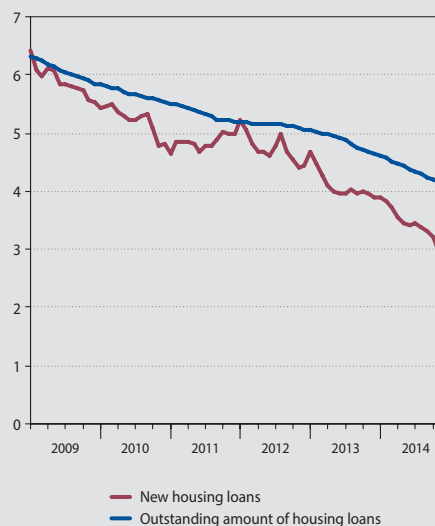
Source: NBS.

**Chart 12 Outstanding amounts of selected types of retail loans (annual percentage changes)**



Source: NBS.

**Chart 13 Interest rates on housing loans (%)**



Source: NBS.

Interest rates on consumer loans, which had long been slightly above 14%, decreased to 12.8% over the course of 2014. Their dynamics were determined almost exclusively by interest rates on loans with a maturity of over five years.

#### HOUSING LOANS SHOWED A GROWING TENDENCY

After growing at a steadily accelerating pace for two and a half years, housing loans ended the year 2014 with a year-on-year increase of €2 billion (13.5%). This increase was caused mainly by mortgage loans, which, after growing at a pace below 3.5% since 2010, increased by more than 11% in 2014. Consequently, the share of mortgage loans in new housing loans, which had previously shown a decreasing trend, stabilised during the year under review. Most of the banks and branches of foreign banks providing mortgage loans contributed to the growth in housing loans.

Three quarters of the outstanding amount of mortgage loans were accounted for by mortgage loans with a state interest subsidy, which carried an average rate of 1% (including the interest subsidy). The interest rate on a substantial part of mortgage loans was approaching zero in 2014.

The average interest rate on new housing loans fell to a new historical low of 2.93% at the end of the year. Thus, the interest rate difference between new loans and the outstanding amount of

loans increased to a historical high, 1.17 percentage points at December 2014. Hence, the incentive for borrowers to refinance their existing loans increased still further. Naturally enough, banks took full advantage of this situation to attract new customers.

In international comparison, Slovakia was still one of the countries with the strongest growth in housing loans in 2014. In the euro area, stronger growth in housing loans was only recorded in Belgium (16.8%), Luxembourg (11%) and Malta (9.5%). In other countries, the rate of growth in housing loans ranged from -7% to 3% year-on-year; the average figure for the euro area was 0.1%.

The rapid growth in housing loans was expected to affect the real estate market. However, real estate prices continued stagnating or declining slightly for approximately the sixth consecutive year.

#### THE AVERAGE LTV RATIO FELL SLIGHTLY

The average loan-to-value (LTV) ratio remained virtually unchanged, at a level close to 73%, but the volume of loans provided with an LTV ratio greater than 85% fluctuated during the year under review. A number of banks deviated from their policies, mainly at the end of the year, which was probably connected with the issuance of NBS Recommendation No 1/2014 in





October. Some of the banks reported a decrease in the share of loans with a high LTV ratio, while other banks recorded an increase in the share of such loans.

#### THE CREDIT QUALITY OF LOANS REMAINED VIRTUALLY UNCHANGED

The proportion of non-performing loans fluctuated over the course of 2014. The range of fluctuations was influenced by actual developments only in some of the banks, where a one-off increase in the volume of non-performing loans was followed by an increase in the volume of loans sold off. Since the total volume of loans also grew throughout the year, the share of non-performing loans increased only in September (to 4.7%), then decreased to 4.3% in December. Loans past due by 31 to 90 days followed the growing trend seen in the total volume of loans, without indicating an increase in the number of loans defaulting over the short-term horizon.

In terms of credit risk, a positive trend was the decreasing number of registered unemployed in all regions. Slovakia's unemployment rate dropped by 1.2 percentage points year-on-year, to 12.3% as at December 2014.

#### DEPOSITS STARTED TO GROW AGAIN

After decelerating for about two years, the pace of deposit growth accelerated by 4.8% during 2014. This represented a year-on-year increase of €1.3 billion in absolute terms. Thus, the volume of deposits doubled in comparison with 2013.

The situation across banks was rather heterogeneous during the year under review. The most significant increases were recorded in the portfolios of home savings banks, probably because home saving is relatively advantageous in a low-interest-rate environment.

The group of three banks with the largest share of deposits maintained their market share at 54% for a second successive year. Small and medium-sized banks slightly increased their market share (to 38% as at December 2014) at the expense of foreign bank branches (8% as at December 2014).

All three main types of deposits, i.e. sight deposits, savings deposits, and time deposits, showed positive tendencies. The first two types grew at an accelerating pace (sight deposits by 14.6%

and savings deposits by 15.3% as at December 2014), while time deposits continued to decline, but, after two years, the pace of decline at least stabilised at -4.2% in December 2014. These developments were influenced primarily by deposits with a maturity of over two years. A natural explanation as to why customers preferred deposits of this type is that they pay interest at higher rates than other deposits.

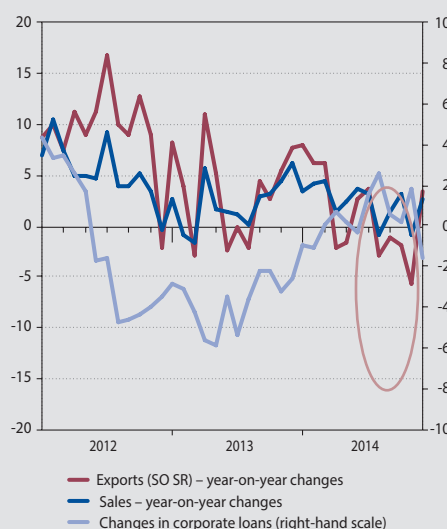
In an environment of low interest rates, it is natural for customers to turn away from time deposits for a longer period. Households often invest their financial assets in alternative products, mainly in collective investment funds. The steady decline in time deposits, however, indicates that the effect of low interest rates on demand for such deposits has weakened. In view of the lower level of risk, a large proportion of depositors will probably continue to prefer time deposits, regardless of the level of interest rates.

### THE CORPORATE SECTOR

#### DEVELOPMENTS IN THE CORPORATE ENVIRONMENT CONTINUED TO BE SHAPED BY THE UNCERTAIN MACROECONOMIC AND GEOPOLITICAL CONDITIONS

The average annual growth rate of sales in the corporate sector in 2014 slightly exceeded 2%, but the annual rate of this growth weakened gradually during the year. Insignificant changes in sales were recorded in industry and construc-

Chart 14 Exports, sales, and corporate loans (annual percentage changes)



Source: SO SR, NBS.

tion. This was due mainly to stagnation in sales in the manufacturing of transport vehicles, coupled with unfavourable developments in new orders in the last two years. Sales in the construction sector fell by 1.7% year-on-year, which can be seen in a positive light considering that they fell by an average of 10% in previous post-crisis years (not including 2011, when they grew).

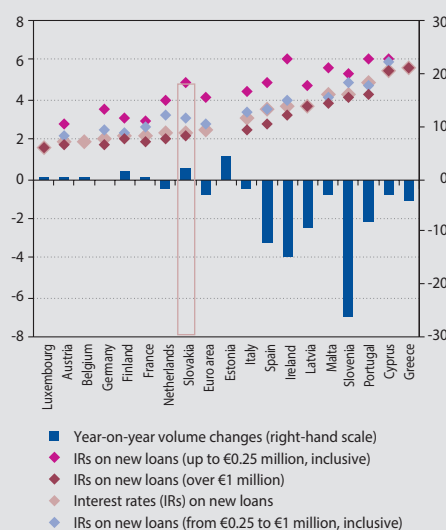
The uncertain situation in the external environment was also reflected in gradually weakening exports, mainly in the second half of the year, when the annual rate of change in exports was in negative territory for most of the months under review. Declines were recorded mainly in the volume of goods exported to Slovakia's neighbouring countries (Czech Republic, Poland, and Hungary) and to Russia. By contrast, exports to most countries of western Europe showed a positive tendency. The uncertainty in the corporate sector was not reflected in the economic sentiment indicator, which rose year-on-year relatively steeply throughout 2014. Less optimism was implied by the OECD's business confidence indicator, which rose year-on-year only very slightly in Slovakia, as well as in its main trading partners (Chart P23).

#### THE SUPPLY SIDE OF THE CORPORATE LOAN MARKET REMAINED VIRTUALLY UNCHANGED

Credit standards changed only slightly and thus remained relatively strict, as in 2013. A minor change was a slight easing of credit standards in the second half of 2014, although it was considerably concentrated to certain banks. This change was in line with the banks' continuing cautious approach to risks arising from the external environment. The majority of banks claimed to have no intention to ease their credit standards in the near future.

Interest rates on new loans continued falling, to historical lows. A slight fall was also recorded in interest rates on the outstanding amounts of loans in the second half of the year. Thus, the gap between interest rates on new loans and the outstanding amount of loans widened still further. The average price of new loans fluctuated around 2.1% during 2014, while the average interest rate on the outstanding amount of loans reached 3.4%. The decline in interest rates on new loans was not a general trend, since lending rates fell only for large corporations (to an average of 1.7%), while lending rates for small and me-

**Chart 15 Comparison of interest rates and annual volume changes in loans within the European Union (%)**



Source: ECB Statistical Data Warehouse.

dium-sized enterprises rose somewhat during the year (to an average of 3.7%). The conflicting trends can be attributed to various factors, on both the supply and demand sides. Within the euro area, Slovakia is one of the countries with the largest differences between lending rates for small and medium-sized enterprises and lending rates for large corporations. Overall, the average interest rate in 2014 was comparable with the euro area average, close to the average figure for the core countries.

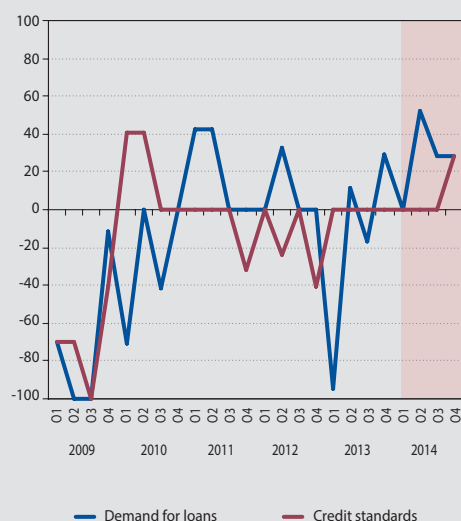
#### THE REVIVAL OF DEMAND FOR LOANS LED TO A SLIGHT UPTURN IN LENDING ACTIVITY

The demand side of the market experienced a certain revival in the second quarter of 2014, which continued until the end of the year, though sales and exports were more or less stagnant in that period. Increased interest in loans was shown mainly by large corporations, while small and medium-sized enterprises were more restrained in this respect, which was probably connected with the cautious behaviour of banks on the supply side.

During 2014 the annual rate of change in the outstanding amount of corporate loans became less negative and eventually turned positive, with the growth rate for the last six months averaging 1%. However, the volume of loans fell again at the end of the year (by 1.5%), to €14.4 billion.



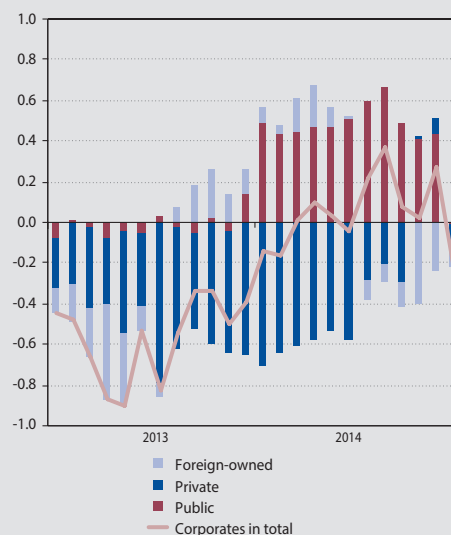
**Chart 16 Changes in credit standards and in demand for loans (%)**



Source: NBS.

Notes: The data represent net percentage shares. Positive values indicate an increase in demand and/or an easing of credit standards. Negative values indicate a fall in demand and/or a tightening of credit standards.

**Chart 17 Annual rate of change in corporate loans broken by type of ownership of borrowing firms (EUR billions)**



Source: NBS.

Developments in the total volume of loans were influenced considerably by lending to state-owned enterprises. Such lending operations took place mostly at the beginning of 2014. Another significant increase was recorded in the middle of the year. In December, however, a large part of these loans were repaid, so the total volume of loans granted to state-owned enterprises fell to its 2013 level. Lending to private enterprises improved gradually, mainly in the second half of the year, when the outstanding amount of loans increased almost continuously in month-on-month terms. The annual rate of change in lending to such enterprises increased to 0% in the last quarter of 2014, from -6% in the same period a year earlier. In lending to private enterprises, however, a relatively steep decline was recorded in December 2014. Lending to small and medium-sized enterprises showed similar dynamics in year-on-year terms as in 2013, when the volume of loans to such enterprises increased by slightly more than 2%.

Overall, developments in bank lending during 2014 can be seen favourable in some respects, mainly in that the downward trend in lending to private enterprises gradually came to a halt. The growth rate trends in the outstanding amount of loans were not spread broadly across banking

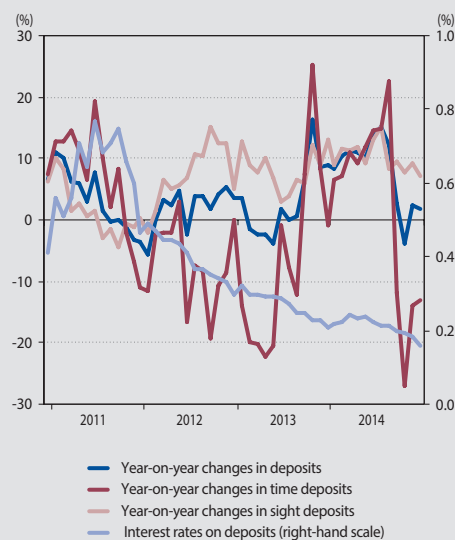
sector, nor across economic sectors. While most large banks managed to maintain or increase their market share in 2014, some small or medium-sized banks lost part of their market share.

Broken down by economic sector, the strongest lending growth was recorded in energy supply and in information and communication. Compared with the previous year, the situation also improved somewhat in the real estate sector. By contrast, the volume of loans continued to decrease in manufacturing and construction. The volume of loans in the manufacturing sector fell in 2014 to its lowest level since 2006, which, with sales exceeding the pre-crisis level, positively influenced the debt-service burden on firms in this sector. In December 2014, the volume of loans in construction reached the same level as in the middle of 2008. Given that lending to the construction sector had been growing until the beginning of 2010, there has been a substantial adjustment in this case, too.

#### CORPORATE DEPOSITS GREW IN VOLUME PRACTICALLY THROUGHOUT 2014

The strongest deposit growth took place in the first three quarters of 2014, in both sight and time deposits. The total volume of deposits increased

**Chart 18 Deposits (annual percentage changes) and deposit rates**



Source: NBS.

to €10.5 billion as at end-December 2014. The last three months saw a slowdown in deposit growth, caused by a sharp fall in the volume of time deposits, which is a relatively frequent phenomenon in historical terms. Deposits grew steadily even though interest rates had been falling for three years, bar some fluctuations. At the end of the year, the average deposit rate reached 0.21%, of which 0.06% was accounted for by sight deposits and 0.55% by time deposits. The structure of deposits did not undergo any major changes during the year under review. It continued to be dominated by sight deposits with a share of 70% of total deposits. Time deposits comprised mainly overnight deposits and deposits with a maturity of up to one year. The positive trend in the total volume of deposits, accompanied by stagnation in the volume of loans, resulted in a fall in the loan-to-deposit ratio. This ratio fell during the year to a level slightly below 1.5, which is much lower than the euro area average and is a sign of good financial positions in both the corporate and banking sectors.

#### THE UNCERTAIN OUTLOOK FOR THE FUTURE CONTINUED TO AFFECT CREDIT RISK IN THE CORPORATE SECTOR

The uncertain situation in the corporate sector continued to hinder any real improvement in credit risk developments. The relatively favourable trend in the indicators of economic sentiment and business confidence, accompanied

by a revival in economic activity in both Slovakia and the euro area, were in contrast with the gradual weakening of exports and sales, and with the decrease in industrial orders. The future trend will be shaped by the macroeconomic situation, which is still affected by the complicated situation in the EU and by persisting geopolitical tensions.

The ongoing environment of low interest rates continued to influence positively the ability of companies to repay their loans. The impact of low interest rates entails certain risks, in that there is no scope to cut rates further in response to an adverse shock to sales, as happened at the turn of 2008/2009. The debt-service burden of companies (Chart P30) decreased in the first three quarters of 2014, owing mainly to the falling volume and price of loans,<sup>1</sup> while sales showed relatively weak dynamics in year-on-year terms.

