NBP Narodowy Bank Polski

July 2014

Financial Stability Report

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The aim of this *Report* is to assess financial system stability in Poland. Financial system stability is a situation when the system performs its functions in a continuous and efficient way, even when unexpected and adverse disturbances occur on a significant scale. The stability of the financial system is a necessary condition for ensuring sustainable economic growth.

The stability of the banking system is of particular importance for financial system stability. Banks play a crucial role in financing the economy and settling payments. They also perform another important function by providing products that allow other entities to manage their financial risk. Therefore, special emphasis is put on the analysis and assessment of banking system stability.

Financial system stability is of particular interest to the NBP due to its statutory tasks to contribute to the stability of the domestic financial system and to establish the necessary conditions for the development of the banking system. Financial system stability is closely related to the primary task of the central bank, i.e. maintaining price stability. The financial system plays a key role in the transmission of monetary impulses to the real economy. Financial system instability may hamper the efficient implementation of the monetary policy. The analysis of the financial system stability also constitutes a necessary element of an efficient regulatory and supervisory policy, in the development of which the NBP plays an important role and which, together with the monetary policy, contribute to maintaining sustainable economic growth. Another reason for the involvement of the NBP in activities supporting the stable functioning of the financial system is the fact that the central bank is entrusted with the task of organising monetary clearing. The stable functioning of financial institutions that are integral components of payment systems is a necessary condition for the smooth operation of these systems.

The "Financial Stability Report" is primarily addressed to financial market participants as well as to other persons and institutions interested in the subject. The aim of the *Report* is to present conclusions from analytical and research work on financial system stability, including the assessment of its resilience to potential disturbances. Disseminating this knowledge should support the maintenance of financial stability through, among others, better understanding of the scale and scope of risk in the financial system. This enhances the probability of a spontaneous adjustment of the behaviour of those market participants that undertake excessive risks, without the necessity of public entities' intervention into market mechanisms. Thus, the information policy of the central bank is an important instrument for maintaining financial system stability.

The analysis conducted in this *Report* is based on data available up to 30 May 2014 (cut-off date). Some high-frequency data, especially relating to financial markets, and other particularly significant information may go beyond the adopted cut-off date. The *Report* was approved by the Management Board of the Narodowy Bank Polski at a meeting on 10 July 2014.

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Chapter 1.

A synthetic assessment of Poland's financial system stability

The "Financial Stability Report" provides the assessment of the position of the most important segments of Poland's financial system. The *Report* analyses major economic risks that institutions (banks, in particular) operating in the Polish market are exposed to and presents an assessment of their resilience to the materialisation of the risks.

1.1. Assessment of financial stability and its outlook

In the period analysed in the *Report*,[1] the Polish financial system functioned in a stable manner, and its major segment – the banking sector — was characterised by a high degree of resilience to disturbances in its environment.

Poland's economic situation is largely linked to the situation in its environment, in the euro area in particular. The uncertainty about a continued improvement in the economic situation outside Poland remains a major factor of risk to domestic financial system stability. The importance of domestic risk factors, including, inter alia, the situation of some smaller financial institutions, and growing imbalance in the commercial property market, is lower. The better economic growth outlook, coupled with a high level of resilience of the key segments of the Polish financial system to turmoil, are reasons why the risk of the materialisation of threats to domestic financial system stability can be assessed as moderate and has additionally diminished since the last edition of the *Report*.

Economic environment of the financial system

Outlook for the Polish economy that determines the functioning of the financial system has improved since the release of the previous edition of the *Report*. Poland's economic growth rate accelerated – after a period of low growth in 2012—2013, by

[1] The analysis presented in the *Report* focuses on data available in the period from the cut-off date of the previous edition, i.e. from 31 October 2013 to 30 May 2014. Some high-frequency data, especially data on financial markets, and other particularly significant information may go beyond the adopted cut-off date.

1.9% and 1.6% y/y respectively, GDP grew by 3.4% y/y in the first quarter of 2014. The July NBP macroeconomic projection shows that Poland's GDP growth will accelerate in 2014–2015 compared to 2013. The growth outlook is better than expected towards the end of 2013, which is, inter alia, reflected in faster-than-previously-expected improvement in the labour market situation.

Growth forecasts for the world economy for 2014–2015, most notably for the euro area, have not changed substantially, nevertheless data on the euro area show that from the second quarter of 2013 (after six successive quarters of decline) GDP, in quarter-on-quarter terms, has continued to rise albeit at a low rate. The recovery remains fragile due to lower-than-in-the-past economic growth rate in large emerging markets and still low economic activity in some large euro area economies. It can be said, however, that the likelihood of a recurrence of a severe economic slowdown in the euro area has diminished.

The financial markets of highly developed countries were characterised by rising optimism and a higher investor propensity to take risk, the latter manifesting itself in growing investment in assets exhibiting higher investment risk. These were supported, inter alia, by better macroeconomic conditions in some highly developed economies. There was also a certain improvement in the situation of public finances of euro area countries that were in economic distress in the past.

A less expansive monetary policy of the Federal Reserve, together with the improving macroeconomic position of highly developed countries, contributed to capital outflows from the emerging markets. This process generated problems mainly for countries with relatively weaker macroeconomic fundamentals. This indicates that the impact of future developments in monetary policy in major developed economies on emerging markets may largely depend on the assessment of country-specific fundamentals.

The impact of these phenomena on the situation on the domestic financial market, most notably on the government bond market and the FX market, was temporary and smaller than in the case of other emerging markets.

The portfolio of government bonds held by domestic banks, which increased substantially, is almost exclusively composed of Polish bonds.[2] The low assessment of credit risk of Polish government bonds, reflected in CDS premia, indicates that Poland's solvency is rated positively by investors, and risk to domestic financial system stability associated with sovereign credit risk is very low.

The situation in the property market is varied. The residential property market is close to equilibrium between demand and supply, and the trends seen in the market do not generate risk to financial stability. Signs of imbalance can be identified in the retail and office property market, and this imbalance is characterized by excessive and still rising supply amid relatively high prices and rents. However, the situation in this market poses no threat to domestic financial market stability, which is primarily due to the low exposure of domestic financial institutions to the market that is characterised by a significant share of foreign funding.

Financial institutions

The financial condition of the banking sector was good and stable in the fourth quarter of 2013 and the first quarter of 2014. Risk in this sector can be considered as moderate. The operating conditions of banks substantially improved. At the same time, the loss absorption capacity of banks remained high.

[2]The share of financial debt instruments issued by foreign entities in the Polish banking sector's assets is 0.2%.

The capital adequacy ratio for the Polish banking sector is close to the average for EU countries, however the sector is characterised by considerably more conservative risk weights and lower leverage as well as high quality capital. Since the onset of the global crisis in 2008, no bank in Poland has required recapitalisation with public funds.

The banks' capacity to absorb potential shocks was also strengthened by the still high earnings and their profitability ratios were only marginally lower than those registered in previous quarters. This was primarily due to a decrease in non-interest income, linked to lower revenue arising from the sale of government bonds and regulatory changes regarding the recognition of revenue from bancassurance in the books. Net interest margin rose slightly after banks had adjusted their funding costs to the environment of low interest rates. On the other hand, the ratio of credit risk costs to assets was stable and the quality of loans to the non-financial sector slightly improved. Lending growth accelerated along with higher economic growth rate. The recovery was seen in the market for loans to enterprises, especially investment loans, but also consumer loans.

The results of macro stress tests prove that the firm majority of domestic commercial banks hold sufficient buffers (high capital levels and current profits) to absorb the effects of even a severe economic slowdown and to maintain high capital adequacy ratios. The results of stress tests for liquidity risk also point to a strong liquidity position of banks and a further improvement in resilience in this area. It should be pointed out that the analyses were performed according to very restrictive assumptions; the probability of these assumptions materialising can be termed as low.

The current financial condition of the sector of cooperative banks can be assessed as stable, similarly as the condition of commercial banks. Cooperative banks exhibited a better quality of the loan portfolio and higher net interest margin, but as their cost efficiency was significantly lower, their profitability was slightly lower than profitability of commercial banks. The level of the capital adequacy ratio of cooperative banks was lower than the value of the ratio for commercial banks. An overwhelming majority of cooperative banks have a surplus of deposits over loans, which makes them unexposed to risk associated with the use of market funding.

The low profitability of the cooperative bank sector in the environment of a substantial improvement in the economic climate points to the challenges it faces. Low cost efficiency associated with a small scale of operations of some cooperative banks is one of the challenges. Another challenge is the model of cooperation with the associating banks, which, in a number of cases, results in the transfer of business risk from cooperative banks to the associating bank. When cooperative banks deposit their excess liquidity at the associating banks, this generates risk to the stability of the sector of cooperative banks. The stable current condition of the sector provides a supportive environment for making the necessary modifications to the sector's operating model, including a tighter integration of the associations, which would help to mitigate the current risks and adjust to the do requirements of the CRD IV / CRR regulatory package.[3] Lack of closer integration or even a disintegration of the associations could enhance the risk associated with the operations of cooperative banks.

The *Report* presents an analysis of risk related to banks' mutual exposures as well as the interconnectedness between banks and other financial institu-

[3] More on the challenges the cooperative bank sector faces can be found in: "Financial Stability Report. December 2013", 2013, NBP, Box 6, p. 88.

Table 1.1. Synthetic assessment of domestic financial system stability

Area of assessment	Change since the previous edition of the *Report*
Banks' current financial standing	►
Banks' shock absorption capacity	►
Non-bank financial institutions current financial standing	►
Outlook for environment of Polish economy	▲
Synthetic assessment of outlook for domestic financial system stability	▲

Notes: ▲▲ – significant improvement, ▲ – improvement, ► – no change, ▼ – deterioration, ▼▼ – significant deterioration. Outlook for the environment of the Polish economy takes into account both most likely developments and a risk of the materialisation of a significantly more unfavourable scenario. In this Table, non-bank financial institutions include institutions discussed in Chapter 4.
Source: NBP expert assessment.

tions. This analysis indicates that besides the interconnectedness between cooperative and associating banks – which stems from the model of operation of cooperative banking – other types of connections do not constitute a source of substantial risk to financial stability. In particular, due to a relatively minor scale of interconnectedness between insurance companies, investment fund management companies (TFIs), pension fund management companies (PTEs) and credit unions with banks, the impact of these institutions on Poland's banking sector is limited and they do not generate systemic risk.

The situation of insurance companies, investment fund management companies (TFIs) and pension fund management companies (PTEs) posed no major hazards to financial system stability. In 2013, the technical and financial results of the insurance sector declined, which was primarily driven by the reduced sale of insurance-wrapped deposits. On the other hand, the technical profitability of the non-life insurance sector improved. The decline in the solvency ratios of insurance companies, related to the payout of part of capital as dividend by the PZU group, which is characterised by very high capital adequacy, did not pose a risk to the functioning of this sector. The revision of the pension system reduces the scale of operations of open pension funds, which may, in the long run, result in a decrease in profits by PTEs. These changes should not have a negative influence on financial system stability.

The financial condition of the credit unions sector in 2013 was regarded by the Polish Financial Supervision Authority (KNF) as difficult, especially as far as the sector's capital levels – assessed ad inadequate – are concerned.[4] The credit unions sector needs restructuring, and the process will be additionally supported by the fact that credit union members' deposits have been covered by the BFG guarantees. By the end of May 2014, 44 out of all 55 operating credit unions had been required by KNF to develop recovery programmes, and KNF appointed administrators at 4 credit unions.

Due to their minor share in the financial system and a low scale of interconnectedness with other financial institutions, in particular with the banking sector, the condition of credit unions should not generate systemic risk.[5] However, the weak capital position of the credit unions sector increases its vulnerability to shocks and may lead, through reputational effects, to a drop in clients' confidence in financial institutions. Moreover, a smooth restructuring of the sector is advisable as credit unions play a significant role as a provider of financial services for their numerous clients.

[4] The KNF opinion was presented in the report "Informacja o sytuacji spółdzielczych kas oszczędnościowo–kredytowych w roku 2013" [Information on the condition of credit unions in 2013], available on the KNF website, www.knf.gov.pl.
[5] For definition of this term, see *Glossary*.

Infrastructure of the financial system

In the analysed period, substantial structural changes occurred in the post-trade infrastructure of the domestic financial instruments market. CCP and trade repository operated by the KDPW group were authorised by supervision authorities to carry out business in accordance with the requirements of the EMIR regulation. Poland is one of few EU countries where such entities of financial market infrastructure operate. Their operation will have a substantial impact on the functioning and stability of the domestic financial market and for risk management at financial institutions. Therefore, the corporate structure of these entities should ensure a significant influence of the central bank, as the institution responsible for financial stability, on the design of their policies.

1.2. Systemic risks

Cyclical risk

In the Polish economy, there are presently no significant imbalances whose unwinding could negatively affect financial stability. Developments in the commercial property market, despite identification of growing imbalance, should not adversely impact the functioning of the financial system because the value of exposures of domestic financial institutions to this market is low. Also, the difficult condition of the credit unions sector should not generate systemic risk due to the minor scale of interconnectedness between credit unions with other financial institutions.

Cyclical risk factors relate primarily to developments in the environment of the Polish economy, mainly in the euro area and other highly developed countries. Although economic forecasts for the euro area economy are relatively favourable, recurrence of stagnation in countries that are Poland's main trading partners still cannot be excluded. This could result, inter alia, from an occurrence of a surge in risk aversion in global financial markets, which would contribute to deceleration of the growth rate of emerging economies and deterioration of the condition of banking sectors in developed countries. Deflation and, consequently, a rise in the real value of sovereign and private debt, could also add to a longer crisis. In addition, should the Russian-Ukrainian conflict intensify, it may negatively affect the economic situation in the European Union. However, the likelihood of the scenario of a severe economic slowdown unfolding in the euro area has diminished.

A significant fall of euro area GDP growth or economic stagnation are factors that would slow Poland's economic growth rate, which would negatively affect the situation in the labour market. Credit risk would be the main channel through which the materialisation of such a scenario would affect financial stability. Credit risk growth would stem from the deterioration of both the condition of enterprises and the situation in the labour market, and from the depreciation of the zloty negatively affecting the quality of the foreign currency loan portfolio.

A surge in risk aversion would also involve more pressure on the European banks to deleverage, which could in turn constrain credit supply in Poland. Worse availability of funding and a rise in funding costs could also adversely impact credit supply. The outcome of the comprehensive assessment of the situation of banks conducted by the ECB, to be published in the second half of 2014, will have an important impact on the market assessment of banks from countries participating in the banking

union. If the assessment results prove to be substantially worse than market expectations, this may result in the materialisation of the negative scenario discussed above.

A scenario involving a sharp decrease in the economic growth rate or stagnation in the euro area would also negatively affect the position of the Polish State budget. This development together with increased risk aversion would push up the yields on Polish government bonds. However, banks' exposure to market risk is limited and should not generate systemic risk.

Another scenario that may lead to a rise in market risk in the banking sector would involve a faster than expected abandonment of expansive monetary policy by major central banks or a substantial growth in geopolitical risk associated with, for example, the deepening crisis in Russo-Ukrainian relations. These developments would make investors withdraw from less developed markets, which could result in, inter alia, zloty depreciation and higher yields on Polish government bonds. Nevertheless, the impact of such a scenario on domestic financial system stability can be assessed as moderate.

Although the materialisation of the scenario discussed above should not jeopardise financial stability, it may, however, pose a major challenge for some financial institutions. The implications of the materialisation of credit risk would be contained. Stress tests point to banks' high resilience to macroeconomic, market and liquidity shocks. The uncertainty about global developments implies the need to keep this resilience at a high level.

Structural risk

Some strategic investors of Polish banks, despite the good and stable profitability of operations in Poland, may choose to sell Polish subsidiaries as part of their restructuring programmes, the shift of their business models or scaling down operations. In order to maintain the stability of the Polish banking sector, it is essential that such processes are conducted in an orderly manner, and potential new bank owners ensure their stable functioning.

Ownership changes may bring about a rise in concentration in the banking sector. A more important role played by the largest institutions in the banking system may lead to the emergence of the problem of institutions that are "too big to fail". The financial condition of the largest banks and the risk they take have to be closely monitored, and these institutions should demonstrate an increased capacity to absorb the effects of risk materialisation.

Besides risks of an explicitly structural nature, other risks to financial stability, which may become systemic, have to be identified, although are they not strictly associated with the business or financial cycle. These are primarily legal risk and operational risk. Legal risk is associated with the possibility to sustain big losses or costs arising from administrative procedures or court litigations. Risk related to the operation of IT systems and the exposure of these systems to failures and cyber-attacks is of special significance. The experience of Estonia of 2007 shows that such a risk may significantly increase in the environment of ongoing geopolitical tension. A potential materialisation of such risks may have serious consequences for financial stability. The sources of the risks are not economic, and cannot be analysed and assessed by means of analytical tools employed in the *Report*.

1.3. Recommendations

In addition to the analysis of risks in the financial system, the role of the *Report* is to offer solutions aimed at containing such risks. It is one of the activities that Narodowy Bank Polski performs when fulfilling the

mandate to support the stability of the domestic financial system. Narodowy Bank Polski points to the following measures relating to both the design of the financial safety net and the position of specific financial institutions that would contribute to a further strengthening of the stability of the domestic financial system:

1. **A speedy enactment of the law setting up the Systemic Risk Council — the body responsible for macroprudential supervision of the domestic financial system — should be pursued, and its form and competences should ensure an effective identification, assessment and mitigation of systemic risk.** The creation of such an institution will help strengthen the institutional framework of the domestic financial safety net and implement the "Recommendation of the ESRB on the macroeconomic mandate of national authorities" (ESRB/2011/3). The draft law also introduces into Polish law some of the provisions – related to capital buffers — of the new CRD directive. A prompt implementation of other provisions of the directive is also desirable.

2. **Legislative work aiming to introduce the recovery and resolution mechanism for banks into Poland's law should be continued.**

3. **The EU initiatives that serve to contain systemic risk that may be generated by the activities of CCPs, in particular relating to the establishment of the recovery and resolution mechanism for these entities and their appropriate capital levels should be supported.**[6]

4. Average capital adequacy and leverage ratios in the banking sector provide high resilience of banks to shocks, creating favourable conditions for Poland's financial system stability. Therefore, **banks that expand the scale of their operations at a time when the economic climate is improving and loan demand is rising should not substantially increase leverage.** Retention of a significant portion of their profits will help banks to develop their business in a safe manner.

5. **Banks whose liquidity position is sensitive should increase buffers of liquid assets.** This may, in particular, concern banks which demonstrate a high share of counterparty-concentrated liabilities towards non-residents. To reduce funding structure risk, it is essential that banks continue to gradually limit the funding concentration in the counterparty and product dimensions, while ensuring a safe continuity of funding.

6. **Banks should pursue a prudent lending policy in the segment of commercial property loans.** The situation in the retail and office property market shows that imbalances have been growing, which – in the environment of rising supply – may result in unfavourable changes in prices and rents and in credit risk growth.

7. A significant part of housing loans originated in the past, especially foreign currency loans, exhibits high current LtV. **When calculating credit risk costs and pursuing their capital policy, banks should take into account the risk arising from this portion of the loan portfolio.** Banks should avoid taking actions that may enhance the likelihood of borrowers losing the loan servicing capacity.

8. **In order to strengthen the sector of cooperative banking, it is advisable to pursue its closer integration and transformation of as-**

[6]These issues were analysed in greater detail in Box 3 in "Financial Stability Report", December 2013, NBP, p. 32.

sociations into associations with an Institutional Protection Scheme that covers banks' liquidity and capital, to change the business model of the cooperative banking and strengthen the resilience of the associating banks. A closer integration will help cooperative banks to better utilize their potential to expand, including their local market knowledge, and at the same time to stem the trends to transfer business risk to the associating banks.

9. The capital position of credit unions can be assessed as difficult. For this reason, **the restructuring actions should be continued, aiming to enhance the operational efficiency of credit unions and increase their capital, while utilizing the internal resources of the credit unions system in an optimal way.** Work should be started on developing such a business framework for credit unions that would restore the model of strong common bond among members of each credit union.

The current capital position of the majority of banks, most notably low leverage (a large share of regulatory capital in banks' balance-sheet total), is the strength of the Polish financial sector. Its low and stable leverage levels add to its stable operation across the business cycle, thus reducing the room for pro-cyclical behaviour by banks. The low leverage also reduces the probability of the emergence of solvency problems in banks that may potentially require support with taxpayers' money. As the application of internal methods to estimate the capital requirements is becoming more common, the leverage ratio that uses no risk weights will play an important role in ensuring that banks remain appropriately resilient to turmoil. The limit has not yet been set by the EU regulators, however it should be deemed desirable to set it at a more restrictive level than the one proposed by the Basel Committee. The ability to determine the leverage cap should become one of the macroprudential policy tools at national level, and the leeway for regulatory arbitrage should be reduced by solutions corresponding to solutions applied in the case of the counter-cyclical capital buffer.

Chapter 2.

Financial institutions' economic environment

Economic growth in the world economy was moderate and economic activity remained diversified across regions. Poland's economic recovery continued and, at the same time, the situation in the labour market gradually improved. Further development of the economic situation in Poland will largely depend on the global economic situation, including the pace at which euro area countries will be able to achieve sustainable economic growth.

The situation in the Polish financial market was stable. Despite a material structural change relating to the pension system reform, there was no change in the valuation of market instruments and the turnover volumes in the period analysed, which could have represented a significant risk factor for the banking sector functioning.

The situation in the property market was close to equilibrium. The probability of significant falls in the prices of flats and the related negative consequences for financial system stability may be currently assessed as very low. However, in the commercial property market a process of growing imbalances can be observed.

2.1. Macroeconomic developments

The global economy developed at a moderate pace. Economic activity in both developed and developing countries was largely diversified. In the euro area, GDP growth stood at slightly above zero, while in the United States accelerating trend in economic activity growth was stopped by the decreased GDP in the first quarter of 2014,which could have resulted from exceptionally unfavourable weather conditions. Data from the US economy show that another upturn in the economic activity is likely at the beginning of the second quarter of 2014. The growth of economic activity in the world's major developing countries was relatively low and in some of them (China, Russia) it clearly declined.

The prospects for economic growth in Poland's direct environment slightly improved. The economic growth rate in Germany, Poland's major trading partner, accelerated again. An improvement in the economic activity is expected in the euro area, which is demonstrated by an increase in retail sales and improved consumer sentiment, including falling concerns about unemployment growth. The May projection of the European Commission confirms that economic upturn in the euro area will last throughout 2014 and accelerate in 2015. The forecast for euro area growth in 2014—2015 has not changed significantly since the previous *Report*, but the probability of another strong downturn scenario was reduced. A risk factor for global growth may stem form slowing economic activity in the leading developing countries, especially in China, which may result from the correction of existing imbalances.

Economic upturn continued in the Polish economy. In real terms, GDP growth amounted to 3.4% in the first quarter of 2014 against 2.7% y/y in the fourth quarter of 2013 and 1.9% y/y in the third quarter of 2013. The GDP growth rate was associated with further acceleration of domestic demand.

The acceleration of growth in gross capital formation was favourable for the economic growth outlook. In the first quarter of 2014, the growth in gross fixed capital formation rose and amounted to 10.7% y/y against 2.0% y/y in the fourth quarter of 2013. The growth was supported by acceleration in corporate investments and deceleration of slowdown in housing investment. As shown by economic situation studies by NBP[7], enterprises expect further acceleration in investment activities. Moreover, the increase in the propensity of enterprises to invest may have been also supported by growing production capacity utilisation.

The improved economic activity was accompanied by a gradual improvement in the labour market. The number of people working in the economy grew, which mainly resulted from the increase in the number of people working in the services sector. There was an increase, albeit slight, for the first time in over one year, in the number of people employed in the corporate sector. In the first quarter of 2014, the LFS unemployment rate amounted to 9.8% against 10.1% in the fourth quarter of 2013 (seasonally adjusted data). Higher demand for labour accompanying the upturn in economic activity was conducive to accelerated growth in wages.

The financial condition of enterprises continued to improve. In the first quarter of 2014, the growth in net financial result amounted to 20.6% y/y against 18.2% in the third quarter of 2013. The return on sales remained at a similar level (4.5%). In the period analysed, the current and quick liquidity ratios increased by almost 2 percentage points, mainly on

[7] See "Information on the condition of the enterprise sector, including the economic climate in 2014 Q1 and forecasts for 2014 Q2", NBP, 2014.

the back of a decrease in short-term liabilities. Indebtedness of the corporate sector remains at a moderate level – the ratio of corporate loans granted by domestic banking sector to GDP amounted to 15.3% and remains stable since 2010.

The fiscal situation improved. After the first four months of 2014, the budget deficit was markedly lower than in the corresponding period of the previous year. In the period from January to April 2014, total budget revenues increased (a particularly strong increase was that of VAT revenues). Public debt, calculated according to domestic methodology, rose from 52.7% of GDP in 2012 to 53.9% of GDP in 2013, while according to ESA 95 standard – from 55.6% of GDP in 2012 to 57.0% of GDP in 2013.

Under the "Convergence Programme. 2014 Update" a one-off surplus, according to ESA 95 standard, will be recorded in 2014 in the general government sector, amounting to 5.9% of GDP, which is due to the transfer of assets from OFEs to ZUS.[8] The changes introduced to the pension system will help lower the public finance deficit through a reduction in debt servicing costs and an increase in revenues from pension contributions associated with the fact that part of the insured persons will leave OFEs. The above situation, as well as the scheduled wage freeze until 2015 in the budget-financed sector and the observed economic upturn should make it possible to bring the public finance deficit below 3% of GDP in 2015, in line with the requirements of the excessive deficit procedure (EDP) which Poland had been subject to. At the beginning of June 2014, the European Commission recommended that EDP for Poland be lifted.

Since the beginning of 2014, the current account balance further improved which according to March and April preliminary data showed a surplus on the back of positive balance of goods trade in the environment of improved foreign demand. At the same time, the balance on trade in services and on current transfers remained positive and the balance on income – negative.

In the upcoming period, the rate of economic growth will be rising in Poland. According to the central path of the projection showed in the July "Inflation Report", Poland's real GDP growth in 2014–2016 will be 3.6%, 3.6% and 3.5%, respectively. The European Commission forecast of May 2014 indicates that Poland's GDP will grow by 3.2% in 2014 and 3.4% in 2015.

The economic situation will largely depend on economic developments across the world, including the pace at which euro area countries will attain sustainable economic growth. The risk for the positive scenario generated by the conflict in Ukraine may be assessed as moderate but a potential intensification of the conflict and the implementation of strict economic sanctions may have a significant impact and push the future growth rate down.

The probable continuation of the current trends in economic activity and employment growth will create positive conditions for the development and stability of the domestic financial sector.

2.2. Developments in financial markets

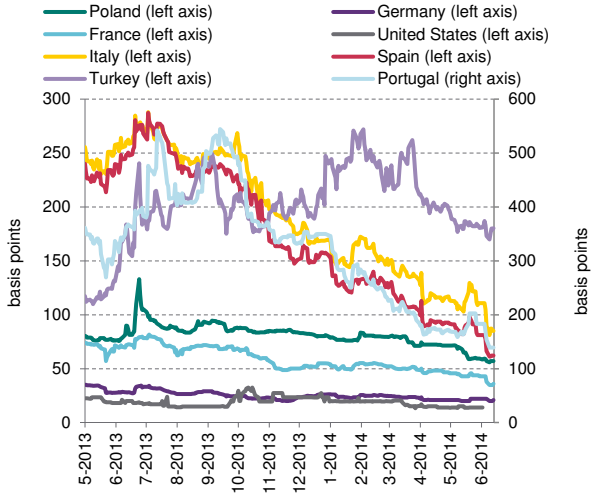
2.2.1. Global environment

In the period from November 2013 to June 2014[9], there was an improvement in sentiment among financial markets participants, which was due to positive macroeconomic data from highly developed

[8] From autumn 2014, a new system of national accounts will be applicable — ESA 2010, in which this operation will not impact the sector's balance.
[9] The following Chapter describes market situation in the period from 1 November 2013 to 13 June 2014.

economies (particularly, the United States and the United Kingdom). The improvement in sentiment was reflected, inter alia, in CDS premia (see Figure 2.1) and the early repayment of liabilities resulting from LTROs by some European banks.

Figure 2.1. CDS premia on 5-year government bonds of selected countries



Source: Thomson Reuters.

The Federal Reserve started tapering of its asset purchase programme, which was supported by a high GDP growth rate in the United States in 2013 (2.6%) and favourable prospects for further rapid economic growth. According to earlier announcements, the Federal Open Market Committee (FOMC) reduced the quantitative easing programme after its meetings in December 2013 and January, March and April 2014, cutting the monthly value of asset purchases each time by 10 billion US dollars. At the same time, the Fed confirmed it was ready to maintain interest rates unchanged after terminating the asset purchase programme, making the decision conditional on labour market conditions and inflationary pressures.

The European Central Bank took some measures to stimulate economic growth in the euro area and counteract the inflation rate persisting below the inflation target. The measures were prompted by the lower-than-expected economic growth in the euro area and low inflationary pressures observed despite cuts in the ECB interest rates in 2013 (the last one on 7 November 2013, by 25 basis points, to 0.25%). In April 2014, Mario Draghi, the ECB President, announced that if too low inflation in the euro area persisted for a prolonged period the ECB would consider applying unconventional monetary policy measures. At the meeting of the Governing Council on 5 June 2014, the ECB decided to lower its reference and deposit interest rates by 10 basis points, which meant, inter alia, the introduction of a negative rate applying to all deposits held with the ECB in excess of the minimum reserve requirements. The Governing Council of the ECB also decided to continue conducting its main refinancing operations in unchanged form at least until the end of 2016 and to conduct regular three-month refinancing operations as fixed rate tender procedures with full allotment. Moreover, in 2014–2016, the ECB intends to conduct targeted longer-term refinancing operations – TLTROs, to support lending to the non-financial sector (excluding loans to households for house purchase) in the euro area, as well as intensify work related to outright purchases of asset-backed securities.

Different courses of action taken by central banks in the United States and in the euro area have been reflected in developed countries' capital markets. Between February and April 2014, the yields on US government bonds were slightly rose on the short end of the yield curve, while the government bond market in euro area countries saw a decline in yields (see Figure 2.2). In addition to expectations of ECB monetary policy easing, this was driven by a significant improvement in the situation of euro area peripheral countries, reflected in the upgrade of ratings of some of them (see Table 2.1). The improved economic outlook in the United States encouraged investors to increase their exposures in the US equity market – from the beginning of November 2013 to

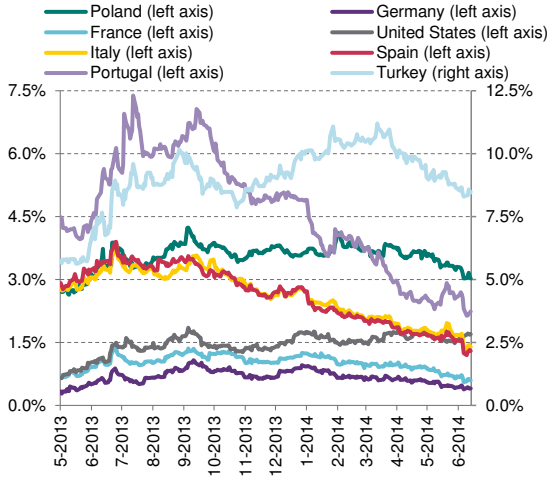
Table 2.1. Ratings of selected euro area countries and dates of ratings' revisions from November 2013 to June 2014

	Moody's	S&P	Fitch
Greece	Caa3 *28 November 2013 (C)*	B-	B *23 May 2014 (B-)*
Spain	Baa2 *21 February 2014 (Baa3)*	BBB *23 May 2014 (BBB-)*	BBB+ *25 April 2014 (BBB)*
Ireland	Baa1 *16 May 2014 (Baa3)* *17 January 2014 (Ba1)*	A- *6 June 2014 (BBB+)*	BBB+
Portugal	Ba2 *9 May 2014 (Ba3)*	BB	BB+
Italy	Baa2	BBB	BBB+

Note: the ratings pertain to long-term debt in foreign currency; the revision dates from the beginning of November 2013 to 13 June 2014 are marked in italics, previous rating is given in brackets.
Source: Bloomberg.