#### THE NON-PERFORMING LOAN RATIO INCREASED IN DECEMBER 2014, BUT THE VOLUME OF NEW DEFAULTED LOANS DECREASED

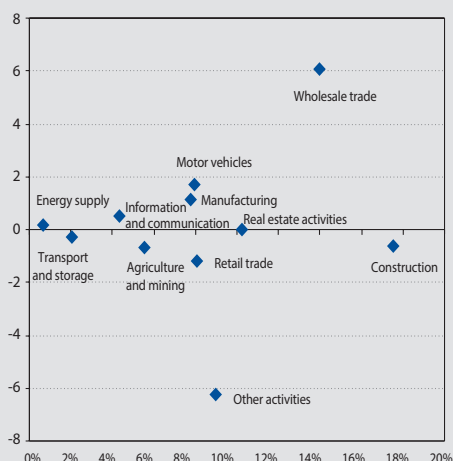
The volume of non-performing loans (NPLs) followed a virtually unchanged trend, remained relatively volatile at a level slightly exceeding that recorded at the end of 2013. The NPL ratio in the corporate loan portfolio fluctuated slightly above 8%, but rose to 8.6% at the end of the year owing mainly to a marked fall in the volume of loans. Developments in non-performing loans were, to some extent, affected by loan write-offs and sell-offs at several banks. With their total amount for 2014 taken into account, the NPL share of non-performing loans fluctuated at around 9.7%. A positive development was decreasing trend in the volume of newly defaulted loans and default rates observed in the second half of the year (Chart P28).

Credit risk developments in the banking sector were heterogeneous. NPL ratios increased in several banks, but remained unchanged or decreased slightly in others. At the same time, there were still marked differences in the quality of corporate portfolios between individual banks.

Broken down by economic sector, credit risk continued to show different tendencies in the year under review. The continuing unfavourable macroeconomic developments affected primarily the sale of motor vehicles, wholesale trade,

<sup>1</sup> Loans received from abroad were also included in the debt-service burden of companies. The aforementioned fall in the volume of loans was caused by a marked decrease in loans received from abroad in the second half of 2014, when loans from domestic banks increased slightly.

**Chart 19 Non-performing loans broken down by economic sector (%)**



Source: NBS.

Note: The horizontal axis shows the NPL ratio in the loan portfolios for the different economic sectors as at December 2014. The vertical axis shows the absolute annual rate of change in NPL ratio as at December 2014. The chart does not include accommodation and food service activities, the share of which in non-performing loans increased by 11% year-on-year, to 27% as at December 2014.

accommodation services, and manufacturing, which led to a marked increase in the NPL ratios for these sectors. In the loan portfolios for the construction and commercial real estate sectors, lending growth stalled and the deterioration in quality showed signs of entrenchment.

#### THE SITUATION IN THE COMMERCIAL REAL ESTATE SECTOR SHOWED SIGNS OF IMPROVEMENT

This sector poses a significant risk in terms of the concentration of credit risk, because it accounts for the largest share of the total volume of corporate loans, as well as of the total volume of non-performing loans in the corporate sector. The situation improved somewhat in the year under review, in both the residential (apartments) and non-residential (office premises) segments.

Developments in the residential segment were strongly influenced by growing demand, which was driven largely by the favourable financing conditions offered by banks for real property purchases and by increased lending to households. The growing demand led to an increase in the share of sold property development projects, to the highest level in the post-crisis period. The

same applied to the total number of apartments sold. The sale of unoccupied apartments in completed residential buildings continued at an accelerated pace. The supply side of the residential segment also reacted to the growing demand. As a result, a large number of new apartments (the largest since the crisis) were placed on the market in the last quarter of 2014.

Positive trends were also observed in the office segment. Rented office space increased more rapidly than new office space. As a result, the vacancy rate fell to 11.24% in the fourth quarter, representing a fall of 356 basis points compared with the same period a year earlier. The growing number of office projects under construction was an indication of growing optimism among property developers.

These positive supply-side trends on the residential and non-residential property markets may provide a stimulus for future developments in the construction sector.

### 3.1.2 SECURITIES

#### THE DECLINING TREND IN INVESTMENT IN DOMESTIC GOVERNMENT BONDS CONTINUED IN 2014

In the sector as a whole, the main trends in the debt securities portfolio continued throughout the year under review. The total volume of investment in domestic and foreign government bonds decreased somewhat. As a result, investment in Slovak government bonds and Treasury bills, expressed as a share of the banking sector's total assets, continued to decrease, from 17.4% at the end of 2013 to less than 16% at the end of 2014.

On the other hand, the total volume of investment in bonds issued by domestic banks and non-financial corporations increased during 2014. The increase in the volume of these bonds, however, was not large enough to compensate for the decrease in investment in domestic government bonds.

#### THE SHARE OF FOREIGN BONDS IN THE SECTOR'S OVERALL PORTFOLIO REMAINED INSIGNIFICANT

Besides Slovak bonds, the largest share was accounted for by debt securities issued in Italy, Poland, Cyprus and the Czech Republic, but none

of these countries had a share in the overall portfolio exceeding 3.2% (IT – 3.2%, PL – 1.8%, CY – 1.0%, CZ – 0.9%, GR – 0.4%). The concentration of foreign bonds was higher in certain banks.

Broken down by type of security, the overall portfolio of debt securities was dominated by securities held to maturity (HTM) and securities available for sale (AFS). During 2014, the share of investments in the HTM portfolio decreased gradually (from 62% to 57%), while that of investments in the AFS portfolio increased (from 32% to almost 39%). These changes may be partly attributable to the positive trend in market yields. This led to an increase in own funds, owing to a rise in the real value of bonds in the AFS portfolio.

#### THE ISSUANCE OF DEBT SECURITIES CONTINUED WITHOUT ANY NOTEWORTHY CHANGE

The bonds issued by banks in 2014 were mainly mortgage bonds, which with a total nominal va-

lue exceeding €650 million, accounted for more than 70% of all the securities issued by banks (including also shares, 13.9%, and other bonds, 13.7%).

The structure of mortgage bonds issued remained virtually unchanged. Banks issued mostly fixed-coupon bonds or floating-coupon bonds tied to the three-month or six-month EURIBOR rate. The average coupon rate followed a trend that was similar to that observed in Slovak government bond yields. This resulted in a stable average spread between coupon yields and government bond yields. In the fourth quarter, banks issued mortgage bonds with a historically high average maturity, owing probably to the low-interest-rate environment.

### 3.1.3 THE INTERBANK MARKET

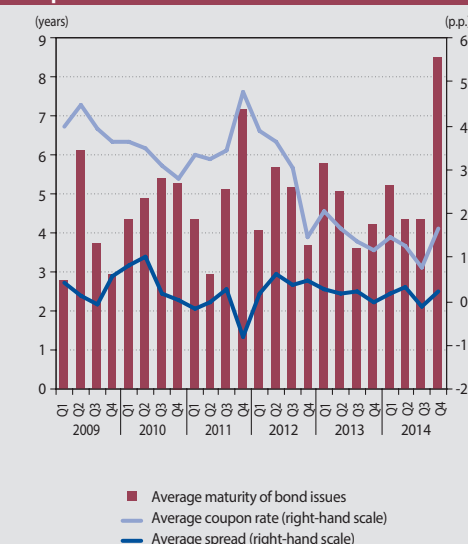
#### INTERBANK OPERATIONS REMAINED BROADLY UNCHANGED

Interbank operations continued to be relatively volatile during 2014, on both the asset and liability sides. Such operations were used primarily to offset the effects of changes in other volatile balance-sheet items of banks (mainly deposits from and loans to non-financial corporations, general government entities, and non-residents). There were no major changes in comparison with the previous years, only a few minor changes occurred during the year under review.

After increasing at the end of 2013, the amount of surplus funds deposited with the ECB decreased during May and June 2014, to a level close to the long-term average. This development was influenced by several banks, and it is not possible to point out a single reason. In any case, the increased amount of operations with the ECB should receive more attention, since in the past banks were placing their surplus funds almost exclusively on the interbank market. During 2014 some banks also conducted operations with the ECB in order to improve their liquid asset ratio.

In September and December 2014, auctions were held for targeted long-term refinancing operations (TLTROs). Slovak banks showed very little interest in participating in these auctions directly.

**Chart 20 Average spreads and maturities of mortgage bonds issued with a fixed coupon**



Source: NBS.

Notes: Spreads, coupon rates, and maturities are weighted by the nominal amount of mortgage bonds issued.

The spreads were calculated as the difference between the coupon rate for the given mortgage bond and the yield on a government bond with the same maturity at the time of issuance. In the absence of a government bond with the same maturity, the yield was calculated on the basis of a linear interpolation.

Only fixed-coupon mortgage bonds were used in such calculations.

Interest rates in the domestic interbank market were broadly in line with EURIBOR rates throughout 2014. Interest rates on deposits received from non-resident banks remained slightly higher, as a consequence of higher rates for long-term deposits received by selected banks from their groups.

### 3.1.4 MARKET RISKS, CONCENTRATION RISK, AND LIQUIDITY RISK

#### MARKET RISKS

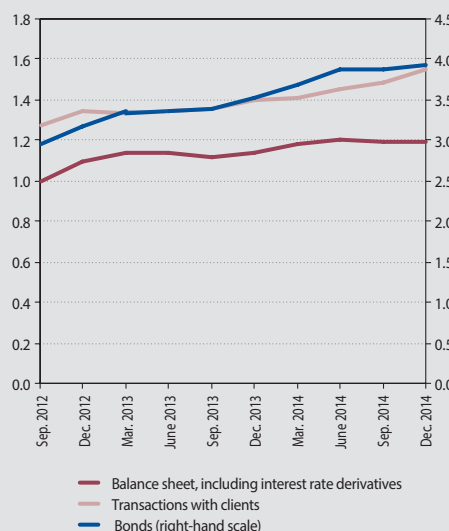
Over the long-term horizon, a gradual increase can be observed in the duration of the banking sectors' total assets. This means that the negative impact of rising interest rates on the banking sector is gradually increasing, because the rise in interest rates causes interest costs to increase before interest income. This can be explained mainly by the gradual increase in the average duration of the bond portfolio, as well as of the loan portfolio.

Equity and foreign exchange risks remained low in most banks. In view of the relatively steep rise in foreign exchange market volatility, including the increased risk of changes in the exchange rates of relatively stable currencies vis-à-vis the euro (e.g. the Swiss franc), banks should cautiously manage their own positions, as well as the risks arising from potential positions held in favour of their customers.

#### CONCENTRATION RISK

One of the most important structural characteristics of the Slovak banking sector from the view of risk is its exposure to concentration risk. At the end of 2014, the proportion of large exposures (i.e. exposures exceeding 10% of the bank's own funds, except for exposures in the form of government bonds) to the banking sector's total own funds stood at 101%. This proportion roughly corresponded to the figure recorded at the end of 2013, though it rose temporarily in the middle of 2014. Some of the large exposures were to clients from countries that were perceived as risky (Russia, Cyprus). The exposures of certain banks to their own financial group remained relatively high.

Chart 21 Sensitivity to interest rate risk



Source: NBS.

Note: Both vertical axes show duration in years.

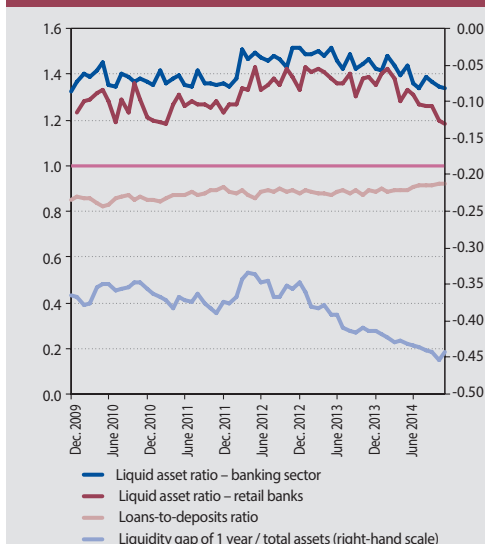
#### THE LIQUIDITY OF BANKS WEAKENED SOMEWHAT

The liquidity position of banks was influenced largely by two dominant trends: growth in loans provided to households and growth in short-term deposits received from households and enterprises. The impact of these trends was reflected in all three primary liquidity ratios.

The first is the liquid asset ratio, which decreased gradually throughout 2014. This was due mainly to growth in short-term deposits received, which increased the amount of volatile liabilities. In banks active in the household sector (except for home savings banks), the average value of this ratio was lower than in other banks and it tended to decline more rapidly. As a result of faster growth in illiquid housing loans, the ratio of liquid assets to total assets declined slowly during the year. Although the decline was modest in size, the ratio reached its lowest level for 36 months in December. This was partly attributable to the decreasing share of investment in domestic government bonds.

It should be noted that although the combination of increasing short-term deposits and stagnating liquid assets led to a decrease in the regulatory ratio, household deposits remained a stable source of funding for banks.

Chart 22 Main liquidity ratios



Source: NBS.

Note: Liquidity gap means the difference between assets and liabilities with the same maturity.

Another factor affecting developments in traditional banking is the deepening maturity mismatch between assets and liabilities. The negative liquidity gap narrowed throughout 2014, with its ratio to total assets reaching -44% at end-December 2014. It must again be stressed that, the dynamics of the negative liquidity gap are largely attributable to the short-term, but stable, deposits of households and, to a lesser extent, of enterprises.

The loan-to-deposit ratio rose in the year under review, but remained below 1.0, despite unprecedented growth in household loans. This can be explained by the aforementioned growth in deposits, which was connected with the structure of financial assets held by households oriented to bank products.

## 3.2 FINANCIAL POSITION OF THE BANKING SECTOR

### 3.2.1 PROFITABILITY

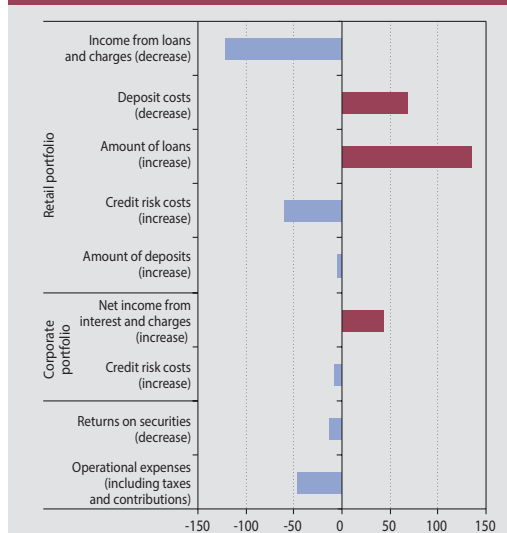
In 2014, the banking sector achieved an aggregate profit of €560 million, which was similar to the result for 2013. The net profit was only 0.7% higher than a year earlier.

Losses were reported by one bank and nine branches of foreign banks.

#### IN RETAIL SECTOR BANKS COMPENSATED FOR THE DECREASE IN MARGINS BY INCREASING THE VOLUME OF LENDING

In year-on-year terms, the structure of profits changed considerably in 2014, mainly in the retail sector (see Chart 23). The changes were caused largely by the persisting decline in interest rates in this sector, which thanks to continuing growth in retail loans and decreasing deposit costs, was the main factor behind the rise in banks' income. The marked reduction in interest rates, accompanied by increased loan refinancing at lower rates, led to a significant fall in returns on loans in the retail sector (Chart 24). In addition, credit risk costs increased by 43% year-on-year, in connection with a larger increase in non-performing loans (in volume terms). Nevertheless, the total income of banks from the retail sector increased in year-on-year terms.

Chart 23 Major changes in the structure of profits in 2014 (EUR millions)



Source: NBS.

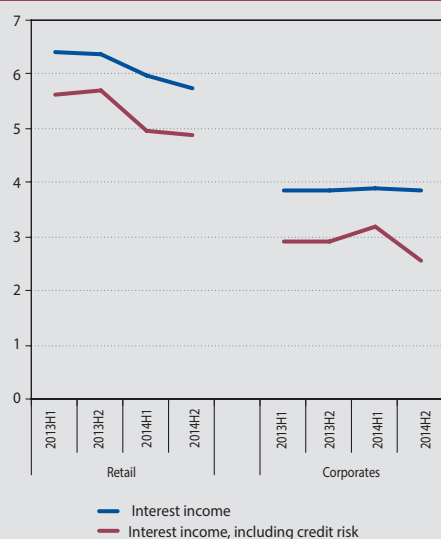
Note: The horizontal axis shows the year-on-year changes recorded between 2013 and 2014 (in EUR millions).

#### NET INCOME IN THE CORPORATE SECTOR INCREASED, WHILE THE PROVISION COVERAGE OF NON-PERFORMING LOANS DECREASED

The banking sector also achieved increased profits in the corporate sector, mainly as a result of increased income from bank charges in the second half of 2014. In this sector, however, credit



**Chart 24 Rate of return on loans in the retail and corporate sectors (%)**



Source: NBS.

Note: The values of semi-annual incomes are annualised.

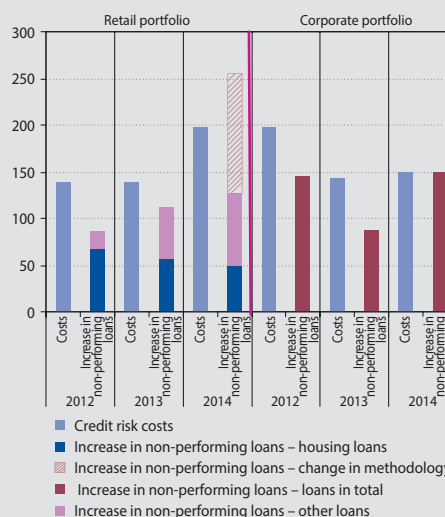
risk costs also rose somewhat during the year, by 5% year-on-year.

As we have already mentioned, credit risk costs in the banking sector increased in 2014. Nevertheless, the provision coverage of non-performing loans decreased (from 57% to 52%), especially in the corporate sector, where many of the banks recorded a marked increase in non-performing loans. In 2014, unlike in previous years, credit risk costs in this sector remained below the increase in non-performing loans (Chart 25). It should, however, be noted that the decline in the provision coverage of non-performing loans was markedly influenced by the retail sector. The decline in this sector was a result of a methodological change, under which the volume of NPLs increased without affecting the level of credit risk and profits in the banking sector. Banks in which this proportion was higher recorded an even greater decrease in the NPL coverage.