13 June 2014 S&P500 and DJIA indices reached their historically high levels (see Figure 2.3).

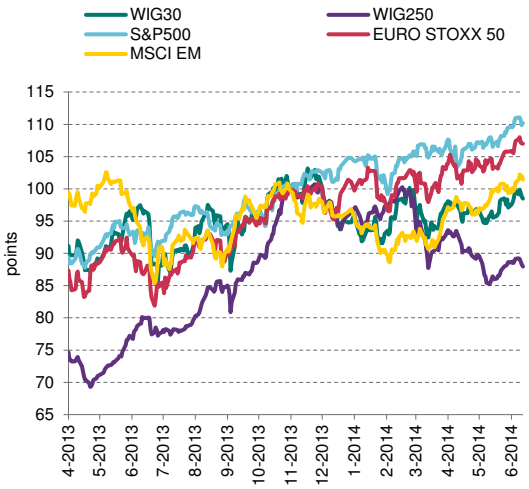
Figure 2.2. Yields on 5-year government bonds of selected countries



Note: data pertain to bonds denominated in domestic currencies.
Source: Thomson Reuters.

In view of the improved situation in the developed markets, worse-than-forecasted macroeconomic data for emerging markets triggered a stronger outflow of capital from those markets. The outflow was particularly intensive at the end of January 2014 when the Fed, against the expectations of some market participants based on the publication in the first half of January 2014 of weaker data from the US labour market, scaled down asset purchase under the quantitative easing programme. This led, inter alia, to growth in yields on government bonds and the significant weakening of currencies of developing countries, which was particularly abrupt in some economies characterised by high current account deficits (e.g. Argentina and Turkey).

Figure 2.3. Selected stock market indices



Note: data normalised to 100 points as of 31 October 2013.
Source: Thomson Reuters.

2.2.2. Domestic markets

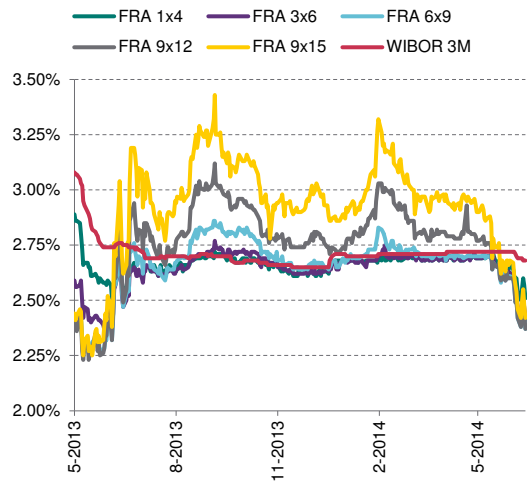
Money market

The NBP interest rates remained at historically low levels (the reference rate stood at 2.5%). In January and February 2014, market participants expected the rates to increase in the second half of the year. However, press release after the meeting of the Mon-

etary Policy Council held on 4-5 March 2014[10], stating that the NBP interest rates should be kept unchanged until the end of the third quarter of 2014 (forward guidance), dampened these expectations significantly (see Figure 2.4). The expectations of unchanged interest rates were strengthened by the April and May 2014 release of lower-than-expected data on inflation. At the end of May 2014, some market participants started to forecast NBP interest rate would be lowered within the next 6 months. Such expectations were substantially amplified by the ECB monetary policy easing at the beginning of June 2014. In mid-June 2014, some market participants expected the NBP interest rates to be lowered at the September meeting of the MPC, which was reflected in FRA rates.

The situation in the Polish money market was stable. From the beginning of November 2013 to June 2014, the WIBOR 3M/OIS 3M spread fluctuated within the band of around 25-30 basis points, reflecting relatively low perceived credit risk in the unsecured interbank deposits market. Average daily net turnover in this market amounted to nearly 4.9 billion zlotys (decline by around 10% compared with the period from June to October 2013). The share of O/N transactions stood at nearly 90%.

Figure 2.4. Current and expected WIBOR rates

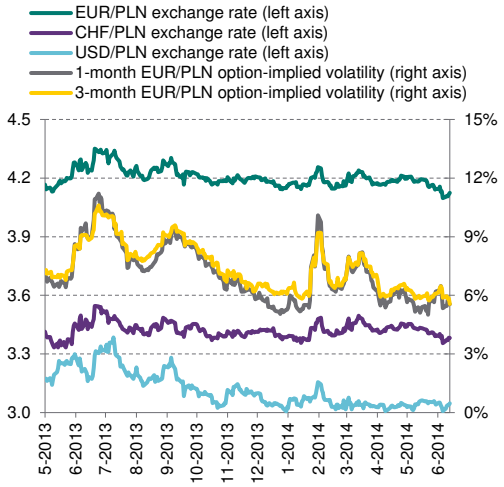


Source: Thomson Reuters.

Foreign exchange market

The zloty exchange rate against the euro was stable and remained at the level of around 4.18 zloty per euro (see Figure 2.5). A temporary weakening of the zloty and a strong increase in the zloty exchange rate volatility in January 2014 resulted mainly from the developments in the global environment described above. Their impact on the zloty exchange rate was also strengthened by the usage of the zloty as a proxy currency for the region of Central and Eastern Europe. In March 2014, in turn, the temporary increase in the zloty exchange rate volatility was caused, apart from the continuation of the scaling down of asset purchase by the Fed, by unfavourable macroeconomic data from Russia and China and the increase in risk aversion associated with the geopolitical situation in Crimea. A slight strengthening of the zloty against the euro observed in the first half of June was associated with monetary policy easing by the ECB.

Figure 2.5. Zloty exchange rate and its volatility



Source: Thomson Reuters.

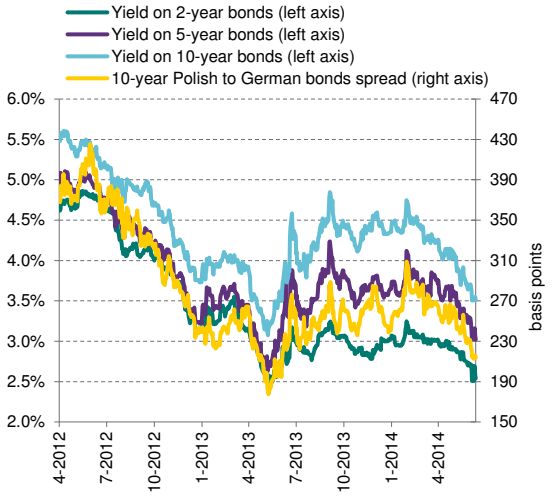
[10]"Information from the meeting of the Monetary Policy Council held on 4-5 March 2014" is available at: http://www.nbp.pl/en/aktualnosci/2014/mpc_2014_03_05.pdf

Bond market

The yields and historical volatility of domestic government bonds decreased and the yield curve flattened. Poland's perceived credit risk decreased significantly, as reflected in CDS premia (see Figure 2.1). These tendencies were mainly associated with revising upward Poland's GDP growth forecasts for 2014 and 2015 (by, inter alia, the IMF, EBRD and the European Commission), and a simultaneous significant lowering of the expected inflation rate. The decrease in government bond yields was also affected by the aforementioned MPC announcement of March 2014 and the ECB measures taken at the beginning of June 2014. Moreover, the high level of financing of the State Treasury's borrowing needs, which amounted to over 86% at the end of May 2014, allowed the supply of debt securities to be flexibly adjusted to the market situation. This resulted in a decrease in the yield on Polish 10-year government securities by 65 basis points from the beginning of November 2013 to 13 June 2014, the yield on 5-year bonds by 48 basis points, and that of 2-year bonds by 38 basis points (see Figure 2.6).

The temporary increase in yields on domestic government bonds in January 2014 was mainly the effect of external factors, inter alia, the start of tapering by the Fed which resulted in capital outflow from the emerging markets. The impact of these factors on the domestic market was weaker than in less mature economies due to, inter alia, high liquidity of the secondary market for government bonds[11] and an increase in open pension funds' (OFE) demand for these instruments.[12] From the end of October 2013 to the end of April 2014, non-residents' exposure in the domestic government bond market declined in nominal terms by around 6.0 billion zlotys to 187.6 billion zlotys. The largest outflow was observed among foreign non-bank financial institutions. Domestic banks, in turn, increased their exposure in this market significantly (by 24.7 billion zlotys to 135.4 billion zlotys).

Figure 2.6. Yields on domestic government bonds and the spread between yields on Polish and German government bonds



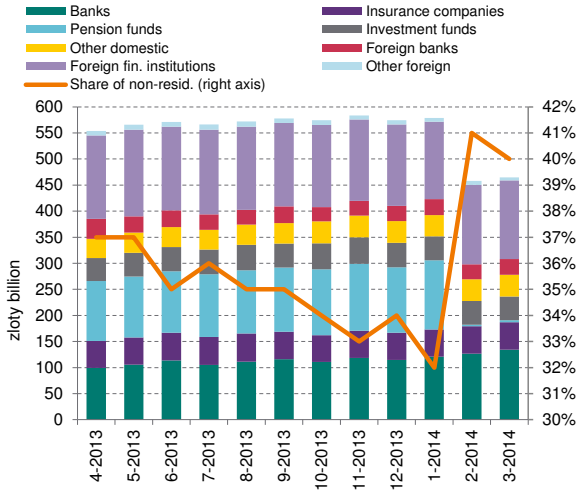
Source: Thomson Reuters.

The changes to the pension system significantly influenced the structure of investors in the Polish government bond market (see Figure 2.7). The value of government bonds transferred by OFEs to the Social Insurance Institution (ZUS) on 3 February 2014, and subsequently redeemed, amounted to 130.2 billion zlotys (which accounted for 43.6% of these funds' net asset value as at the end of January 2014). This move made it possible to reduce the public-debt-to-GDP ratio by 7.6 percentage points. The redemption of government bonds led to a significant increase in the share of non-residents in the domestic market for those instruments (from around 34% at the end of October 2013 to around 40% at the end of May 2014). A less diversified investor base may weaken

[11] In the period from November 2013 to April 2014, the average daily value of outright transactions amounted to 12.4 billion zlotys.
[12] The amendments to the pension system provided that the total share of State Treasury-guaranteed debt securities in the assets of each fund as at the end of January 2014 could not be lower than on 3 September 2013. As there was an appreciation of the equity portfolio in this period OFEs had to increase their government bond portfolio to keep the abovementioned share.

the resilience of this market in case of strong turmoil in the global environment.

Figure 2.7. Structure of investors in the domestic government bond market



Note: the data reflect the balance on the securities accounts in KDPW.
Source: Ministry of Finance.

Equity market

Domestic stock market indices did not strictly follow the trends observed in the world's major stock markets. From the beginning of November 2013 to 13 June 2014, WIG30 and WIG250 indices declined by 1.6% and 12.1%, respectively (see Figure 2.3). The fall was driven by investors' concerns about developments in the emerging markets, associated, inter alia, with slower-than-expected economic growth in the developing countries, in particular in China. The improvement in equity market sentiment in February 2014 was temporary. Since the beginning of March, the decrease in prices of those instruments has been influenced by the unstable situation in Ukraine, as this country used to be a significant recipient of goods exported by many companies listed on the Warsaw Stock Exchange (WSE).

Domestic factors also had an unfavourable impact on stock prices on the WSE. There was a significant outflow of investors from equity investment funds (mainly small and medium enterprises) to bond and money market funds. Another factor that may have had a negative impact on equity prices on the WSE were the changes in the functioning of OFEs. Uncertainty over the scale of the decline in the inflow of new contributions to these funds was not conducive to investments in those instruments. In addition, after the liberalisation of the limits for foreign investments, OFEs most likely changed their portfolio structure, preferring more liquid investments in foreign markets over the exposure to equities listed on the WSE. From the beginning of November 2013 to the end of May 2014, the value of foreign equities in OFEs' portfolios rose from 5.1 billion zlotys to 7.2 billion zlotys (from 1.7% to 4.8% of net assets). In the same period, the value of their investments in equities listed on the WSE declined by 6.9% (from 131.3 billion zlotys to 122.3 billion zlotys), while the WIG index fell by 2.9%.

2.3. Situation in the real estate market

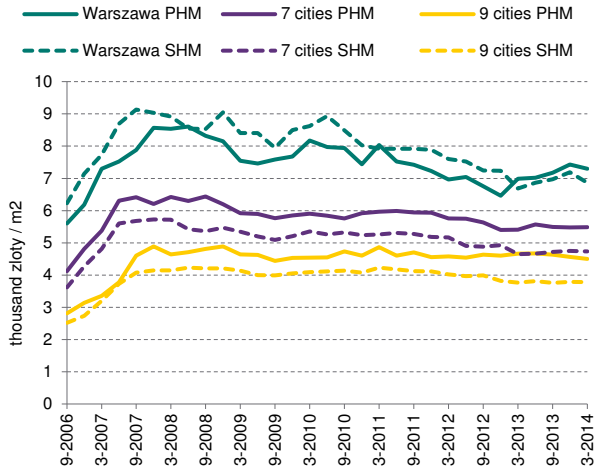
The situation in the residential real estate market in 2013 Q3 – 2014 Q1 was close to equilibrium.[13]. Therefore, the likelihood of significant declines in housing prices and the ensuing negative consequences for the stability of the financial system may now be assessed as very low.

During the analysed period, in most markets transaction and offer prices of dwellings, including dwellings put on the market by real estate developers for the first time, stabilized or showed only

[13] A more detailed description of processes observed in the residential and commercial property markets may be found in the 2013 quarterly and 2014 Q1 "Information on home prices and the situation in the residential and commercial real estate market in Poland" and the annual "Report on the situation in the residential and commercial real estate market in Poland in 2012".

a slight downward trend in the long term. Levelling off of prices means that with other conditions unchanged the ratio of the value of the outstanding loan principal to the current value of the loan-financed property remains unchanged. Also rents for housing remain stable. This indicates that shocks and market tensions caused by the mismatch between demand and supply, including the mismatch in the housing structure, have a minor effect on the market. Housing prices in the primary market in most cities exceeded prices in the secondary market, which may be explained by a better quality of new housing.

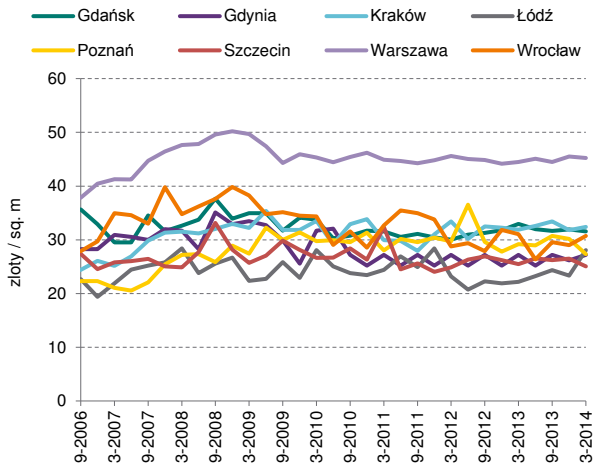
Figure 2.8. Transaction prices in the primary (PHM) and secondary (SHM) housing market in Poland



Source: NBP.

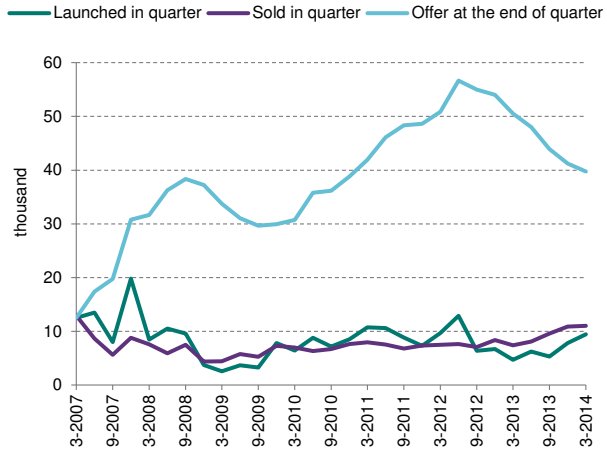
The launch of the government scheme aimed at subsidizing the acquisition of the first housing "Housing for the Young" could have boosted growth in transaction prices of housing observed in the Warsaw market. Despite a conservative price limit, the Housing for the Young scheme generated few percent of additional demand for housing amidst a rigid short-term supply. CPI-adjusted housing prices in real terms in all big cities are now close to the 2006 level (primary market) and the 2005 level (secondary market). Housing prices in real terms adjusted for the average wage growth in the enterprise sector were lower. Availability of housing for the average nominal wage increased in large cities to 0.7-1 sq. m from approx. 0.3-0.6 recorded during the period of tensions in the real estate market in 2005-2008. The ownership costs to rental costs ratio (P/R) does not point to any excessive appreciation of the value of housing, either. The favourable P/R ratio is largely the result of low interest rates.

Figure 2.9. Average (offer and transaction) rent rates in Poland's selected cities



Source: NBP.

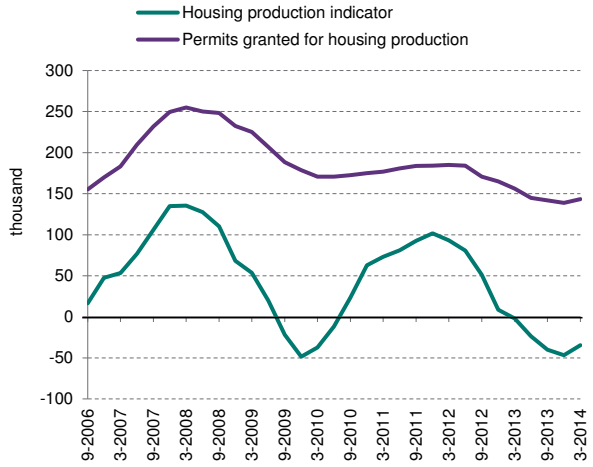
Figure 2.10. Number of homes put on the market, sold and remaining listed in Poland's six largest markets



Note: Poland's six major markets include: Kraków, Łódź, Poznań, Gdańsk-Sopot-Gdynia Tricity, Warszawa, Wrocław.
Source: REAS.

In the discussed period, the primary market of Poland's largest cities posted a rise in the number of sold housing units, which becomes particularly noticeable when we compare the sales performance in 2014 Q1 and 2013 Q1. It was a further consequence of lower interest rates and fiscal stimulus packages. Sales of housing were financed, to a greater extent, by cash, but it is difficult to univocally assess whether these were cash flows from the sale of secondary market housing or investment purchases of rental housing. A prolonged dwelling selling period in the secondary market implies that the funds tend to come from outside of the housing sector. It may be assessed that housing investment has now become relatively more attractive, as income on bank deposits has lowered, costs of financing housing investment have declined and rent rates have remained unchanged. This could have urged households to invest in housing, despite high transaction costs and the low liquidity of housing assets.

Figure 2.11. Housing production indicator in Poland

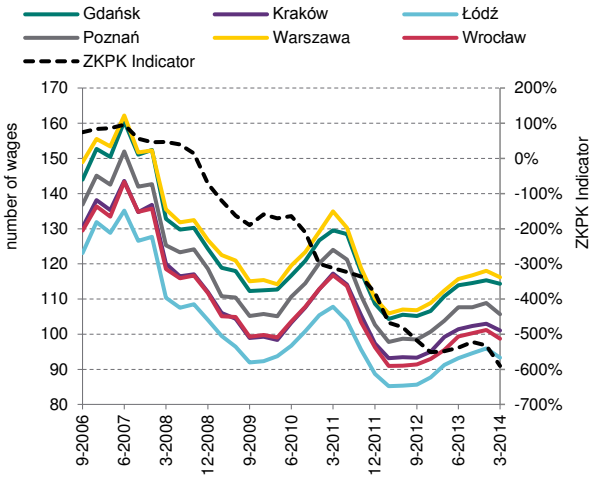


Note: definition of housing production indicator in *Glossary*.
Source: GUS.

Housing loans and their increasing availability are an important factor supporting growth in demand for construction by real estate developers. The long-term use of loans in the financing of home purchases in the largest cities may be estimated at approx. 50%. The rising demand is also driven by growing employment and income of households as well as investment aspect of housing. On the other hand, the main demographic factor, namely the increase in the number of new households, gradually loses its importance.

The residential development market in the largest cities has practically returned to the equilibrium level after six years of housing supply exceeding housing demand. This is indicated by, among other things, shorter average time needed to sell the housing stock which has been listed for sale. It has dropped from eight (at the end of 2012) to less than four quarters (at present). Small housing, tailored to clients' purchasing power dominates the structure of the residential development market.

Figure 2.12. Available housing loan and accumulated index of changes in banks' credit standards with regard to housing loans



Note: definition of available housing loan in *Glossary*.
Source: NBP, GUS.

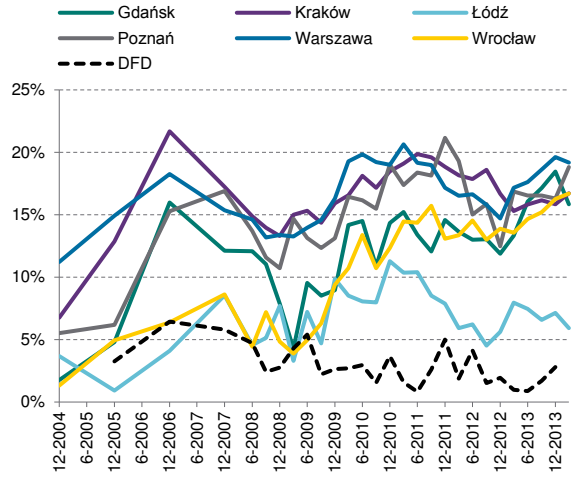
There is no reliable and up-to-date information on the number of transactions in the secondary housing market. An approximate indicator of the economic situation in the secondary market may be the prolonged housing selling period(about 150 days), which is indicative of a slightly deteriorating situation. The secondary housing market competes with

the residential development market offering lower prices and a better location. Yet, it is not covered by the government-subsidized housing scheme.

The consequence of a gradual increase in dwelling sales in the primary market, both as regards completed housing and contracts for housing construction, is a large number of new housing projects launched by real estate developers. This is supported by a considerable increase in demand and a relatively high[14] estimated with the model at approx. 18% annual rates of return on equity from development projects. According to the GUS (Central Statistical Office) profitability ratios of real estate developers are at a much lower, a few percentage level[15].Developers are well capitalized, have the necessary experience and are in the possession of numerous construction sites. The quality of real estate development loans can be assessed as low (loans considered by banks as impaired account for approx. 12% of the total extended loans), but the capitalization of the real estate development sector is high (equity accounts for approx. 40% of companies' total assets), and bankruptcies are relatively rare, especially as compared with the construction industry.

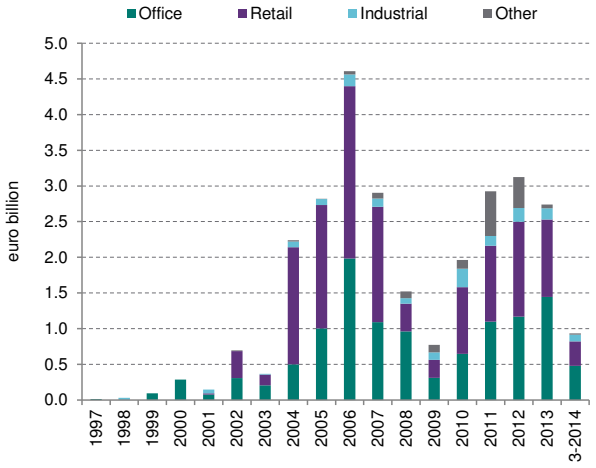
In the commercial property sector, i.e. retail, office and warehouse market, imbalances are rising. In the case of real estate financed by bank loans this may mean a growing credit risk combined with a deteriorating quality of collateral. On the other hand, in the case of investment funds, investment fund managers may not be able to sell their properties at the expected price, and consequently will be forced to extend the period of the operation of the fund.

Figure 2.13. ROE on investment projects in six cities and real rate of return of large real estate development companies (DFD)



Source: NBP, Sekocenbud, GUS.

Figure 2.14. Value of investment transactions in the commercial property market



Source: Comparables.pl

Growing imbalances may be observed, in particular, in the office and retail property markets, posting a very rapid growth in fixed assets financed by capital inflows. This is supported by persisting low interest rates in the global markets. For example, in 2014 Q1,

[14]Detailed analysis of a real estate development project in the article "Real estate development enterprise in the Polish market and issues related to its analysis" in "Report on the residential and commercial real estate market in Poland in 2011", 2012, NBP.

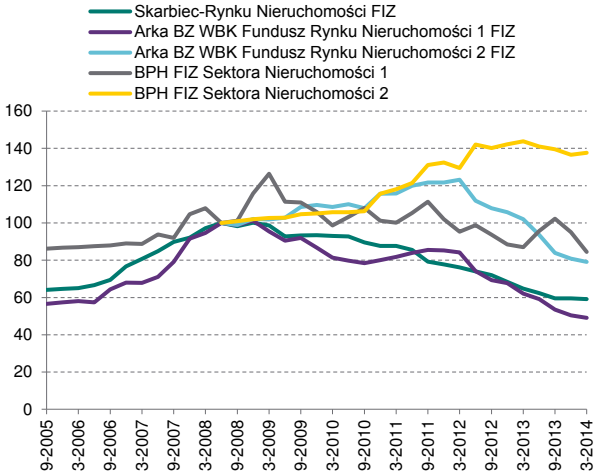
[15]The discrepancy in the ratios results from various factors, among other things, accounting principles of development companies, in line with which the sale of a housing construction contract does not constitute income. Income is booked only when the building is completed. Other factors include various kinds of historical burdens of companies being the result of bad decisions or tax optimisation.

the retail space in shopping centers in large cities, expressed in per capita figures, reached levels recorded in Germany, amidst a lower GDP *per capita* and the related lower purchasing power of the society. The growing supply of commercial property boosts competition in this market, leading to declines in rents and increases in vacancy rates. The deteriorating situation in the commercial property market is demonstrated, by, among other things, the falling valuation of participation units in closed-end investment funds investing in commercial real estate and difficulties with their timely redemption.

International experience shows that problems in the commercial real estate market usually affect highly developed countries or countries following a rapid economic catch-up process, such as Poland. This experience also shows that banks' credit risk mitigation policy, which involves the investor's high own contribution requirement, is generally ineffective in this situation. The main problem is the very low liquidity of unsuccessful or excessive investments and the ensuing impossibility of withdrawing capital, which further exacerbates price declines.

Also the exit of some of institutional investors, such as investment funds, through the sale of loan-financed property may pose a threat to the banking sector. As a result, in many cases the risk is passed to the banking system. Taking into account the negative and costly experience of other countries in this market segment, the banking system should rather maintain its conservative approach when verifying the possibility of loan repayment and its collateral.

Figure 2.15. Performance indicators of closed ended real estate investment funds operating on the commercial real estate market



Note: Q2 2008 = 100.
Source: Internet pages of the investment funds.

Chapter 3.

Banking sector stability

In the period analysed in the *Report*, the Polish banking sector was stable and posed no risks to the financial system stability. Although the situation of the banking sector as a whole is stable, some banks display increased sensitivity. This concerns especially some of the smaller commercial banks and a part of the cooperative banking sector.

Banks' capital adequacy was high and their liquidity position was sound. This is confirmed by the results of stress tests, which indicate that the majority of domestic commercial banks hold sufficient capital to absorb the impact of even a very severe economic downturn. Most banks have also accumulated adequate liquidity buffers allowing them to absorb even very strong liquidity shocks. Banks' good situation facilitates them to enhance lending. The growth rate of lending accelerated, particularly in the case of consumer loans and corporate investment loans.

Banks should take special care to maintain high capital position and expand lending without significantly increasing leverage. This is possible due to continuously high earnings of the banking sector. Net interest margin resumed its growth following a period of declines associated with a decrease in market interest rates. The quality of loans to non-financial sector, measured by the impaired loans ratio, showed a further gradual improvement. On the other hand, charges for impairment provisions for some types of loans slightly reduced bank's financial results. Looking forward, it may be expected that banks' earnings will stabilize or slightly improve due to the favourable macroeconomic prospects.

3.1. Lending

In Poland, the growth of lending to the non-financial sector is one of the highest in the EU (see Figure 3.1). Following a cyclical decline in the growth rate of lending – mainly due to lower demand – it has been gradually increasing since July 2013. At the end of March 2014, it amounted to 4.4% y/y.[16]

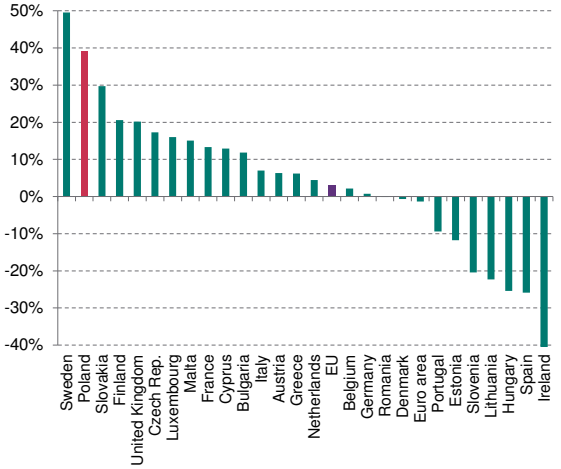
There have been changes in the structure of the loan portfolio, which were favourable for financial system stability. The share of loans to enterprises in loans to the non-financial sector has stabilised, yet on a quite low level (see Figure 3.2). At the same time, the value of foreign currency housing loans has been declining and that of zloty housing loans – rising.

Loans to households

The growth rate (y/y) of housing loans has remained on a similar level for around a year (4.6% in March 2014, of which zloty loans – 16.8%, see Figure 3.3, right-hand panel). The changes in the balance sheet value of housing loans do not fully reflect new lending due to the repayment of principal of the outstanding loans. Owing to the increasing average age of housing loan portfolio the pace of principal repayment is becoming quicker, which is supported by the dominating share of fixed instalment loans carrying variable market-indexed interest rates. In the period analysed in the *Report*[17] the estimated value of new housing loans (gross increases) was higher by around 17% than in the corresponding period of the previous year.

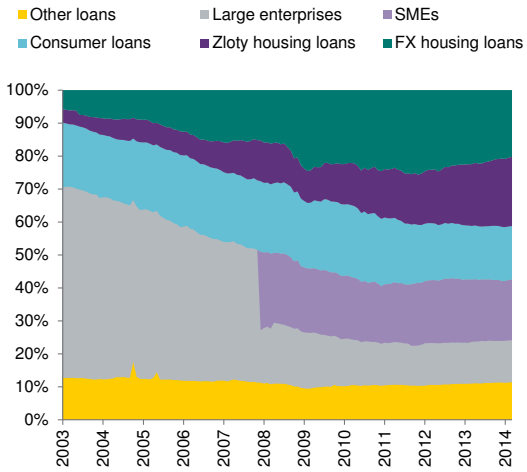
New housing loans were granted almost solely in zlotys. As a result the share of zloty loans in the whole housing loans portfolio rose systematically to amount to around 51%. These changes are positive for financial system stability. If the present growth rate of zloty loans and repayment of foreign currency loans is maintained, in 5 years the share of zloty-denominated loans would increase to around 75%.

Figure 3.1. Growth of loans to the non-financial sector in the period December 2008 – March 2014.



Source: own calculations based on ECB data.

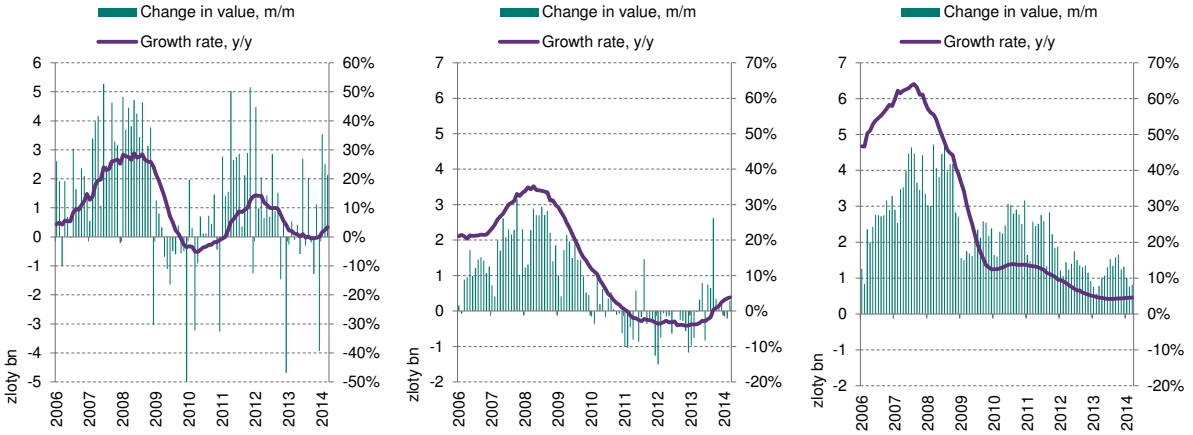
Figure 3.2. Structure of loans to the non-financial sector



Note: striped area indicates a share of loans for the whole enterprise sector in a period when data broken down by loans to large enterprises and to SMEs were not available.
Source: NBP.