#### OPERATING COSTS, TAXES AND LEVIES INCREASED

Besides the changes mentioned above, the banking sector's profitability was adversely influenced by an increase in operating expenses, taxes and levies. This negative impact is likely to increase in the period ahead, mainly as a result of rising expenses related to the implementation

**Chart 25 Credit risk costs in comparison with the increase in non-performing loans (EUR millions)**



Source: NBS.

Notes: The increase in the volume of non-performing loans is expressed in gross terms, i.e. not reduced by write-offs and sell-offs. The increase in non-performing loans as a result of a change in methodology (hatched area) is connected with the ongoing implementation of the EBA technical standards on the reporting of exposures with delayed maturity and problematic exposures. This increase has no effect on the quality of loan portfolios, nor on the profits of banks.

of the banking union, in the form of fees paid for supervision and contributions to the Single Resolution Fund. In addition, banks were also affected by the continuing decline in income from their bond portfolio, though, in relative terms, this factor was less significant.

### 3.2.2 CAPITAL ADEQUACY AND LEVERAGE

#### THE LEVEL OF CAPITAL ADEQUACY REMAINED HIGH

The capital adequacy of the banking sector was at the end of 2014 at about the same level as in 2013. The average total capital ratio of the banking sector was 17.3% at the end of 2014, up slightly from end of 2013 (17.2%). The common equity tier 1 (CET1) ratio remained unchanged, at 16.0%. It should, however, be noted that the plateauing of banks' capital ratios followed several years in which they rose sharply, due mainly to increases in the share of profits paid as dividends (88% of the 2013 profit, compared with 75% of the 2012 profit). Some banks, however,



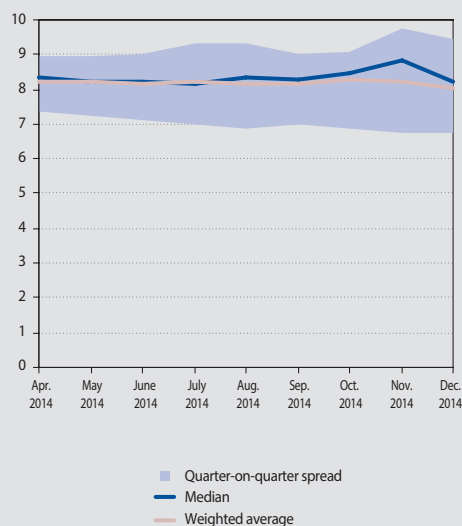
increased their own funds still further during the second half of 2014 by increasing their share capital or subordinated debt, or by implementing Basel III standards.

A positive development for financial stability is that increases in retained earnings and/or own funds were recorded mostly by banks that had lower capital ratios at the end of 2013. The lowest capital ratio of any bank in the sector increased from 10.6% in 2013 to 12.0% 2014, while the lowest CET 1 ratio rose from 9.9% to 11.3%. By the end of 2014, all banks were comfortably meeting the minimum capital ratio requirement (8%). They also satisfied the capital conservation buffer requirement (2.5% of RWAs), which was adopted in Slovakia at the maximum level, with a shortened transition period, from 1 October 2014.

#### THE LEVERAGE RATIO REMAINED AT A SATISFACTORY LEVEL

The weighted average value of the banking sector's leverage ratio remained at a satisfactory level throughout 2014, ranging from 8.0% to 8.2%. This level was substantially higher than the average in the EU banking sector as at 30 June

Chart 26 Changes in the banking sector's leverage ratio (%)



Source: NBS.

2014, i.e. 3.9% for large international banks and 4.9% for other banks.<sup>2</sup> The lowest leverage ratio in the Slovak banking sector between 31 March 2014 and 31 December 2014 rose from 4.8% to 5.9%.

<sup>2</sup> Source: EBA: CRD IV – CRR / Basel III monitoring exercise, 3. March 2015.





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## CHAPTER 4

# THE INSURANCE SECTOR

## 4 THE INSURANCE SECTOR

### INSURERS' PROFITS ROSE AGAIN

The aggregate profit of insurance companies increased in 2014 by 13.3%, year-on-year, to €179 million. Historically, this was the sector's second highest profit, bettered only by the figure of €188 million in 2011. The 2014 profit encompassed, on the one hand, a negative contribution from the technical result, which declined by €15 million (owing to a drop in technical income and an increase in operating expenses), and, on the other hand, a positive financial result. Despite the higher pre-tax profit, the amount of tax payable fell by 25%, or almost €15 million, year-on-year, which had an appreciable impact on the overall result. Total losses of individual insurance companies which ended 2014 with a negative operating result in the sector amounted to less than €1 million in 2014, broadly the same as in 2013.

In non-life insurance, the decline in the technical result in 2013 was shown to be an anomaly. The result in 2014 increased by more than 40% in comparison with the previous year, to €58

million, marking a return to the level of 2012. The factors contributing to this result included a decrease in claims paid and changes in the amounts of certain technical provisions.

In life insurance, the technical result deteriorated by €31 million, reflecting mainly a decline in net premiums earned and an increase in operating expenses. The positive overall financial result was mostly attributable to unit-linked insurance, in which the financial result increased from €34 million in 2013 to €59 million. In standard life insurance business, however, the financial result declined moderately, to €135 million. Returns on assets covering technical provisions in life insurance fell by a further 0.3 percentage point, although performance was heterogeneous across asset types. Whereas returns on government bonds fell year-on-year by almost 1 percentage point, to 3.8%, overall returns on other bonds increased, from 3.6% in 2013 to 4.8% in 2014.

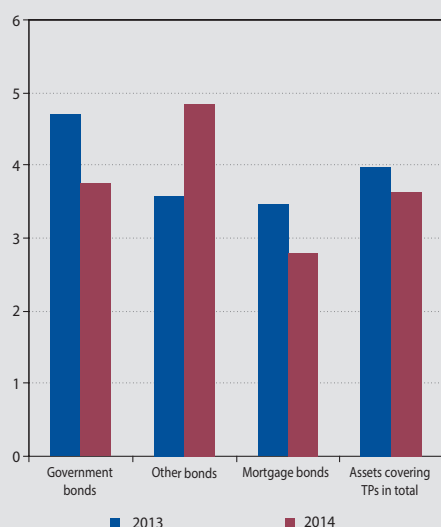
### PREMIUMS IN LIFE INSURANCE DECLINED

Total premiums in life insurance fell year-on-year by 0.27%, but that may be due to the base effect of their sharp increase in 2013, since new business recorded a drop of 3.13%. This development was apparently related to a cut in the technical interest rate, from 2.5% to 1.9%, as from 1 January 2014, because towards the end of 2013 insurers were seeking new customers by pointing out the upcoming rate change. Annual premiums increased slightly (by 1.14%), while the number of insurance contracts remained broadly flat (increasing by a mere 0.34 %).

The most significant decrease was in standard life insurance. Premiums fell by a substantial 4.3% in comparison with the previous year, and the number of insurance contracts dropped by 5.3%. Annual premiums also decreased, and in new business by almost 10%. The number of surrenders rose by twenty thousand (one-fifth), while their frequency stood at 5.2%. Claims paid remained similar to the previous year, but their average amount increased moderately.

In unit-linked insurance, premiums increased by 2.2% and the number of insurance contracts rose

**Chart 27 Net return on assets covering technical provisions in life and non-life insurance, excluding technical provisions in unit-linked insurance (%)**



Source: NBS.

Note: The chart shows only the net return on those assets that have a share of more than 10% in the coverage of technical provisions in life insurance.

TPs – technical provisions

by 2.5%. Technical provisions for unit-linked products climbed by almost 11%. Neither the number and frequency of surrenders, nor the average amount of benefits paid, changed appreciably. This sub-sector accounts for one-third of the premiums in life insurance.

Premiums in supplementary insurance maintained accelerating growth, to be 9.9% higher at the end of 2014 than at the end of 2013. Both annual premiums and new business continued to increase, but so also did cost of benefits paid. Pension insurance, the smallest sub-sector of life insurance, saw premiums continue to fall. Re-insurance business in the Slovak life insurance market remains insignificant, according to end-2014 figures.

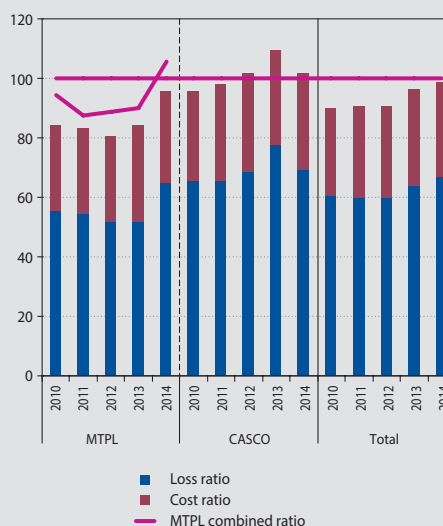
#### NON-LIFE INSURANCE PICKED UP AGAIN

After falling in each of the previous two years, premiums in non-life insurance increased in 2014 by 2.9% year-on-year, to €939 million by end-December 2014. This growth was driven by premiums in comprehensive motor vehicle (CASCO) insurance and property insurance, while the decline in motor third-party liability (MTPL) insurance was more moderate than in the previous two years.

Premiums written in motor insurance increased slightly year-on-year (thanks to a rise of 2.2% in CASCO insurance), but average premium prices decreased in both MTPL insurance (from €120 to €111 per year), and CASCO insurance (from €393 to €372 per year). The converging trend between average premiums in new and renewed contracts did not continue in 2014, as new contracts were almost 10% cheaper in MTPL insurance and 15% in CASCO insurance.

In MTPL insurance, the combined ratio increased to 95.5%. Although operating expenses decreased, and hence also the cost ratio, this did not offset the impact of an increase in claims paid amid a long-running downward trend in premiums earned. If the calculation of the combined ratio factored in also the transfer of a share of premiums to the account of the Slovak Interior Ministry, the contribution to the Slovak Insurers' Bureau (SKP) and the change in the technical provision for the liability to the SKP, the ratio would rise to €105.3%.

**Chart 28 Loss ratio, cost ratio and combined ratio in motor insurance (%)**



Source: NBS.

Note: The MTPL combined ratio is calculated similarly as the combined ratio except that the technical cost of claims paid is increased by the contribution to the Slovak Insurers' Bureau (SKP) and change in provision for the liability to the SKP and that the amount of premiums earned is reduced by the transfer to Slovak Interior Ministry.

By contrast, the combined ratio in CASCO insurance fell to 102%, though that drop is probably related to the increase in MTPL insurance. Customers may be intentionally misreporting claims for any of a number of reasons (for example, to keep their no-claims bonus, to reduce their contribution to the claim cost, to minimise administrative and time costs).

The combined ratio for overall motor insurance increased by 2.4 percentage points to 98.6%. After taking into account the above-mentioned additional factors in MTPL insurance, the ratio would be up to 103.6%.

The individual insurers with the highest combined ratio are those that have the largest share of premiums written in the market. Across the sector the ratio ranges from 84% to 197%.

In property insurance, the combined ratio edged down to 62.1%, thanks entirely to a drop in claims paid.

The share of non-life insurance premiums ceded to reinsurers continued to increase in 2014, surpassing 31% to reach its highest level since 2004.

On the one hand, this may indicate that insurers are becoming more cautious; on the other hand, it raises the question whether they are not in fact taking on riskier contracts and subsequently re-insuring them.

#### TECHNICAL PROVISIONS AND THEIR INVESTMENT

The total amount of technical provisions in the insurance sector increased in 2014, to reach €5.23 billion by the end of the year. They rose in both life insurance (continuing a prolonged trend) and, for the first time since 2010, in non-life insurance. In the case of non-life insurance, most of the rise was in technical provisions for claims and for unearned premiums.

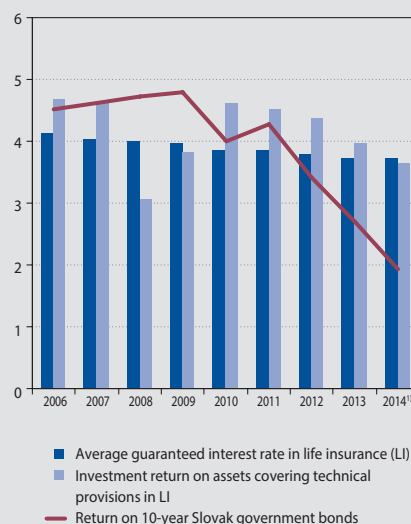
The funds invested in equities and investment fund shares/units almost doubled over the past two years. Holdings of government bonds, corporate bonds, and mortgage bonds also continued to increase, while investment in bank bonds other than mortgage bonds fell. Investments in time deposits did not follow a clear trend, since the outstanding amount was around €120 million at the mid-point of both 2013 and 2014, but around €60 million at the end of each period.

#### RISKS IN THE INSURANCE SECTOR

The most significant risk in the insurance sector has long been the persisting environment of low interest rates. Reduction in the technical interest applied only to new contracts, and insurers face having to cover those contracts entered into with higher guaranteed rates.

In this environment of low rates, reinvestment risk remains an issue. Some 4% of the bond portfolio

**Chart 29 Guaranteed interest rates and actual returns (%)**



Source: NBS, Bloomberg.

1) Since the average guaranteed rate figures for 2014 are not yet available, the data for 2013 are used as an estimate.

folio is maturing in 2015, as is a further 4% in 2016. Approximately one-third of the bond portfolio is due to be redeemed by 2020.

Credit risk remains largely unchanged. At the end of 2014 government bonds made up around half of the sector's investments (with 80% of those bonds issued by the Slovak government), while bonds issued by domestic banks accounted for 7%, bonds issued by foreign banks for 16%, corporate bonds for 14%, and bank deposits for around 1%. Equity and foreign exchange risk remained insignificant



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CHAPTER 5

# OTHER SECTORS OF THE FINANCIAL MARKET

## 5 OTHER SECTORS OF THE FINANCIAL MARKET

### 5.1 THE SECOND PILLAR OF THE PENSION SYSTEM – THE OLD-PENSION SAVING SCHEME

**LOOKING AT THE BREAKDOWN OF SECOND-PILLAR FUNDS BY NUMBER OF SAVERS AND NET ASSET VALUE, 2014 SAW A VERY MODERATE SHIFT TOWARDS EQUITY AND INDEX FUNDS**

The number of savers in the second pillar increased by more than 17,000 in 2014, back to the level observed before the scheme was last reopened temporarily (to allow people to join or leave it voluntarily). Demand for index pension funds increased sharply, and these accounted for more than half (13,883) of the total net increase in savers, including some switching from another fund and others joining the scheme for the first time. The number of savers in equity pension funds climbed by almost 12,000. On the other hand, several thousands of savers left mixed and bond pension funds. In the case of bond funds, their share of the sector still remained by far the largest, at around 90%. In mixed funds, however, the number of savers slumped by a third from its level at the start of 2014, to leave these funds with a share of less than 1%.

The overall net asset value (NAV) of second-pillar funds increased by €664 million in 2014, to total €6.402 billion at the end of the year. This growth was markedly higher than that in 2013. Part of the reason for the difference was that the 2013 figure was affected by an outflow of funds to the Social Insurance Agency in connection with the reopening of the second pillar. A second, positive reason was the improved performance of pension funds, with fully one-third of the NAV growth attributable to the returns on assets in the pension funds' portfolios.

The relative heterogeneity in performance across pension funds partly explains why equity and index pension funds slightly increased their share of overall NAV, at the expense of guaranteed bond pension funds. Nevertheless, bond funds' share of the sector's NAV remained at more than

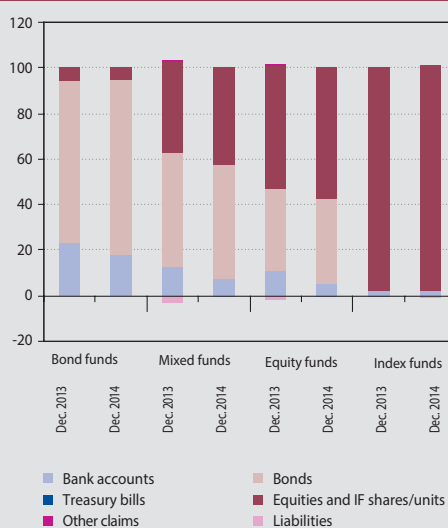
88%. Although the amount of assets under management in index pension funds was still low (less than 1.5% of the total NAV) in 2014, it overtook that of mixed pension funds. Also related to this switch in positions was the cancellation of one mixed fund right at the beginning of 2014 (this was the third such fund to be discontinued).

**IN THE COMPOSITION OF PENSION FUNDS' ASSETS THERE WAS A SHIFT AWAY FROM BANK DEPOSITS AND TOWARDS BONDS (IN THE CASE OF BOND PENSION FUNDS) AND EQUITY INVESTMENTS (MIXED PENSION FUNDS AND EQUITY PENSION FUNDS)**

As regards the structure of assets under management in the second pillar, the share of bank deposits declined in all types of pension fund (other than index funds) during 2014, by between five and seven percentage points, so that by the year-end the aggregate share was at its lowest level since the old-age pension saving scheme was established.

In bond pension funds, the funds taken out of bank deposits was reinvested in bonds, whose share in the overall assets of these funds increased to more than three-quarters of their NAV.

**Chart 30 Asset structure of different types of second-pillar pension funds (%)**



Source: NBS.

In equity and mixed pension funds, the equity component of the asset portfolio increased to, respectively, 53% and 36% of the NAV, via purchases of equities, investment fund shares/units and ETF instruments with that investment focus. Through indirect investments, one equity pension fund and one mixed pension fund increased their exposure to commodity markets, but in neither case did the exposure exceed 5% of the fund's NAV.

Whereas in 2013 the sector saw a broad-based increase in the average residual maturity and duration of debt securities, in the period under review these variables did not change. In the case of the average residual maturity across pension funds (around 4.5 years), the lowest and median values increased moderately and the highest value increased markedly, to nine years. The average duration oscillated throughout the year 2014 at close to 3.5 years.

By contrast, the relative downward trend in the share of government bonds in pension funds' debt securities continued in the first half of 2014, and by the end of the year it was down to 44%, six percentage points lower than its level at the start of the year. The share of bonds issued by a financial institution or non-financial corporations increased.

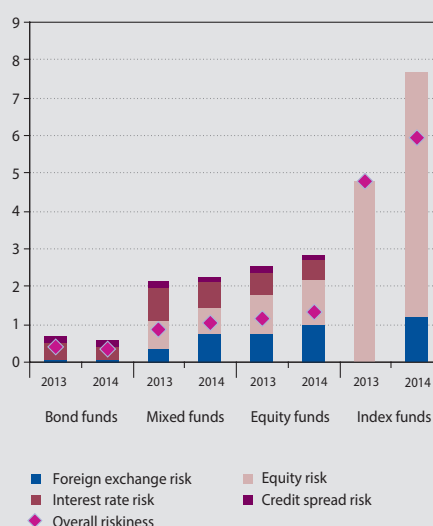
Amid the persisting environment of low interest rates, the average coupon paid by debt securities in the aggregate assets of second-pillar funds declined to some extent.

In almost all mixed and equity pension funds, and in one bond pension fund, there was an increase in the share of foreign currency-denominated assets, owing mainly to the expansion of direct and indirect equity positions with a significant foreign-exchange component. Furthermore, the amount of foreign currency-denominated interest rate instruments doubled, albeit from a low base. The most extensive foreign currency in the second-pillar asset portfolio was the US dollar. The Japanese yen and Polish zloty had significant and increasing shares. In mixed and equity funds, the average share of foreign-exchange instruments in total NAV at the end of 2014 was, respectively, 20% and 31%. It is worth

noting that in one bond fund, futures contracts were used in order to bring the unhedged part of foreign-exchange position to below the statutory limit for this type of fund (5% of NAV). In no other fund were foreign-exchange positions (as at 31 December 2014) hedged with currency derivatives.

A positive development from the view of risk was the decrease in the extent to which bank deposits in the second-pillar asset portfolio were concentrated among certain banks. This decline was more marked in those pension funds reporting an above-average figure for such concentration. At the same time, however, the share of deposits held with domestic banks increased, thus making the already dominant position of these banks even stronger. In one bond pension fund, however, almost all the deposits were held with banks in Slovenia, Bulgaria, Romania and Poland, and the share of such deposits in the fund's NAV increased from 32% to 42% during the year.

Chart 31 VaR of second-pillar pension funds (%)



Source: NBS, Bloomberg, internet.

Note: Data on the left-hand scale represent percentage shares of total assets (or NAV). VaR was calculated as the worst expected loss over a period of ten working days at a confidence level of 99%. 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.





The exposure of pension funds to Russia and Ukraine was low at the sectoral level, and it fell further in 2014. In two pension funds, however, the share of such assets increased up to 4% of NAV.

Riskiness as calculated using the VaR approach increased year-on-year in every type of pension fund apart from bond funds during the period under review. The increase in the overall riskiness of mixed and bond funds was only slight and stemmed from a rise in the exposure to equity and foreign exchange markets (and to the heightened volatility of these markets). The same factors, to a greater extent, contributed to the increase in the riskiness of index pension funds. The small decrease in, and low degree of, risk exposure in bond funds can be explained by the reduced interest rate risk.

**FAVOURABLE NOMINAL RETURNS ON PENSION FUNDS' ASSETS, SUPPORTED BY A ZERO-INFLATION ENVIRONMENT, TRANSLATED INTO ALL-TIME HIGH REAL RETURNS**

As mentioned above, 2014 was a favourable year for pension fund performance. The average nominal returns of mixed pension funds (+8.1%) and equity pension funds (+9.6%) for the 2014 calendar year were the highest achieved by these funds in the history of the scheme. Every one of these two types of fund recorded a return of more than 6%. Index funds performed even more strongly, as their average nominal return was 13.4%. Across mixed, equity and index pension funds, performance was driven up by the equity component of the portfolio. As for the largest category, bond pension funds, the average return of 3.3% was the highest since 2009. Among these funds, returns ranged from 1.2% to 5.5%. The flip side of their improved performance was that the volatility of pension point values reached its highest level for last six years.

The real returns of pension funds in 2014 were even more exceptional than the nominal returns. The average real return was 4% whereas its previous highest level had been around one per cent and in several years it had been in negative territory. The upturn was explained by stagnating consumer prices, which ensured almost full pass-through of nominal returns to real returns.

The aggregate profit of pension funds management companies (PFMCs) for 2014 was almost €20 million, representing a threefold increase on the previous year's result. This sharp rise was largely accounted for by income from pension fund performance fees, which soared by 126%. The year-end results showed that, for the first time in the history of the scheme, all PFMCs were making a profit.

## 5.2 THE THIRD PILLAR OF THE PENSION SYSTEM – THE SUPPLEMENTARY PENSION SCHEME

**NET INFLOW OF NEW PARTICIPANTS HIGHER THAN IN PREVIOUS YEARS**

The number of participants in the supplementary pension scheme increased by 24,500 in 2014, which in terms of rate of increase (3% year-on-year) was at least twofold higher than in any of the previous five years. Across contributory supplementary pension funds, the increase in participants was approximately offset by the number of participants who came to the end of the saving stage of the scheme. Hence the overall increase in participants was almost entirely reflected in pay-out supplementary pension funds. As in previous years, the modest increase in the number of participants in contributory funds masked a decrease in participants in those funds with a balanced investment strategy and increases in those with a conservative or growth strategy.

The amount of assets under management in the third pillar of the pension system soared in 2014 by almost 9% year-on-year, or €117 million. The NAV growth rate was more than twofold higher in 2014 than in 2013, although from the view of the longer-term horizon it was in line with the current broadly linear trend. The increase in NAV was attributable not just to contributions, but to an appreciable extent to the performance of supplementary pension funds. Their assets under management increased in the range of 6% to 12%, but without resulting in any significant change in market shares in the sector's aggregate NAV.





Nor in 2014 was there any change in the slow downward trend in the dominant market share of balanced supplementary pension funds. Although the aggregate NAV of these funds increased by 6%, that of the other contributory supplementary pension funds – those with a conservative or growth strategy – climbed fourfold. Thus these smaller funds with niche investment strategies saw their overall share of the sector's NAV increase from 15% to 17% during the period under review. The amount of assets in pay-out supplementary pension funds remained largely unchanged.

**IN THE ASSET PORTFOLIOS OF THIRD-PILLAR FUNDS, THE TWO MOST SIGNIFICANT CHANGES IN 2014 WERE A SLIGHT INCREASE IN AVERAGE DURATION AND, IN CERTAIN FUNDS, AN INCREASE IN THE SHARE OF FOREIGN CURRENCY-DENOMINATED ASSETS**

The asset structure of supplementary pension funds changed only slightly 2014. One of the minor, broader trends was a year-on-year increase in the share of bank deposits in the aggregate portfolio of balanced funds, although even that increase amounted to just a few percentage points. Complementary to that trend, the bond component in these funds decreased. The average equity exposure of ba-

lanced supplementary pension funds (including indirect exposure) remained unchanged at 17%.

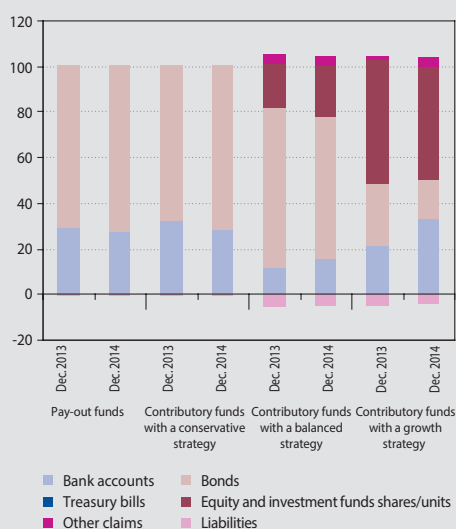
Across growth-oriented supplementary pension funds, the core equity component of the asset portfolio – comprising mainly investments in investment fund shares/units and ETF instruments – fell from 53% to 47%. In this case, however, the average values were significantly affected by the largest fund in the group. The range in sizes of these funds' equity components narrowed to between 41% and 60% of NAV as at 31 December 2014. In conservative contributory funds and pay-out funds, the average asset mix remained unchanged, with bonds accounting for 70% of the NAV and bank deposits for the rest.

In three funds of one supplementary pension management company (SPMC), a notable development was the acquisition of futures contracts for the portfolio. In two of these funds in particular, the nominal amounts of these contracts were substantial and increased sharply over the course of the year. Abstracting from those futures contracts apparently used to hedge foreign exchange risk in the rest of the portfolio, the nominal value of the futures contracts in these two funds increased year-on-year, as a share of NAV, from, respectively, 11% to 36% and 20% to 73%.

The bond component of the sectoral asset portfolio became slightly more sensitive to interest rate movements in 2014. Its average duration was 3.5 years at the end of 2014, 0.3 higher than at the start of the year. The development of this indicator was, however, heterogeneous across supplementary pension funds, as it increased in only half of them and decreased in the other half.

Bonds issued by non-financial corporations maintained an upward trend during 2014 in their share of the overall bond portfolio, which reached 23% by the year-end. Although the share of government bonds fell slightly, it still constituted more than half of the bond portfolio.

**Chart 32 Asset structure of supplementary pension funds broken down by fund investment strategy (%)**



Source: NBS.



In the third pillar, as in the second pillar, a majority of pension funds were affected by slight decreases in both interest rates on time deposits at banks and bond coupon rates.

The share of foreign currency assets (excluding derivatives) in the aggregate portfolio increased by 19% in 2014. These assets comprise mainly US dollars and to a lesser extent currencies of other countries in central Europe. Several supplementary funds had a significant exposure to foreign currencies, and in five of them the share of foreign-currency assets exceeded 20% of NAV. The extent of foreign-exchange risk in the funds was mitigated, however, by the use of forward, swap and futures contracts.

At the beginning of 2014 two supplementary pension funds held bonds issued by Russian entities, but they soon sold them off and from that point on the sector had zero exposure to Russian assets.

**THE AVERAGE NOMINAL RETURN OF SUPPLEMENTARY PENSION FUNDS, 3.6%, WAS FULLY PASSED THROUGH TO REAL INCOME**

The annual nominal return on assets in balanced contributory pension funds was 3.7% in 2014. Growth-oriented contributory funds performed even better, with an average return of 5.0%, while conservative contributory funds and pay-out funds earned, respectively, 1.7% and 2.5%. Given the zero-inflation environment, these figures also represented the real returns for the year under review.

The aggregate profit of supplementary pension management companies fell in 2014 by around one-third, year-on-year, to €6.2 million, after three years of gradual increases. Although the average NAV rose, income from pension fund management fees recorded a particularly sizeable drop. While there was a reduction in the statutory maximum rate for the calculation of management fees, that by itself could not account for the overall drop in this fee income. In 2014, apparently due to market competition, supplementary pension management companies further reduced the fees they charge customers. Although the profits of all four SPMCs declined, they did so to substantially varying degrees.

## 5.3 COLLECTIVE INVESTMENT

**CONTINUING UPWARD TREND IN ASSET GROWTH IN THE SECTOR**

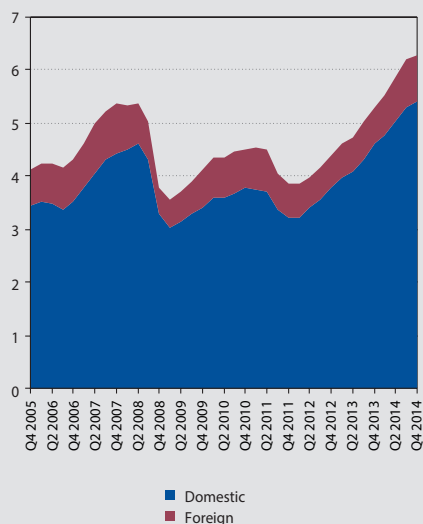
In the collective investment sector, the trend of strong asset growth observed in the previous two years continued in 2014. The overall NAV in the sector increased by €938 million, which slightly exceeded the increase in 2013 and was close to the all-time high set in 2007. Another record from 2007, the absolute NAV, was surpassed in the early months of 2014. By the year-end, the amount of assets under management in the sector amounted to €6.286 billion. In absolute terms, the NAV growth was driven by domestic funds, which received a significant €800 million, but in relative terms the NAV growth of foreign investment funds (referring to sales in Slovakia) exceeded the growth rate in the domestic side of the sector.

NAV growth was relatively steady during 2014, although it slowed somewhat in the last quarter. Among four of the five domestic asset management companies (AMCs), the increase in the amount of assets under the management ranged from 3% to 32%. In the other AMC, the NAV almost doubled owing mainly to an inflow of assets from another AMC that ceased asset management operations in Slovakia from October 2014. With its departure, the domestic sector became further consolidated. Indeed, the number of domestic AMCs had gradually fallen by half from the ten originally established in 2009. The number of investment funds in the Slovak market initially fell by two at the beginning of 2014, but with the subsequent establishment of a further six, the total number of funds had increased to 87 by the year-end.

**THE HIGHEST NET SALES WERE RECORDED BY MIXED FUNDS AND BOND FUNDS; REAL ESTATE FUNDS EXPERIENCED MODERATE NET REDEMPTIONS**

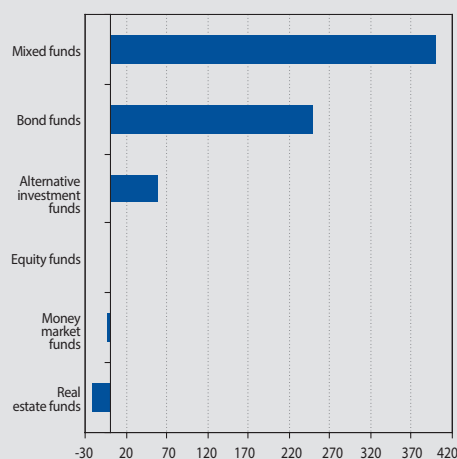
In 2014 more than half of the NAV growth in the domestic side of the collective investment sector was accounted for by mixed funds. As their market share in terms of NAV increased from 22% to 27%, they strengthened their second place ranking. In the leading category, bond investment funds, NAV grew by more than €280 million, but

**Chart 33 NAV of domestic and foreign investment funds in the Slovak market**



Source: NBS.

**Chart 34 Net sales of domestic investment funds (EUR millions)**



Source: NBS.

its percentage increase was less than the average rate for all domestic investment funds. In each of the top two categories, NAV growth was driven by net sales of shares/units, mostly to retail investors.

The highest NAV growth rate, 135%, was observed in the still relatively small category of alternative investment funds. Equity investment funds, too, posted NAV growth, albeit far less substantial, with most of it attributable to returns on assets rather than net sales. The new investment into funds of these two categories came mainly from institutional investors.

Whereas in previous years real estate funds were among the most sought-after investment vehicles, in 2014 their aggregate NAV fell slightly, year-on-year, by around 2% (€21 million). Nevertheless, household investment in these funds continued to increase, albeit to a lesser extent than in 2013. The overall net outflow was attributable to net redemptions of shares/units held by banks in two real estate funds.

Among foreign investment funds in the Slovak market, the highest net sales were achieved by bond investment funds. Net sales-driven NAV

growth was also a feature of most other categories of foreign investment funds. The exception was money market funds, whose aggregate NAV slumped by more than half.

In contrast with the previous period, almost half of the total NAV growth in domestic investment funds was recorded by funds which are designated as undertakings for collective investment in transferable securities (UCITS) pursuant to EU law. A similar and to some extent related turnaround was observed in investment funds not offered to the public, which in the recent past had drawn considerable funds into the sector but which in 2014 saw their NAV drop by 40%.

#### NEW INVESTMENT IN INVESTMENT FUNDS DRIVEN MAINLY BY HOUSEHOLDS

Sales of investment fund shares/units in 2014 were heavily concentrated in the household sector, whose share in the total liabilities of domestic investment funds increased moderately, to 77% as at 31 December 2014. But although the household sector's outlays on investment funds in the past three years have been relatively large in absolute terms, the overall composition of household financial assets cannot be said to show

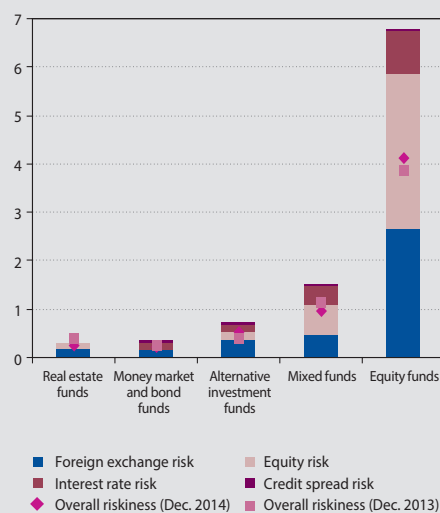
a marked preference for collective investment vehicles. The growth in household investment in this area is largely proportional to the overall increase in household financial assets, and only partially and slowly does it indicate a shift in preference towards investment funds. In the pre-crisis period, investment funds shares/units accounted for more than one-tenth of household financial assets, but at present their share is only around seven per cent.