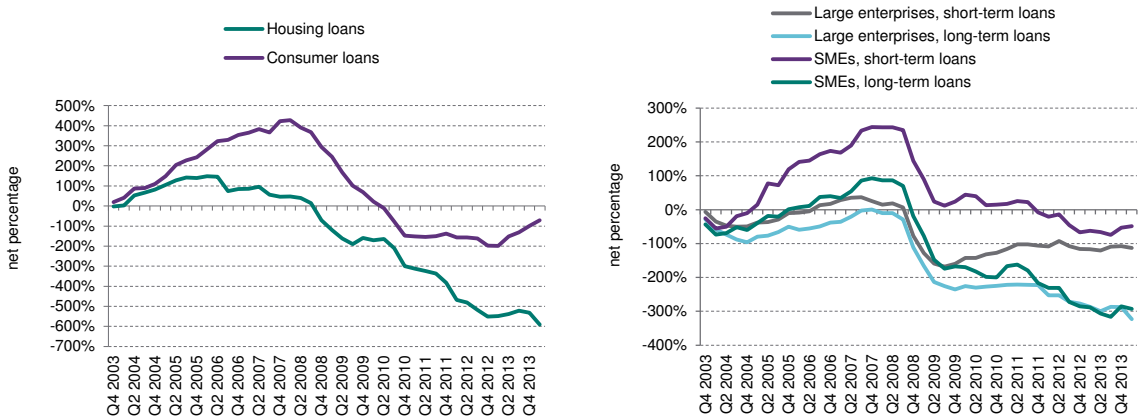
[16] Changes in loan values referred to in Chapter 3.1 apply to data after excluding the impact of foreign exchange rate changes.
[17] Unless otherwise indicated, the "period analysed" in this Chapter covers the period from 30 September 2013 to 31 March 2014 and the point of reference is the period considered in the previous edition or the end of September 2013.

Figure 3.3. Changes in the value (m/m) and growth rate (y/y) of loans to enterprises (left-hand panel), consumer loans (central panel) and housing loans to households (right-hand panel)



Source: NBP.

Figure 3.4. Accumulated index of changes in banks' lending policy standards – loans to households (left-hand panel) and loans to enterprises (right-hand panel)



Note: an increase in the index indicates that lending standards were eased in a given period, and a fall – that they were tightened.
Source: NBP.

According to banks' financial plans and NBP estimates, both demand for housing loans and their rate of growth may be expected to remain close to current levels in the near future. Even with rising growth rate of repayment of foreign currency loans granted in the past years this should mean that gross growth of new loans will be higher than currently. In addition to macroeconomic factors and household situation, the growth will be driven by the stabilisation of prices in the property market, which, combined with wages rise, low inflation rate and low interest rates increases the credit availability of flats, which is currently the highest since 2007. The government scheme subsidising home purchase for selected borrower groups – "Housing for the Young", effective from 2014 – may additionally contribute to

increasing demand for housing loans.[18]

Regulatory changes can be mentioned among factors that in a longer perspective may have a weakening impact on housing loans growth. These changes include amendments to Recommendation S *on good practices with regard to management of credit exposures that finance property and are mortgage-secured* of June 2013[19] and, in even longer perspective, probable better maturity match of banks' assets and liabilities. The revised Recommendation S has tightened from January 2014 supervisory guidelines relating to some terms of granting housing loans, inter alia, maximum loan maturity (35 years, with recommended maximum maturity of 25 years), the requirement to grant a loan in the currency of the borrower's income[20], maximum level of LtV ratio for newly granted housing loans (95% – in 2014, with the target value of 80% – from 2017).

The maximum LtV level may be the binding constraint influencing the level of new lending. According to data of the Polish Bank Association (ZBP)[21], the average value of LtV ratio for housing loans increased at the end of the year compared with its value throughout 2013, which may be partly related to impending introduction of the maximum level of the LtV ratio. Among housing loans granted in the fourth quarter of 2013, 61% had the LtV ratio exceeding 80%. At the same time, only 2.2% had a maturity longer than 35 years (64% had a maturity in the range of 25-35 years), and less than 1% were foreign currency loans. The above mentioned modifications to the Recommendation may limit the value of individual housing loans, however, their favourable impact on the quality of the new portfolio may also be expected.

On the other hand, the implementation of the long-term liquidity rule (probably in 2018)[22] in the EU banking sector may lead to increased competition for long-term liabilities. A few banks have increased margins on housing loans, which may signal gradual adjustment to the need to incur increased funding costs in the future (the main type of housing loans in the Polish banking sector are loans with variable interest rate and fixed margin).

After a decline in the value of the consumer loan portfolio lasting two and a half years, since August 2013 its annual growth rate has been positive and has been rising gradually (to 3.8% at the end of March 2014; see Figure 3.3, center panel). The reversal of the downward trend may be connected with the entry into force of amended provisions of Recommendation T *on good practices with regard to risk management of retail credit exposures*.[23] Easing of the requirements of the Recommendation translated into a gradual easing of consumer loan standards by banks from the second quarter of 2013.[24]

[18]The scheme provides budget subsidies to loans for first home purchase, taken by persons under 35. The subsidies are to be relatively high: 10% of the replacement value of a home, where the borrower is a single person or childless family, and 15% for a single child family; additionally 5% after the birth of a third or subsequent child. See law of 27 September 2013 *on State aid for young people to purchase a first home*, (Journal of Laws of 2013, item 1304).

[19]Resolution No.148/2013 of KNF of 18 June 2013 on issuing Recommendation S *on good practices with regard to management of credit exposures that finance property and are mortgage-secured* (Official Journal of KNF of 2013, item 23). The provisions of Recommendation S were to be applied from 1 January 2014, at the latest (in the case of certain provisions – from 1 July 2014).

[20]This provision will be effective from 1 July 2014.

[21]See "AMRON–SARFIN Report 4/2013. Nationwide report on housing loans and property transaction prices ", February 2014, ZBP.

[22]The CRDIV/CRR regulatory package in its present wording does not introduce the NSFR long-term liquidity standard. However, it puts on banks the obligation to report the positions that may in the future become the NSFR numerator and denominator. The standard will be defined by the European Commission and will most probably enter into force in 2018, following the EBA report on conclusions from the reporting period, which will draft the final definition of the standard.

[23]See Resolution No. 59/2013 of the Polish Financial Supervision Authority (KNF) of 26 February 2013 on issuing Recommendation T *on good practices with regard to risk management of retail credit exposures* (Official Journal of KNF of 2013, item 11).

[24]More information on changes in banks' lending policy, in particular on the impact of Recommendation T on banks' lending policy can be found in: " Senior loan officer opinion survey on bank lending practices and credit conditions ", editions for the third and fourth quarter of 2013, and the first and second quarter of 2014, NBP.

(see Figure 3.4, left panel), inter alia, in the segment of low value loans to customers cooperating earlier with a given bank. The pick-up on the consumer loan market is confirmed by BIK data on the number of new loans.[25]

In the coming quarters an acceleration of the consumer lending growth rate may be expected. The acceleration will be supported by higher economic growth, improving household situation and restoring consumer optimism. The responses of banks surveyed by NBP and own estimates point to a possible lending growth in 2014 at a rate of around 10% y/y. A few banks report increased interest in this credit market segment and expect increases of around 20% in 2014.

Corporate loans

At the end of March 2014, the growth rate of corporate loans amounted to 3.8%, (see Figure 3.3, left-hand panel). The value of investment loans taken both by large and small and medium sized enterprises has been increasing (9.1% y/y in March), while the value of working capital loans and real estate loans has been declining.

The launch of *de minimis* Portfolio Guarantee Facility[26] in March 2013 was favourable for the supply of working capital loans for SMEs, although the scale of its impact is hard to assess. According to BGK data, banks granted working capital loans with *de minimis* guarantee amounting to 15 billion zlotys throughout the year when the program was in force[27] (around 17% of the value of working capital loans to SMEs as at the end of March 2013) to 45 thousand micro–, small and medium sized enterprises. In the same period, however, the value of working capital loans extended to the SME sector on the banks' balance sheet decreased by around 1.5 billion zlotys (i.e. -2.4% y/y as at the end of March 2014). The fact that the newly granted loans are not reflected in the increase of loan growth rate indicates that part of the enterprises may have used the loans with the *de minimis* guarantee to roll over loans taken previously in banks. This phenomenon seems to refer mostly to loans granted by commercial banks participating in the program [28], in which the value of working capital loans for SMEs has declined by 2.1 billion zlotys since March 2013. Over the same period the value of SMEs' working capital loans in cooperative banks increased by 1.1 billion zlotys. At the same time, the value of loans of microenterprises (in monetary statistics, they are classified as households) increased by around 3.5 billion zlotys (i.e. 13.8% y/y), of which in cooperative banks by around 0.3 billion zlotys.

Outlook for corporate loan growth has improved, mainly on the back of better cconomic outlook.[29] Since 2004, a rise in enterprises' needs for bank loan financing has occurred, on average, after four quarters of economic climate improvement [30], which enables us to already expect an acceleration of lending growth rate. Rise in demand for investment loans should be supported by a relatively high capacity utilization (the ratio is above the long-term average). The enterprises surveyed by NBP point to investment demand growth plans but it should be borne in mind that still more than half of the enterprises

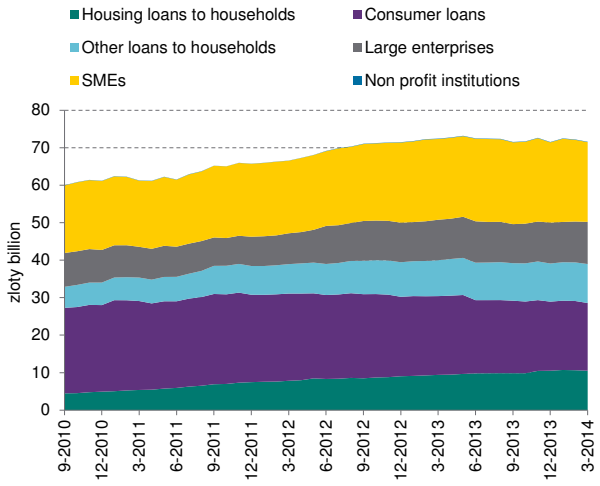
[25] See "Kredyt trendy. Raport Biura Informacji kredytowej", March 2014, BIK, p. 5, https://www.bik.pl/kredyt-trendy-marzec-2014.
[26] See law of 25 January 2013 amending the act *on warranties and guarantees granted by the State Treasury and particular legal persons* (Journal of Laws of 2013, item 198) and the Regulation of the Minister of Finance of 18 February 2013 *on de minimis aid granted by Bank Gospodarstwa Krajowego (BGK) in the form of loan repayment guarantee* (Journal of Laws of 2013, item 239).
[27] See "Podsumowanie po roku", http://www.deminimis.gov.pl/banki/wazne-informacje/
[28] The agreement with BGK – the administrator of the guarantee funds – was signed by 22 banks, including associating banks SGB and BPS (loans with the guarantee may also be granted by cooperative banks associated with the latter two banks). Full list of banks can be found at: http://www.deminimis.gov.pl/przedsiebiorcy/lista-bankow/
[29] See "Inflation report", July 2014, NBP.
[30] See "Financial Stability Report. July 2013", 2013, NBP, p.51.

continue to finance investment projects from their own funds. Available data indicate that corporate loan growth rate will continue to rise.

3.2. Credit risk

For several quarters, the quality of loans to the non-financial sector, as measured by the impaired loan ratio, has been slowly improving. At the end of March 2014, the impaired loan ratio for this sector amounted to 8.4% compared to 8.5% at the end of September 2013. The value of impaired loans remains at an almost unchanged level[31] (see Figure 3.5).

Figure 3.5. The value of impaired loans for the non-financial sector



Source: NBP.

3.2.1. Credit risk of loans to households

The analysed period saw a further gradual improvement in the quality of household loans, together with a drop in the value of impaired loans (see Figures 3.6 and 3.7). As at the end of March 2014, the impaired loan ratio amounted to 7.1% at commercial banks and 4.8% at cooperative banks; its average value in the banking sector amounted to 7.0% (in September 2013, these ratios amounted to 7.3%, 4.8% and 7.1% respectively).

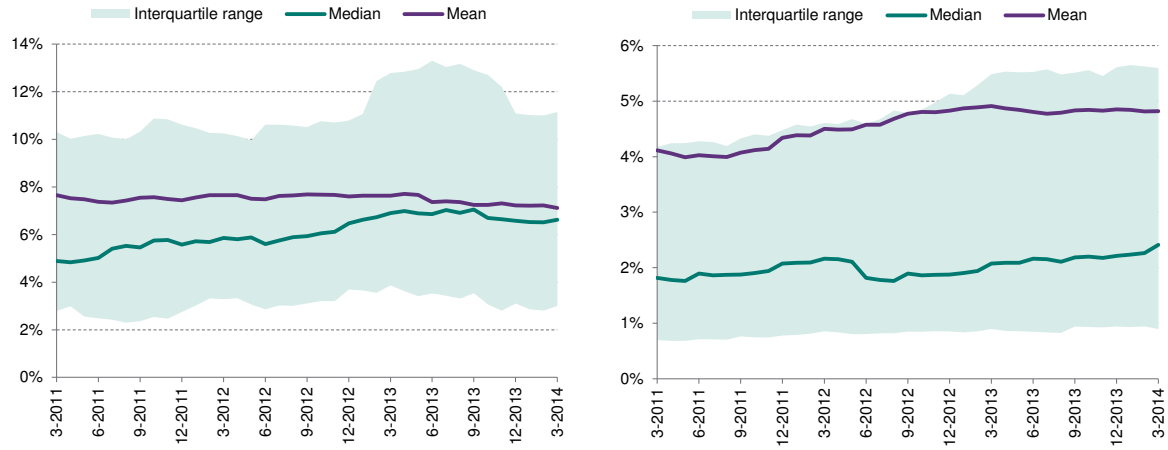
The value of credit losses and their ratio to loans' value stabilised (see Figures 3.8 and 3.9). At the same time, credit losses in segments other than consumer and housing loans to households[32] slightly grew, mostly in loans to entrepreneurs (the growth was concentrated in one of the major banks).

A factor of an extraordinary nature, which was the change in the criteria of loan impairment identification and estimation made at one of major banks in the fourth quarter 2013, had an impact on the structure of credit losses and value of impaired loans. The change resulted in a statistical growth of impaired housing loans and a rise in credit losses on this loan category, with a simultaneous decrease in consumer loans.

Both the impaired loan ratios and the relative value of credit losses at cooperative banks are much lower than at commercial banks, which implies a lower credit risk level of household loans at cooperative banks.[33] The impaired loan ratios at cooperative banks tend to rise concurrently with the growth in the size of the bank – they are the lowest at small banks and the highest at large cooperative banks. On the other hand, the coverage of impaired loans with provisions is higher at commercial banks.

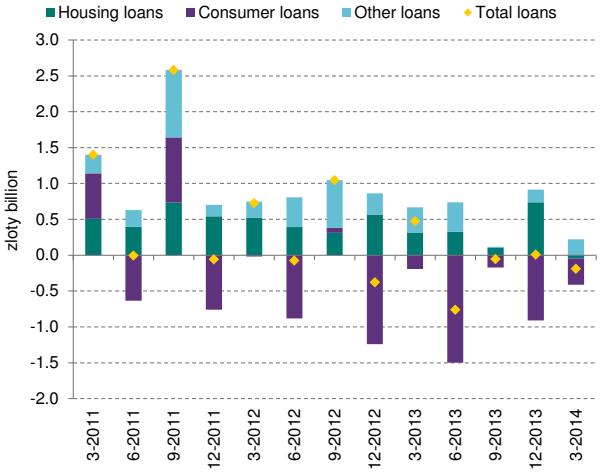
[31] Changes in the value of impaired loans quoted in Chapter 3 refer to data after excluding the impact of foreign exchange rate changes.
[32] Other loans to households mainly include loans to entrepreneurs and individual farmers, other than housing loans.
[33] The reasons for a better quality of housing loans at cooperative banks than at commercial banks were discussed in greater detail in the previous edition of the *Report*, pp. 61-62.

Figure 3.6. Impaired loan ratio for households at commercial banks (left-hand panel) and cooperative banks (right-hand panel)



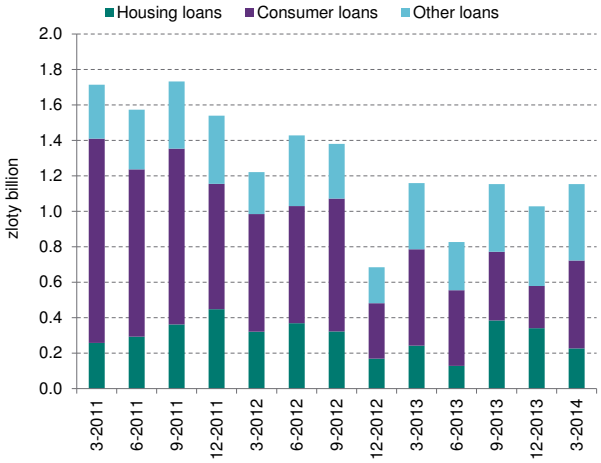
Note: unless otherwise indicated, dispersion plots in Chapter 3 relate to commercial banks.
Source: NBP.

Figure 3.7. Quarterly changes in the value of impaired loans to households



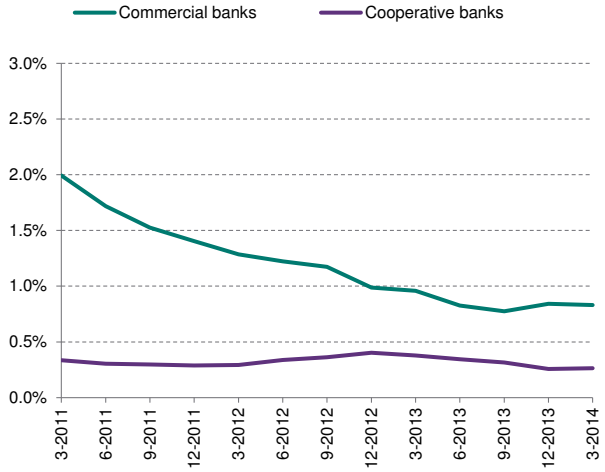
Source: NBP.

Figure 3.8. Net quarterly charges to provisions for impaired loans to households



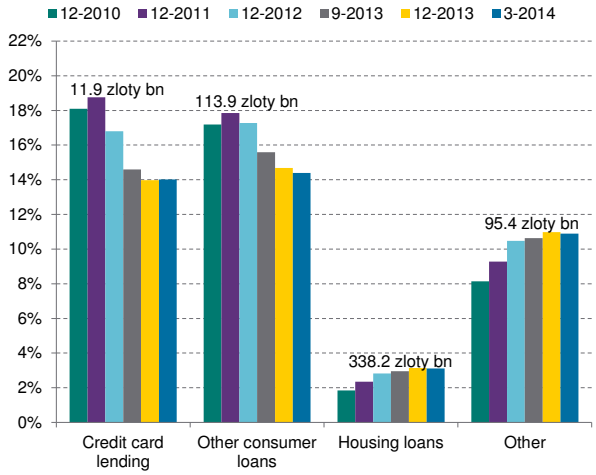
Source: NBP.

Figure 3.9. Ratio of net charges to provisions for impaired loans to households to net value of the loans



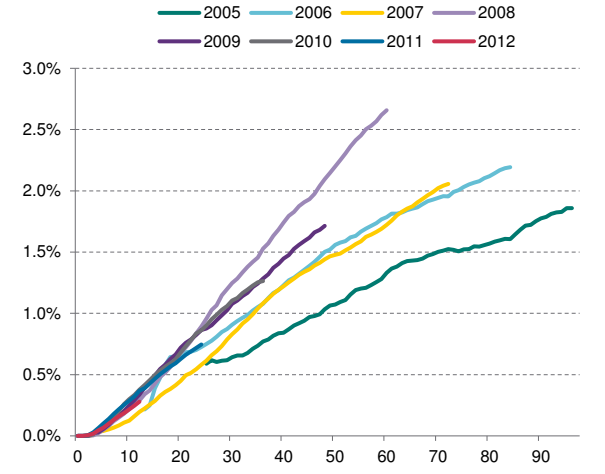
Note: data annualised.
Source: NBP.

Figure 3.10. Impaired loan ratios for main types of loans to households



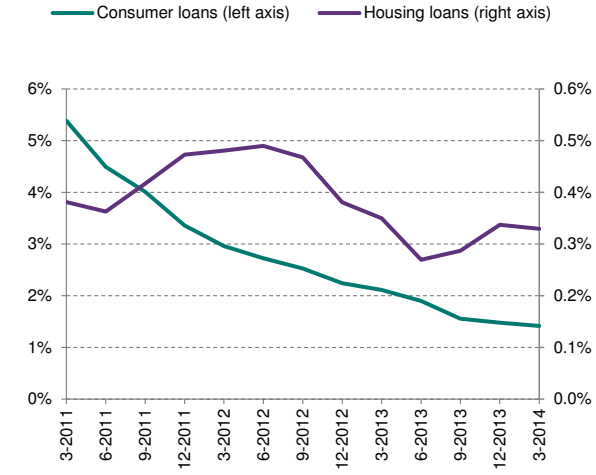
Note: values above the bars are the values of each loan type at the end of March 2014.
Source: NBP.

Figure 3.11. Number of housing loans in arrears of more than 90 days in relation to total number of loans extended in a given year



Note: vintage lines for loans extended in a given year at the end of consecutive months from loan origination.
Source: BIK.

Figure 3.12. Ratio of net charges to provisions for impaired loans to the net value of loans



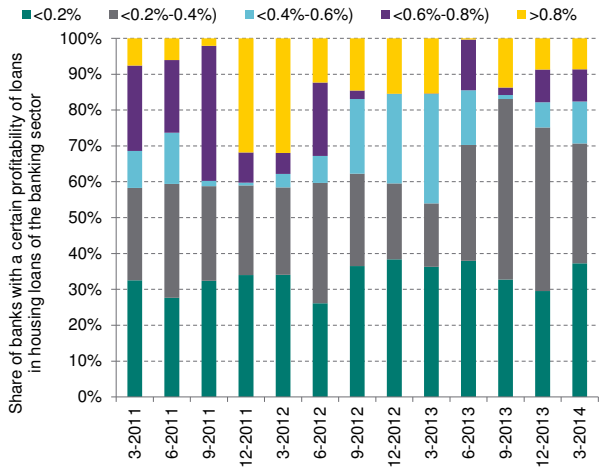
Note: data annualised.
Source: NBP.

Housing loans

Impaired loan ratios and the value of impaired housing loans continued to grow slowly (see Figures 3.7, 3.10 and 3.11). Over the longer-term horizon, this growth is predominantly an effect of the ageing of the housing loan portfolio. However in the period discussed is this *Report*, the growth was largely driven by the abovementioned change of criteria of the housing loan impairment identification and estimation at one of the major banks.

Over the recent quarters, credit losses and their ratio to housing loan value have stabilised (see Figures 3.8 and 3.12). Although the banks with relatively high credit losses increased their market share (see Figure 3.13), this was entirely the effect of the said changes in the accounting methods.

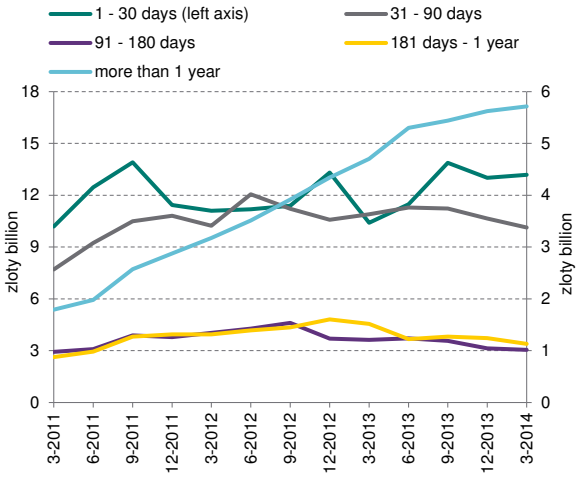
Figure 3.13. The share of banks with a given ratio of net charges for impaired loans to the net value of loans in housing loans extended by the banking sector



Note: data annualised.
Source: NBP.

The timeliness of repayment of housing loans has slightly improved (see Figure 3.14). The value of loans in arrears dropped somewhat in the majority of past due categories, up to one year inclusive.[34]

Figure 3.14. Value of housing loans in arrears in particular past due categories



Source: NBP.

Since the beginning of 2013, the coverage of impaired housing loans by provisions has remained at a stable level (see Figure 3.15), which may be seen as safe, taking into account the estimated recoveries from the sale of the real estates served as collaterals.[35]

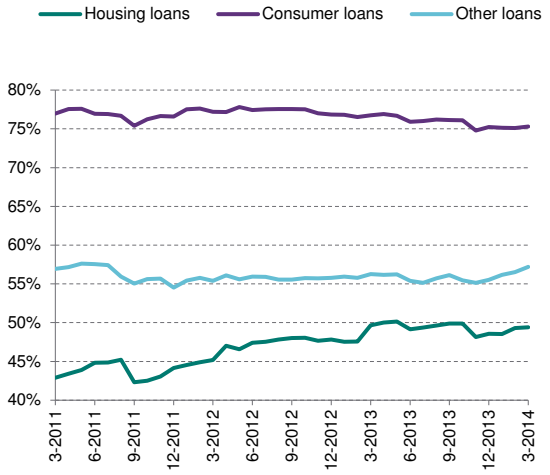
The zloty exchange rate being lower than in the period when most of loans were extended increases their servicing costs. However, the growth of instalments of Swiss franc-denominated loans against the loan origination date can be assessed as moderate, largely due to currently low market interest rates in the Swiss franc. The estimated average increase in instalments of Swiss franc-denominated loans granted in the successive months of 2005-2010 amounted to 18% as at the end of March 2014, while the maximum increase – to 28% (see Figure 3.16). The factor positively affecting the borrowers' capacity to service loans is a salary increase which has

[34] Even though the drop in the value of loans in arrears was partly the effect of the housing loan debt sale in one of the banks, yet the values of loans in arrears decreased in the remaining part of the banking sector as well.
[35] A more extensive assessment of the level of coverage of particular types of loans to households by provisions, including simulations of recoveries at the current LtV ratio and property market prices were presented in the: "Financial Stability Report. December 2013", NBP, Box 4, p. 66 and "Financial Stability Report. July 2013.", NBP, Box 3, p. 55.

taken place since the time when most Swiss franc loans were extended. As compared to the average for the years 2005–2008, when approximately 90% of Swiss franc denominated loans were granted, the average nominal wage[36] in the first quarter of 2014 was higher by approximately 46%.

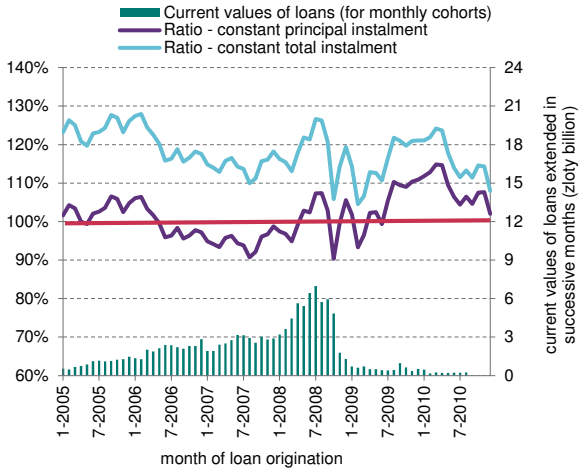
Loans with high Loan-to-Value ratios still have a big share in banks' loan portfolios, although it is gradually diminishing as principal instalments of these loans are repaid. Swiss franc-denominated loans extended in 2007–2008, that is in the period of a high exchange rate of the zloty against the Swiss franc and high property prices, have the biggest share in high LtV loans (see Figure 3.17).

Figure 3.15. Coverage of impaired loans by provisions for main types of loans to households



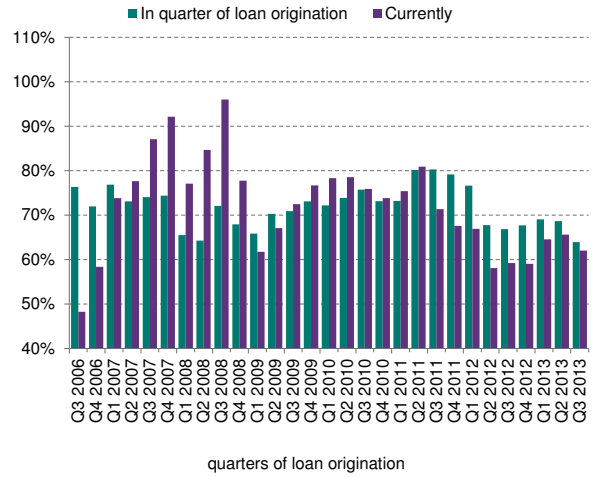
Source: NBP.

Figure 3.16. The ratio of current loan instalment to instalment at loan origination against current values of Swiss franc-denominated housing loans



Assumptions: a Swiss franc-denominated housing loan with maturity of 25 years, repaid in constant total instalments or in constant principal instalments; current instalment calculated on the basis of the Swiss franc exchange rate and the LIBOR 3M rate of 31 March 2014 and average spread on Swiss franc-denominated loans at loan origination. Points on a horizontal line mark the month of loan origination.
Note: bars present the *current* value in the zloty of Swiss franc housing loans taken out in a given month marked on a horizontal axis.
Source: NBP, BIK.

Figure 3.17. Average LtV values of Swiss franc-denominated housing loans extended in a given quarter



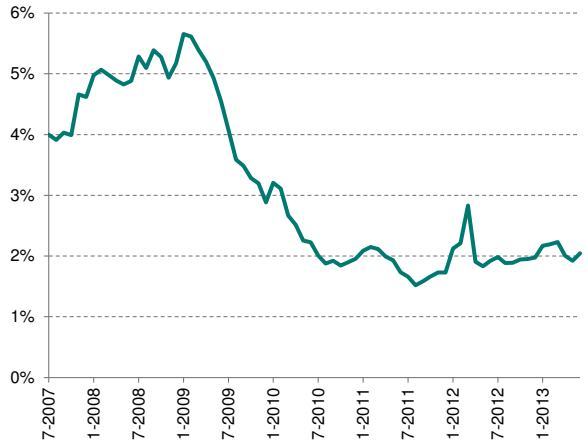
Assumptions: current average LtV value estimates based on average Swiss franc exchange rates, average LtV at loan origination, average maturity of loans taken out in specific quarters of the period considered and on changes in average transaction prices of dwellings in the period analysed. The loan value translated into the zloty at the Swiss franc exchange rate of 31 March 2014.
Source: NBP estimates based on survey data.

[36]The average wage growth in the economy according to GUS data.

Consumer loans

The quality of consumer loans continued to improve (see Figures 3.7 and 3.10). This was on the back of effects of both economic (a relatively low rate of deterioration in the quality of new loans) and statistical nature (large debt sale transactions) (see Figures 3.18 and 3.19).

Figure 3.18. Percentage of consumer loans in arrears of more than 30 days after 6 months from loan origination

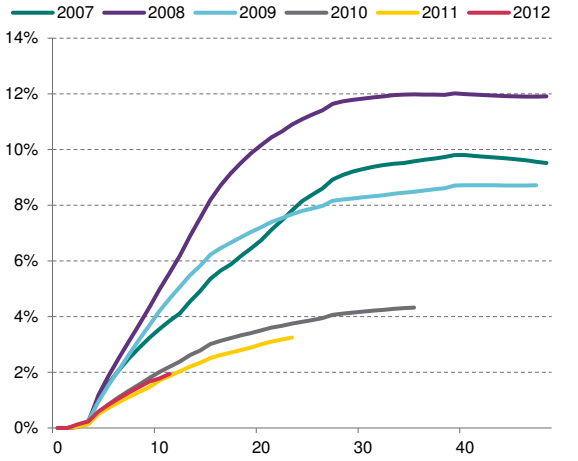


Note: points on the horizontal line mark a month of loan origination.
Source: BIK.