Looking at the asset structure of domestic investment funds, the most notable changes were in bond funds and alternative investment funds. In both cases, investments in bonds and in fund shares/units increased at the expense of bank deposits. In mixed funds, by contrast, the share of bank deposits increased, while that of debt securities fell. In real estate funds, property-related investments are the core component and their share increased still further in 2014 (to 78%).

The overall rate of risk of domestic investment funds, as measured by VaR, was almost the same at end-2014 as at end-2013. The risk exposure of investment funds is largely concentrated in the equity and foreign-exchange components. By far the most exposed funds were equity investment funds, and their riskiness increased slightly year-on-year. The rate of risk of mixed investment funds was also relatively high, while that of other investment funds was low.

The average return across all domestic and foreign investment funds increased to 3.4% in 2014, from 2.7% in 2013. The most marked improvement in performance was observed in those funds that have a high share of interest rate instruments (money market and bond funds), although in comparison with other categories they still had the lowest returns, not exceeding 2%. Somewhat higher were the nominal returns of mixed funds and real estate investment funds. By far the highest returns were earned by equity funds – 10% on average – although they were slightly lower in comparison with the previous year. The returns of domestic investment funds were substantially lower than those of foreign

**Chart 35 VaR of domestic investment funds broken down by category (%)**



Source: NBS, Bloomberg, internet.

funds in 2014, both overall and in each type of fund.

The aggregate profit of domestic AMCs soared in 2014 by 145% year-on-year, to €18.3 million. This was based mainly on an increase fee and commission income, stemming from the growth in the NAV of investment funds. Another factor behind the large difference between the 2013 and 2014 results was the special dividend income reported by one AMC.

## 5.4 INVESTMENT FIRMS

Activity in the sector of investment firms fell slightly in 2014. The volume of transactions conducted during the year declined by 11% in comparison with the previous year. This reflected mainly a drop in the value of derivatives transactions, which have long had a predominant share in the overall volume of transactions. The volume of bond transactions increased for a second consecutive year.

The long-running downward trend in customer assets under management was reversed

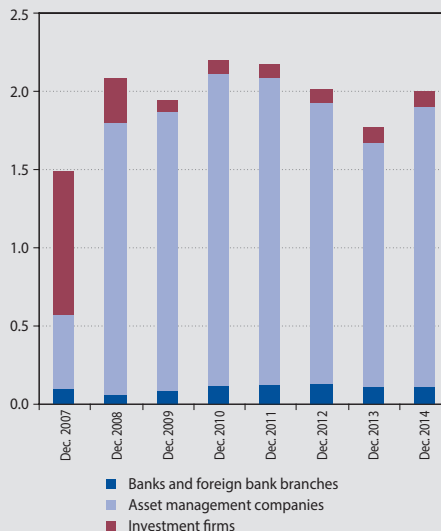


**Chart 36 Overall transactions broken down by investment instrument (EUR billions)**



Source: NBS.

**Chart 37 Amount of customer assets managed by licensed entities (EUR billions)**



Source: NBS.

in 2014, as the amount increased by 13% to €2 billion. This amount was identical to that reported at the end of 2012. Almost all of the

growth was accounted for by one asset management company that has the dominant position in this area.



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CHAPTER 6

# MACRO STRESS TESTING OF THE SLOVAK FINANCIAL SECTOR



## 6 MACRO STRESS TESTING OF THE SLOVAK FINANCIAL SECTOR

**WHEREAS THE BASELINE SCENARIO ASSUMES GRADUAL INCREASE OF GROWTH IN THE DOMESTIC ECONOMY, THE STRESS SCENARIOS ENVISAGE ECONOMIC CONTRACTION, RISING UNEMPLOYMENT, AND TENSIONS IN FINANCIAL MARKETS**

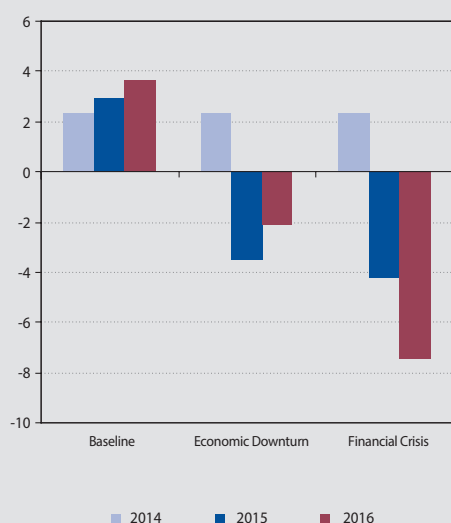
The resilience of the Slovak financial sector was tested using three scenarios: a Baseline scenario and two stress scenarios. The Baseline scenario is based on the update of the December 2014 NBS Medium-Term Forecast, published in January 2015. Accordingly, it assumes real GDP growth in both 2015 and 2016, driven early in the period mainly by domestic demand and then to a gradually increasing extent by exports, too. Prices are assumed to remain flat in 2015 owing largely to the fall in oil prices, and only moderate increase of inflation is envisaged for 2016.

The stress scenario 'Economic Downturn' assumes that external demand declines significantly in 2015 and more moderately in 2016. This outlook is based on assumptions of weaker

than expected progress in world economies and of emerging markets being adversely affected when the US Federal Reserve gradually tightens monetary policy. The Economic Downturn scenario assumes a slightly higher rise in oil prices than the Baseline scenario, but their level at the end of the stress test horizon is not significantly different from end-2014. In this context, the scenario envisages that the domestic economy contracts, unemployment rises, and inflation remains below the ECB's target rate of two per cent.

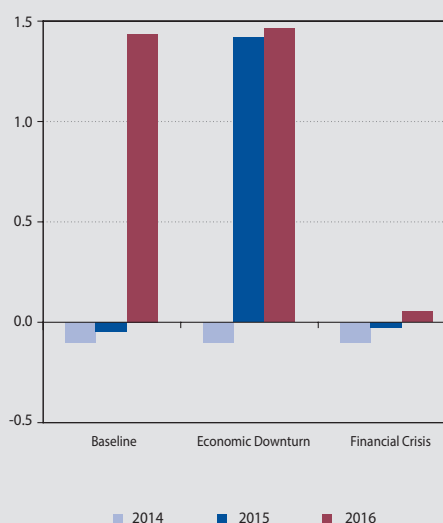
In the stress scenario 'Financial Crisis', tensions in financial markets are assumed to escalate amid doubts about the sustainability of public finances in several euro area countries. In addition, the assumption for oil prices is lower than that in the Baseline scenario. The result is subdued inflation that exacerbates the adverse pressures on the real economy. Domestic GDP is assumed to contract in 2015 and, even more so, in 2016, while the price level remains flat in both years and unemployment increases.

**Chart 38 GDP growth – Baseline and stress scenarios (%)**



Source: NBS.

**Chart 39 Annual inflation – Baseline and stress scenarios (%)**



Source: NBS.

### THE BANKING SECTOR REMAINS RESILIENT TO ADVERSE SHOCKS IN THE REAL ECONOMY AND FINANCIAL MARKETS

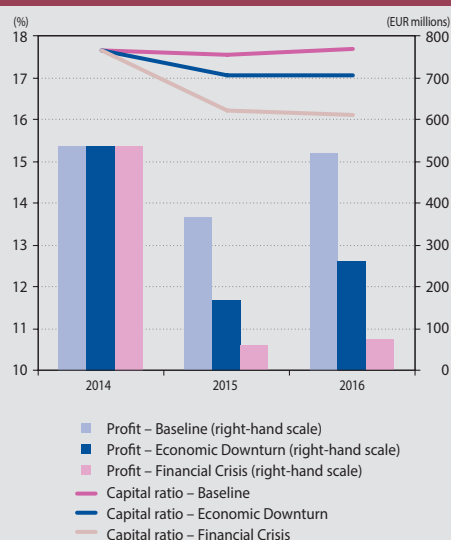
According to the stress test results, the banking sector still appears to be quite resilient to adverse shocks in the domestic economy and in financial markets. This is so even though the stress scenarios envisage, in comparison with the Baseline scenario, a relatively sharp drop in net interest income and a marked increase in losses related to respective types of risk.

The resilience of the banking sector remains supported by two factors in particular – strong capital adequacy and the assumed ability to generate net interest income under all three scenarios. The sector's aggregate capital ratio was 17.3% at the end of 2014. Assuming that banks increased their own funds by retaining a commensurate part of their profit for 2014, the capital ratio would rise to 17.7%. Under the Baseline scenario, the overall capital ratio at the end of the two-year stress test horizon is 17.7%, while under the Economic Downturn and Financial Crisis scenarios it is 17.1% and 16.1%, respectively. In the Baseline scenario, own funds increase arising from higher retained earnings are offset by increases in risk-weighted assets resulting from growth in lending to firms and

households. In the case of the two stress scenarios, the decline in the capital ratio is the result of the decrease of own funds owing to losses of certain banks and to losses from the revaluation of securities in the available-for-sale portfolio. Under both stress scenarios, assuming a conservative approach, the amount of risk-weighted assets is maintained despite an assumed decrease in the outstanding amount of loans to a constant level.

For the above reasons, all banks under both stress scenarios continue to meet the regulatory minimum capital requirement of 8%. In 2014, however, as part of the implementation of the EU's CRD IV Directive, banks in Slovakia became subject to a capital conservation buffer requirement, set at 2.5% of risk-weighted assets (without a transition period). This brought the overall minimum capital requirement to 10.5% of risk-weighted assets. Under the Baseline scenario, the higher requirement is still met by all banks, but in each of the stress scenarios the sector has a capital shortfall: €9 million (0.2% of aggregate own funds as at end-2014) under the Economic Downturn scenario and €21 million (0.4%) under the Financial Crisis scenario.

**Chart 40 Bank capital adequacy ratios and profits – Baseline and stress scenarios**



Source: NBS.

Note: The capital ratio at the end of 2014 is adjusted to take account of the assumed impact of equity increase.

This positive outcome for the sector as a whole is achieved despite the fact that four individual banks make a loss under the Baseline scenario, seven do so under the Economic Downturn scenario, and nine do so under the Financial Crisis scenario. If losses on the revaluation of securities in the available-for-sale portfolio are taken into account, the sector as a whole makes a cumulative loss of €28 million over the two-year period under the Financial Crisis scenario<sup>3</sup>.

In this exercise, as in previous stress tests, losses on loans to non-financial corporations are greater than other risk losses. Only under the Financial Crisis scenario do market risk losses exceed losses on loans to households.

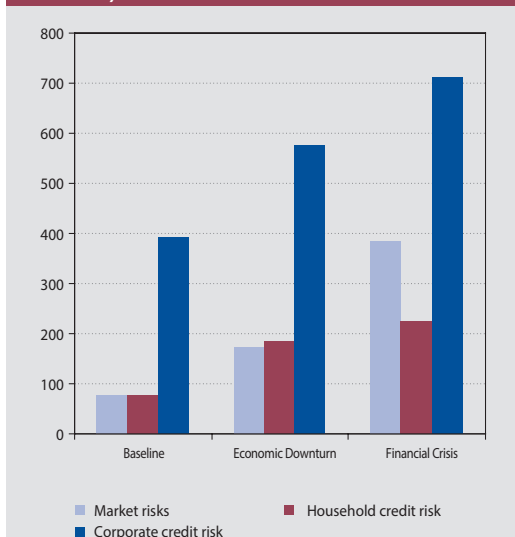
### THE INSURANCE SECTOR IS RESILIENT TO LOSSES UNDER THE STRESS SCENARIOS

Given the composition of its portfolio, the insurance sector does not experience significant changes in net interest income under the two-

<sup>3</sup> Since losses/gains from the revaluation of securities in the AFS portfolio are recorded directly in own funds, they are not included in the profit calculation.



**Chart 41 Losses arising from different types of risk – Baseline and stress scenarios (EUR millions)**



Source: NBS.

Note: The chart shows the total loss for the stress test period.

year stress scenarios, not even when there are larger marked shifts in market conditions. Under the Economic Downturn scenario, the sector manages to cover cumulatively the decline in the fair value of its financial assets (see Chart P56). Where this shock is combined with an increase in claims/benefits paid, the insurance sector suffers a loss of around €184 million and a reduction in equity. Under the Financial Crisis scenario, the drop in equity is more than twice as large. In both stress scenarios, the financial result is in negative territory. Nevertheless, the sector is expected to maintain adequate solvency.

The negative impact of the Economic Downturn scenario on assets covering technical provisions for unit-linked business is less than half of the impact on the collective investment funds, albeit as much as three-quarters of those assets are invested in investment funds (see Charts P55 and P58). By the end of the stress test horizon, the value of the assets is reduced by 0.3% under this scenario and by -2.4% under the Financial Crisis scenario.

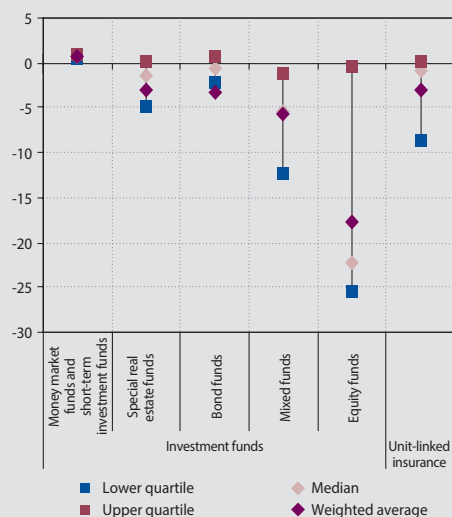
#### RESULTS OF THE STRESS TEST IN OTHER SECTORS

In the sector of second-pillar pension funds (managed by PFMCS), the bulk of assets are invested in lowest-risk bond funds, which earned stable returns in the recent period. Even under the Economic Downturn scenario, the majority of these funds are expected to register slightly positive returns. Only under the Financial Crisis scenario do they suffer a moderate loss, owing mainly to an increase in bond credit spreads. It is a different situation with equity and index funds, which under both stress scenarios recorded a quite marked drop in returns.

Since PFMCS are required to make up any losses incurred by their bond pension funds out of the company's own funds, it is necessary to analyse not only the impact of the scenarios on the performance of funds, but also on the company's losses to be deducted from its own funds. As at end-2014, the amount of PFMCS' own funds exceeded the regulatory minimum requirement, set at 25% of general operating expenses, by almost 30 times on average. Where, however, PFMCS make up bond fund losses under the Financial Crisis scenario, only for one year, their own funds decrease by around two-thirds. It should be noted, though, that at present this is only a theoretical analysis of sensitivity. PFMCS are by law required to make up such losses for a period of ten years, while the stress scenarios focus on only a two-year period. Moreover, the requirement to make up losses will not be in force until 2023. On the other hand, this analysis shows that the requirement to supplement losses over a ten-year horizon may be quite high considering the current capitalisation of PFMCS. Therefore until the date when this requirement takes effect, PFMCS should be gradually using their profits to build up sufficient capital buffers.

As for the collective investment sector (Chart 42), the stress test results did not show any significant changes from those in 2013. Still a large part of the assets under management (39%) would not be exposed to a loss under the stress scenarios and a further 41% would not incur a loss of more than 5%. By contrast, the most exposed funds – particularly certain equi-

**Chart 42 Distribution of the impact of the stress scenarios on the collective investment sector and unit-linked insurance (%)**



Source: NBS, RBLG, ECB, Bloomberg.

Note: The chart shows quartiles of the estimated profit/loss-to-asset ratio resulting from the application of the respective scenarios as at 31 December 2015.

Values are given as a percentage share of total assets (or NAV).

ity, mixed and bond funds – could record a loss of more than 20%.

The sector recording the highest average loss under the stress scenarios was that of third-pillar pension funds (managed by SPMCs). As already mentioned, the exposure of this sector to interest-rate, equity and foreign-exchange risk increased slightly during 2014. Under the increase in financial market tensions envisaged in the Financial Crisis stress scenario, the NAV of these funds falls by an average of more than 5%, and in contrast to the impact of this scenario on the collective investment sector, several of the most significant funds are affected.

## Box 1

### EUROPEAN STRESS TEST OF THE INSURANCE SECTOR

In 2014 EIOPA conducted a stress test of market and insurance risk. This was the second such exercise it had carried out, and in comparison with the first, the technical specifications were substantially closer to the requirements laid down by the Solvency II Directive.

The stress test comprised:

- a core stress module focused on identifying financial resilience to
  - a. market stress scenarios (2 scenarios)
  - b. single factor insurance shocks (15 single factors);
- a low yield module focused on identifying insurers' resilience to a prolonged period of low interest rates (2 scenarios);
- a questionnaire on the modules.

In the core stress module, the participating entities comprised a total of 167 insurance groups and individual undertakings repre-

senting 55% of gross written premium for the EU market. In the low yield module there were a total of 227 insurance groups and individual undertakings representing 60% of gross technical provisions in the EU market. Among insurers incorporated in Slovakia, nine entities participated in the exercise, all of them in the low yield module.

The results of the core stress module show that under the baseline scenario, 14% of participants do not have 100% coverage for the Solvency Capital Requirement (SCR). They, however, represented only 3% of total sample assets. The results of the two stress scenarios indicate a sizeable impact on the sector's capitalization. The share of participants whose SCR is below 100% after stress is 27% under market scenario 1 and 44% under market scenario 2. By contrast, insurance undertakings achieve better outcomes in the case of single factor



underwriting stress shocks, with, on average, a decrease in eligible own funds of less than 10% even under the most severe shocks.

In the low yield module, 16% of the participating undertakings did not reach an SCR ratio of 100%, representing a share of 8% of

total sample assets. The share of participants falling short of the SCR threshold rises to 20% under stress scenario 1 and 24% under stress scenario 2. The Slovak insurance sector has one of the highest SCR coverage ratios (close to 300%) and this is reduced only marginally under the stress scenarios.



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ANNEX 1

# MACROPRUDENTIAL INDICATORS OF THE FINANCIAL SECTOR

P1



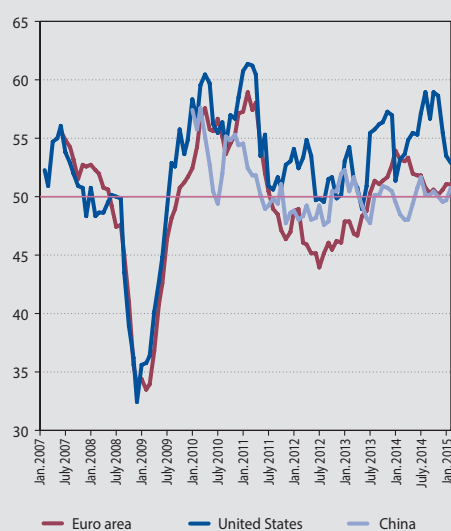
# MACROPRUDENTIAL INDICATORS OF THE FINANCIAL SECTOR

## GENERAL NOTES:

The formulation 'index: 31 December 2014 = 1' means that the given index was set in such a way that its value as at that date (31 December 2014) was 1.

## MACROECONOMIC RISK INDICATORS

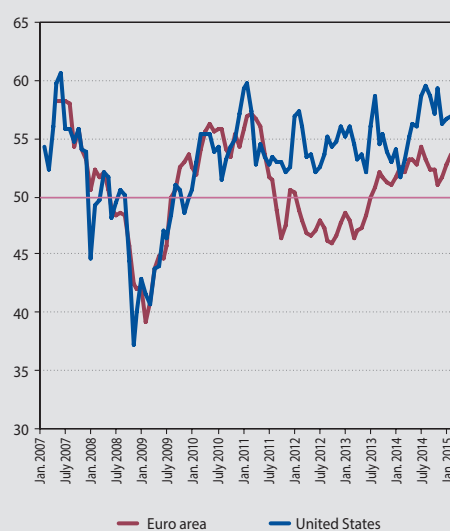
Chart P1 Manufacturing Purchasing Managers' Index (PMI) in selected economies



Source: Bloomberg.

Notes: A definition of the indicator is given in the section "Glossary and abbreviations".

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

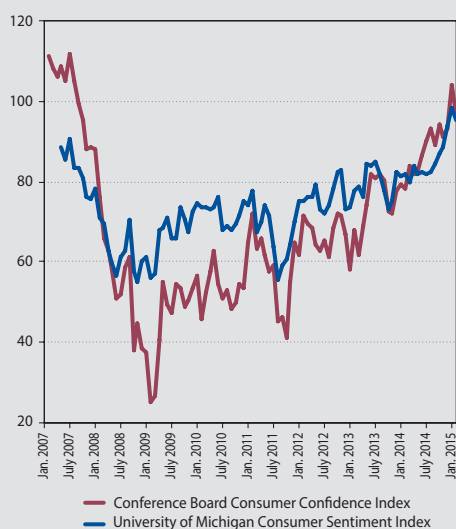


Source: Bloomberg.

Notes: A definition of the indicator is given in the section "Glossary and abbreviations".



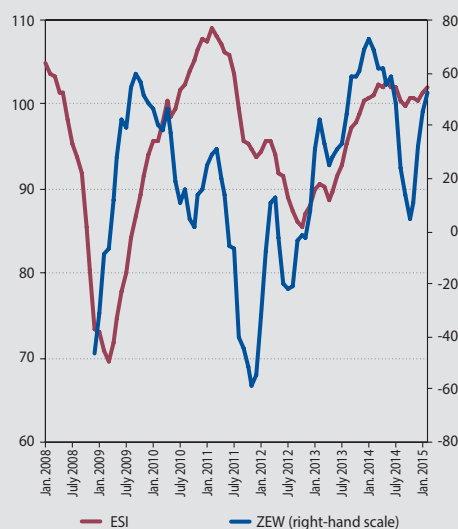
**Chart P3 Consumer confidence indicators in the United States**



Source: Bloomberg.

Notes: The chart refers to US consumer confidence indices produced by two different institutions.

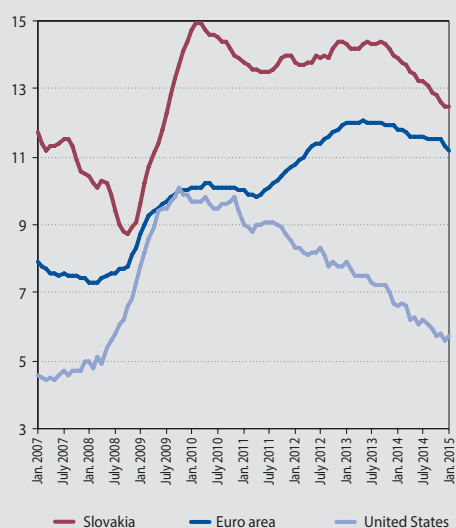
**Chart P4 Economic sentiment indicators in the euro area**



Source: Bloomberg.

Notes: A definition of the indicators is given in the section "Glossary and abbreviations".

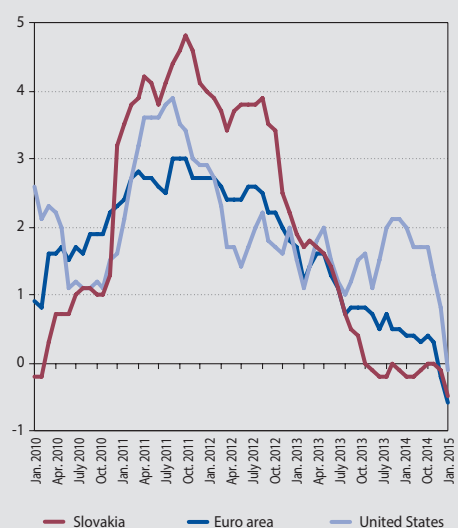
**Chart P5 Unemployment rates in selected economies (%)**



Source: Eurostat, Bureau of Labor Statistics.

Notes: Seasonally adjusted.

**Chart P6 Consumer price inflation in selected economies (%)**

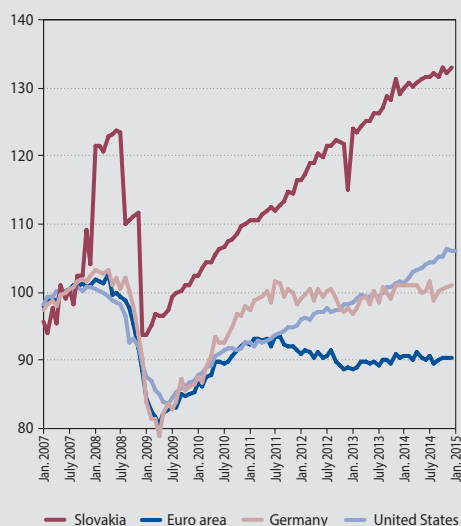


Source: Eurostat, Bureau of Labor Statistics.

Notes: Annual percentage changes in the consumer price indices.

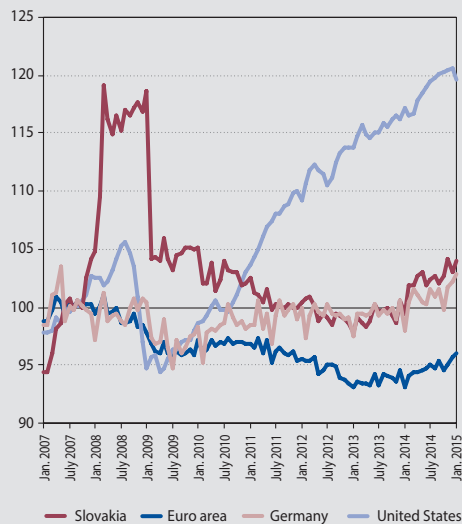


**Chart P7 Industrial production indices in selected economies**



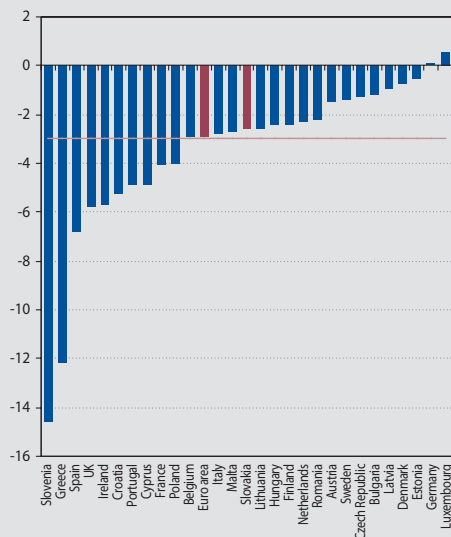
Source: Eurostat, US Federal Reserve.  
Notes: Rebalanced (average 2007 = 100).  
Seasonally adjusted.

**Chart P8 Retail sales indices in selected economies**



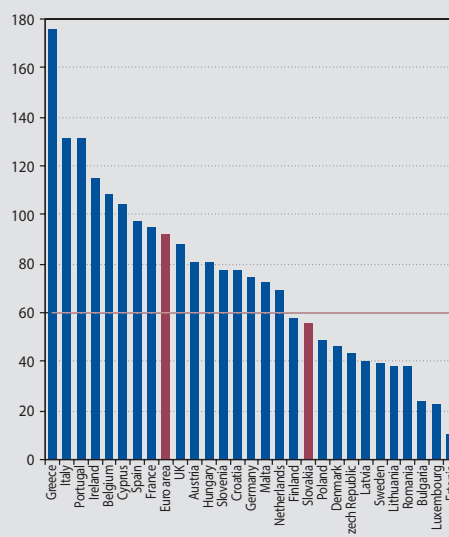
Source: Eurostat, US Department of Commerce.  
Notes: Rebalanced (average 2007 = 100).  
Seasonally adjusted.

**Chart P9 General government balances of EU countries in 2013 (%)**



Notes: Balance expressed as a percentage of GDP.

**Chart P10 Gross government debt of EU countries in third quarter of 2014 (%)**



Notes: Percentage shares of GDP.



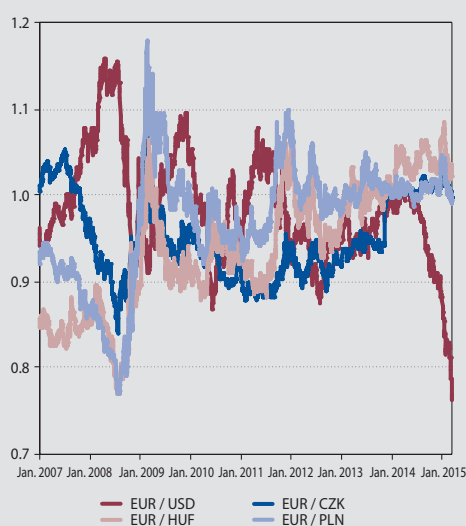
## FINANCIAL MARKET RISK INDICATORS

**Chart P11 Price commodity indices  
(31 December 2013 = 1)**



Source: Bloomberg, NBS.

**Chart P12 Exchange rate indices  
(31 December 2013 = 1)**



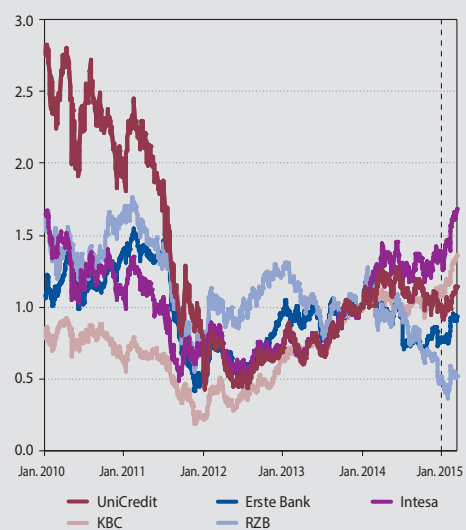
Source: Bloomberg, NBS.

**Chart P13 Equity indices  
(31 December 2013 = 1)**



Source: Bloomberg, NBS.

**Chart P14 Share price indices of the  
parent undertakings of the five largest  
domestic banks (31 December 2013 = 1)**



Source: Bloomberg, NBS.





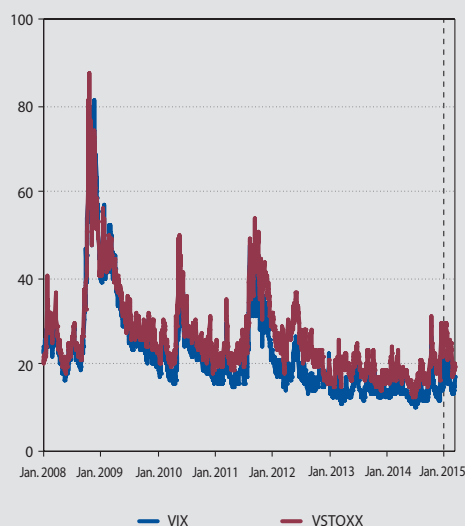
**Chart P15 Yield curve slopes in selected economies**



Source: Bloomberg, NBS.

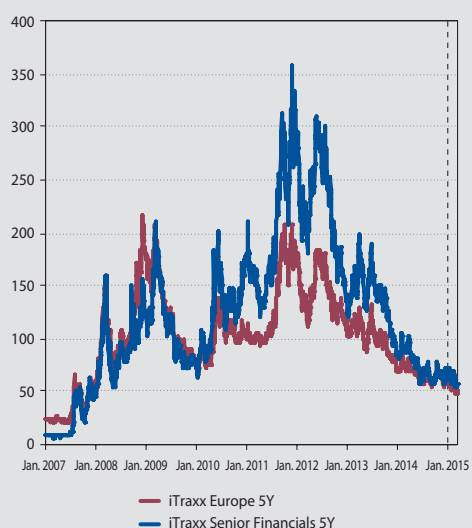
Notes: The yield curve slope is expressed as the difference between the yield to maturity on 10-year and 3-month government bonds.

**Chart P16 Volatility of equity indices**



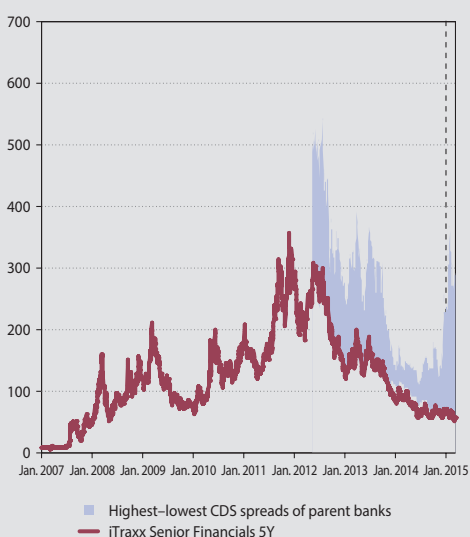
Source: Bloomberg.

**Chart P17 CDS spread indices (b.p.)**



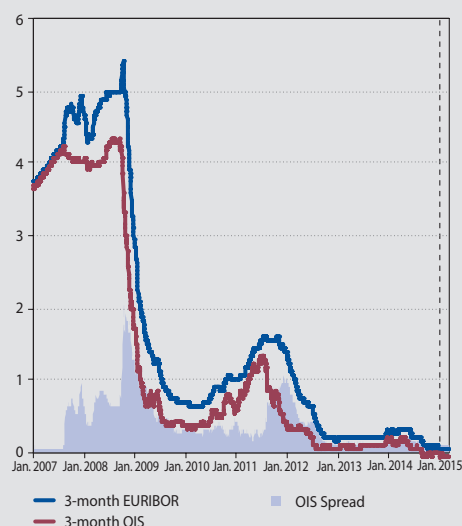
Source: Bloomberg, NBS.

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



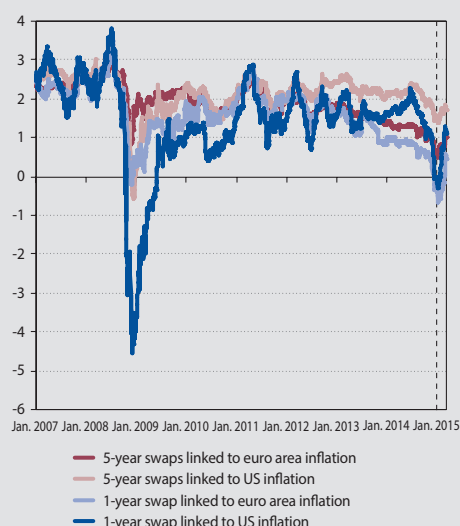
Source: Bloomberg, NBS.

**Chart P19 Three-month rates and the OIS spread (%; p.p.)**



Source: Bloomberg, NBS.

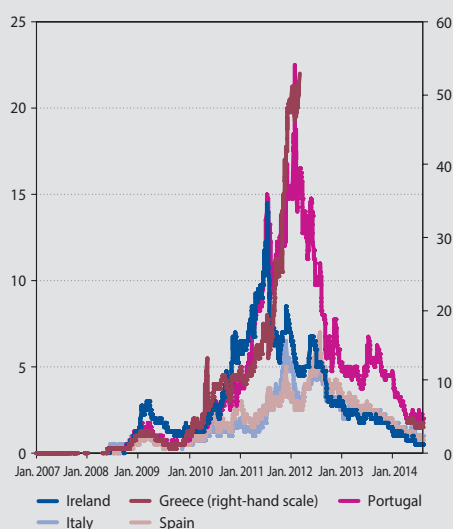
**Chart P20 Inflation-linked swap prices**



Source: Bloomberg, NBS.