Credit losses and their ratio to the value of consumer loans stabilised at the levels significantly lower than in the period of 2011–2012 (see Figure 3.8 and 3.12). This was conducive to further improvement in the average profitability of the portfolio. Beneficial to the system stability was a marked decline in the market share of banks reporting relatively high credit losses (see Figure 3.20).

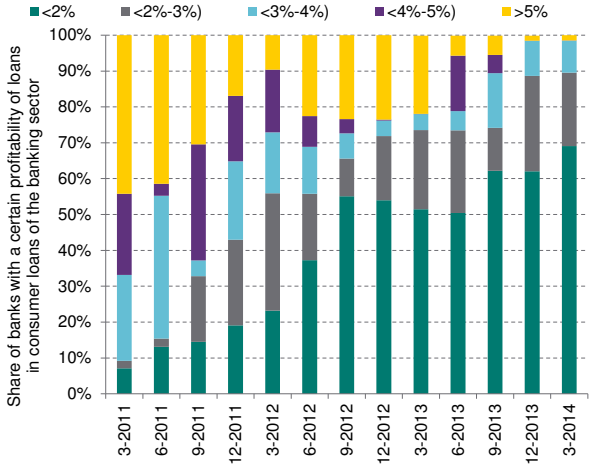
However, there are signs of a possible increase in credit losses in the future. This would be an effect of the process of lending policy easing in this market segment, which started in the first half of 2013. This may be corroborated by a certain growth in credit losses and their ratio to the value of loans in the banks which, over the past year, increased their consumer loan portfolios at a rate almost twice as high as the market average growth. However, taking account of the high consumer loan profitability, the current rate of growth of credit losses should pose no threat to financial stability.

Figure 3.19. Number of consumer loans in arrears of more than 90 days in relation to total number of loans extended in a given year



Note: vintage lines for loans extended in a given year at the end of consecutive months from loan origination.
Source: BIK.

Figure 3.20. Share of banks with a given net ratio of provisions for impaired loans to net credits in consumer loans extended by the banking sector



Note: data annualised.
Source: NBP.

For a few years, the average coverage of impaired consumer loans by provisions has remained at a sim-

ilarly high level (see Figure 3.15). The level largely corresponds with the discount on the portfolio value upon its sale. A slight decline in this ratio seen in the period covered by the *Report* followed entirely the changes in accounting method described above – after excluding the impact of those changes, the coverage would have insignificantly increased.

Outlook

Economic climate improvement will facilitate a fall in credit losses on the housing loan portfolio. Within the NBP projection horizon, further improvement in the situation on the labour market and growth in household sector income are expected. The easing of lending policy by banks in the consumer loan segment may be a loan portfolio quality improvement-impeding factor, which may to some extent affect the value of credit losses on this portfolio. Due to very high profitability of this product (see Figure 3.42), a possible moderate growth in net loan impairment provisions should not pose a threat to a stable functioning of banks.

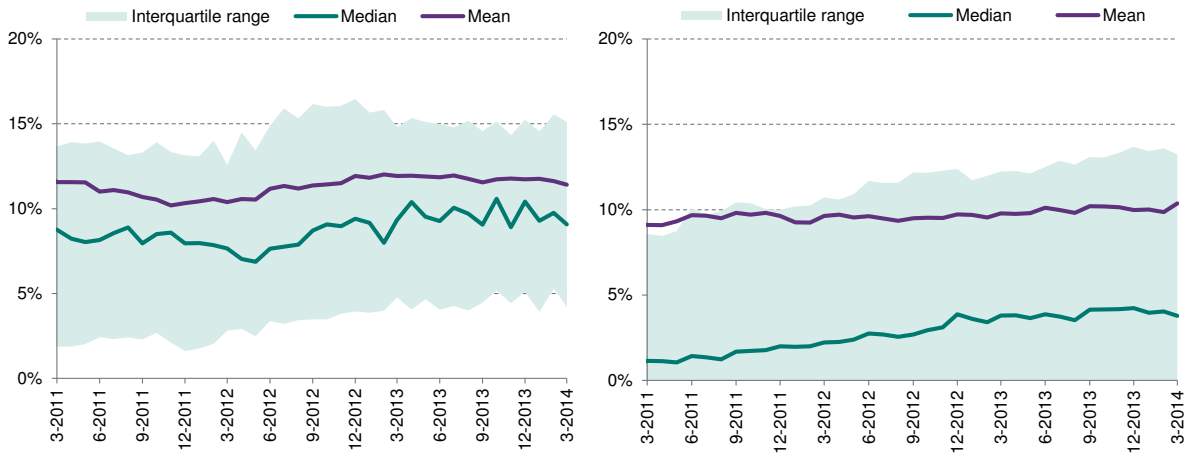
3.2.2. Credit risk of corporate loans

Corporate loan quality

The impaired corporate loan ratio has not changed-materially. At commercial banks, as in the whole banking sector, it fell from 11.5% to 11.4% (see Figure 3.21), whereas at cooperative banks – it edged up from 10.2% to 10.4%. Conducive to this lack of a significant change in the value of the ratio were a minor growth in the value of impaired loans in banks' loan portfolios (by 0.3 billion zlotys) and increased lending in the first quarter of 2014 (see Figure 3.22).

Although balance-sheet data do not indicate a marked improvement in loan quality, in the survey on credit market conditions[37] – for the first time in two years – banks cited improved quality of corporate loan portfolio as a factor contributing to the easing of their lending policies in the first quarter of 2014.

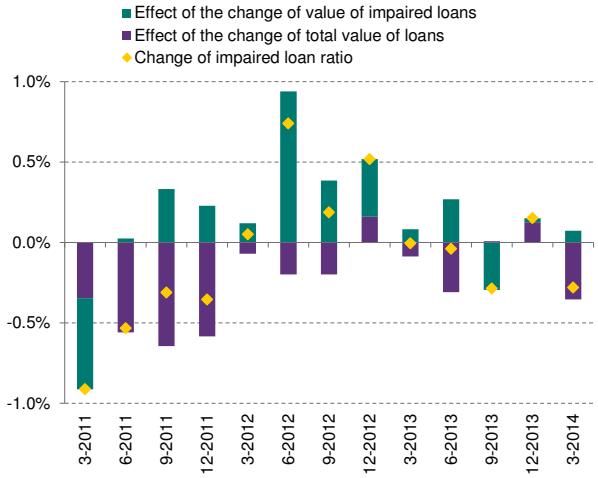
Figure 3.21. Impaired loan ratio for enterprises at commercial banks (left-hand panel) and at cooperative banks (right-hand panel)



Source: NBP.

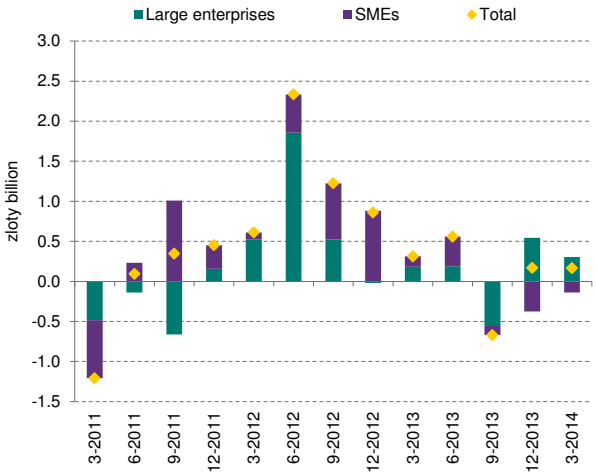
[37] See "Senior loan officer opinion survey – on bank lending practices and credit conditions. Second quarter of 2014", May 2014, NBP, p. 4.

Figure 3.22. Decomposition of change (q/q) of the impaired loan ratio for enterprises



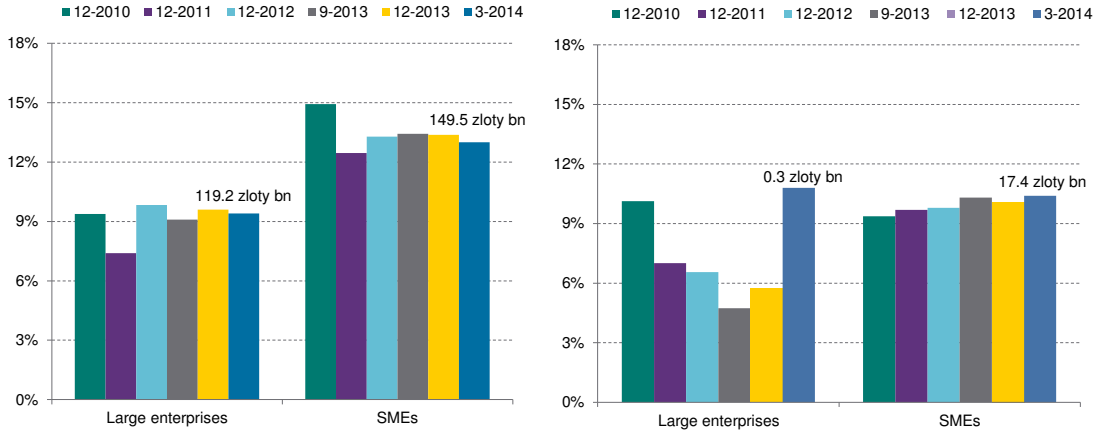
Note: decomposition with the use of a derivatives calculus: a partial derivative of the ratio at the points calculated in relation to a given variable comprising the ratio of impaired loans (impaired loans or total loans) and multiplied by a value of change of the variable in a quarter. The sum of products of partial derivatives and changes in the value of the variables is approximately equal to the change of the impaired loan ratio.
Source: NBP.

Figure 3.23. Quarterly changes in the value of impaired loans to enterprises



Source: NBP.

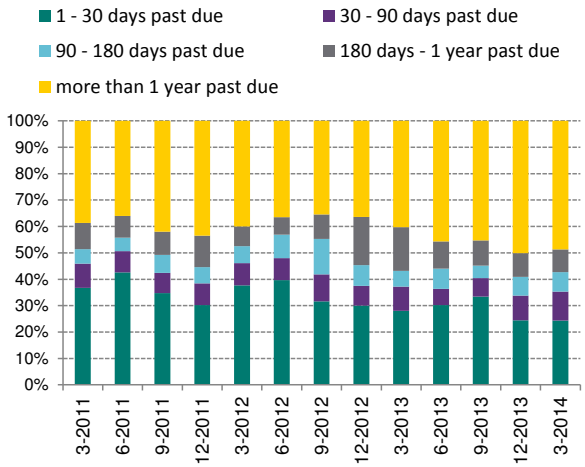
Figure 3.24. Impaired loan ratios for enterprises by their size at commercial banks (left-hand panel) and at cooperative banks (right-hand panel)



Note: values above the bars are the value of all loans in a given group of banks for a given category of enterprises at the end of March 2014.
Source: NBP.

Since the end of 2012, the share of corporate loans overdue more than 1 year in the structure of overdue loans has increased (to approximately 50% at the end of March 2014, see Figure 3.25). The increase was largely driven by a further deterioration in the quality of loans related to major infrastructure projects by construction companies, many of which had gone bankrupt.

Figure 3.25. The structure of overdue corporate loans

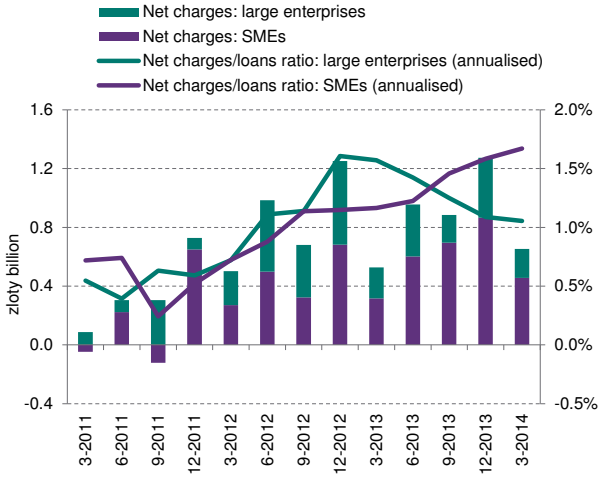


Source: NBP.

In the period analysed, the value of provisions for impaired loans has not change materially compared to the previous edition of the *Report*. Despite a drop in impaired loans for SMEs, the value of provisions for this loan category did not change substantially. This implies that the provisions are made after a certain time lag against the loan impairment date.

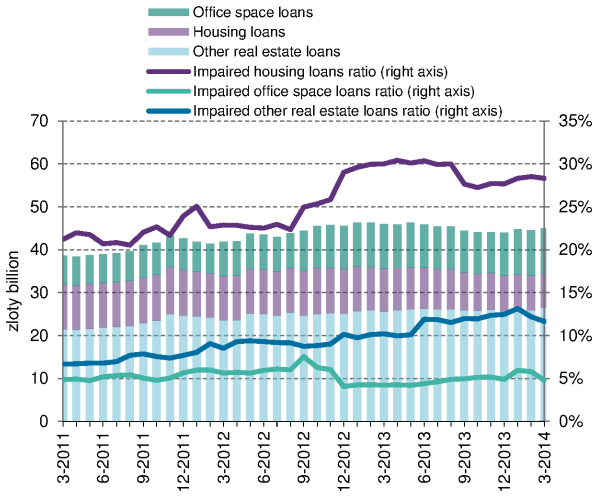
The value of impaired real estate loans slightly declined, which was reflected in the stabilisation of the impaired loan ratio.[38] This applied to both loans to large enterprises and SMEs. However, the quality of residential property loans (mainly to developers) still remains low (see Figure 3.27). This, however, poses no risk to banking sector stability, because the value of housing loan portfolio to enterprises in the whole banking sector is small and is steadily diminishing. The growth of the ratio may be attributed to just few banks, in which the ratio of this loan category to total loans does not exceed 4%.

Figure 3.26. Quarterly net charges to provisions for impaired corporate loans and their ratio to net value of loans



Source: NBP.

Figure 3.27. Value and quality of real estate loans for enterprises



Note: data excluding BGK.
Source: NBP.

[38] The impaired loan ratio does not include data of Bank Gospodarstwa Krajowego due to its specific activities that comprise, inter alia, extending subsidised loans for residential construction under the state-provided funds.

Table 3.1. Quality of large exposures to non-financial enterprises by sections of the economy at the end of March 2014 (%).

Section	Structure of total loans by section	Structure of impaired loans by section	Impaired loan ratio
A – Agriculture	3.7 (3.5)	2.2 (2.0)	6.5 (6.3)
B – Mining	2.0 (1.6)	2.8 (2.0)	15.1 (13.5)
C – Manufacturing	24.0 (23.7)	23.4 (22.9)	10.4 (10.4)
- Food processing	4.8 (5.0)	4.1 (4.1)	9.2 (8.9)
- Manufacture of coke and refined petroleum products	1.5 (1.5)	0.5 (0.6)	3.5 (4.2)
- Manufacture of rubber and plastic products	1.9 (1.8)	1.3 (1.3)	7.2 (8.1)
- Manufacture of other non-metallic products	1.3 (1.4)	2.5 (2.5)	19.8 (19.5)
- Manufacture of metal products (excluding machinery and equipement)	2.2 (2.3)	2.3 (2.3)	11.3 (11.1)
D – Electricity, gas and steam supply	4.4 (4.2)	0.4 (0.5)	1.0 (1.4)
E – Water supply, sewerage, waste management	1.2 (1.1)	0.4 (0.4)	3.7 (4.1)
F – Construction	11.3 (12.4)	25.0 (24.4)	23.4 (21.3)
G – Retail trade and repairs	19.4 (19.7)	15.7 (15.4)	8.6 (8.5)
H – Transportation and storage	3.6 (3.3)	1.8 (2.0)	5.5 (6.6)
I – Hotels and restaurants	2.9 (2.9)	5.8 (5.7)	21.0 (21.4)
J – Information and communication	3.1 (3.7)	0.7 (0.6)	2.3 (1.8)
L – Real estate activities	14.4 (14.3)	13.5 (15.5)	10.0 (11.8)
M – Professional, scientific and technical activities	3.9 (3.6)	5.1 (5.6)	13.9 (16.8)
N – Administrative activities	3.3 (3.3)	0.8 (0.7)	2.5 (2.2)
P – Education	0.4 (0.4)	0.3 (0.3)	9.2 (8.5)
Q – Health care	1.6 (1.6)	1.1 (1.2)	7.8 (8.0)
R – Arts, entertainment and recreation	0.5 (0.5)	0.3 (0.2)	6.2 (5.4)
S – Other services	0.3 (0.3)	0.5 (0.5)	16.0 (16.1)

Notes:
In brackets, data at the end of September 2013. Presented data come from new reporting forms NB0300. They may differ from the data presented in the previous editions of the *Report* due to a different methodology applied.
Claims include following balance-sheet positions: loans and other receivables, debt and equity instruments and remaining receivables.
Large exposures – for a bank that is a joint-stock company, state-run bank and a non-associated cooperative bank – mean exposures towards one enterprise in excess of 500,000 zlotys, and for an associated cooperative bank – exposures towards one client in excess of 100,000 zlotys.
In section C five subsections with the largest share in total claims are presented.
Source: NBP.

Loan quality by section of the national economy[39]

The portfolio of loans to "construction" with a share of 11.3% in banks' claims on non-financial enterprises displayed the lowest credit quality (see Table 3.1). The impaired loan ratio for this section grew for another consecutive half-year, inter alia, on the back of weak lending and holding of old impaired loans granted to this section. The first quarter of 2014 saw symptoms of recovery in this section of the economy, e.g. in the form of rising capacity utilisation, improved margin on sales ratio, higher liquidity and increased capacity to service liabilities[40], all of which allow to expect a gradual improvement in loan quality, alongside a growing number of new orders in the sector stemming from increased invest-

[39] Analysis based on the so-called large exposures.
[40] See "NBP Quick Monitoring. Information on the condition of the enterprise sector, including the economic climate in 2014 Q1 and forecasts for 2014 Q2", 2014, NBP.

ment demand in the economy.

The loan debt of "manufacturing", the section with the largest share in the portfolio, grew. The quality of loans in this section are, on average, of good and improving quality.

There was no material change in the very good quality of banks' exposures towards leasing companies. Bank finance corporates and take associated credit risk also indirectly by lending to leasing companies from their own groups. Exposures towards leasing companies are concentrated at several banks, however they constitute an insignificant part (3–6%) of their assets. The impaired loan ratio for these exposures stood at merely 0.4% at the end of March 2014. Furthermore, the leasing companies' claims on enterprises are mostly fully collateralized with fixed assets leased. Therefore, risk associated with the claims is limited.

Outlook

Further improvement in the credit risk outlook for this group of clients may be expected. This is indicated by the survey data[41] and data from financial statements of enterprises. The capacity of enterprises to service debt has improved, while their debt and interest payment burden has declined. Moreover, for the first time in three years, a drop in the number of bankruptcies[42] was observed in the fourth quarter of 2013 and the first quarter of 2014. The decline in the number of bankruptcies was noted mostly in "construction", which indicates completion of restructuring processes in this section of the economy. A gradual reduction of charges to provisions for credit risk related to losses from infrastructure contracts may be expected in the coming quarters. Developments in the residential property market, where signs of imbalance started to emerge [43], is a new risk factor. The size and distribution of banks' exposures to this sector do not suggest that possible quality deterioration should have any systemic effects.

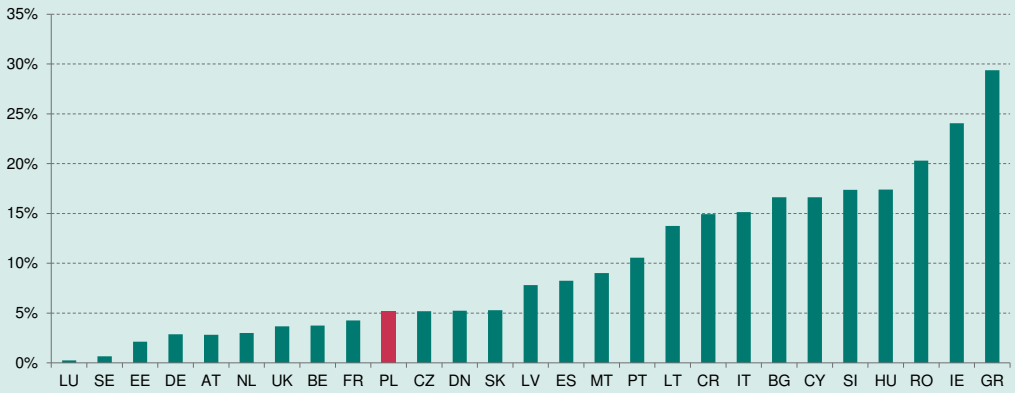
In the half-year period discussed, export-oriented enterprises were in a much better financial condition than other enterprises. Exporters were also in the group of sectors with the highest sales, investment and employment growth rates. The Russian-Ukrainian political conflict is a credit risk factor for Polish enterprises. Falling exports to these countries might affect some enterprises primarily from the sections of "manufacturing" as well as from "agriculture". Potential credit losses should not significantly affect the banking sector, though. Total claims on sectors with the highest share in exports to Russia or Ukraine (selected by product types) constitute almost 11% of the banking sector's claims on non-financial enterprises.[44] If the condition of Poland's trading partners remains sound and the Ukrainian crisis has no negative consequences for the enterprise sector (including higher prices of fuels and energy), a gradual improvement should be expected in the quality of the corporate loan portfolio.

[41] See "Information on the condition of the enterprise sector, including the economic climate in 2014 Q1 and forecasts for 2014 Q2", 2014, NBP.
[42] See "Raport Coface nt. upadłości firm w Polsce w I kwartale 2014 roku" [Coface report on bankruptcies in Poland in the first quarter of 2014], Coface.
[43] A more extensive description of the developments in the commercial property market can be found in: "Information on home prices and the situation in the residential and commercial real estate in Poland in the first quarter of 2014", 2014, NBP.
[44] The estimated effect does not take account of the impact on enterprises cooperating with the aforementioned sectors.

Box 1. Barriers and limitations in reducing overdue loans by banks

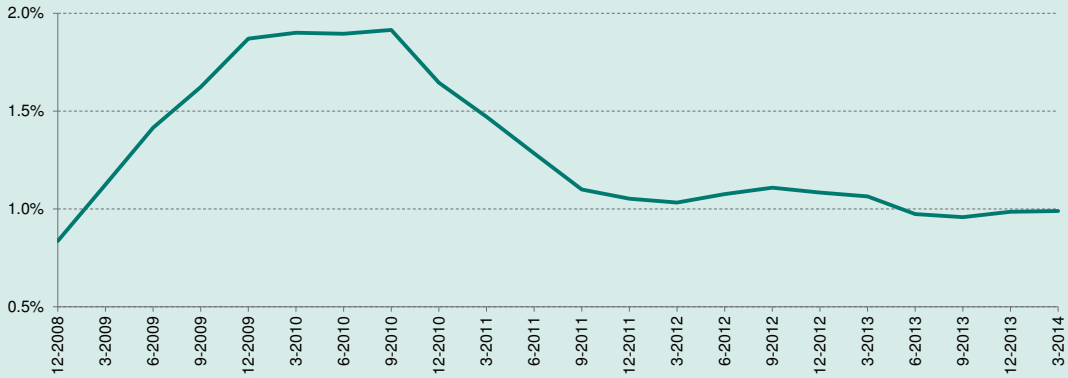
The share of impaired loans in the loan portfolio of Polish banks has been rising moderately since the onset of the global crisis. When compared with the EU and CESEE countries, Poland is one of the states with a relatively low impaired loan ratio (see Figure 1).[1] Despite the improvement of the economic climate and a decrease in the cost of charges to provisions for impaired loans, the value of impaired loans in banks' portfolios remains relatively stable, except consumer loans that register a light drop (see Figure 2 and 3.5 – in the main body of the text). This box discusses the factors that keep impaired loans at an increased level and make it difficult to swiftly reduce the value of this portfolio. In order to identify these factors, NBP conducted a survey among 27 banks with an 84% share in the banking sector's assets at the end of March 2014.

Figure 1. Ratio of loans in arrears of more than 90 days in EU countries



Notes: data as at the end of the first half of 2013, for Germany and Bulgaria – as at the end of 2012.
Indications of countries: AT – Austria, BE – Belgium, BG – Bulgaria, CR – Croatia, CY – Cyprus, CZ – Czech Republic, DE – Germany, DN – Denmark, EE – Estonia, ES – Spain, FR – France, GR – Greece, HU – Hungary, IE – Ireland, IT – Italy, LT – Lithuania, LU – Luxembourg, LV – Latvia, MT – Malta, NL – Netherlands, PL – Poland, PT – Portugal, RO – Romania, SE – Sweden, SI – Slovenia, SK – Slovakia, UK – United Kingdom.
Source: IMF.

Figure 2. Ratio of charges to provisions for impaired loans to the value of loans to the non-financial sector



Note: annualised data.
Source: NBP.

Factors affecting the value of the portfolio of impaired loans at various stages of the proceedings related to impaired loans, i.e. restructuring, collection and sale of debt, are discussed later in the box.

Debt restructuring

A correct use of the restructuring mechanism in order to settle the dispute amicably, i.e. a compromise with the debtor, debt relief and re-scheduling of terms of payments, could help decrease the value of the portfolio of impaired loans. A restructuring procedure that is opened well in advance may give the opportunity to mitigate the risk of the client's insolvency and help return the exposure to the category of performing loans. However, it should be pointed out that a debt restructuring procedure that is carried out improperly may result in presenting an inadequate – underestimated level of charges to provisions for impaired loans, which in turn results in an incorrect presentation of economic events in financial statements and wrong governance decisions.

Banks are reluctant to take restructuring measures when a debtor has many creditors. This reluctance is often explained by the low willingness of creditors to cooperate as they compete with one another to satisfy their claims on the debtor's assets. Another reason for this reluctance is creditors' preference to collect claims through seizure and sale of physical collateral (if any), as a solution providing a better opportunity to recover claims than debt restructuring. In the case of some banks, the postponement of the moment of a loan impairment identification[2] in order to to present better financial results may be the factor limiting the willingness to take restructuring measures in advance. This may result in taking restructuring measures too late, when chances for success are slim.

Tax regulations in particular unfavourable fiscal effects of debt redemption both for the debtor and the bank may also discourage interested parties from taking restructuring measures. As a general rule[3], especially in the case of debtors who are natural persons, the value of the debt redeemed is tax revenue, which decreases the effective benefit for the debtor resulting from redemption. On the other hand, for the bank, the redemption of a portion of loan entails the release of provisions created for this loan. In that case the bank has to pay tax on the provisions released provided that they were classified before as tax-deductible costs. Tax implications have a negative impact on the bank's willingness to reduce loans in order to adjust loan servicing costs to the financial situation of the debtor.

Recovery proceedings, initiated by the debtor, that lead to the suspension of debt repayments and protection against enforcement proceedings, are rarely applied in business practice. However, such measures may be an effective method of restructuring. Such proceedings may gain in importance after the implementation of solutions provided for in the draft Restructuring Law that are aimed at simplifying and making restructuring measures less formalized.[4]

Collection

The course of the debt collection process , especially its duration, affects the value of the impaired loan portfolio, as well as applicable tax provisions which, in banks' view, are one of the main obstacles to the reduction of those portfolios. The obstacles result mainly from the rules of classifying impairment provisions as tax-deductible costs. In accordance with the Corporate Income Tax Act, classification of all provisions as tax-deductible costs requires that debt uncollectibility be documented, provided that enforcement or insolvency proceedings relating to the debtor have been completed[5] and may be a long lasting process.

The process of debt collection with regard to consumer loans is relatively short due to the standardized nature of these loans and their collateral as well as a relative ease in pursuing the claim (issuance of a bank enforcement title and referring the case to the debt collector). In a number of cases, the collection is partially outsourced by banks.

Due to their complex character, corporate loans are in principle processed on a case-by-case basis at the stage of collection. On a number of cases, pursuing the claim is taking place during lengthy legal proceedings (e.g. insol-

vency proceedings). In banks' view, excessive length of the proceedings results, inter alia, from the debtor's use of various possibilities of delaying them, including making use of legal provisions allowing the debtor to file various petitions, complaints or appeals. Moreover, other entities (e.g. tax offices, communes, other banks) often file their own claims, as they have the right to priority claims.

Enforcement actions towards enterprises are also relatively difficult and time-consuming. In the case of physical collateral, difficulties in its disposal are observed. This happens because of the features of collateral (these are often production assets or specialised machinery) or the lack of buyers. In a number of cases, a factor that makes it impossible to dispose of collateral quickly is too low market price in relation to the bank's claim or the actual value of underlying assets.

Lengthy enforcement proceedings also relate to the mortgages' execution. In the survey, some banks indicated the buyers' slim interest in the debt collector's auctions relating to real estate and — in the case of residential property loans — the lack of appropriate regulations to quickly evict occupants from the flat to be purchased. Problems with selling the property also arise from organisational reasons, i.e. the need for banks to have specialized units, and market-related factors — mostly the lack of organized trading market and the need to seek buyers on an individual basis.

Sales of loans

Another method of reducing the level of impaired loans is the sale of individual loans or loan portfolios, which are removed from bank's accounting books as a result of the transaction.

In practice, the tax provisions restrict the range of buyers of bank loans only to the so-called securitisation funds or investment fund management companies that established such funds[6], what is perceived by banks as one of the obstacles to growth of this market. In addition, even if the loan is sold to these entities, loss due to the sale below its nominal value can be classified as tax-deductible costs only to the amount of impairment provisions classified earlier as tax-deductible expenses. As documenting of loan uncollectibility may be a long-lasting process, this adds to the lengthening of the period of time when impaired loans are present on banks' balance-sheets (until the sale is more profitable due to tax reasons). It should be pointed out that the sale of loan to securitisation funds operating in Poland does not amount to securitisation in the most commonly used sense, i.e. the issuance of asset–backed securities.

The sale of consumer loans is viewed by banks operating in Poland as relatively easy due to the simplicity of their valuation based on statistical methods and the presence of specialized firms (debt collection companies that set up specialized securitisation funds for debt collection) that deal with debt purchase.

According to banks, the underdeveloped debt trading market for corporate and housing loans and low prices offered by buyers on this market are a major obstacles to a reduction of impaired loan portfolios. The buyers of enterprise loan portfolios are mostly foreign investors. However, it is difficult to effect such transactions as there is a limited number of potential buyers and relatively small portfolios of loans for sale compared to the size of transactions they are interested in. Therefore, it is necessary to build a sufficiently large loan portfolio and to select loans that are eligible for sale, which is difficult and time-consuming due to a relatively low value of individual loans.

Among other obstacles for loan sale banks also cite the impossibility to transfer a bank enforcement title onto the buyer.

Summary

There are several major reasons why banks keep impaired loans at a relatively high level. They can be roughly divided into reasons resulting from banks' internal procedures for dealing with defaulted loans and those resulting from external conditions that determine the conduct of institutions.

The following are internal factors:

- limited or too late use of debt restructuring by banks,
- preference to collection by the use of collateral,
- organisational difficulties associated with the need to keep and seek specialized units responsible for claims collection and sale of collateral.

External factors:

- tax provisions in force, including those relating to documentation of debt uncollectibility in particular,
- lengthy insolvency proceedings, enforcement and other court procedures,
- a poorly developed market for trading in items from collection,
- competition between creditors in the process of restructuring or collection,
- a poorly developed debt trading market for other than consumer loans.

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[1] See "The European Banking Coordination Vienna Working Group report on NPLs in Central, Eastern and Southeastern Europe", March, 2012, available at: http://www.imf.org/external/region/eur/pdf/2012/030112.pdf and "Nonperforming loans in CESEE-an even deeper definitional comparison", S. Barisitz, Focus on European Economic Integration Q3/2013, p. 67—84, Oesterreichische Nationalbank, Vienna, 2013, available at: http://www.oenb.at/Publikationen/Volkswirtschaft/Focus-on-European-Economic-Integration/2013/Focus-on-European-Economic-Integration-Q3-13.html.

[2] In accordance with the IFRS/IAS, the debtor's financial problems or granting the debtor special loan repayment facilities should result in loan impairment identification.

[3] Exceptions include, inter alia, debt redemption under insolvency proceedings within the meaning of the provisions of the Bankruptcy and Restructuring Law.

[4] Information on the proposal and analyses behind the draft amendments to the current regulations are available on the website of the Ministry of Justice: http://ms.gov.pl/pl/nowelizacja-prawa-upadlosciowego-i-naprawczego/.

[5] Exceptions to the rule apply, inter alia, to cases where expected enforcement and court fees are higher than the amount of the debt and when the court has dismissed the insolvency petition or discontinued the insolvency proceedings because the debtor's assets are insufficient to satisfy the proceedings' fees.

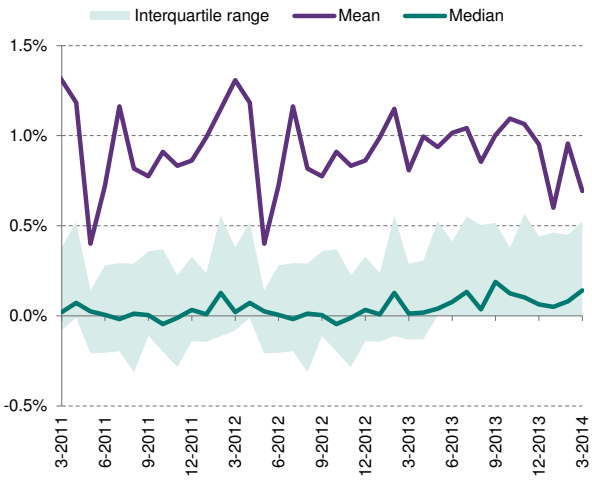
[6] According to the Act *on Legal Persons' Income Tax*, the amount obtained from the sale of loan is exempted from income tax only when it is sold to a securitisation fund or an investment fund management company that constitutes a securitisation fund. If the loan is sold to other entities, it is not possible to classify a loss on the sale of loan as tax-deductible costs.

3.3. Market risk

Market risk that domestic banks are exposed to is low. The average capital requirement for market risk does not exceed 1% of banks' regulatory capital, while the key risk factors relate to: FX risk and interest rate risk.

Polish banking sector has a long FX balance-sheet position. FX assets that are predominantly composed of housing loans exceed FX liabilities. In the period analysed, foreign FX liabilities and foreign currency denominated housing loans decreased at a similar rate, which meant that the long FX balance-sheet position changed only to a relatively minor degree.

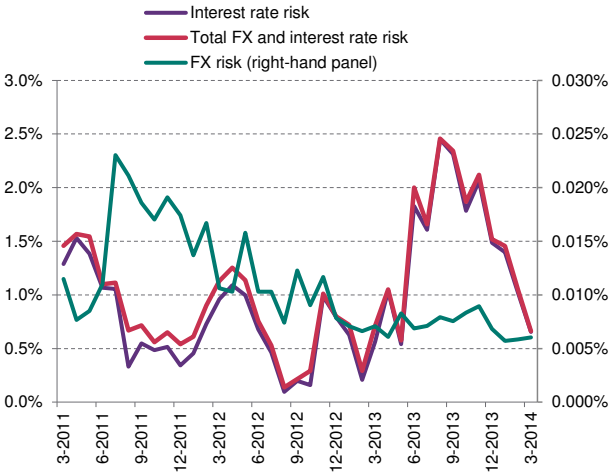
Figure 3.28. Open FX position to regulatory capital



Source: NBP.

The risk of significant losses due to changes in the valuation of the FX position is limited. The average open FX position (including hedging positions) does not exceed 1% of banks' regulatory capital, and in most banks it is close to zero. The FX balance-sheet position is hedged with instruments such as FX swaps and CIRS, mostly concluded with foreign banks. The median of Value at Risk (VaR) for FX risk does not exceed 0.01% of commercial banks' regulatory capital (see Figure 3.29). VaR for FX risk is calculated based on the assumption that the market for hedging instruments is liquid and banks are fully capable of rolling over maturing hedges. Therefore, this estimate does not encompass other types of risk that banks are, in practice, exposed to: a rise in transaction costs, the incapability of rolling over maturing hedges and counterparty default.

Figure 3.29. Median of Value at Risk for FX risk and interest rate risk



Notes: VaR at confidence level of 99% and a 10-day horizon calculated for commercial banks and expressed as % of regulatory capital; VaR for interest rate risk includes the banking and trading book.
Source: NBP.

A potential rise in the margins on transactions that hedge against FX risk may pose a threat to the profitability of FX assets. The risk is particularly significant for some banks that extended foreign currency loans at very low spreads (in the range of 100–150 basis points), where market competition was most intense, and, at the same time, actively competed for new deposits. At the end of March 2014, the estimated profitability of the portfolio of housing loans was negative for around 16% of banks (see Figure 3.43).

Another potential source of risk related to the need to hedge to FX balance-sheet position is liquidity risk. Depreciation increases the value of zloty funds needed to roll over contracts that hedge FX posi-

Table 3.2. Balance sheet value of debt securities in banks' portfolios by issuer (zloty billion)

Issuer	Resident			Non-resident		
	3-2013	9-2013	3-2014	3-2013	9-2013	3-2014
Central banks (money bills)	123.0	114.8	96.4	0.0	0.0	0.0
Central government agencies	137.0	147.4	157.9	0.7	1.3	2.9
-Treasury bills	7.8	2.4	3.0	0.0	0.0	0.2
-Treasury bonds	129.1	145.1	154.9	0.7	1.3	2.6
Municipalities	13.9	14.6	17.1	0.0	0.0	0.0
Financial institutions	7.4	7.7	6.7	0.6	0.6	0.6
Non-financial institutions	12.4	13.7	17.3	0.2	0.1	0.1
Total	**293.6**	**298.2**	**295.4**	**1.5**	**2.1**	**3.6**

Note: as at the end of March 2014.
Source: NBP.

tions on banks' balance sheets. Depreciation may also entail the need to use liquid funds for the margin calls associated with FX position-closing transactions. This risk was accounted for in the stress scenario of stress tests (see Chapter 3.7.2.). The results of the simulation show that for some banks (with an approximately 10% share in the sector's assets) the value of zloty funds needed to roll over hedging contracts would exceed their liquidity buffer of government bonds and NBP bills. This applies, in particular, to the banks that used to grant foreign currency loans denominated in the Swiss franc and the euro on a large scale amid small scale balance sheet funding in the two currencies.

Interest rate risk related to the portfolio of debt securities is limited. A vast majority (around 86%) of the portfolio are domestic government bonds and NBP bills (see Table 3.2). Banks hold around 91% of government bonds in portfolios that are marked-to-market. At the same time, majority of them is held in the bankig book and changes in their valuation are recognised in capital, rather than in banks' income statements (see Table 3.3). The risk of price changes in government bonds portfolio is mostly hedged using derivatives. The average duration of the bond portfolio is relatively small and amounts to around 1.9 years.

Banks may be exposed to risks arising from volatility of the spread between bond yields and the underlying interest rate swaps used for hedging. The macro stress tests results conducted under the shock scenario indicate that this risk is not significant (see Chapter 3.7.2.). Limited scale of such risk is a result of low duration of government bond securities held by Polish banks (see Table 3.3).

Table 3.3. Debt instruments issued by central government institutions in banks' assets

Portfolio type	Share
Available for sale	80.0%
Held for trading	9.7%
Held to maturity	6.3%
Loans and other receivables	2.4%
Fair value through profit & loss	1.5%

Notes: as at the end of March 2014. Data include instruments issued by residents and non-residents.
Source: NBP.

Except government bond portfolio, another source of interest rate risk in the banking book stems from maturity mismatch of other interest-bearing assets and liabilities. However, the median of estimated VaR for interest rate risk of trading and banking book portfolios does not exceed 1% of banks' own funds (see chart 3.29). In some banks an increase in the estimated interest rate VaR recorded in the second half of 2013 was mainly driven by higher volatility of Polish government bonds in the period of June – September 2013. Increased volatility was due to expectations of Fed withdrawing quantitative easing stimulus. After this period the Polish bond yields stabilised (see Chapter 2.2.).

***

In the analyzed period there were significant improvements made in the domestic market post trade infrastructure that would have important implications for the banks' risk management practices, including market risk.

On 7 November 2013, the trade repository run by the KDPW, as one of the first four in the EU, was registered in accordance with EMIR requirements.[45] Following ESMA decision, TR_KDPW may collect and store data relating to all derivative contracts concluded by legal entities in the regulated and OTC markets. Registration of trade repositories meant that the obligation to report to them details of derivative contracts and information relating to the counterparties became effective on 12 February 2014. In addition, from 11 August 2014, the financial market participants will be obliged to provide information on the mark to market valuation of these instruments and the collateral posted.

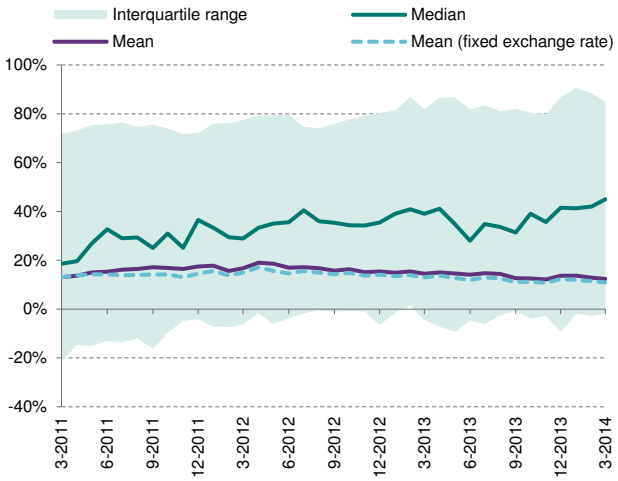
On 8 April 2014, KNF granted KDPW_CCP an authorisation for the provision of clearing services as a CCP under EMIR. KDPW_CCP received the authorisation to clear PLN-denominated FRA, IRS and OIS transactions, repos on government bonds and the following financial instruments' transactions executed on organized market: equities, bonds, futures, options on equities and stock indices, FX futures, WIBOR reference rate futures and T-bonds futures.

Aforementioned changes contribute to strengthening the stability of the financial system.[46] Domestic entities will in fact be able to comply with EMIR requirements on OTC derivative trading using infrastructure located in Poland. IRS and FRA transactions, which are used among others to hedge against changes in the value of bond portfolios, may be among the first classes of OTC derivatives directed by domestic banks to CCP clearing.

3.4. Liquidity risk

The average funding gap in the banking sector is relatively low and has been gradually decreasing over the recent years. In the period analysed, the growth rate of deposits from non-financial and general government sectors was slightly higher than the growth rate of lending to these sectors. As a result, the funding gap continued to decrease. At the same time, the degree to which individual banks vary in terms of the funding gap increased, in particular there was a rise in the number of banks with relatively high levels of the gap (see Figure 3.30). This concerned mostly branches of credit institutions and small, specialised banks.

Figure 3.30. Funding gap

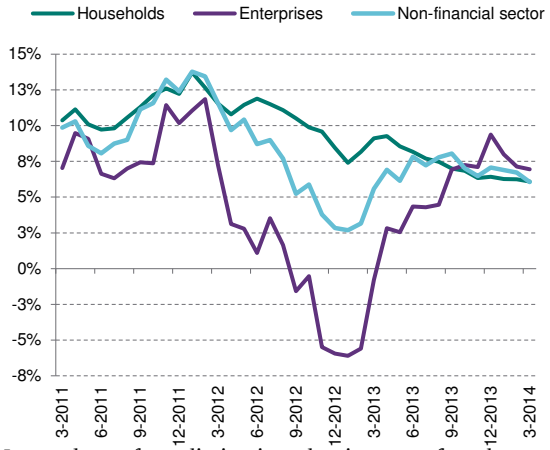


Note: in order to eliminate the impact of exchange rate movements on the value of the funding gap, for the variable *mean (fixed rate)* the values of foreign currency claims and liabilities were translated into zloty according to a fixed exchange rate as at the end of March 2011.
Source: NBP.

[45] Regulation No. 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories (Official Journal of the European Union L201 of 2012, p. 1).
[46] More information on the CCP's impact on financial system stability can be found in: "Financial Stability Report. December 2013", NBP, Box 3, p. 34.

Deposits of the non-financial sector grew at a stable pace (see Figure 3.31). The annual growth rate of corporate deposits stood at approximately 7–9%. It stabilized after a strong acceleration observed in the first three quarters of 2013. On the other hand, the rate of growth of household deposits has been very slowly but systematically decelerating to reach 6% at the end of March 2014. A gradual fall in the growth rate of household deposits could have been related to an increased interest in alternative forms of savings in the environment of low interest rates. This could be corroborated by a higher inflow of households' funds to investment funds observed in 2013.

Figure 3.31. Growth rate (y/y) of deposits of the non-financial sector



Notes: data after eliminating the impact of exchange rate changes.
Source: NBP.

There were no signs of an increase in banks' competition for deposits. The average spread between the WIBOR rates and the interest rates on new term and current deposits[47] ceased to decrease. At the same time, the structure of household term deposits changed. Following a period of notable drops in term deposits (predominantly in the period of monetary policy easing), term deposits increased much quicker than current deposits in the period analysed.

The cost of financing the whole portfolio of banks' (zloty and foreign currency) liabilities declined markedly (see Figure 3.33). The decline took place amidst stable interbank market rates, which may be attributed mostly to maturing of liabilities incurred in the periods of higher interest rates and stabilisation of spreads on new deposits. As a consequence, the negative impact of the movements in financing costs on net interest income of banks was halted (see Chapter 3.5.).

Foreign funding of the banking sector (see Figure 3.34) was gradually decreasing. The decline concerned the majority of commercial banks, in particular those banks whose business model had been largely based on extending foreign currency housing loans. On the other hand, foreign liabilities grew in some commercial banks for which foreign funding had been a relatively insignificant source of financing[48] and the majority of branches of credit institutions.

The share of foreign liabilities in banks' funding mix decreased (see Figure 3.34). Yet, there is still a group of banks for which intragroup liabilities constitute a predominant form of funding. In the majority of cases, these are banks with sizeable portfolios of long-term foreign currency housing loans and relatively low portfolios of liquid assets, which may expose them to the risk of withdrawal of foreign funds.

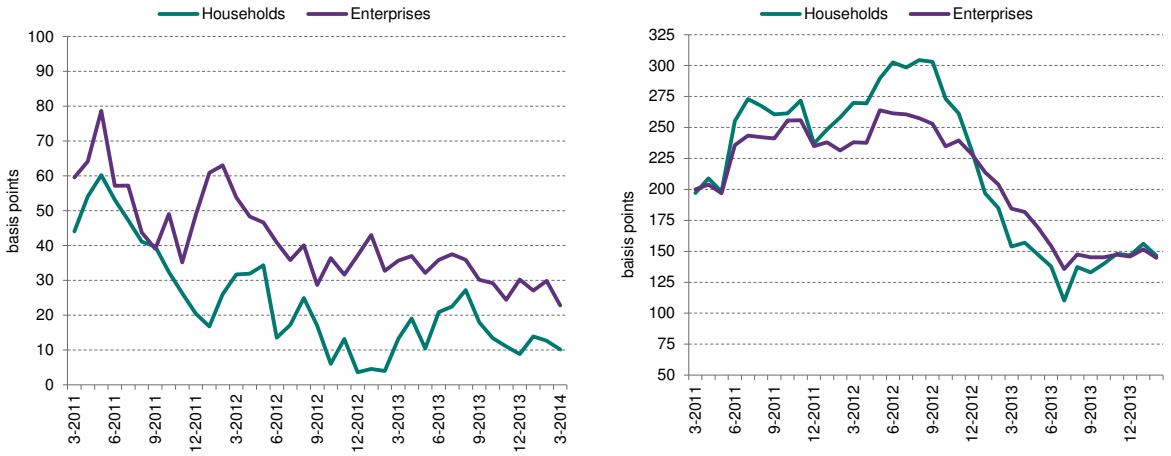
For approximately 9% of banks a liquidity shock[49] assuming mainly foreign funding outflow and crystallization of market risk stemming from the need to finance foreign currency assets would pose a serious threat to their stable operation due to the lack of sufficient buffers of liquid assets (see Chapter 3.7.2.).

[47] In bank reporting, the category "current deposits" includes all deposits under which funds are withdrawn on demand, i.e. both checking and saving accounts.
[48] These were most of all banks that are not part of foreign banking groups.
[49] In order to estimate potential risk related to foreign funding, a simulation was performed as part of stress tests. The shock scenario of this simulation assumes, inter alia, an outflow of a portion of foreign liabilities, depreciation of the zloty and a fall in the value of the buffer of liquid assets.

This result implies a further minor improvement of the resilience of banks to liquidity shocks. Large share of funding obtained from parent banks, which during the crisis proved to be a stabilizing factor, mitigates the risk of foreign funding withdrawal.

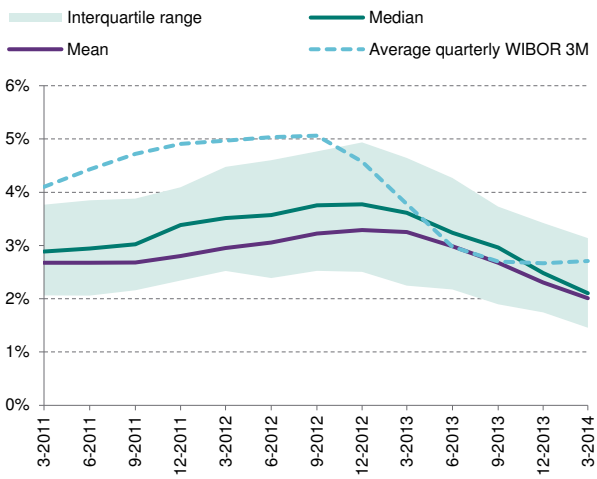
The short-term liquidity position of banks did not change significantly and was favourable. The share of NBP bills on banks' balance sheets declined, but, on the other hand, banks increased their Treasury bonds portfolios. Banks largely vary in terms of government bond portfolios' holdings (see Figure 3.36). Sizable portfolios of government bonds are held by the largest banks, and in the period analysed, these banks were mainly responsible for the growth of government bonds portfolio in the banking sector. For over 95% of commercial banks the portfolio of liquid assets fully covered the adjusted short-term liquidity gap.

Figure 3.32. Spread between the average WIBOR rate and interest rate of new zloty term deposits (left-hand panel) and interest rate on the portfolio of current deposits (right-hand panel)



Notes: data based on a sample of 18 banks that report interest rate information to NBP; spread is the difference between the WIBOR rate and a respective interest rate on deposits; for new term deposits, the average WIBOR rate was calculated as a monthly average of WIBOR 1M, 3M, 6M, 1Y rates weighted by shares of deposits with respective maturities in all new deposits in a given month; for current deposits, the average monthly WIBOR O/N rate was used.
Source: NBP.

Figure 3.33. Effective interest on liabilities

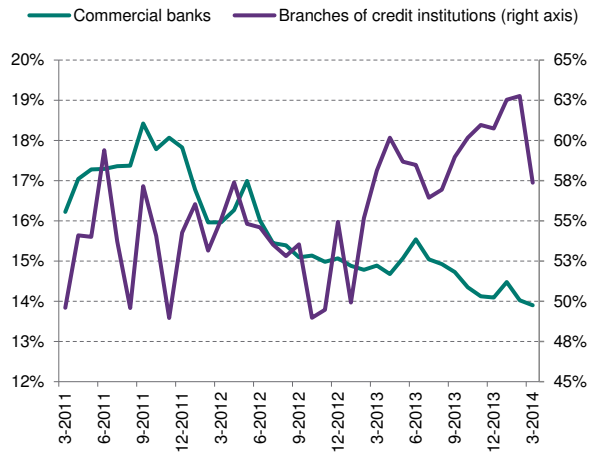


Notes: effective interest – the ratio of annualised interest expense to annual average balance-sheet value of liabilities. The calculations include zloty and foreign currency liabilities.
Source: NBP.

Figure 3.34. Quarterly change in liabilities towards banks and branches of credit institutions

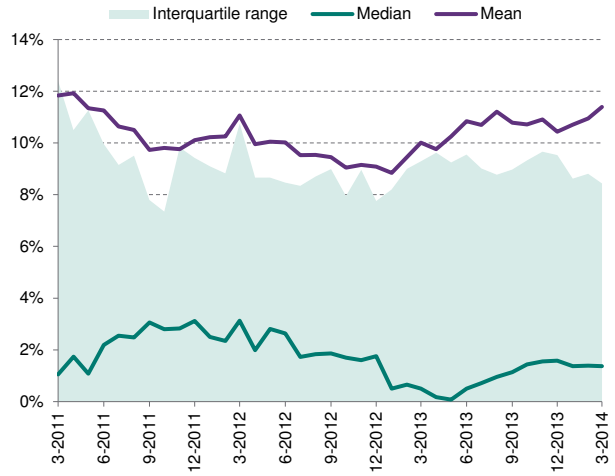
Notes: data after excluding the impact of foreign exchange rate changes; data include deposits and loans received.
Source: NBP.

Figure 3.35. The ratio of liabilities towards foreign financial institutions to balance sheet total



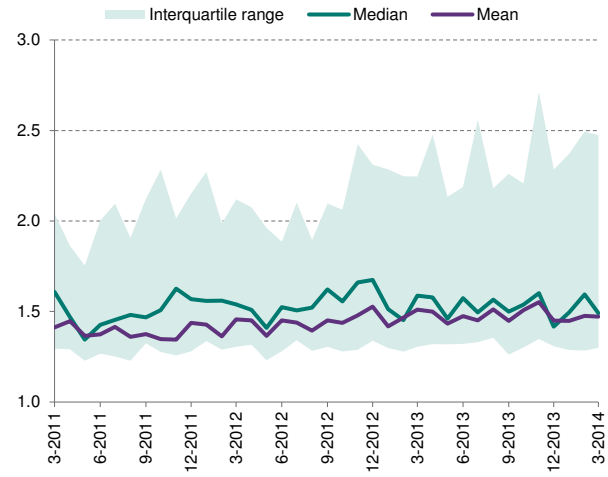
Source: NBP.

Figure 3.36. Share of Treasury securities in banks' assets



Source: NBP.

Figure 3.37. Supervisory M2 liquidity standard at commercial banks



Source: NBP.

The supervisory liquidity ratios that domestic banks are required to meet[50] also indicate that the liquidity risk position of banks was good. As regards short-term liquidity, commercial banks are bound to meet M1 and M2 liquidity ratio limits, i.e. to maintain liquidity reserves above the level of unstable external funds. In the period analysed, all commercial banks maintained the M2 ratios above the required minimum of 1.00. All commercial banks also complied with the supervisory M4 long-term liquidity ratio. In the period analysed, the average M2 and M4 ratios in commercial banks did not change significantly (see Figure 3.37).

Outlook

The liquidity position of banks is good and poses no significant risk to banking sector stability. The tendencies of reducing the funding gap and financing lending mostly with domestic funds, which have been observed in recent years, should be viewed as favourable for the financial system stability. Individual banks are strongly diversified in terms of their liquidity position, however it can be said that the situation of banks with the relatively highest liquidity risk profile has been improving systematically.

The condition of parent banks remains a major risk factor for the liquidity position of Polish banks. A potential deterioration of their standing could adversely affect Polish banks both via the direct fund-

[50] See KNF Resolution No. 386/2008 *defining liquidity standards binding for banks*. For more details on the KNF supervisory liquidity standards, see Box 2 in: "Financial Stability Report – December 2009", 2009, NBP.

ing channel and a fall in confidence in the financial markets. The risk concerns, however, only a part of the banking sector.

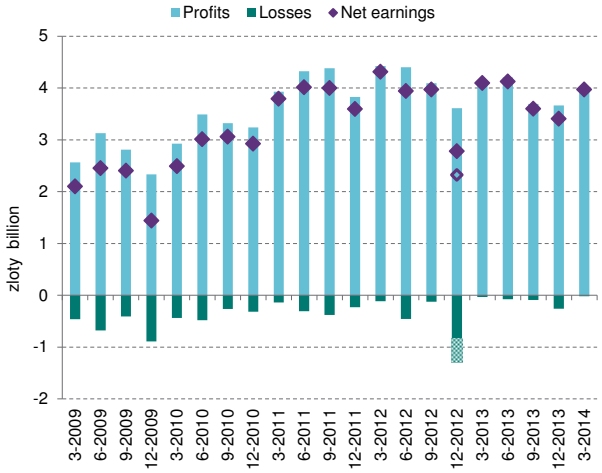
In the longer-term requirements on long-term funding (in particular introduction of NSFR) may contribute to a gradual change in the funding profile of some banks.

3.5. Earnings

The earnings of the banking sector, which constitute an important source of capital, remained at a high level (see Figure 3.38). The number of banks which reported a 12-month financial loss decreased significantly (to 26 from 33 as at the end of September 2013) and so did their share in the banking sector's assets (from 7.3% to 2.5%).[51] Total losses made by these institutions were very small (see Figure 3.38). For a substantial fraction of the loss-making banks, they were also modest when compared with the scale of their operations and the value of their own capital. However, in the case of three banks with a total share in the sector's assets amounting to around 1%, the losses exceeded 15% of their average core capital.

Profitability ratios of the banking sector decreased only slightly (see Figures 3.39 and 3.40) and remained much higher than in most banking sectors within the EU.[52] The decline of ROE was mainly driven by an increase in the burden of costs on net income from banking activity in the first quarter of 2014, which was due to, inter alia, higher charges to provisions for impaired loans, in particular loans to SMEs and other loans (than consumer and housing loans) to households (see Chapter 3.2.). Minor increases in leverage alleviated the decline of ROE.

Figure 3.38. Quarterly net earnings of the banking sector



Note: the empty marker and the dotted bar area are used to mark the estimated net earnings and the sum of losses of the banking sector adjusted for the net earnings of banks that either ceased their operations in the fourth quarter of 2012 or carried them on in a modified form.
Source: NBP.

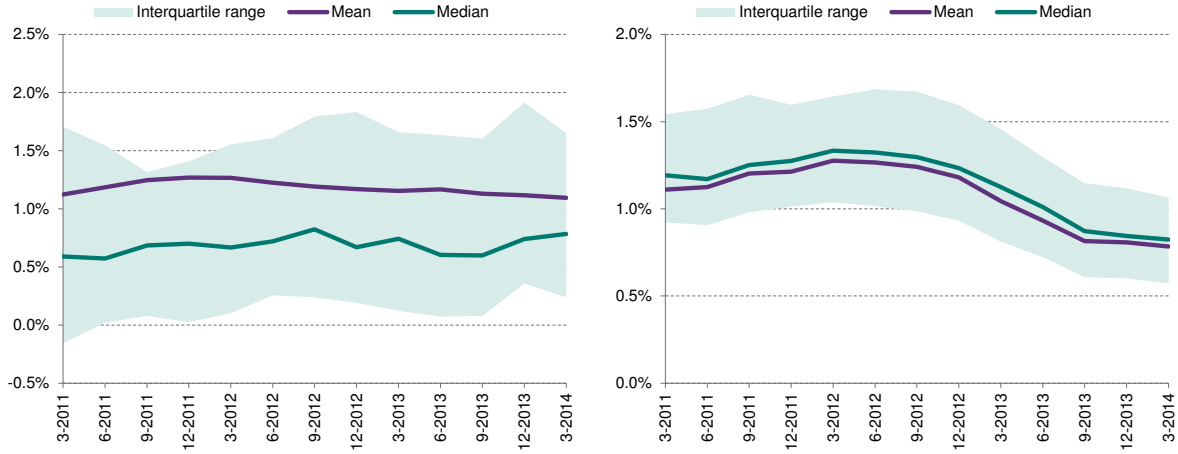
Net interest margin of the banking sector started to grow again (see Table 3.4), and its increase offset the further decrease of non-interest margin. The latter resulted, inter alia, from regulatory measures relating to bancassurance products[53] and from lower profits on the sale of bonds from the "available for sale" portfolio.[54] The reversal of the downward trend in net interest margin was primarily driven by a considerable decrease of effective interest on banks' liabilities. This may show that banks succeeded (with a certain time lag against the decrease of interest income) in adjusting their funding costs to low market interest rates (see Chapter 3.4.). Net interest income remained the most important

[51] A loss as at the end of the period analysed was reported by two commercial banks (with a 2% share in the sector's assets), 10 branches of credit institutions (0.3%) and 14 cooperative banks (0.2%), compared to 6, 10 and 17, respectively, as at the end of September 2013.
[52] According to consolidated banking data published by the ECB, ROA of the Polish banking sector amounted to 1.12% at 2013-end, as compared to 0.12% EU average. The respective figures for ROE were 9.97% and 2.28%.
[53] According to UKNF, banks' revenue from the sale of insurance products should be largely allocated over the whole period of the contract or even, if such products are integral to the credit, included into effective interest rate calculation (see "Position of UKNF of 7 March 2013 on the manner of the recognition of insurance fees by banks", available at http://www.knf.gov.pl/regulacje/praktyka/stanowiska/stanowiska_uknf_sektor_bankowy.html).
[54] At the beginning of 2013, some banks improved their earnings by selling bonds from the "available for sale" portfolio.

source of net income from banking activity and, as a result of the fall of the non-interest net income, its share in the structure of net income from banking activity grew (see Figure 3.41 and Table 3.4).

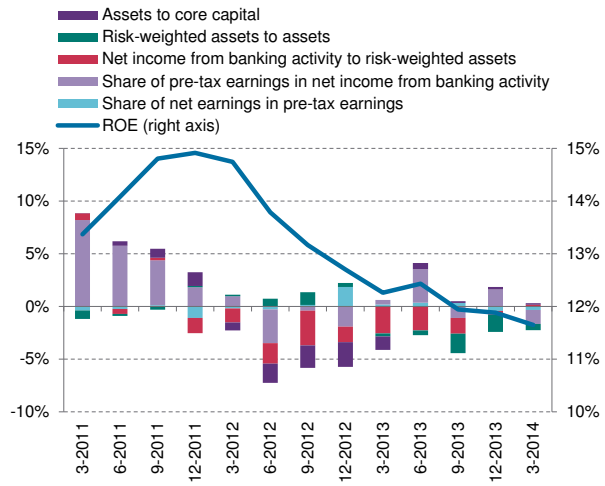
The drop in effective interest on liabilities helped improve the estimated profitability of most credit products (see Figures 3.42–3.45). The share of banks with low profitability of these products in the banking sector also diminished. Regarding consumer loans, that remained the most profitable product, the increase in estimated profitability was additionally driven by higher effective interest on loans. As for the loans to SMEs, the adjusted net interest margin declined as a result of the above mentioned increase in the cost of credit risk materialisation.

Figure 3.39. Return on assets at commercial banks (left-hand panel) and cooperative banks (right-hand panel)



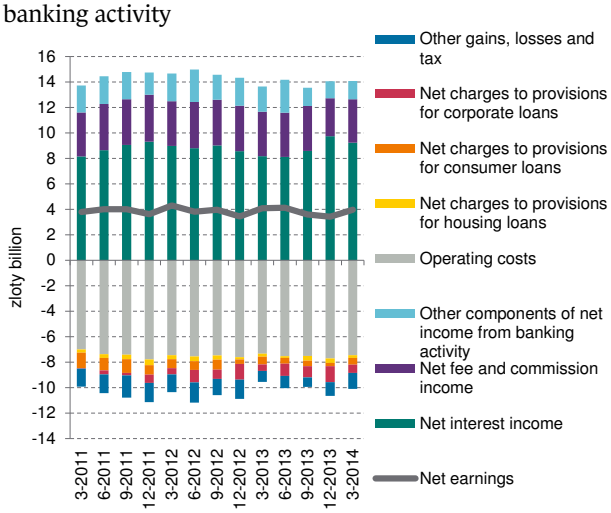
Note: annualised data.
Source: NBP.

Figure 3.40. ROE of the domestic banking sector and decomposition of changes



Notes: ROE – annualised data, decomposition components – changes quarter on quarter.
The share of pre-tax earnings in net income from banking activity may be interpreted as a part of income from banking activity that was not used to cover operating costs and cost of credit risk materialisation.
Source: NBP.