Notes: The price of inflation-linked swaps is defined in the section "Glossary and abbreviations".

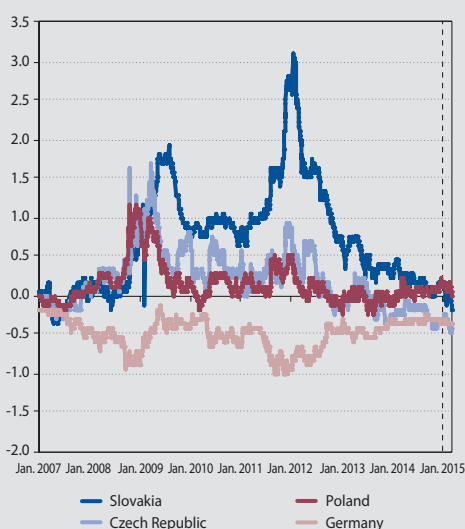
**Chart P21 Credit spreads on 5-year government bonds with higher risk (p.p.)**



Source: Bloomberg, NBS.

Notes: The left-hand scale shows percentage differences between yields on 5-year bonds issued by the different 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**



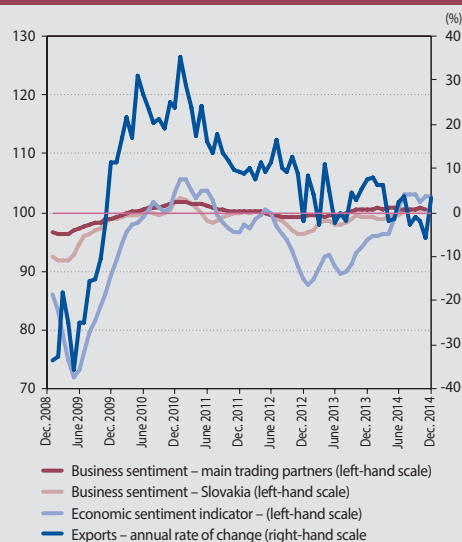
Source: Bloomberg, NBS.

Notes: The chart shows percentage differences between yields on 5-year government bonds denominated in the domestic currencies of the countries and 5-year swap rates for the respective currencies. Values are in p.p.



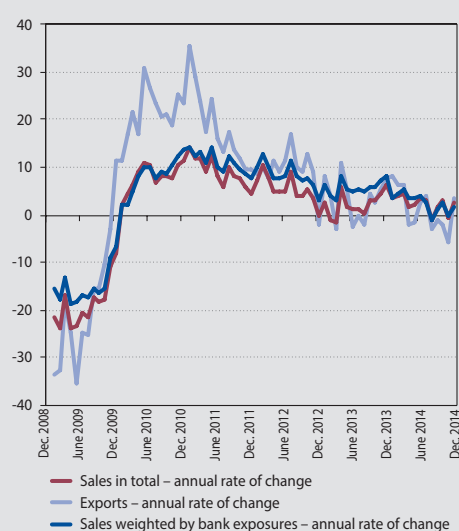
## CORPORATE CREDIT RISK INDICATORS

Chart P23 Exports and the business environment



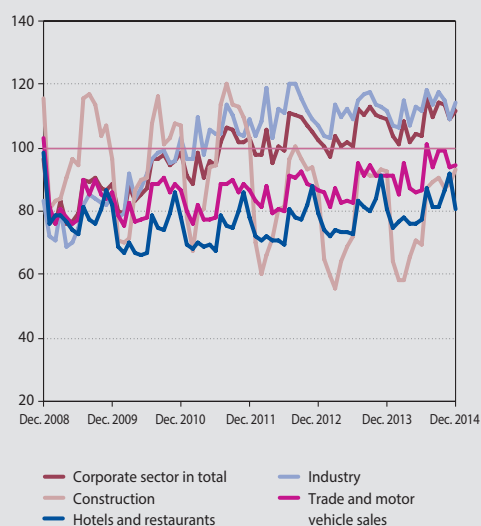
Source: NBS, OECD, SO SR.

Chart P24 Exports and corporate sales (%)



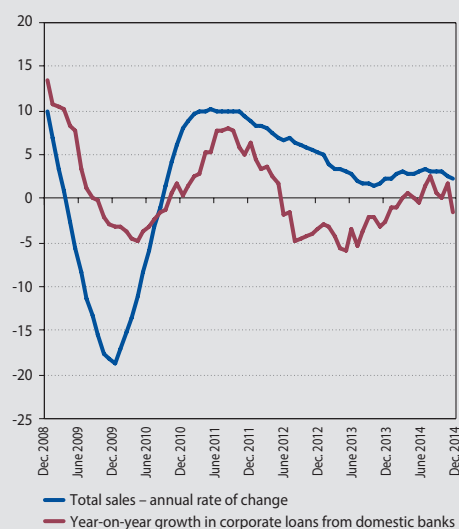
Source: SO SR, Slovak Ministry of Economy, OECD, NBS.

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



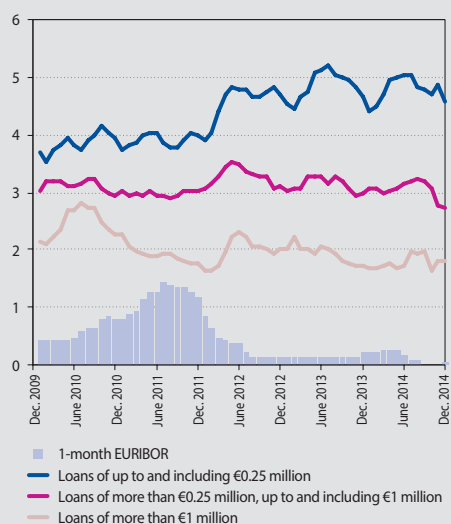
Source: SO SR.

Chart P26 Corporate loans and sales (%)



Source: NBS, SO SR.

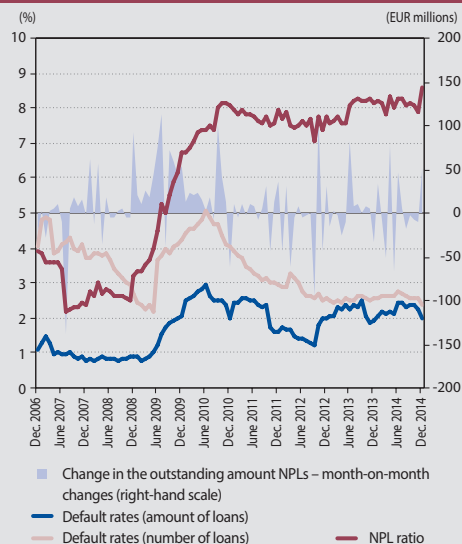
**Chart P27 Interest rate spreads on new loans to corporates (%)**



Source: NBS, EBF.

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

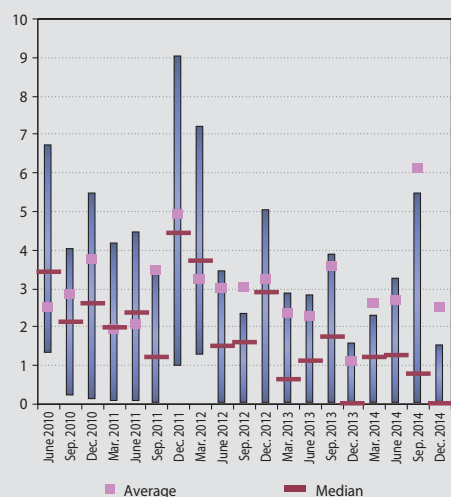
**Chart P28 Non-performing loans (NPLs) and default rates**



Source: NBS.

Note: Default rates refer to the number/volume of loans re-categorised during a horizon of one year as defaulted to the number/volume of non-defaulted loans at the beginning of a horizon of one year.

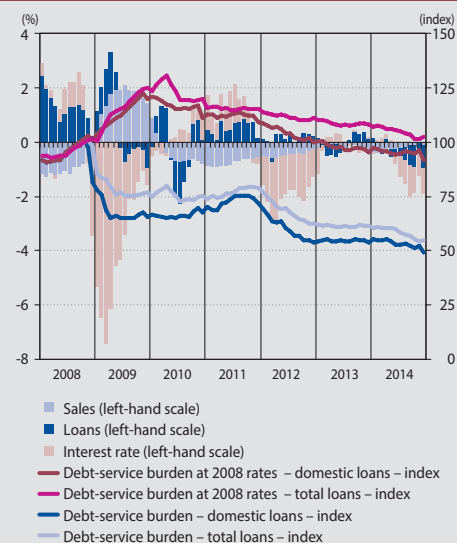
**Chart P29 Loans at risk (%)**



Source: NBS.

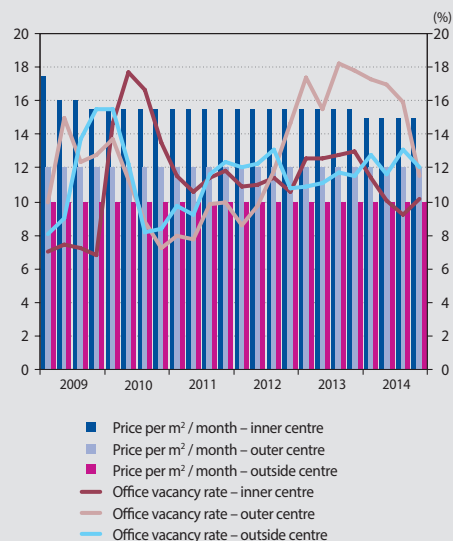
Note: The chart shows the interquartile range.

**Chart P30 Debt-service burden by component**



Source: NBS, SO SR.

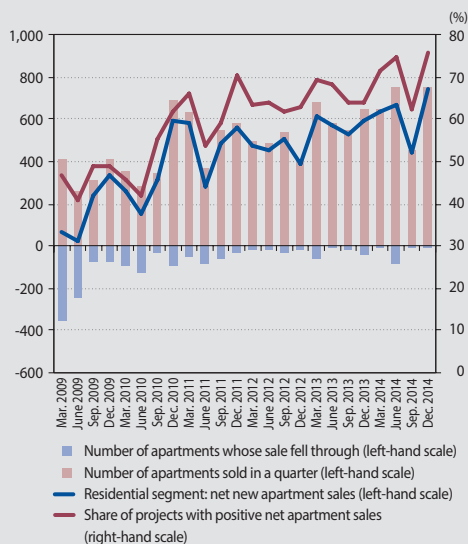
**Chart P31 Commercial real estate: prices and vacancy rates in the office segment**



Source: CBRE, NBS.

Notes: The chart shows prices and vacancy rates in Bratislava.

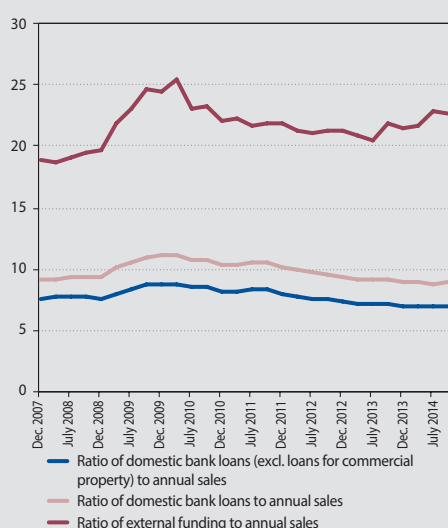
**Chart P32 Commercial real estate: sales in the residential segment – (new apartments)**



Source: Lexxus, NBS.

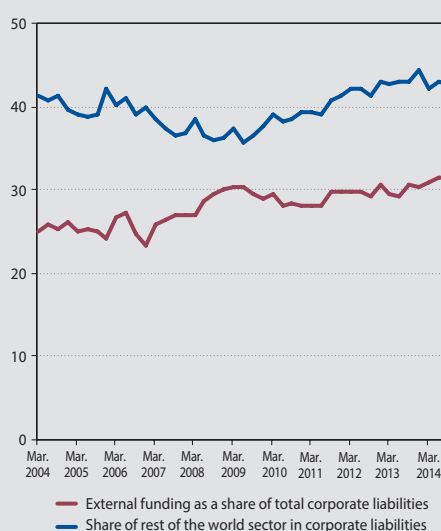
Notes: The chart shows developments in Bratislava.

**Chart P33 Comparison of corporate balance sheets and sales (%)**



Source: NBS, SO SR.

**Chart P34 Liabilities of non-financial corporations (%)**

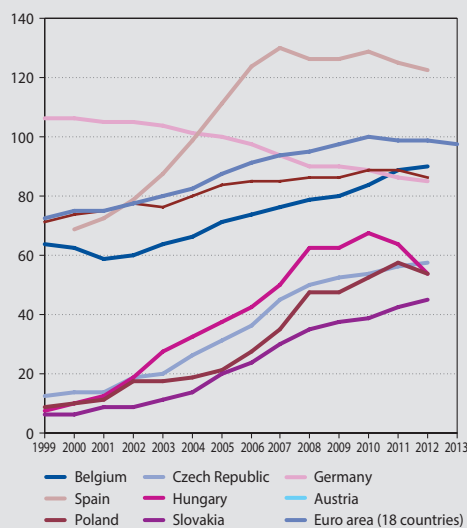


Source: NBS.



## HOUSEHOLD CREDIT RISK INDICATORS

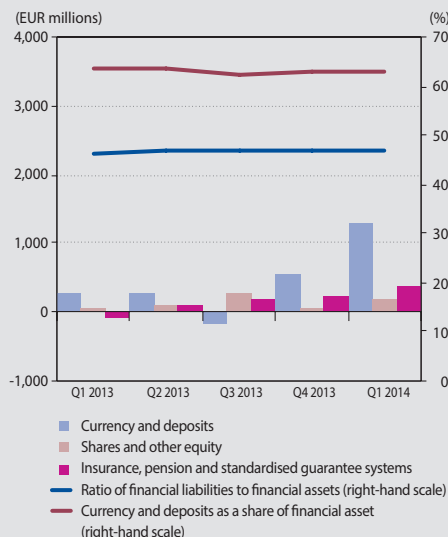
**Chart P35 Household indebtedness in Slovakia and in selected countries**



Source: Eurostat.

Note: The ratio of total debt of households to disposable income (%).

**Chart P36 Changes in household financial assets**



Source: NBS.

Note: Data refer to quarter-on-quarter changes. Owing to methodology changes, no historical data are available as yet.

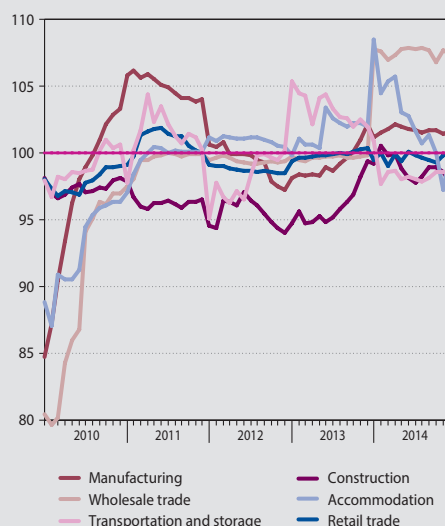
**Chart P37 Changes in the number of unemployed by income category**



Source: Central Office of Labour, Social Affairs and Family of the SR.  
Notes: Left-hand and right-hand scales: numbers of job seekers in thousands.

The income categories are defined in the section "Glossary and abbreviations".

**Chart P38 Index of employment in selected sectors**

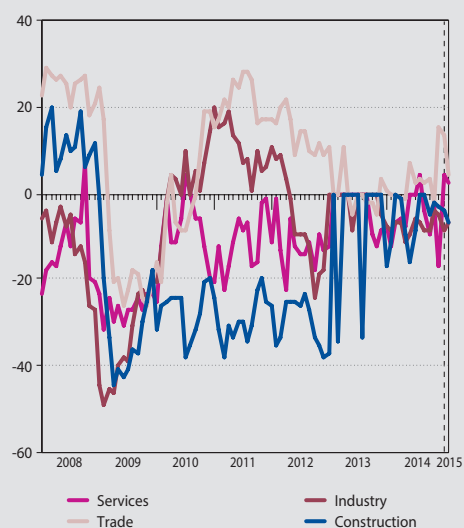


Source: SO SR.

Notes: Year-on-year changes.

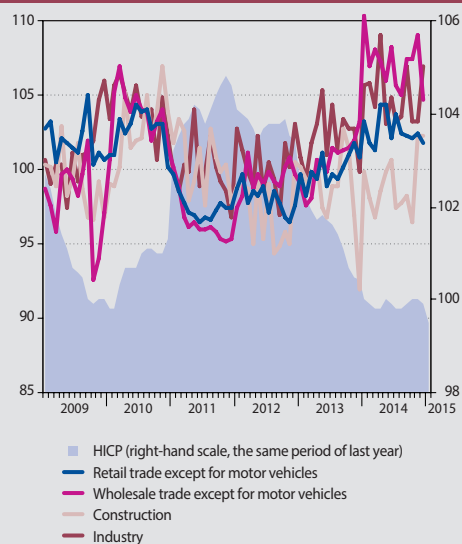


**Chart P39 Expected employment in selected sectors**



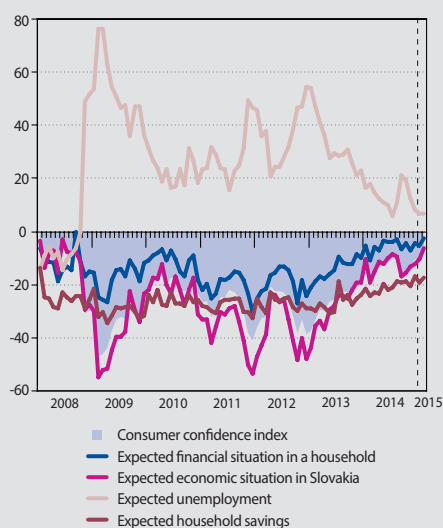
Source: SO SR.  
Note: Index data.