Figure 3.41. Sources and allocation of net income from banking activity



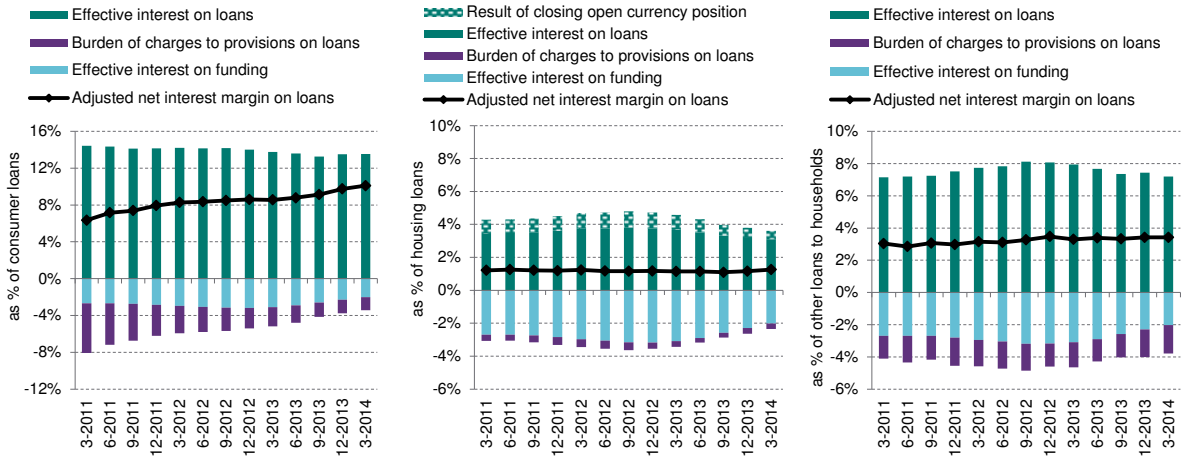
Note: quarterly data.
Source: NBP.

Table 3.4. Selected operating indicators and items of profit and loss account of the banking sector

	2012		2013				2014
	Q3	Q4	Q1	Q2	Q3	Q4	Q1
				As % of average assets[1]			
Net interest income	2.76	2.68	2.59	2.50	2.44	2.49	2.53
Net non-interest income	1.75	1.76	1.73	1.69	1.62	1.49	1.43
Net income from banking activity	4.51	4.45	4.32	4.20	4.06	3.98	3.96
Operating costs[2]	2.32	2.30	2.26	2.23	2.19	2.16	2.14
Net charges to provisions for impaired loans	0.64	0.63	0.61	0.56	0.54	0.56	0.56
Pre-tax earnings	1.52	1.45	1.41	1.42	1.36	1.35	1.33
Net earnings (ROA)	1.20	1.17	1.14	1.15	1.10	1.09	1.07
				As % of net income from banking activity[1]			
Net interest income	61.3	60.3	60.0	59.7	60.0	62.5	63.9
Net non-interest income	38.7	39.7	40.0	40.3	40.0	37.5	36.1
Net income from banking activity	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Operating costs[2]	51.4	51.6	52.3	53.0	54.0	54.3	54.1
Net charges to provisions for impaired loans	14.3	14.1	14.2	13.2	13.3	14.0	14.0
Pre-tax earnings	33.6	32.7	32.7	33.7	33.4	33.9	33.5
Net earnings	26.6	26.3	26.4	27.3	27.1	27.5	27.0
				As % of average core capital[1,3]			
Pre-tax earnings[4]	16.6	15.8	15.2	15.3	14.7	14.6	14.4
Net earnings (ROE)[4]	13.2	12.7	12.3	12.4	11.9	11.8	11.6
				Amounts[5] (zloty billion)			
Net interest income	26.8	35.4	8.2	16.3	24.9	34.6	9.2
Net non-interest income	17.4	23.3	5.5	11.5	16.5	20.8	4.8
Net income from banking activity	44.2	58.7	13.7	27.8	41.4	55.4	14.1
Operating costs[2]	22.5	30.3	7.3	14.9	22.4	30.1	7.4
Net charges to provisions for impaired loans	6.3	8.3	1.7	3.5	5.5	7.7	1.8
Pre-tax earnings	15.0	19.2	5.1	10.1	14.5	18.8	5.0
Net earnings	12.1	15.4	4.1	8.2	11.8	15.2	4.0

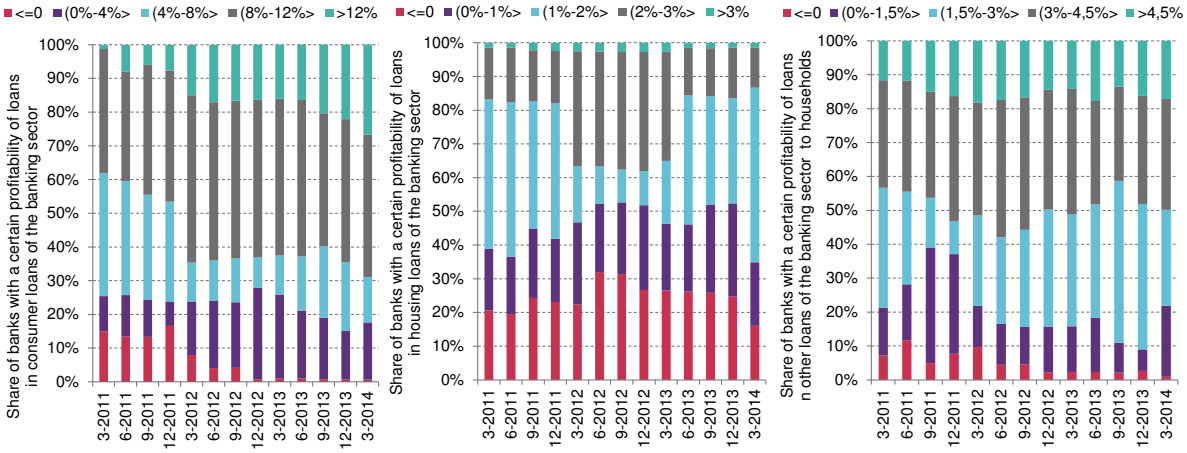
[1] Annualised data.
[2] Operating costs = general expense and depreciation.
[3] Core capital without deductions by the shortfall of specific provisions and other so-called regulatory deductions.
[4] Profits of branches of credit institutions have been subtracted.
[5] Data, cumulatively, from the start of the year.
Source: NBP.

Figure 3.42. Estimated profitability of consumer loans (left-hand panel), housing loans (middle panel) and other loans to households (right-hand panel)



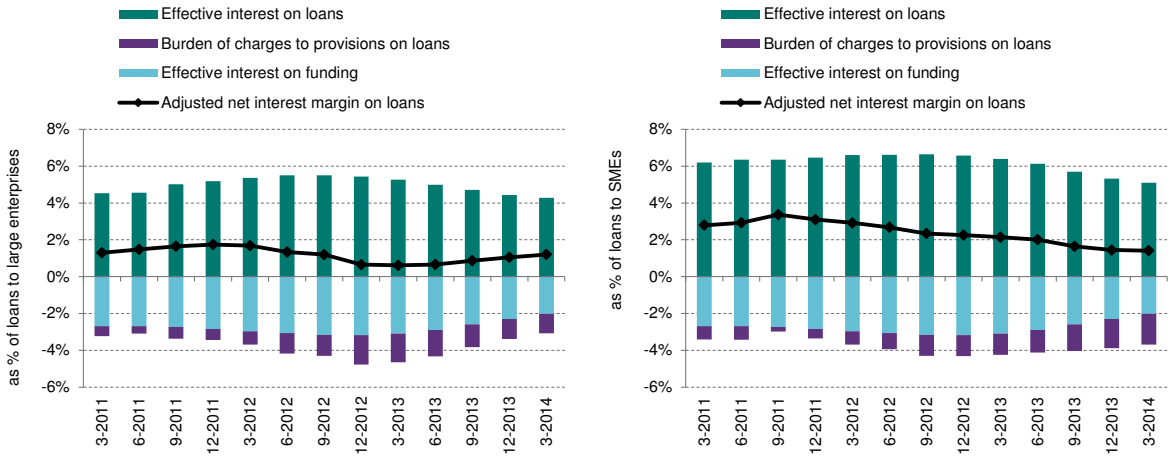
Notes: annualised data.
Values of the adjusted net interest margin presented in this Figure should only be regarded as a proxy of the actual profitability of particular credit products. Identical funding costs ("effective interest on liabilities") were assumed for each credit category. This calculation takes no account of operating costs or costs of capital needed to cover the capital requirements. This estimate takes also no account of fees and commissions income (except for those included into the effective interest rate), related, inter alia, to cross-selling of bank products, that may significantly differ depending on product type. Estimated profitability takes no account of profits earned on foreign currency-denominated loans due to the difference between the bid and offer prices of currencies (FX spread).
The "result of closing open currency position" for housing loans is the estimated net gains/losses on closing an open on-balance-sheet FX position by banks (related to the origination of Swiss franc-denominated housing loans), assuming the use of rolled over 3-month CHF/USD and USD/PLN FX swap. The forward exchange transaction (so-called long leg, equivalent to a forward transaction) is used to close the position, while the amount in foreign currency received by a bank in the initial swap (so-called short leg) is swapped for zlotys on the FX market. The result of such a hedging strategy was estimated as the product of the sum of banks' long positions (the quarterly average of positive differences between the value of Swiss franc-denominated housing loans and value of liabilities valued at amortised cost in this currency) and the average quarterly difference between the WIBOR 3M and LIBOR CHF 3M rates, adjusted for implied spread on FX swap. Such estimate may be overstated, as it takes no account of counterparty risk margin paid by Polish banks.
Source: NBP.

Figure 3.43. The share of banks with a specified estimated profitability of loans in consumer loans (left-hand panel), housing loans (middle panel) and other loans to households (right-hand panel) extended by the banking sector



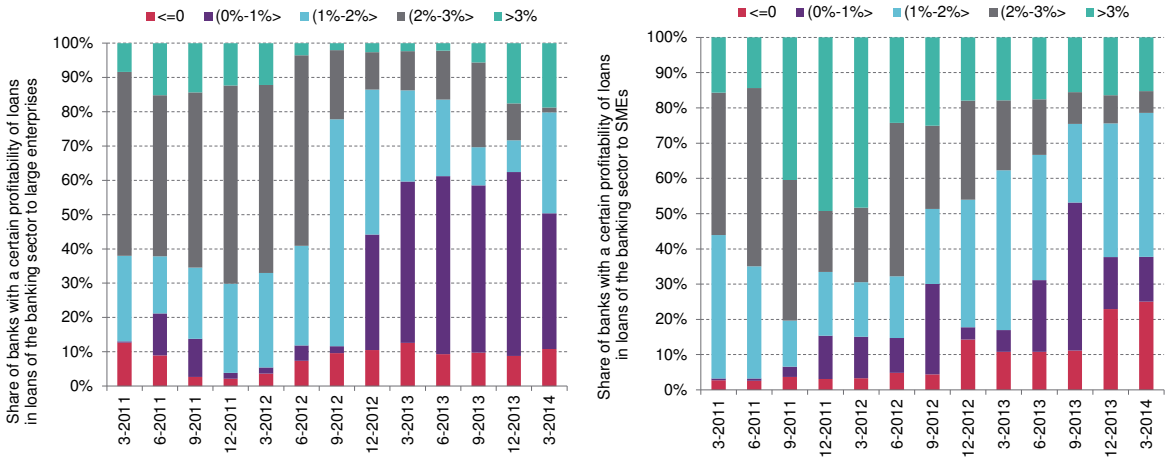
Note: for a description of estimated profitability measurement, see Notes to Figure 3.42.
Source: NBP.

Figure 3.44. Estimated profitability of loans to large enterprises (left-hand panel) and loans to small and medium-sized enterprises (right-hand panel)



Note: for a description of estimated profitability measurement, see Notes to Figure 3.42.
Source: NBP.

Figure 3.45. The share of banks with a specified estimated profitability of loans in loans to large enterprises (left-hand panel) and loans to SMEs (right-hand panel) extended by the banking sector



Note: for a description of estimated profitability measurement, see Notes to Figure 3.42.
Source: NBP.

Outlook

The following changes affecting the profitability of the Polish banking sector can be expected in the upcoming quarters:

- **Stabilisation or a slight increase of net interest margin.** Extensive evidence shows that in the period analysed a substantial part of the banking sector succeeded in adjusting financing costs to the environment of low interest rates. However, a further strong decline of effective interest on liabilities should not be expected. Moreover, the new regulations aimed at raising the share of stable funding sources in the structure of liabilities may, in a longer perspective, be conducive to a rise in the cost of funding.

  Lack of expectations about WIBOR rate growth in the nearest period (see Figure 2.4 in Chapter 2.2.) suggests that banks' opportunities to increase the difference between interest on assets and liabilities will be limited. A rise in demand for loans resulting from a favourable outlook for the economic situation might, however, enable banks to slightly raise lending margins. Moreover, a pick-up in the segment of consumer loans (characterised by high margins) leading to an increase in their share in the total loan portfolio of banks may help increase the portfolio's profitability.

- **A further fall of non-interest margin.** Banks' revenue will be pushed down by the regulatory reduction in the interchange fee effective from July 2014.[55] In addition, the fall in the net fee income may be driven by Recommendation U on good practices in the sale of bancassurance products issued by the KNF.[56]

- **A fall in the burden of loan impairment charges on earnings** resulting from the expected improvement in the economic situation. However, the cost of credit risk materialisation may grow slightly in a longer time horizon at banks which have recently eased their lending policy (most notably in the segment of consumer loans).

- **An increase in fees paid by banks to BFG** resulting from the introduction of the prudential fee[57], and (in the longer perspective) from the proposal for introducing a resolution fund.[58]

- **An increase in leverage.** The major part of the banking sector meets supervisory requirements[59] allowing for payment of the dividend in the amount of up to 100% of 2013 profit. A pick-up in lending may also be conducive to an increase in leverage.

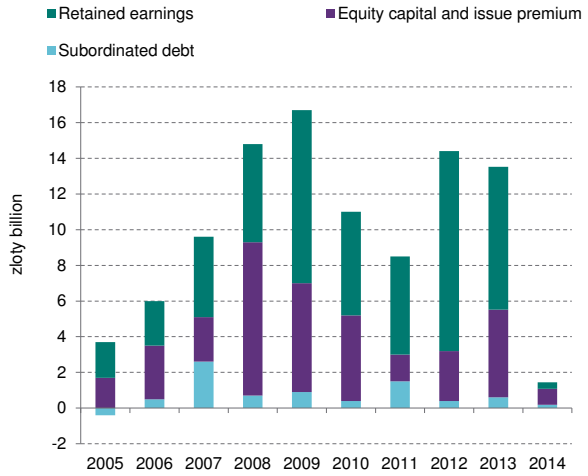
The above changes should lead to a stabilisation or a slight rise in profitability of banking business as measured by ROA and ROE.

[55] See the Act of 30 August 2013 *Amending the Act on Payment Services* (Journal of Laws of 2013, item 1271).
[56] Recommendation U was approved by KNF on 24 June 2014 and is available at http://www.knf.gov.pl/Images/Rekomendacja_U_tcm75-38338.pdf
[57] See the Act of 26 July 2013 *Amending the Act on the Bank Guarantee Fund and Certain Other Acts* (Journal of Laws of 2013, item 1012).
[58] See the draft of 23 April 2013 of the Act on *the Bank Guarantee Fund, Bank Resolution and on amending Certain Other Acts* available in the Public Information Bulletin of the Government Legislation Centre.
[59] See "Position of the Polish Financial Supervision Authority on the dividend policy of financial institutions" of 10 December 2013, available at http://www.knf.gov.pl/Images/KNF_polityka_dywidendowa_10_12_tcm75-36534.pdf

3.6. Banks' capital position

Polish banking sector has large regulatory capital, and its stability is confirmed by high levels of capital adequacy ratios and low leverage ratio. Since September 2013, regulatory capital[60] of the domestic banking sector has slightly risen (by 0.3%), mainly due to an increase in share capital (see Figure 3.46).

Figure 3.46. Changes (y/y) of selected items of regulatory capital of domestic banks



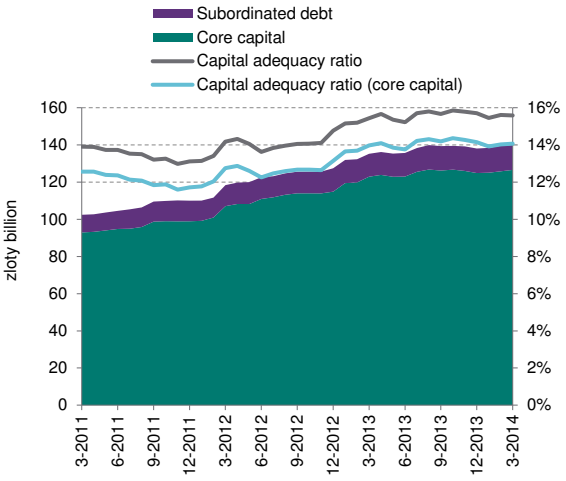
Notes: the data do not include: in 2009 – 3.9 billion zlotys in government funding to the state bank Bank Gospodarstwa Krajowego, in 2011 – Polbank (capital increase after the branch was turned into a subsidiary), in 2012 – effects of bank mergers. Data for 2014 include the first three months of the year.
Source: NBP.

Core capital has a dominant share in the banks' regulatory capital (see Figure 3.47). This confirms high capacity of banks to absorb potential losses. The regulatory capital structure was less favourable only in associating banks – they were characterised by a significantly higher than average share of additional own funds in their regulatory capital (around 27%).

The capital adequacy ratio for the majority of banks was high, with the average level for the banking sector at around 15.6%. Banks with the capital adequacy ratio above 12% had a 95% share in the domestic commercial banks' assets and a 72% share in the assets of cooperative banks (see Figure 3.48).

The value of capital requirements increased slightly (see Figure 3.49), which was mainly driven by an increase in the capital requirement for credit risk – its major component. This increase resulted from an increase in the value of the loan portfolio. On the other hand, the value of capital required to cover other types of risk remains at a low and stable level.

Figure 3.47. Selected items of the regulatory capital and the capital adequacy ratio of domestic banks

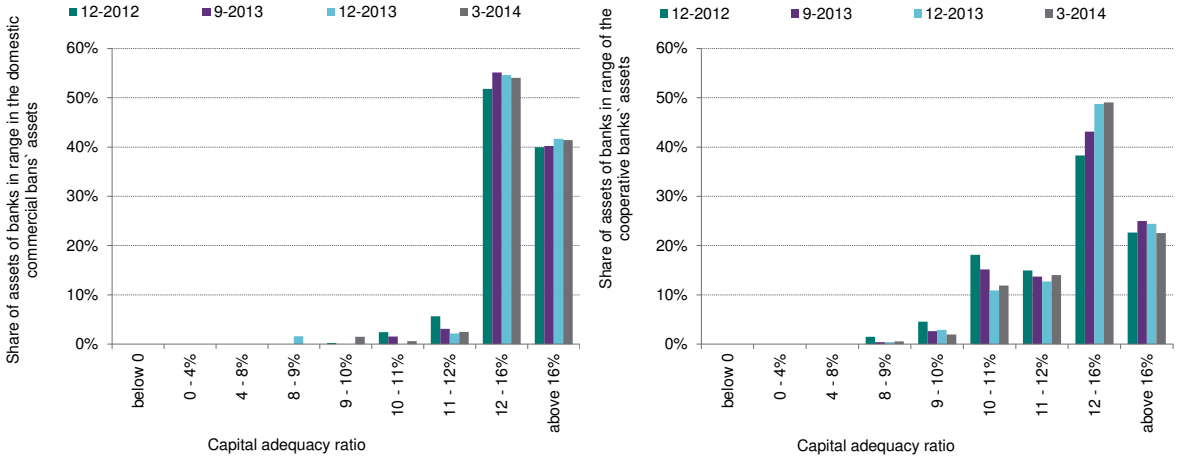


Source: NBP.

The ratio of risk-weighted assets to total assets in domestic banks remained on a high level (see Figure 3.50). This stems from the fact that the majority of banks apply a relatively conservative method of calculating capital requirements, i.e. the standardized approach. Only four banks – whose share in the sector's total assets amounts to approximately 20% – calculate their capital requirements using statistical methods (two of them are within the interim period in which the value of their capital requirements for credit risk as calculated with statistical methods cannot be lower than 80%/100% of the capital requirements value as calculated using the standardized approach). The average credit risk weight for the non-financial sector in domestic banks amounted to around 69%.

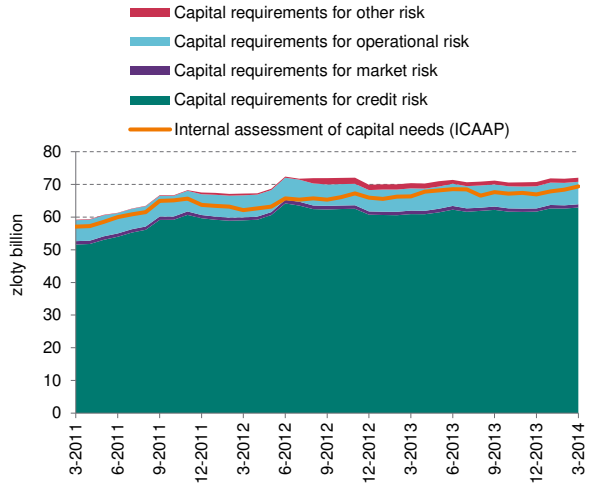
[60] Capital used to calculate the capital adequacy ratio.

Figure 3.48. Distribution of assets of domestic commercial banks (left-hand panel) and cooperative banks (right-hand panel) by the capital adequacy ratio



Source: NBP.

Figure 3.49. Capital requirements for selected types of risk at domestic banks



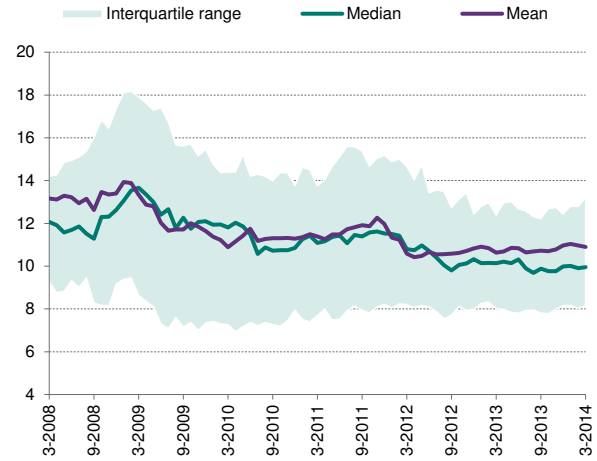
Source: NBP.

Figure 3.50. The ratio of risk-weighted assets to total assets of domestic banks

Source: NBP.

Polish banking sector is characterised by a low leverage ratio. In the period analysed, the average leverage ratio[61] slightly rose, to reach 10.9 at the end of March 2014 (see Figure 3.51) on the back of rising assets.

Figure 3.51. Leverage ratio at domestic commercial banks



Source: NBP.

The capital position of the Polish banking sector is well above the average for the EU. The capital adequacy ratio based on Tier 1 funds is marginally above the average for the EU banks (14.1% against 13.9%, respectively)[62], however the share of regulatory capital in the balance sheet total of the Polish banking sector was almost twice as high (9.2% comparing to 5.7% respectively). In similarity, the ratio of risk-weighted assets to total assets is much higher in the Polish banking sector than in the EU banks (63,8% and 37,5% respectively), which indicates that the risk weights applied by Polish banks are more conservative.

The above analysis was conducted based on banks' capital adequacy data complying to the requirements binding before the entrance into force of new EU regulations (CRDIV/CRR package).[63] Preliminary data indicate that as regards some banks, a marked change will be observed in the value of capital adequacy ratios, yet all the banks will meet the required minimum levels. The changes do not have a material impact on the assessment of the capital adequacy of the whole sector.

3.7. The resilience of the banking sector to shocks

3.7.1. Simulations of credit loss absorption capacity

In order to determine whether banks' capital would be sufficient to absorb potential losses stemming from credit risk materialization, four simulations were performed.[64] A separate simulation was aimed at analysing the risk of the domino effect associated with banks' mutual exposures in the interbank unsecured deposit market.[65]

The results of Simulation I (see Figure 3.52) indicate the scale of a deterioration in the quality of performing loans that individual banks may absorb without breaching the capital adequacy standards, that is without the decrease of capital adequacy ratio below 8% and without own funds dropping below capital requirements internally estimated by banks

[61] The leverage ratio, which is an additional measure reflecting the capital position of banks, is equal to the ratio of assets to core capital before regulatory deductions.
[62] The calculations presented in this paragraph have been made on the basis of the end-2013 banks' consolidated financial reports published by the ECB.
[63] Banks' reporting data on capital adequacy conforming to the CRDIV/CRR package were not available at the time when this *Report* was being prepared. Banks were required to report such data by the end of June 2014, that is after the cut-off date of this edition of the *Report*.
[64] The simulations were performed on data on domestic commercial banks and cooperative banks. Branches of credit institutions were not included in the simulations.
[65] The simulation examined the impact of an original bankruptcy of domestic commercial banks on commercial and cooperative banks. Mutual exposures of commercial banks from one capital group were excluded from the analysis.

under ICAAP. The results of this simulation allow to rank the banks by the resilience to a deterioration in the quality of their loan portfolios. The share (in terms of assets) of banks that would be able to absorb only a 7% deterioration in their loan portfolio quality[66] is analysed in the simulation as the measure of their sensitivity.

The simulation performed on March 2014 data points to a minor increase in banking sector's vulnerability. For domestic commercial banks, a deterioration in the quality of 7% of loans would result in a breach of capital adequacy standards at banks with a 3.9% share in assets. In September 2013, an identical shock would have triggered a breach of these standards at banks with a 1.8% share in assets of domestic commercial banks. For cooperative banks, the assumed shock would have caused the capital adequacy ratio to fall below 8% at banks with a 6.0% share in assets of all cooperative banks, compared to 5.8% in September 2013.

The purpose of Simulation II was to determine the level of the capital adequacy ratio, if the uncollateralized fraction of impaired loans turned uncollectible and simultaneously the value of their collateral declined (assuming 25%, 50% and 100% decrease scenarios). The results of this simulation may indicate the degree, to which the present portfolio of impaired loans poses a threat to banks' solvency. Banks that would evidence a fall of the capital adequacy ratio below 8% in this simulation can be regarded as exhibiting a relatively high value of impaired loans compared to their capital and current financial year's profit.

The results of the simulation for domestic commercial banks in the scenario of 100% decrease in collateral value show that in the period analysed the significance of the portfolio of impaired loans for banks' capital adequacy has slightly increased (see Figure 3.53, left-hand panel). The share of banks, whose capital adequacy ratios would in this scenario drop below 8%, in assets of domestic commercial banks amounts to around 8.3% (see Figure 3.54), compared to 7.5% at the end of the third quarter of 2013. In the case of cooperative banks the vulnerability to deterioration in the quality of impaired loans has slightly fallen. Should the scenario discussed in the simulation unfold, the capital adequacy ratio would drop below 8% at banks with an 14.1% share in assets of all cooperative banks, compared to 18% in September 2013.

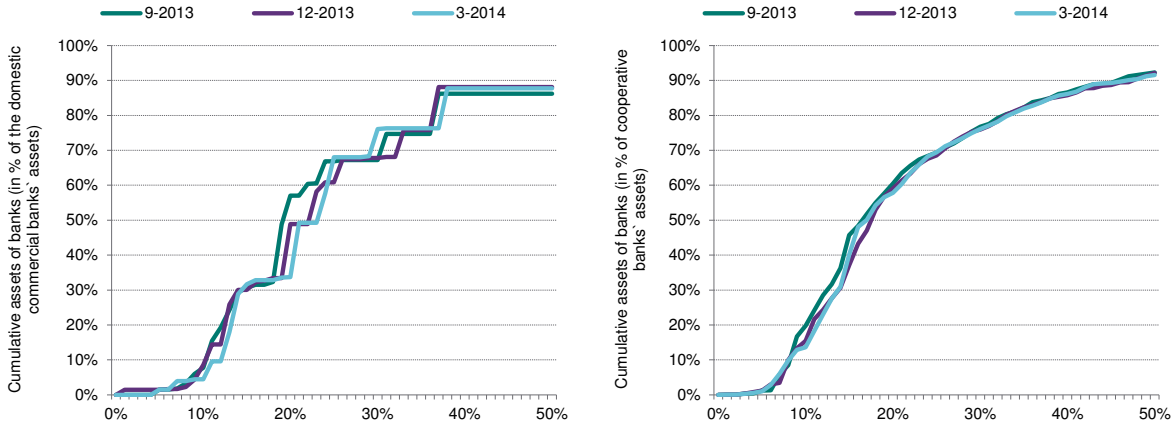
Simulation III was designed to examine the significance of the risk of credit exposures' concentration in the banking sector. The simulation assessed the impact of a simultaneous bankruptcy of three largest non-financial borrowers (of the sector as a whole). Claims on these enterprises are held in the portfolios of 35 banks. The simulation assumed that impairment would stand at 100% for all these loans and that the cost of provisions would decrease, first, banks' current net profit not recognized as regulatory capital, and then banks' regulatory capital. The effects of a hypothetical bankruptcy of three largest financial (non-bank) borrowers were examined in a similar way. The simulation did not take into account exposure to domestic subsidiaries and affiliates.

Simulation IV examined the concentration of credit exposures at individual commercial banks by the impact assessment of a hypothetical bankruptcy of three largest borrowers of each bank.

The results of Simulation III indicate that the amount of potential losses arising from the bankruptcy of three largest borrowers of the banking sector as a whole increased as compared to

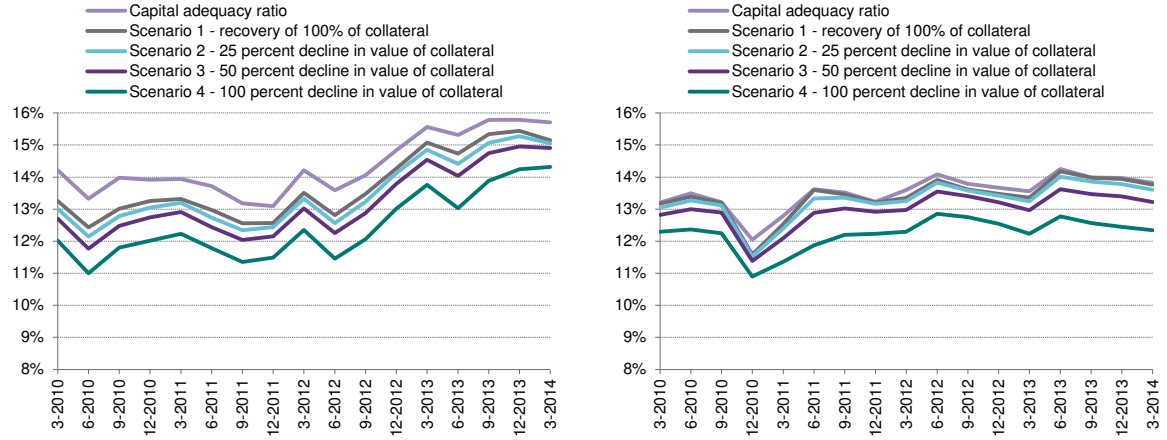
[66]This is the approximate magnitude of deterioration in the quality of the loan portfolio that was observed after the breakout of the global financial crisis in 2008 (in the period from end-2008 to end of March 2013, when the NPL ratio reached its highest level.

Figure 3.52. Simulation I: assets of domestic commercial banks (left-hand panel) and cooperative banks (right-hand panel) ranked by percentage of loans without identified impairment, deterioration in quality of which would result in a breach of capital adequacy standards



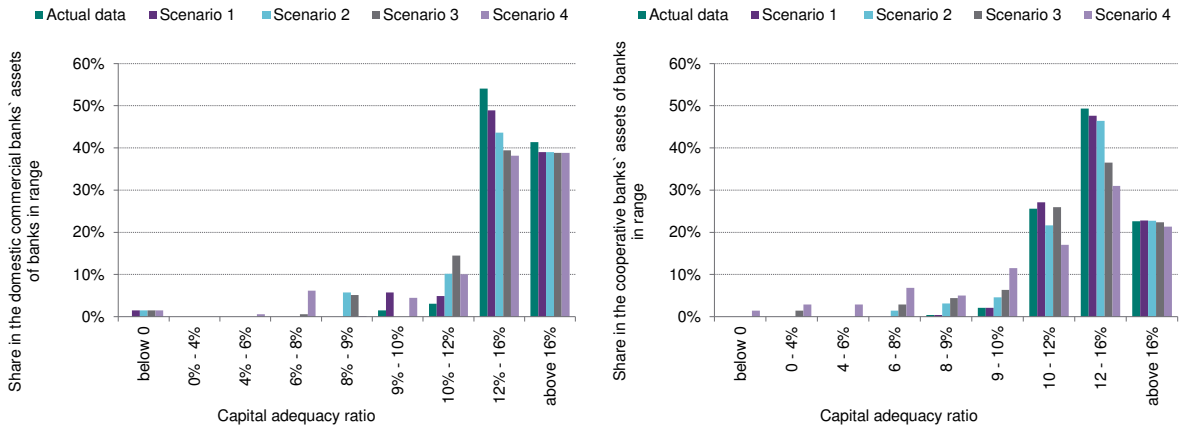
Assumptions of the simulation:
1. Deterioration in loan quality means that 50% impairment is recorded for the loans. 2. Hypothetical charges to impairment provisions decrease, firstly, the bank's current profit not recognized as regulatory capital, and then the bank's regulatory capital. 3. Impaired loans carry a 100% risk weight. 4. No release of impairment provisions.
Source: NBP.

Figure 3.53. Simulation II: the average capital adequacy ratio of domestic commercial banks (left-hand panel) and cooperative banks (right-hand panel) in scenarios that assume a deterioration in the quality of impaired loans



Assumptions of the simulation:
1. Under all scenarios, banks bear credit risk costs (that firstly decrease the bank's current net profit not recognized as regulatory capital, and then the bank's regulatory capital) equal to the value of an uncollateralized portion of impaired loans. 2. The portfolio of loans without identified impairment remains unchanged. 3. In Scenarios 2, 3 and 4, charges to impairment provisions are increased by the value of the decrease in collateral value (25% of collateral value in Scenario 2, 50% in Scenario 3 and 100% in Scenario 4.).
Source: NBP.

Figure 3.54. Simulation II: distribution of assets of domestic commercial banks (left-hand panel) and cooperative banks (right-hand panel) in scenarios assuming a deterioration in the quality of impaired loans according to data as of March 2014.



Note: the scenarios are defined in explanatory notes below 3.53.
Source: NBP.

September 2013. At the same time, potential losses for the majority of the banks would not be high enough to jeopardize their solvency. Moreover, given such restrictive simulation assumptions, a total shortfall of regulatory capital would be relatively small and amount to around 1.4% of the regulatory capital of the sector as a whole.

In case of default of the three largest borrowers of each separate bank (Simulation IV) the potential amount of losses of the banking sector decreased in comparison to September 2013. Banks with a deficit of regulatory capital in this simulation control 3.6% of the banking sector's assets.

The results of the simulations discussed above point to a persistent divergence of capital buffers among banks. The vast majority of banks hold sufficient capital to absorb the impact of a deterioration in loan portfolio quality consistent with the assumptions of the simulations described above. However, there is a group of several medium-sized and small banks that are less resilient to potential shocks and should seek to increase their regulatory capital.

Simulation V has shown that the domino effect resulting in the secondary insolvency of banks would be triggered by the original insolvency of 3 out of 40 domestic commercial banks operating as at the end of March 2014. A secondary insolvency would apply only to two small commercial banks with assets below 0.2% of the domestic banking sector's assets. On the other hand, a hypothetical collapse of the associating banks could trigger a secondary insolvency of a considerable group of cooperative banks with a 5% share in the domestic banking sector's assets and a 67% share in the cooperative banks' assets. The simulation performed for the previous edition of the *Report* brought analogous results.

A minor risk of the domino effect occurring in the domestic commercial banks' sector stems from a small scale of deposit transactions between domestic banks and a low value of individual exposures as compared to banks' regulatory capital. A relatively high exposure of cooperative banks to the associating banks results from the specific nature of their operations, including cash clearing and settlement via the associating banks and depositing excess liquidity at these banks.

Table 3.5. Simulations III and IV: the impact of a hypothetical bankruptcy of three largest borrowers of the banking sector and three largest borrowers of each bank (data as of March 2013)

	Nonfinancial borrowers	Financial borrowers
Number of banks lending to investigated companies	35	12
Share of these banks in the banking sector assets	76.3%	62.3%
Credit risk cost (zloty billion)	12.0	8.4
Share[1] of banks with capital adequacy ratio below 8% or with own funds lower than internal capital	0.1%	0.0%

	Three largest borrowers of each bank
Credit risk cost (zloty billion)	25.1
Share[1] of banks with capital adequacy ratio below 8% or with own funds lower than internal capital	3.6%

[1] Share in the domestic banking sector's assets.
Hypothetical charges to impairment provisions decrease, firstly, the bank's current net profit not recognized as regulatory capital and, next, the bank's regulatory capital.
Source: NBP.

3.7.2. Stress tests

Stress tests that take into account a macroeconomic shock, a market shock and a liquidity shock were used to assess the resilience of banks[67] to external negative shocks. The central path of the NBP macroeconomic projection from "Inflation Report – July 2014", developed under the assumption of fixed interest rates, served as a reference scenario. The analysis aimed at quantifying the effects of hypothetical shocks on banks in the period from the second quarter of 2014 to the end of 2016. The results of the simulation for the reference scenario and results of other simulations included in this section should not be regarded as a forecast of the condition of the banking sector.

The analysis was performed as a three-stage examination. In the first stage, the analysis covered the impact of two macroeconomic scenarios (reference and shock) on banks' credit risk materialisation costs, their net interest income and capital adequacy. Owing to a multi-equation macroeconomic model used in the analysis, the assumed shock scenario takes into account, to the extent possible, a complete combined impact of investigated shocks on the economic conditions. In contrast to single-factor simulations (see Chapter 3.7.2.) that depict the sensitivity of banks to single, isolated shocks, the stress tests help to estimate a more complete impact of multiple simultaneous shocks on the financial condition of banks. In the second stage, the macroeconomic shock scenario was accompanied by the impact of an additional market shock on the capital position of banks. In the third stage, the influence of a market shock on the liquidity position of banks was considered.

The hypothetical capital needs of banks in both scenarios were calculated, assuming that banks had to hold sufficient regulatory capital to keep their capital adequacy ratios at 12%, capital adequacy ratios

[67] The simulation concerns domestic commercial banks. Bank Gospodarstwa Krajowego was excluded from the simulation.

calculated on the basis of core capital at 9%, and that regulatory capital had to be higher than the capital requirements estimated by banks under ICAAP.[68]

The stress tests assumed that banks complying with the above mentioned solvency criteria at the end of a given quarter were allowed in the subsequent quarter to increase their loan and securities portfolios and other assets at the quarterly growth rate of nominal GDP.[69] The balance-sheet value of the loan portfolio was also affected by loan impairment provisions, and the value of the portfolio of debt securities – by the market shock. A constant relation to assets was assumed for the unmodelled items of the profit and loss account. Banks complying with the minimum capital adequacy levels were also allowed to pay out dividend from profits earned in the simulation period. The dividend rate depended on the excess of capital adequacy ratios above the assumed minimum. Changes in bank assets were balanced by changes in liabilities valued at amortised cost, inter alia, deposits.

The following assumptions were made for the macroeconomic shock scenario:

- The increase in risk aversion on the global financial markets, that leads to dampening of growth rate of emerging economies and deterioration of the situation of banking sectors in developed countries, would be the main factor halting the recovery in the Eurozone economy.
- The danger of deflation and the resulting increase in the real value of debts of governments and private sector would deepen the crisis.
- Additionally, Poland's economic situation would be adversely affected by the aggravation of political tensions in Europe leading to impediments to exports and a rise in prices of imported energy resources.

Given these assumptions, Poland would experience a substantial slowdown in the pace of economic growth (see Table 3.6). The likelihood of such a severe and long slowdown in Poland's GDP growth rate, as the one arising from the shock scenario, can be assessed as minor (see Figure 3.55).

Table 3.6. Major economic indicators in macroeconomic scenarios (%)

	2014	2015	2016
GDP growth y/y			
Reference scenario	3.6	3.6	3.5
Shock scenario	2.7	0.7	0.0
LFS unemployment rate, annual average			
Reference scenario	9.7	8.8	8.0
Shock scenario	10.1	10.2	12.1
CPI inflation y/y			
Reference scenario	0.2	1.4	2.3
Shock scenario	1.7	3.2	1.1
WIBOR3M			
Reference scenario	2.7	2.7	2.7
Shock scenario	2.8	3.4	2.2

Source: NBP.

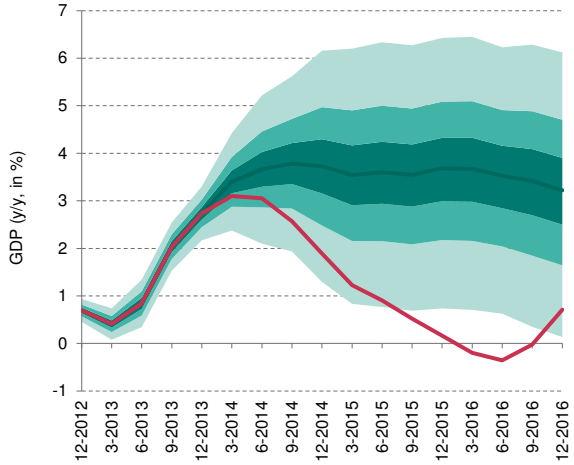
A market shock was added to the macroeconomic shock scenario in order to assess the potential impact of a fall in foreign investor confidence in the Polish economy (resulting in capital outflow from Poland) on the capital position of banks. The capital outflow would be reflected in an increase in the yields on Polish Treasury debt securities and a depreciation of the zloty. Zloty depreciation would also bring about an increase in the capital requirements

[68] At the time the stress tests were performed, data on banks' capital adequacy compliant with the requirements introduced by the CRDIV/CRR package was not yet available. However, NBP estimates point that it would not significantly impact the reliability of the results. Moreover, the minimum thresholds for capital adequacy ratios assumed in the stress test are higher than the minimal level required by the EU regulations of the CRDIV/CRR package.

[69] As long as the GDP growth rate was positive; if it was otherwise, a connection between bank assets and GDP was excluded. In addition, the growth rates for particular banks were limited by their excess of capital adequacy ratios above the assumed criteria.

and a deterioration in the quality of banks' loan portfolios due to the growth of foreign currency loans zloty value and the related rise in loan repayment burden on borrowers. The simulation assumed a 300 basis point rise in bond yields and a 30% depreciation of the zloty against the euro.[70]

Figure 3.55. Macroeconomic shock scenario against the fan chart of GDP from "Inflation Report – July 2014"



Note: red line marks the shock scenario.
Source: NBP.

The impact of a liquidity shock was examined in a separate analysis. The purpose of the simulation was to test whether banks had an adequate buffer of liquid assets in the event of zloty depreciation and a rise in Polish government bond yields assumed in the shock scenario and, additionally, an outflow of a fraction of foreign funding and falling confidence from both other domestic financial institutions and real sector entities resulting in a withdrawal of a part of their deposits.[71]

Impact analysis of a potential bankruptcy of a bank under both macroeconomic scenarios on the condition of other banks via the domino effect was the last element of the simulation.

The majority of banks would keep a regulatory capital surplus allowing them to meet the assumed capital adequacy criteria and expand business under both reference and shock scenario. The estimated value of a hypothetical increase in banks' regulatory capital required, if the shock scenario were to unfold, would amount to 2.1 billion zlotys at the end of the simulation period (see Table 3.7). Losses arising from interbank exposures would not push up banks' capital needs. The share of banks, which would have to raise the level of regulatory capital to meet the criteria assumed for the analysis, in the banking sector's assets would be 7.8% in the shock scenario and 1.5% in the reference scenario.[72]

The liquidity risk simulation has shown that in the event of materialisation of a very restrictive shock scenario a group of banks with an around 9% share in the sector's assets would not have sufficiently high buffers of liquid assets to cover liabilities associated with foreign capital outflow, zloty depreciation and a fall in customer confidence (see Figure 3.57). The majority of these banks are largely financed with foreign funds or hold substantial foreign currency loan portfolios. A shortfall of liquid funds at these banks would total approximately 25 billion zlotys.

When compared to the results of the simulation performed in the previous edition of the *Report*, the share of banks with insufficient liquidity buffers and the size of the liquid funds deficit at these banks diminished slightly. This shows a further gradual rise in the resilience of the banking sector to liquidity shocks.

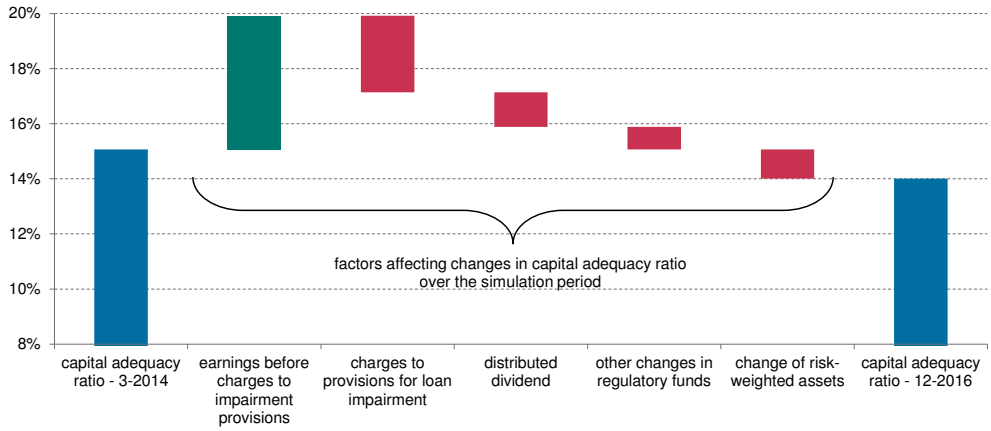
[70] Against bond yields and the zloty exchange rate as of the end of March 2014.
[71] The following, inter alia, were assumed: a withdrawal of 100% of deposits, 10% of loans and 25% of other liabilities towards foreign financial institutions, an outflow of unstable (not classified as core deposits) part of deposits of households, non-financial enterprises and general government sector and, additionally, 5%,10% and 10% of other deposits, respectively.
[72] Although all banks complied with the statutory capital standards at the end of March 2014, the share of banks that failed to meet more restrictive criteria adopted for the analysis (i.e. capital adequacy ratio at 12% and capital adequacy ratio calculated on the basis of core capital at 9%) amounted to 4.2%.

Table 3.7. Results of macro stress tests

	Historical data for the period Q2 2013 – Q1 2014	Simulation results for the period Q2 2014 – Q4 2016	
		reference scenario[1]	shock scenario
On average per year (as % of assets)			
Charges to loan impairment provisions	-0.6	-0.5	-0.9
Net interest income[2]	2.3	2.4	2.1
Net earnings	1.2	1.3	0.6
Capital needs[3] (zloty billion)			
Macroeconomic and market shocks	0.4	0.2	2.1
Domino effect	n/d	–	–
Additional information – market shock in the simulation period (zloty billion)			
Change in bond value recognized in the profit and loss account	n/d	n/d	-1.0
Change in bond value recognized in capital	n/d	n/d	-7.2
Zloty depreciation impact (impairment charges to FX loans to households) recognized in the profit and loss account	n/d	n/d	-2.5

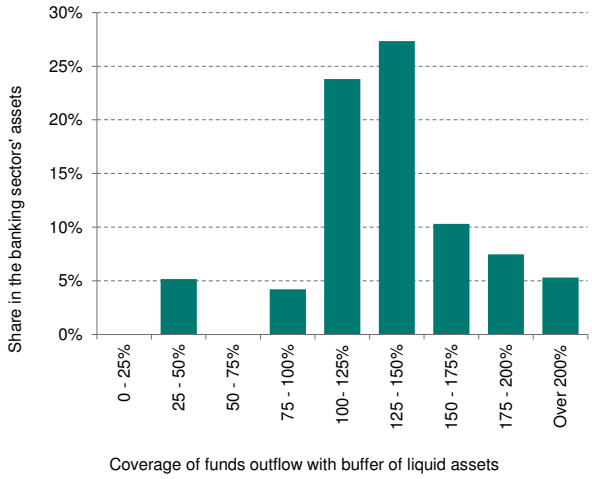
[1] Scenario based on the central path of the NBP macroeconomic projection from "Inflation Report – July 2014".
[2] "Net interest income" includes fees and commissions on extended loans, but does not include interest income on debt securities.
[3] The value of capital injection necessary to ensure that capital adequacy ratios remain above 12%, capital adequacy ratios when taking into account core capital – above 9% and to keep regulatory capital at the level not lower than internal assessment of capital needs at the end of the simulation period.
Notes: data for domestic commercial banks excluding BGK.
The results of simulations under the reference scenario and other simulations in this section should not be regarded as forecasts of the condition of the banking sector.
Source: NBP.

Figure 3.56. Cumulated changes in capital adequacy ratio under the shock scenario (% of risk-weighted assets)



Notes: data for domestic commercial banks excluding BGK.
Blue bars mark the capital adequacy ratio of the banks analysed in the beginning and end of the simulation period under the shock scenario. Factors with a positive influence on the average capital adequacy ratio in the simulation period are marked with green bars, and those with an adverse influence – with red bars. The influence of these factors is expressed in percentage points.
"Earnings before charges to impairment provisions" are equivalent to net income from banking activity decreased by, inter alia, operating costs.
The simulation assumed that banks with positive net earnings that comply with the assumed minimum capital adequacy levels (i.e. capital adequacy ratio above 12%, capital adequacy ratio when taking into account core capital above 9% and regulatory capital at the level not lower that internal assessment of capital needs) would pay out dividends. The dividend rate would depend on the excess of capital adequacy ratios above the assumed criteria.
Source: NBP.

Figure 3.57. Assets of domestic commercial banks by coverage of funds' outflow with a buffer of liquid funds under the shock scenario



Source: NBP.

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The results of the stress tests and simulations of loss absorption capacity indicate that banks' resilience to shocks is high and has additionally improved since the last edition of the *Report*. The majority of banks would be able to safely operate and absorb the effects of the materialisation of the restrictive scenario of a significant slowdown of economic growth.

At the same time, capital buffers are discrepant among banks, and several banks are characterised by relatively low resilience. These banks should seek to increase capital buffers to reduce their sensitivity to potential shocks. In addition, banks that play a particularly important role in the financial system should exhibit – in line with recommendations of the Financial Stability Board (FSB) – an increased capacity to absorb potential losses.

It is important that banks with sufficient capital buffers should not reduce them excessively in the coming periods. In particular, the growth of lending in an environment of a gradual economic recovery should not lead to excessive increase of financial leverage. Sustaining capital adequacy buffers should result from, inter alia, appropriate dividend policy.

The results of the liquidity shock simulation pointed to a continued rise in banks' resilience. To ensure a stable operation of the domestic financial system it is desirable that banks run a diverse funding structure and do not rely too heavily on funding provided by their foreign parent entities.

Box 2. Potential consequences of proposed actions regarding conversion of foreign currency housing loans into zlotys

As a result of the depreciation of the zloty following the deepening global financial crisis in the second half of 2008, there was an increase in the zloty value of debt of borrowers with foreign currency loans. The loan servicing costs also grew as well as the ratio of the value of loan to the value of collateral. From the banking system stability standpoint, the portfolio of Swiss franc-denominated housing loans remains a major issue, which is associated with the high value of the portfolio and a particurarly large scale of appreciation of the currency against the zloty.

The zloty depreciation and the resulting rise of the zloty value of borrowers' debt have not been a source of additional profits for banks. Banks do not hold an open FX position. FX risk arising from the portfolio of foreign currency-denominated loans is offset by banks with liabilities taken out in foreign currency (inter alia, loans from non-residents from the capital group) or with the use of such instruments as FX swaps and CIRS. Consequently, during the period of zloty depreciation, when the value of banks' assets expressed in zloty was rising (inter alia, in connection with the growth in value of foreign currency loans), there was a parallel rise in the value of banks' foreign currency liabilities and liabilities arising from transactions in instruments used to hedge against FX risk.

A potential conversion of foreign currency housing loans into zlotys at the exchange rate lower than the market exchange rate, e.g. the exchange rate of the loan origination date, would generate big losses for banks. In line with the rules of drawing up financial statements, claims and liabilities expressed in foreign currency are valued in banks' balance sheets at the foreign currency exchange rate on the balance-sheet date. Over the last year, the Swiss franc exchange rate was relatively stable and averaged approximately 3.4 zlotys. The prevailing part of Swiss franc-denominated housing loans was extended in 2005–2008, when the Swiss franc exchange rate was much lower and on average amounted to approximately 2.4 zlotys. Due to this difference and the high value of the portfolio of foreign currency loans denominated in Swiss franc (135.1 billion zlotys or around 40 billion Swiss francs at the end of the first quarter of 2014), the conversion of loans denominated in this currency into zlotys at the exchange rate of the loan origination date would result in a substantial decrease in banks' assets. As this decrease would in no way be offset, i.e. banks' liabilities would not diminish and other assets would not increase, banks would post a financial loss due to this transaction.

The losses made by banks on the loan currency conversion into zloty at the exchange rate of the loan origination date would be so big that they would pose a threat for banks'stability and substantially hinder economic growth. The KNF estimates[1] show that at several banks where the value of the portfolio of Swiss franc housing loans is high in proportion to their capital, the size of losses might result in their insolvency (i.e. the value of banks' liabilities would exceed the value of their assets). At other several banks, their regulatory capital after the currency conversion of housing loans into zlotys at the exchange rate of the loan origination date would be positive but not sufficient to safely carry on their operations. According to the KNF estimates, banks, following foreign currency conversion, would have to be recapitalized with the amount of approximately 13 billion zlotys to hold minimum regulatory capital as required by law. For the level of regulatory capital to comply with the KNF recommendations[2], a total recapitalisation of the banks would have to amount to approximately 24 billion zlotys. The scale of the problem could result in the necessity of substantial public support.

The capital shortfalls resulting from the currency conversion of foreign currency loans would have a significant negative impact both on the security of bank deposits and credit supply. The banks that would require recapitalization related to currency conversion of foreign currency loans hold around 20% of deposits of households and enterprises, and their share in loans to the non-financial sector is over 25%. Any capital shortfalls would also force the banks to cut lending, which would provide an additional negative impulse to economic growth. The effects of materialisation of the hypothetical scenario discussed above show that other measures should be taken when the issue of foreign currency housing loans is addressed. At the moment, foreign currency housing loans are a niche product, which is positive and should remain so. Regarding the stock of foreign currency loans accumulated in the past, banks should be flexible in restructuring these loans if any problems in their servicing arise. Also, banks should not make it difficult for borrowers to repay their foreign currency loans earlier if they wish so.

[1] The estimates of losses the banking sector would make as a result of the currency conversion of Swiss franc-denominated housing loans into zlotys at the exchange rate of the loan origination date were presented in a Polish Financial Supervision Authority study of 3 October 2013 "Impact assessment of the proposal of currency conversion of Swiss franc-denominated housing loans into zlotys according to the exchange rate of the loan origination date on the position of the banking sector and the Polish economy". The estimates were made for 18 banks that hold the largest portfolios of Swiss franc loans and whose share in the whole banking sector's Swiss franc housing loans amounted to almost 100%. According to the estimates, a total loss of the banking sector due to loan currency conversion, calculated as the difference between the earnings for the first half of 2013 and earnings that would arise as a result of the conversion, would amount to 44.4 billion zlotys (see https://www.knf.gov.pl/Images/PRZEWALUTOWANIE_tcm75-35881.pdf).

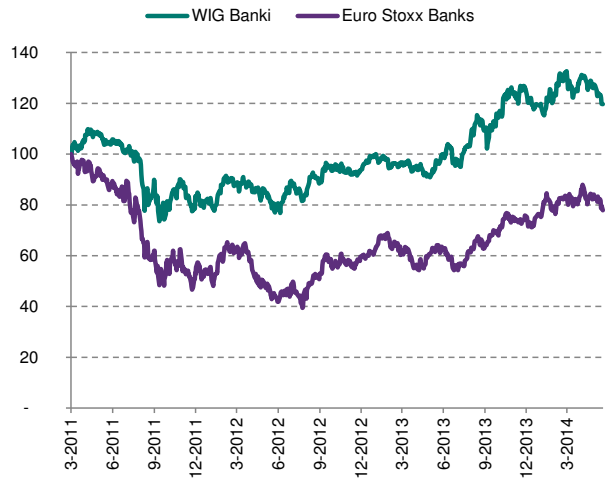
[2] In line with the KNF recommendation, the minimum capital adequacy ratio should stand at 12% and the Tier 1 capital-based ratio at 9% (see https://www.knf.gov.pl/Images/stanowisko__ws_minimalnego_Tier_1_i_wspolczynnika_wyplacalnosci_tcm75-37408.pdf).

3.8. Market assessment of Polish banks

Share prices of Polish banks and of their parent banks (see Figure 3.58) indicate their improved assessment by investors.

The "price-to-book value" for the majority of Polish banks remains stable at a relatively high level, which proves that investor assessment of the banks is positive (see Figure 3.59). In the period analysed, market analysts' expectations about Polish banks' earnings per share in 2014 and 2015 grew (see Figure 3.60).

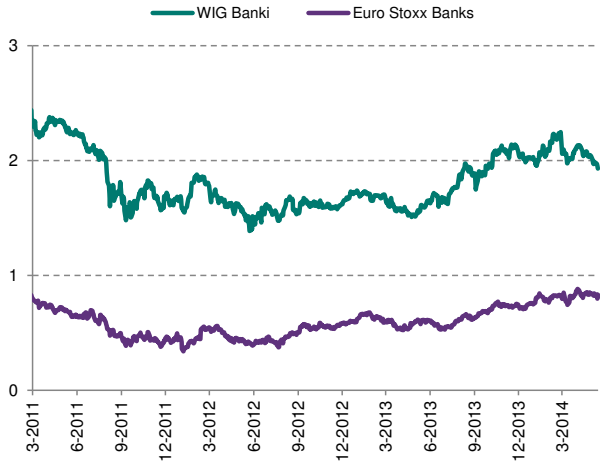
Figure 3.58. Index pric-es of Polish and European banks



Note: index prices rescaled to 100 at the start of March 2011.
Source: NBP calculations based on Thomson Reu-ters.

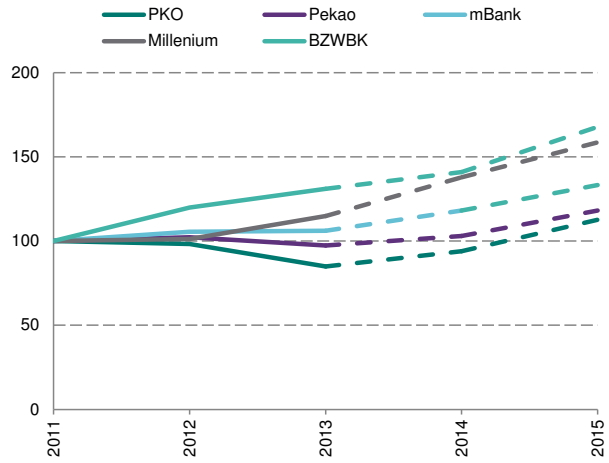
Assessment of Polish banks foreign bond issues is favorable. Spread between yields on bonds of large Polish banks issuing bonds in the euro and dollar and interest rate swaps in these currencies narrowed. In the second half of 2013, heightened volatility on the markets, which was related to uncertainty over a possible reduction of the pace of the Fed asset purchases, had only a temporary effect on the yields on bonds of large Polish banks. At the beginning 2014, some major Polish banks took advantage of the favourable market conditions to issue new bonds in euro.

Figure 3.59. P/BV (price-to-book value) ratio of indices of Polish and European banks



Source: Thomson Reuters.

Figure 3.60. Historical and forecasted earnings per share of selected banks



Note: earnings per share forecasts for 2014–2015 calculated as median of all market forecasts for a given bank, normalized at the start of 2011.
Source: NBP calculations based on Thomson Reuters.

Ratings and their outlook for domestic banks that are part of foreign banking groups resulted primarily from the assessment of their parent banks. For that reason in the period analysed, Fitch downgraded the rating outlook for mBank whereas Moody's downgraded the deposit ratings of BGŻ on the back of the plans to sell the bank announced by its majority shareholder – Rabobank Group (see Table 3.8).

Table 3.8. Ratings of Polish banks by Moody's, Fitch and S&P

Moody's	Financial strenght rating	Long-term deposit rating	Short-term deposit rating	Outlook
PKO BP	C- (C-)	A2 (A2)	P-1 (P-1)	NEG (NEG)
Pekao	C- (C-)	A2 (A2)	P-1 (P-1)	STA (NEG)
Bank Zachodni WBK	D+ (D+)	Baa1 (Baa1)	P-2 (P-2)	NEG (NEG)
mBank	D (D)	Baa3 (Baa3)	P-3 (P-3)	STA (STA)
ING Bank Śląski	D+ (D+)	Baa1 (Baa1)	P-2 (P-2)	NEG (NEG)
Getin Noble Bank	D- (D-)	Ba2 (Ba2)	NP (NP)	NEG (STA)
Bank Millennium	E+ (E+)	Ba2 (Ba2)	NP (NP)	NEG (NEG)
Bank Handlowy	D+ (D+)	Baa3 (Baa3)	P-3 (P-3)	STA (STA)
BGŻ	D (D)	Baa3 (Baa2)	P-3 (P-2)	STA (STA)
BPH	D (D)	Baa2 (Baa2)	P-2 (P-2)	STA (STA)
Credit Agricole	D (D)	Baa3 (Baa3)	P-3 (P-3)	STA (STA)

Fitch	Viability rating	Long-term rating	Short-term rating	Outlook
Bank Zachodni WBK	bbb (bbb)	BBB (BBB)	F3 (F3)	STA (STA)
mBank	bbb- (bbb-)	A (A)	F1 (F1)	NEG (STA)
ING Bank Śląski	bbb+ (bbb+)	A (A)	F1 (F1)	NEG (NEG)
Getin Noble Bank	bb (bb)	BB (BB)	B (B)	STA (STA)
Bank Millennium	bbb- (bbb-)	BBB- (BBB-)	F3 (F3)	STA (STA)
Alior Bank	bb (-)	BB (-)	B (-)	STA (-)
BOŚ	bb (bb)	BBB (BBB)	F3 (F3)	NEG (STA)
mBank Hipoteczny	not rated (not rated)	A (A)	F1 (F1)	NEG (STA)
Pekao Bank Hipoteczny	not rated (not rated)	A- (A-)	F2 (F2)	STA (STA)

S&P	Stand-alone credit profile (SACP)	Long-term rating	Short-term rating	Outlook
PKO BP	bbb (bbb)	A- (A-)	A-2 (A-2)	NEG (STA)
Pekao	bbb+ (bbb+)	BBB+ (BBB+)	A-2 (A-2)	STA (STA)

Notes: in brackets – as of the end of March 2014. For definitions of ratings, see *Glossary*. The banks are listed according to total assets. Ratings assigned by Standard&Poor's only on the basis of publicly available data are not included in the Table. SACP – stand-alone credit profile.
Source: www.moodys.com, www.fitchpolska.com., www.standardandpoors.com

In the case of banks that do not have a foreign majority shareholder, the outlook downgrade was related to the progress on BRRD (Bank Recovery and Resolution Directive[73]) which according to credit rating agencies will reduce the potential support of these banks by the state in a crisis situation. Fitch lowered the rating outlook for BOŚ, S&P – PKO BP, and Moody's – Getin Noble Bank.

[73] Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012 (Official Journal of the European Union L 201 of 12.06.2014).