**Chart P40 Index of real wages in selected sectors**



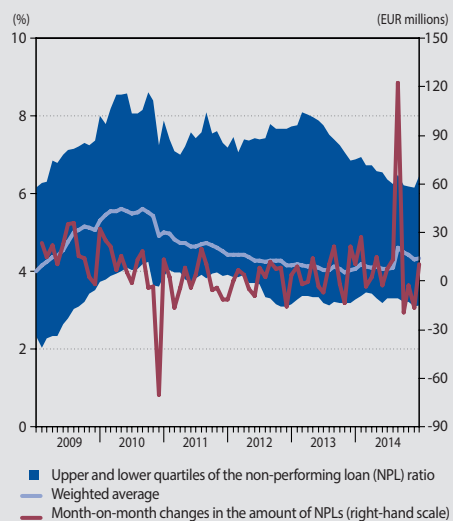
Source: SO SR.

**Chart P41 The consumer confidence index and its components**



Source: SO SR.

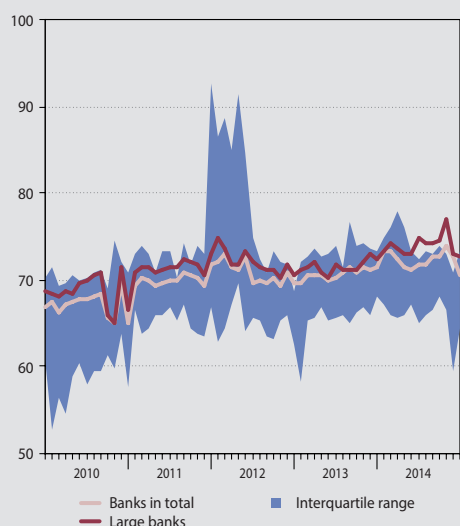
**Chart P42 Non-performing household loans**



Source: NBS.  
Notes: Left-hand scale: ratio of non-performing household loans to total household loans.



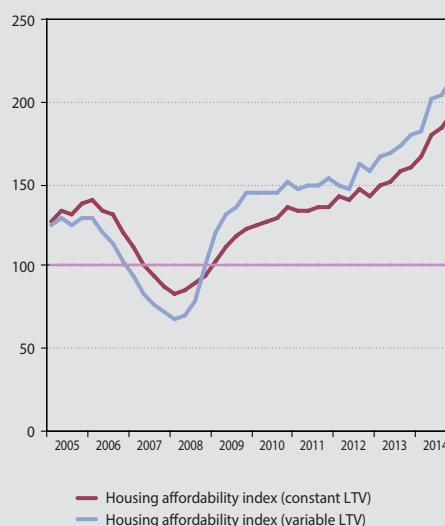
Chart P43 Loan-to-value (LTV) ratio (%)



Source: NBS.

Notes: The ratio is defined in the section "Glossary and abbreviations".

Chart P44 Housing affordability index

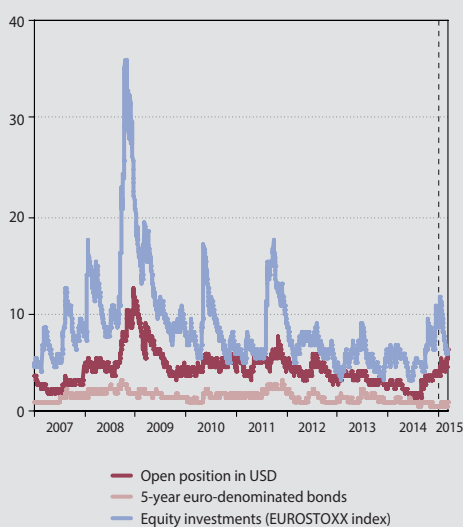


Source: NBS, SO SR.

Notes: The housing affordability index is defined in the section "Glossary and abbreviations".

## MARKET RISK AND LIQUIDITY RISK INDICATORS

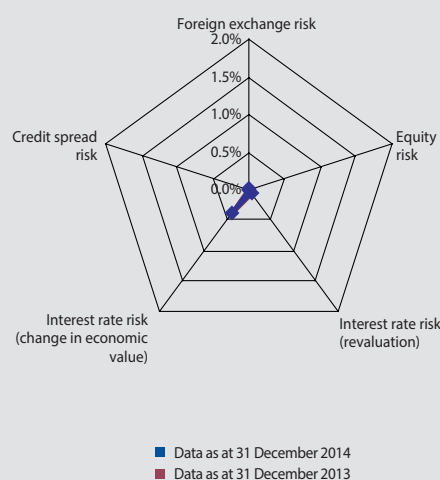
Chart P45 Value at Risk for investments in different types of financial instruments (%)



Source: Bloomberg, 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.

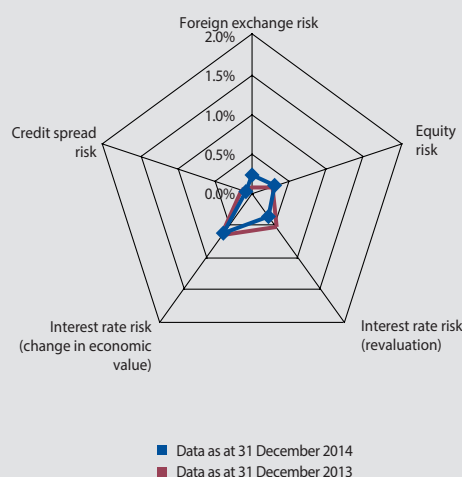
Chart P46 Sensitivity to different risk types in the banking sector



Source: Bloomberg, 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".

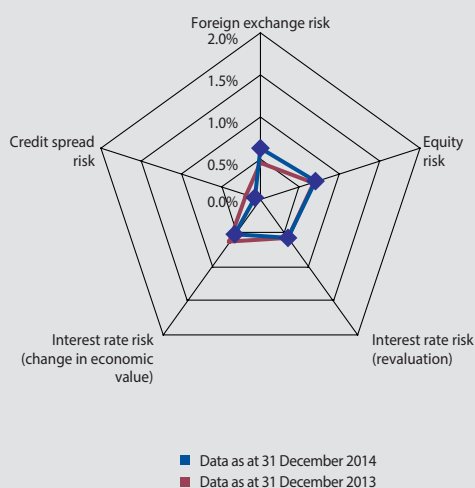
**Chart P47 Sensitivity to different risk types in the sector of PFMC funds**



Source: Bloomberg, 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".

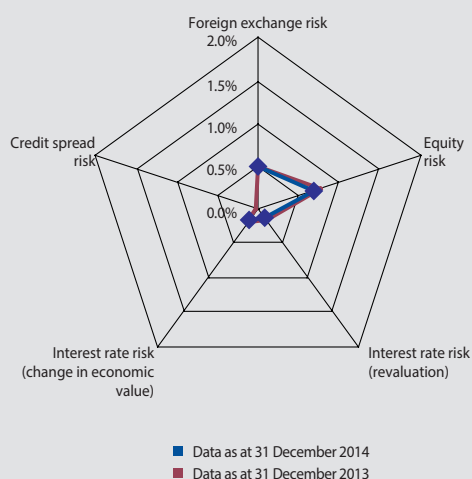
**Chart P48 Sensitivity to different risk types in the sector of SPMC funds**



Source: Bloomberg, 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".

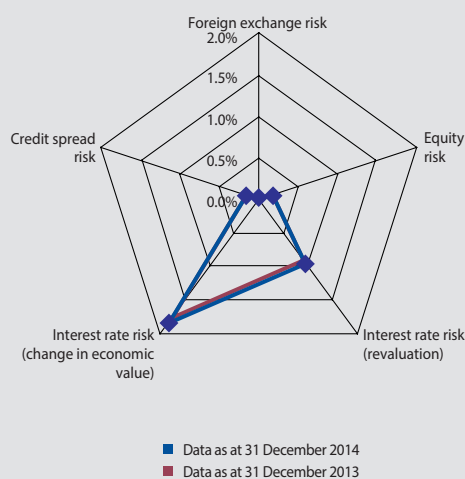
**Chart P49 Sensitivity to different risk types in the collective investment sector**



Source: Bloomberg, 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 Sensitivity of insurers' assets to different risk types**

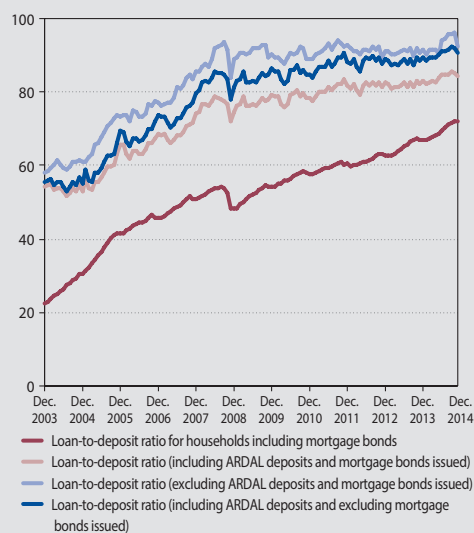


Source: Bloomberg, NBS.

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".



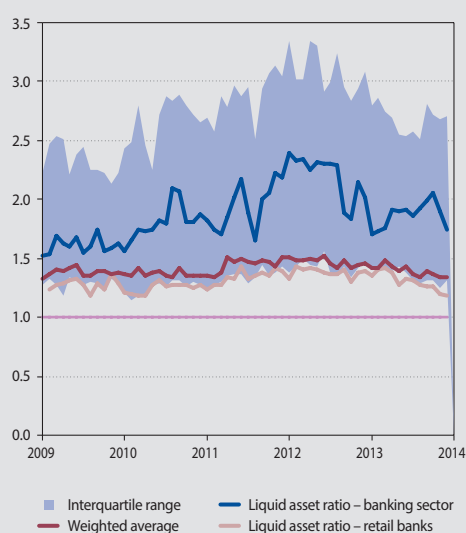
Chart P51 Loan-to-deposit ratio (%)



Source: NBS.

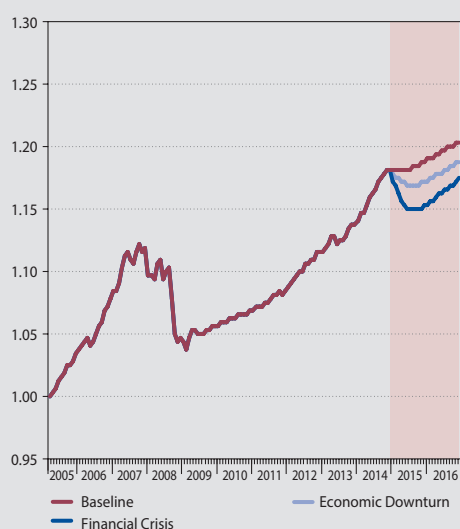
Notes: ARDAL – Debt and Liquidity Management Agency.

Chart P52 Liquid asset ratio



Source: NBS.

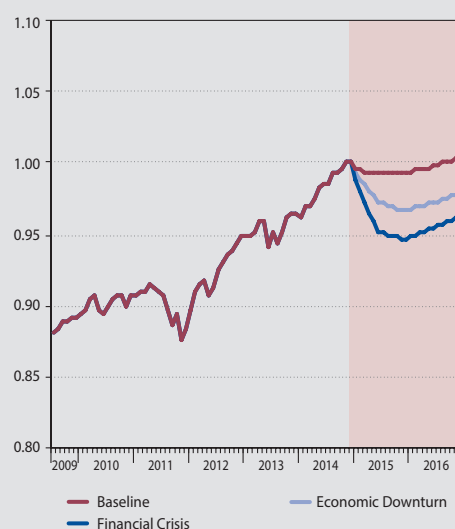
Chart P53 Impact of the Baseline scenario and stress scenarios on PFMC funds



Source: NBS, ECB, Bloomberg, 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 the Baseline scenario and stress scenarios on distribution SPMC funds

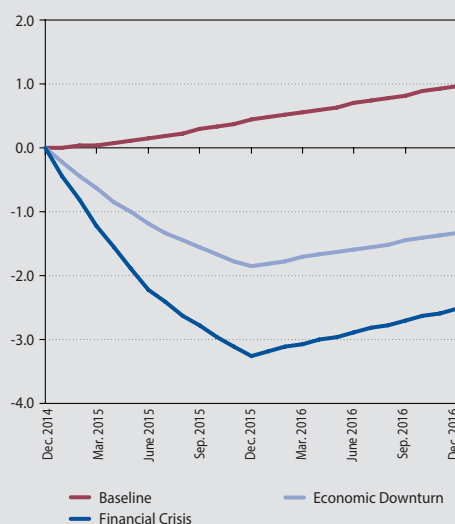


Source: NBS, ECB, Bloomberg, Internet.

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.



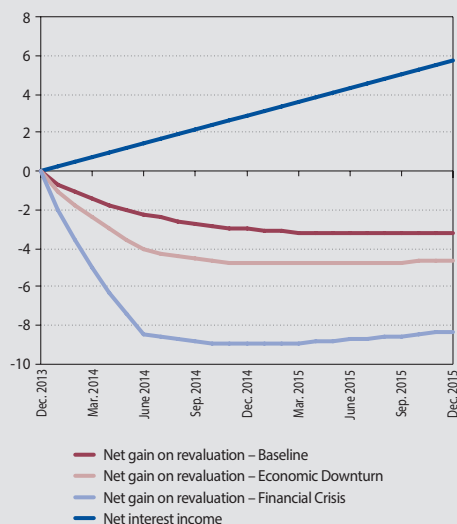
**Chart P55 Impact of the Baseline scenario and stress scenarios on collective investment funds (%)**



Source: NBS, ECB, Bloomberg, Internet.

Note: The left-hand scale shows the estimated gain or loss as a share of NAV, weighted by the NAV of individual funds.

**Chart P56 Impact of the Baseline scenario and stress scenarios on the assets of insurance companies (%)**

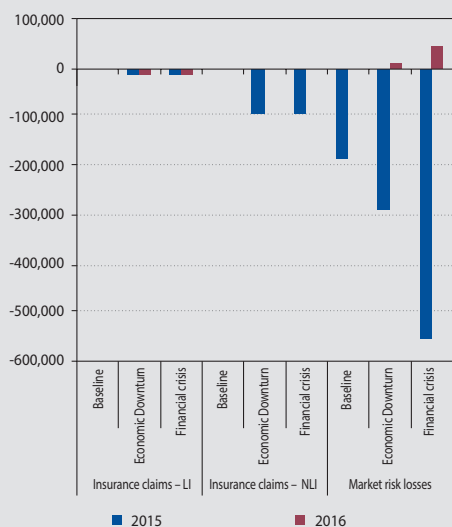


Source: NBS, ECB, Bloomberg, Internet.

Note: The left-hand scale shows the estimated gain or loss as a share of NAV (except for assets covering technical provisions for unit-linked insurance), weighted by the total assets of individual insurance companies.

The impact of stress scenarios on the value of liabilities was not taken into account.

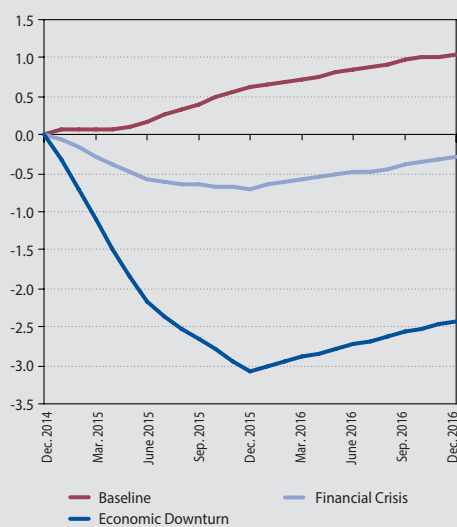
**Chart P57 Additional expenses that the insurance sector would incur under the Baseline and stress scenarios (EUR millions)**



Source: NBS.

Note: LI – life insurance; NLI – non-life insurance.

**Chart P58 Impact of the Baseline scenario and stress scenarios on the assets of unit-linked insurance (%)**



Source: NBS, ECB, Bloomberg, Internet.

Note: The left-hand scale shows the estimated gain or loss as a share of NAV, weighted by the NAV covering unit-linked insurance in individual insurance companies.



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## GLOSSARY AND ABBREVIATIONS



## 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 inter-bank rates.

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

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

*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.

*Net interest rate spread* – the difference between the rate of return on loans (interest income on loans as a share of total loans) and the cost of deposits (interest expenses on deposits as a share of total deposits).

*Non-performing loans* – loans with impairment of more than 50% of their value or with 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.



## G L O S A R Y   A N D   A B B R E V I A T I O N S

*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.





## ABBREVIATIONS

AFS	available for sale (portfolio)
b.p.	basis point
CPPV	current pension-point value
CI	collective investment
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)
IES	economic sentiment index
IF	investment fund
CASCO	comprehensive motor insurance
KZAM	Klasifikácia zamestnaní / Employment Classification
LAR	loans at risk
LTV	loan-to-value (ratio)
MB	mortgage bond
MTPL	motor third-party liability (insurance)
NAV	net asset value
OECD	Organisation for Economic Co-operation and Development
PFMC	pension funds management company
p.p.	percentage point
RBLG	Register of Bank Loans and Guarantees
ROE	return on equity
RWA	risk-weighted assets
SKP	Slovenská kancelária poisťovateľov / Slovak Insurers' Bureau
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
UPSVaR	Office of Labour, Social Affairs and Family
VaR	value at risk



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