3.9. Selected indicators of banking sector's condition

%	2013				2014
	Q1	Q2	Q3	Q4	Q1
Return on assets (ROA)[1]	1.14	1.15	1.10	1.09	1.07
Return on core capital (ROE)[1,2]	12.3	12.4	11.9	11.9	11.7
Net interest margin (NIM)[1,3]	2.59	2.50	2.44	2.49	2.53
Operating costs[3] to net income from banking activity[3] (C/I)[1]	52.3	53.0	54.0	54.3	54.1
Burden of charges to provisions for impaired loans[3] on net income from banking activity[1]	14.2	13.2	13.3	13.9	14.0
Loan growth rate (y/Y)[4]					
nonfinancial sector	2.2	2.1	2.3	2.9	4.4
households	2.7	2.5	3.6	4.2	4.9
consumer loans	-3.8	-2.9	0.4	2.4	3.8
housing loans	4.6	4.2	4.2	4.4	4.6
enterprises	1.1	1.0	-0.5	0.0	3.3
large enterprises	0.1	3.8	4.1	5.2	6.7
SMEs	2.5	1.1	-1.3	-1.0	1.8
Impaired loan ratios[3]					
nonfinancial sector	8.9	8.7	8.5	8.5	8.4
households	7.5	7.2	7.1	7.1	7.0
consumer loans	17.3	16.0	15.5	14.6	14.4
housing loans	2.9	2.9	3.0	3.1	3.1
enterprises	11.8	11.8	11.5	11.6	11.3
large enterprises	9.8	9.6	9.1	9.6	9.4
SMEs	13.1	13.3	13.1	13.0	12.7
Charges to provisions for impaired loans[3] to net value of loans[1]					
nonfinancial sector	1.07	0.98	0.96	0.99	1.00
households	0.92	0.79	0.74	0.80	0.79
consumer loans	2.11	1.90	1.56	1.48	1.42
housing loans	0.35	0.27	0.29	0.34	0.33
enterprisesa	1.36	1.34	1.39	1.36	1.39
large enterprises	1.57	1.42	1.25	1.09	1.06
SMEs	1.17	1.22	1.46	1.58	1.67
Funding gap[3]	10.9	10.7	9.4	10.1	8.6
Short-term liquidity standard M2[3,5]	1.51	1.47	1.45	1.45	1.47
Long-term liquidity standard M4[3,5]	1.19	1.18	1.19	1.19	1.19
Capital adequacy ratio[2]	15.4	15.2	15.7	15.7	15.6
Core capital to risk-weighted assets[2]	14.0	13.8	14.2	14.1	14.1
Financial leverage (multiple)[2,3]	10.63	10.80	10.78	10.73	10.88

[1] Annualised data.
[2] Domestic banking sector.
[3] For definition, see *Glossary*.
[4] Loans to residents, data after excluding the impact of foreign exchange rate changes.
[5] Banks from the domestic banking sector with total assets over 200 million zlotys.
Source: NBP.

3.10. Selected items of the banking sector's balance sheet

zloty billion	2013				2014
	Q1	Q2	Q3	Q4	Q1
Assets – selected items					
Receivables from the non-financial sector	814.6	831.9	838.9	835.6	850.3
of which: from non-residents	8.2	10.0	10.0	10.0	9.1
Receivables from the financial sector	97.3	99.9	114.4	100.7	102.2
of which: from non-residents	26.3	27.8	34.4	25.8	23.5
Receivables from the general government sector	78.8	78.4	77.9	78.5	78.2
of which: from non-residents	0.0	0.0	0.0	0.0	0.0
Securities issued by residents, of which:	300.7	321.6	304.5	302.4	303.4
treasury securities	125.0	133.3	116.2	115.5	156.2
money market bills	134.9	146.1	146.1	138.5	98.0
Securities issued by non-residentsw	1.5	1.7	2.2	3.4	3.7
Liabilities – selected items					
Liabilities to the non-financial sector	740.2	749.8	752.7	780.2	783.5
of which: to non-residents	13.0	13.3	15.7	14.2	14.7
Liabilities to the financial sector	269.7	276.5	283.4	273.4	267.6
of which: to non-residents	169.2	180.2	175.8	169.9	169.2
Liabilities to the general government sector	68.6	76.1	90.6	56.9	80.4
of which: to non-residents	0.2	0.2	0.2	0.2	0.2
Liabilities due to the issue of own securities	48.5	48.2	47.5	48.3	48.3
Equity and subordinated liabilities[1]	144.2	149.8	152.2	152.3	152.6
of which: subordinated liabilities to non-residents[1]	7.7	7.8	8.0	7.7	7.8

[1] Domestic banking sector.
Note: data from monetary statistics, nominal value.
Source: NBP.

Chapter 4.

Sectors of non-bank financial institutions

Due to the insignificant degree of interconnectedness between non-bank financial institutions (NFIs) – insurance companies, pension fund management companies, open pension funds, investment fund management companies, and investment funds – with banks, their impact on the banking sector in Poland through credit, financial and ownership channels is limited. Due to the weakness of mutual ties with banks as well as the stable financial situation and activities of NFIs this sector does not generate systemic risk and does not pose a threat to financial system stability in Poland.

Assets of non-bank financial institutions have decreased (see Table 1.1), as a result of a considerable reduction in OFE assets in February 2014. The decrease was driven by regulatory changes relating to the sector of open pension funds and pension fund management companies.

There was little impact of non-bank financial institutions on the banking sector through the ownership channel. Banks were stockholders or shareholders in nine insurance companies but their share in the insurance sector's own capital was minor (0.9% as at the end of 2013), and their share in capital-weighted gross written premium (hereinafter referred to as premium) amounted to 1.2%. The largest share was that of Bank Zachodni WBK in companies owned by Aviva group (TU Aviva and TUO Aviva 10% each, and 66% in both BZ WBK-Aviva TUnŻ and BZ WBK-Aviva TU Ogólne).

Table 4.1. Assets of open pension funds (OFEs), insurance companies (ZUs), investment funds (FIs) and banks (zloty billion)

	NIF			NIF	Banks	NIF / Banks
	OFE	ZU	FI			
2010	221.3	145.2	121.8	488.3	1 158.5	42.1%
2011	224.7	146.2	117.8	488.7	1 293.9	37.8%
2012	269.6	162.9	151.3	583.8	1 349.5	43.2%
2013	292.0	167.6	195.0	654.6	1 405.4	45.8%
2014	151.4	167.6	200.0	519.0	1 443.2	36.0%

Note: data for 2014 for ZU correspond to data as at the end of December 2013; for OFEs and FIs – data refer to net assets at the end of March 2014.
Source: UKNF, NBP.

Four domestic banks and five domestic insurance companies were direct shareholders in PTEs. Since the publication of the previous edition of the *Report*, there have been changes in the ownership structure of pension fund management companies. This was connected with the takeover of OFE WARTA by PTE Allianz Polska SA.[74] As a result, insurance companies' share in equity capital of PTEs has increased.

In the case of six investment fund management companies (TFI), insurance companies were the sole shareholders with a share in the sector's equity capital amounting to 19.5%. The assets of investment funds managed by these TFIs accounted for 21.1% of the assets of all funds. Banks were the sole shareholders of four TFIs and owned 8.1% of the sector's equity capital. The share of assets of funds managed by these TFIs in total assets of investment funds amounted to 9.4%. Capital ties between TFIs and banks were often, however, of an indirect nature through participation in capital groups. Investment firms were the sole shareholders of five TFIs.[75] Their share in total equity capital managed by these TFIs amounted to 7.5%. Assets of investment funds managed by these TFIs represented 12.2% of all funds' assets.

Banks' risk associated with lending to non-bank financial institutions is minor. The share of loans to insurance companies and pension funds in total bank loans granted did not exceed 0.1% as at the end of March 2014, while the share of loans to investment funds amounted to 1.3% (see Table 4.2). The role of NFIs in funding of banks is also limited. The ratio of deposits placed by insurance companies, pension funds and investment funds total deposits in the banking sector amounted to 1.5%, 0.7% and 1.8%, respectively.

Table 4.2. Exposures of pension funds (FEs), insurance companies (ZUs), investment funds (FIs) to banks (zloty billion)

Loans and other banks' receivables from NIF					
	ZU	FE	FI	NIF	NIF's Loans/ Loans total
12-2010	0.2	0.4	6.9	7.5	0.9%
12-2011	1.0	0.7	2.2	3.9	0.4%
12-2012	0.3	1.9	4.6	6.8	0.7%
12-2013	0.5	0.9	9.3	10.7	1.0%
3-2014	0.8	0.1	13.6	14.5	1.3%
Deposits and banks' liabilities to NIF					
	ZU	FE	FI	NIF	NIF's Deposits/ Deposits total
12-2010	19.3	9.7	7.7	36.7	3.6%
12-2011	21.6	12.0	10.4	44.0	3.9%
12-2012	24.7	21.2	17.5	63.4	5.4%
12-2013	20.9	18.4	22.0	61.3	5.0%
3-2014	19.1	8.7	22.2	50.1	4.0%

Source: NBP.

4.1. Insurance companies

Due to the specific character of insurance companies' activities, their exposure to the liquidity risk is small. The premium paid by the insured for the granted insurance protection coverage is paid in advance as single premium or by instalments. Premium revenue is earmarked for payment of current claims and coverage of liabilities arising from incidents that have already taken place but have not yet been paid for or incidents that may occur in the future. In accounting, these liabilities are called technical insurance provisions. The term and currency structure of deposits are, in line with the existing legal rules, matched to the structure of liabilities arising from the insurance contracts.

[74] KNF issued a takeover permit on 25 March 2014; the merger of assets of OFE WARTA and OFE Allianz Polska will take place on 19 September 2014.

[75] In its opinion of 17 March 2014 to TFIs, KNF drew attention to possible undesirable consequences of a situation where investment firms are dominant entities of TFIs.

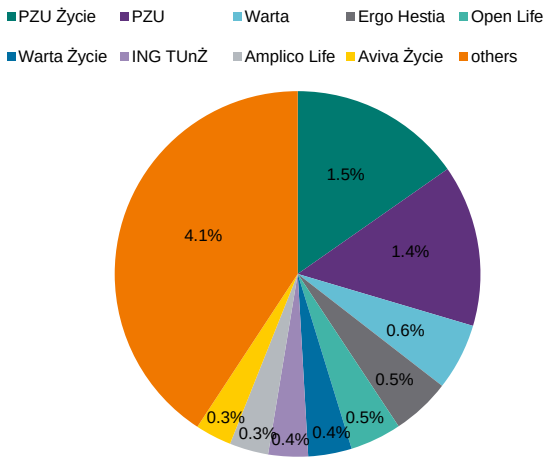
Such an investment policy makes domestic insurance companies less exposed to price fluctuations in financial markets than other financial institutions. Therefore, the exposure of insurance companies to liquidity risk is relatively small. Moreover, premium revenues (premium received or premium instalments), similarly to payment of claims (determined by fortuitous events) are evenly distributed throughout the time. Cat risk may serve as an exception but its impact on the sector's stability is set off by reinsurance schemes.

The exposure of domestic insurance companies to interest rate risk is small. The share of insurance products with a guaranteed rate of return of domestic life insurance companies is insignificant and the share of mortgage insurance in non-life insurance companies does not play a significant role in terms of the system's stability. The exposure to interest rate risk of life annuities arising from motor third party liability, which could be perceived as a potential source of risk to the insurance system, is also small. Liabilities due to disability annuties paid to persons injured in transport accidents are set by using statistical methods proven long ago and a conservative approach to the technical interest rate applied for discount.

The concentration of the insurance sector can be measured with the use of different aggregates, inter alia, the value of assets, deposits or technical insurance provisions. However, the most frequently used measure of insurance sector concentration is the share of individual entities in the premium. In 2013, insurance sector concentration measured with the value of premium written did not change significantly. The domestic insurance sector was dominated by large insurance companies owned by domestic and foreign capital groups. In 2013, premium written of the largest domestic insurance company amounted to 15.3%. PZU capital group collected 29.5% of the sector's premium (see Figure 4.1).

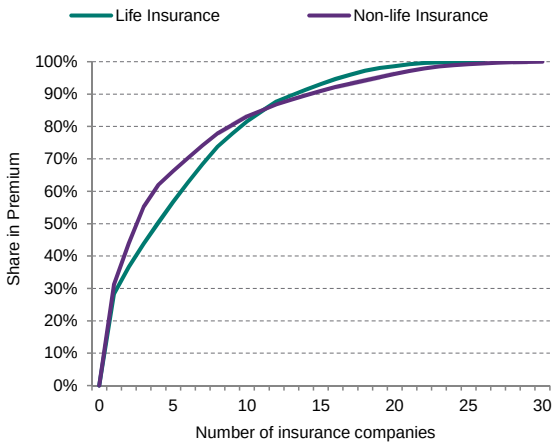
Written premium of the 4 largest life insurance companies and 3 non-life insurance companies amounted to 50% of gross written premium. The written premium of half of domestic insurance companies operating in Poland – 14 entities operating in the life insurance sector and 15 in the non-life insurance sector – amounted to over 90% of gross written premium (see Figure 4.2).

Figure 4.1. The largest domestic insurance companies (share in gross premium written)



Source: UKNF.

Figure 4.2. Distribution of gross written premium in life and non-life insurance



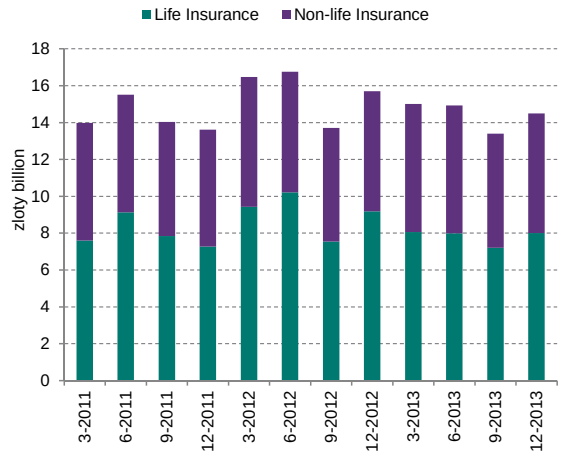
Source: UKNF.

Insurance premiums and claims

In 2013, the life insurance sector recorded a decline in written premium (-14.1%) (see Figure 4.3). The decline was mainly driven by the limitation of the distribution of investment insurance instruments and structured insurance products, which is demonstrated by a clear decline in single premium endowment insurance (decline from 14.0 billion zlotys to 7.7 billion zlotys), sold mainly through banking channel.

In 2013, the non-life insurance sector collected 1.3% more in premium than in the first half of 2012 (see Figure 4.3). The low growth rate was mainly driven by a smaller premium in automobile third party insurance and auto casco insurance, whose share decreased from 34.8% to 32.7% and from 21.9% to 20.5%, respectively. The reasons behind the decrease were a fall in the number and value of cars insured and (to a smaller extent) a fall in insurance prices (mainly of fleet insurance prices). As at the end of 2013, the number of third party insurance contracts concluded amounted to 13.3 million and that of auto casco – to 5.1 million (as at the end of 2012 – 19.2 million and 5.0, respectively).

Figure 4.3. Gross written premium in the insurance sector

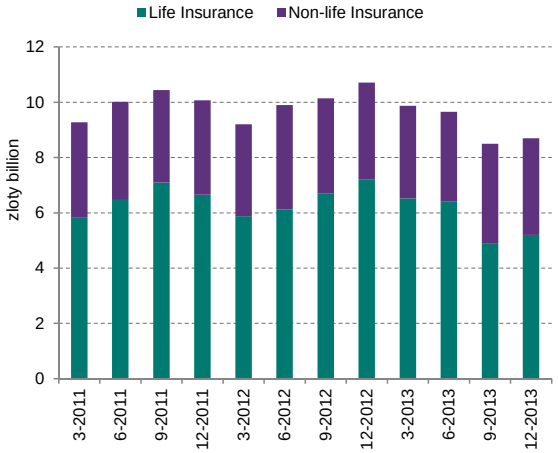


Source: UKNF.

According to the estimates of the Insurance Guarantee Fund, a significant number of car owners (around 250 thousand) do not, as in previous years, conclude the mandatory third party insurance contracts. In 2013, 6.1 thousand requests were filed with the Insurance Guarantee Fund from persons who suffered damage or injury (caused by unidentified drivers or drivers who lacked the mandatory third party insurance) and the amount of claims paid by the Fund stood at 5.3 thousand (increase by 8%).

A smaller number of investment insurance instruments and structured insurance products in 2013 led to a decline in the value of claims paid in the life insurance sector by 10.8%. In the non-life insurance sector, claims paid decreased by 2.6% (see Figure 4.4).

Figure 4.4. Gross claims paid



Source: UKNF.

Earnings of insurance companies

In 2013, the technical and financial result of life insurance companies decreased by 4.0% and 4.9%, respectively. The factors that had an influence on the decrease were a fall in premium revenues and lower investment revenues. In 2012, net investment profit in this insurance sector amounted to 7.7 billion zlotys while in 2013, the sector posted a profit on in-

Table 4.3. Earnings of the insurance sector

	2011 (zloty million)	2012 (zloty million)	2013 (zloty million)	2013/2012 (%)
Life Insurance (Sector I)				
Gross Written Premium	31 832	36 377	31 264	-14.1
Technical Result	3 347	3 127	3 001	-4.0
Financial Result	2 919	2 968	2 823	-4.9
ROE (%)	23.9	23.2	23.3	0.1 pp.
Non-life Insurance (Sector II)				
Gross Written Premium	25 291	26 250	26 599	1.3
Technical Result	0 298	0 665	1 330	100.1
Financial Result	3 085	3 333	6 140	84.2
ROE (%)	17.9	16.8	29.8	13.0 pp.

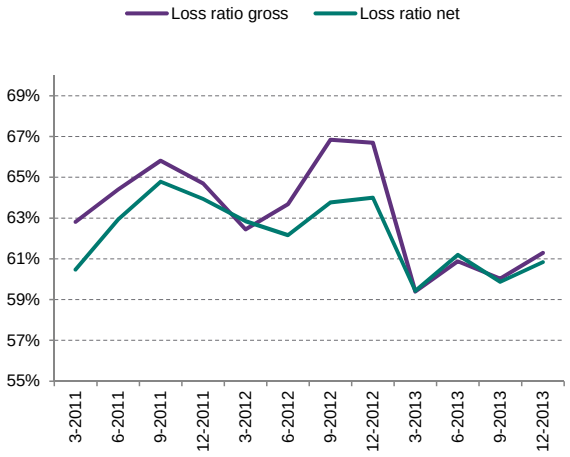
Source: UKNF.

vestment operations amounting to 4.2 billion zlotys. Due to a concurrent reduction in costs relating to the payment of claims and administrative costs, the financial result of this sector declined to 2.8 billion zlotys. At the same time, there was a decrease in the insurance sector's equity capital, which led to a slight increase in ROE to 23.3% (see Table 4.3).

The technical result of the non-life insurance sector increased to 1.3 billion zlotys and net profit reached a historically high level of 6.1 billion zlotys. Such high earnings were mainly driven by income on stocks and shares in subsidiaries in the first half of 2013, which amounted to 4.0 billion zlotys, including the dividend paid by PZU Życie to PZU – 3.8 billion zlotys. The high earnings and the decrease in equity capital of non-life insurance companies had an impact on the increase in ROE of this sector to a historically high level of 29.8% (see Table 4.3).

In 2013, the ratio of claims to premium income in the reporting period in the non-life insurance sector (the so-called loss ratio net) decreased by 3.4 percentage points compared with 2012, and amounted to 60.8% at the end of 2013 (see Figure 4.5). The ratio has shown a decreasing trend for three years, which points to an improvement in the profitability of insurance operations and is conducive to an improvement of the technical result of this sector (see Table 4.3).

Figure 4.5. Loss ratio gross and net in non-life insurance



Source: UKNF.

Investments of insurance companies

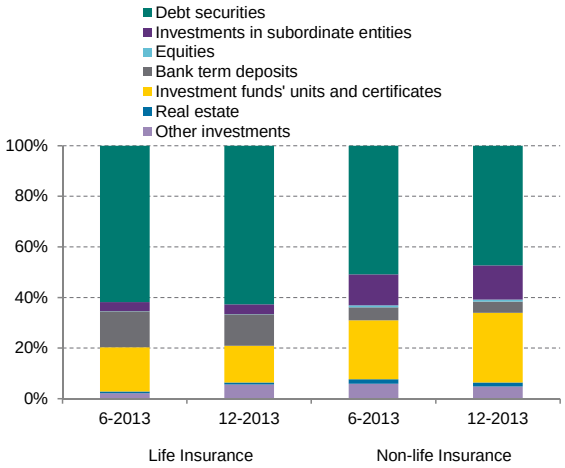
The value of investments was higher at the end of 2013 than at the beginning of the year and amounted to 148.8 billion zlotys. An increase in the share of participation units of investment funds (mainly PZU funds) continues to be observed.

Due to the withdrawal of some entities from the sale of investment insurance instruments at the end of 2013, the value of investments of life insurance companies decreased (from 49.7 billion zlotys to 45.7 billion zlotys – excluding unit-linked insurance investment (UFK)), which concerned term deposits in particular (from 8.6 billion zlotys to 5.7 billion zlo-

tys). Debt securities had the largest share in investments of this sector (28.6 billion zlotys).

Domestic life insurance companies are characterised by aversion to invest in corporate shares quoted on the regulated market. These shares (excluding the unit-linked insurance investments portfolio) accounted for less than 0.1% of this sector's investments (see Figure 4.6).

Figure 4.6. Structure of investments of insurance companies



Note: in life insurance, unit-linked insurance investments were not taken into account.
Source: UKNF.

The structure of investments of non-life insurance companies again saw a significant increase in the share of investment funds' participation units, from 9.1 billion zlotys at the end of 2012 to 11.9 billion zlotys at the end of the first half of 2013 and 14.7 billion zlotys at the end of 2013. This came on the back of the investment policy of the PZU group which increased its exposure to investment funds' participation units. Debt securities accounted for more than a half (25.3 billion zlotys) in the investment structure of non-life insurance companies. Domestic non-life insurance companies practically do not invest in corporate shares of companies quoted on the regulated market, which represented less than 0.8% of this sector's investments.

As a result of the inflow of funds (premium – 13.1 billion zlotys, payments – 7.4 billion zlotys) to unit-linked insurance investments (where investment risk is borne by clients) and positive investment results (net income – 1.8 billion zlotys), the value of unit-linked insurance investments increased to 48.9 billion zlotys at the end of 2013 (43.8 billion zlotys at the end of 2012). The largest share in the investments was that of investment funds' participation units and certificates of investment funds as well as debt securities. Unit-linked insurance investments do not directly influence insurance sector stability as the risk is borne by the persons who conclude the insurance contract.

Solvency of insurance companies

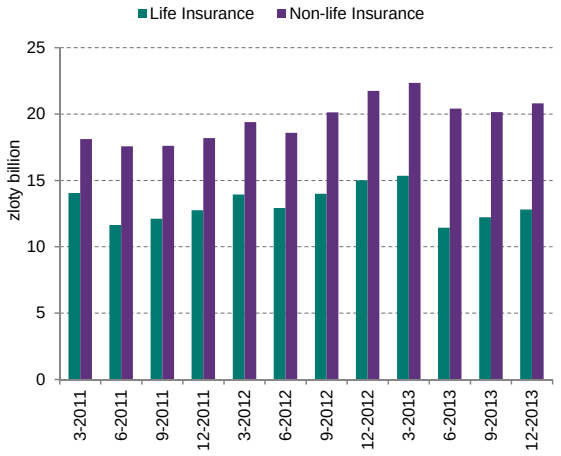
Own funds of life insurance companies decreased from 14.8 billion zlotys at the end of 2012 to 12.8 billion zlotys at the end of 2013, and own funds of non-life insurance companies — from 21.4 billion zlotys to 20.8 billion zlotys. The decreases came on the back of the capital and dividend policy adopted by the PZU group.[76]

In the first half of 2013, the PZU group decided to release part of its equity capital and transfer the funds to shareholders in the form of a dividend. PZU Życie paid a dividend to PZU (the sole shareholder of PZU Życie) in the amount of 3.8 billion and an advance payment on account of the dividend in the amount of 1.7 billion zlotys.

The decrease in equity capital of insurance companies in the first half of 2013 led to a significant reduction in own funds (see Figure 4.7). The improvement in earnings in the second half of 2013 (resulting in an increase in equity capital and own funds) again increased the sector's solvency.

[76] See "Polityka kapitałowa i dywidendowa Grupy PZU na lata 2013–2015", www.pzu.pl.

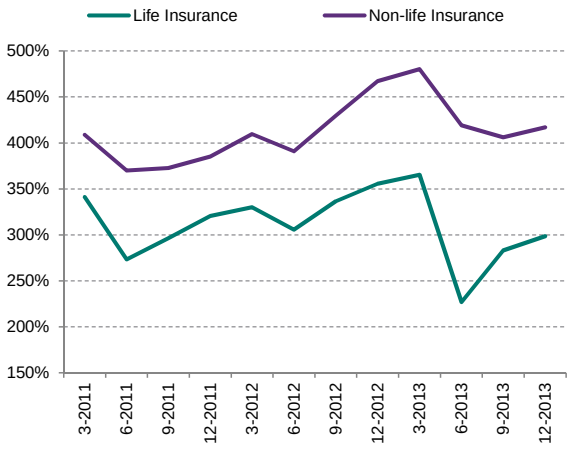
Figure 4.7. Own capital in the insurance sector



Source: UKNF.

At the end of 2013, the amount of own funds in the life insurance sector (11.8 billion zlotys) was three times as high as the statutory level; in the non-life insurance sector (16.6 billion zlotys) it was four times higher (see Figure 4.8). The value of the ratio for domestic insurance companies is higher than the European average,[77] which amounted to around 200% at the end of 2012 and around 275% in the non-life insurance sector.

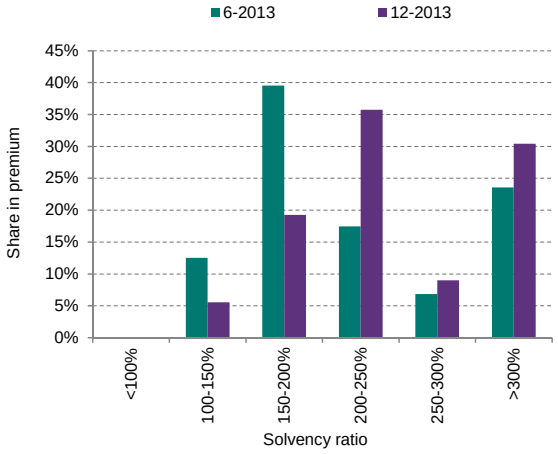
Figure 4.8. Activity monitoring ratio in the insurance sector



Source: UKNF.

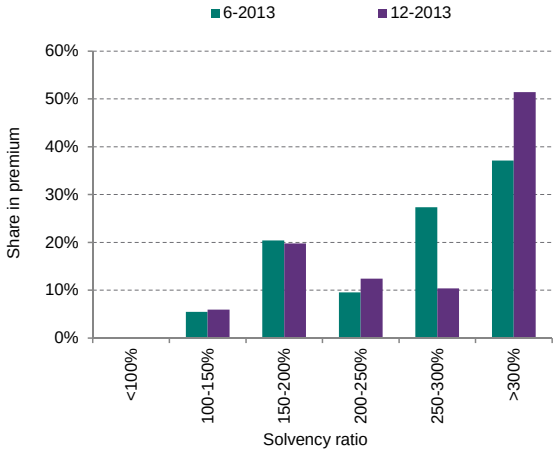
Another factor that also points to the improvement in the sector's solvency is the distribution of the insurance activity monitoring ratio. In life insurance, the share of companies (measured by premium) for which the ratio exceeded 200% increased. In the non-life insurance sector, the ratio exceeded 300% in companies that collected more than half of the premium (see Figure 4.9 and Figure 4.10).

Figure 4.9. Distribution of activity monitoring ratio in life insurance



Source: UKNF.

Figure 4.10. Distribution of activity monitoring ratio in non-life insurance



Source: UKNF.

[77] *EIOPA Risk Dashboard* – 12 September 2013, Appendix – Solvency I ratios, p. 9, www.eiopa.europa.eu

At the end of 2013, the ratio of liabilities (due to insurance contracts concluded) coverage with deposits of life insurance companies amounted to 113.8%, while that of non-life insurance companies – 124.4%. The ratios net of reinsurance amounted to 114.5% and 143.7%, respectively.

In 2013, under reinsurance schemes, non-life insurance companies transferred premiums in the amount of 3.8 billion zlotys while reinsurers paid 2.5 billion zlotys in claims. The share of reinsurers in the premium amounted to 14.2% and in claims 17.9%. These values show that insurance companies transferred a relatively smaller amount of premium than the reinsurers' share in claims.

The gross loss ratio (61.3%) was higher than the loss ratio net of reinsurance (60.8%), which was caused by the fact that in addition to the premium and claims, provisions growth, commissions and reinsurers' share in profits also have an impact on earnings.

Therefore, the Combined Operating Ratio (claims paid, including change in provisions and insurance costs to premium earned) for domestic insurance companies (92.5%) was higher than the corresponding ratio on reinsurers' business (85.2%). This means that in 2013 insurance companies incurred higher costs of operation and costs of reinsurance cover than reinsurers. Reinsurers' costs were relatively lower and they posted a profit on reinsurance cover granted to domestic insurance companies. It should be noted, however, that one of the goals of reinsurance cover is to stabilise the results of the cedant which may be subject to fluctuations as a result of fortuitous events. From the point of view of stability of individual insurance companies, the implementation of this function is connected with a cost that has to be borne to achieve the benefits provided by the stabilisation of earnings and cover against events exceeding the financial possibilities of individual companies.

Despite the decrease in equity capital in the first half of 2013, the sector's solvency at the end of 2013 improved. However, individual entities that will be planning dividend payments should take into account the fact that, beginning from 1 January 2016 (under the Solvency II project), new principles for setting capital requirements will enter into force, which may lead to more rigorous requirements relating to capital adequacy.

Box 3. Liabilities duration of insurance companies

The applicable law and the new regulations (Solvency II system) require that the maturity of insurance companies' assets should be matched with the maturity of liabilities arising from insurance contracts written. The maturity of liabilities due to non-life insurance contracts is usually short-term (except for personal insurance and certain third-party liability insurance), while the maturity of liabilities in life insurance may range from a few to several dozen years (depending on the type of insurance policy).

The period of the insurer's liability and the maturity of life insurance contracts depend on the type of risk covered by the insurance contract and biometric parameters. Depending on the risk covered by a contract, the following risks may form the biometric risk: the probability of death, survival to a stipulated age, illness or other fortuitous events covered by the contract.

The probability of contractual fortuitous events depends on the age of the insured, her/his health and a combination of risks covered by the contract. For example, the combination of death insurance and assurance on survival to a stipulated age leads to a situation, where the risk of an insurance incident is characterized by lower sensitivity, in terms of age and sex. Although the average term of the insurance contract cannot be identified with the expected

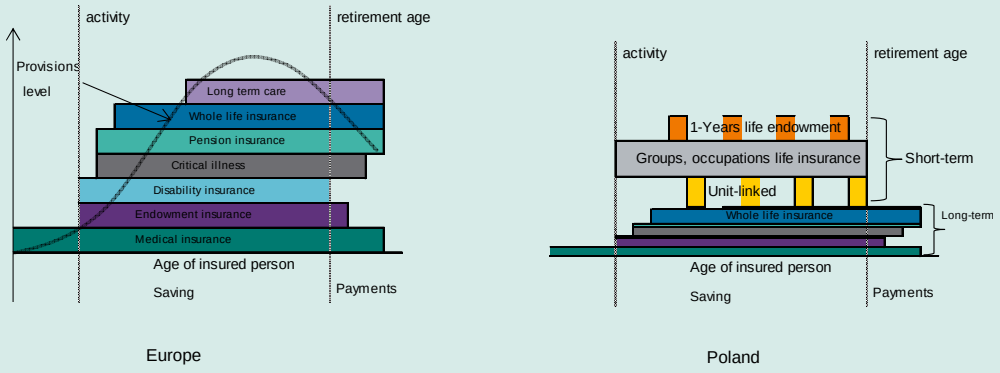
liabilities maturity date, the liabilities maturity date in life insurance contracts is, as a rule, proportional to the term of the insurance contract. Usually, this dependence is not linear and the liabilities (payment of benefits) are cumulated at the end of the insurance period (if these are whole life contracts – at the end of the insured person's life).

Among the types of insurance contracts with the longest term are: whole-life death insurance, medical insurance (covering the cost of medical treatment and hospitalisation – other than employee packages), the cost of elderly care insurance, pension insurance and dowry insurance.

Unit-linked insurance is often written for an indefinite time but it is not of a long-term-liability character. This results from the structure of the insurance contract, which provides for the possibility of terminating the contract and withdrawing funds at any time during the term of the contract. Moreover, the insured may freely dispose of his/her funds (he/she may manage the individual unit-linked insurance portfolio as part of subfunds' offer), by transferring funds without terminating the contract to other subfund (pursuing a different policy and portfolio structure) offered by the insurance company.

In the European market, the duration of liabilities arising from non-life insurance contracts is between 1 year and 5 years. In unit-linked life insurance the duration is in the range of 3 to 5 years, and in life insurance with guaranteed profits (e.g. endowment, life annuity) it rises over 8 years. Due to the specificity of the domestic life insurance sector in Poland, this period is expected to be shorter.

Figure 1. Life insurance in the European and Polish insurance market



Note: the figure presents the scale of differences between the Polish and the European life insurance markets. In the European market the dominant role is played by long-term protection insurance which is almost non-existent in the Polish market. Whole life medical insurance is a good example of the above insurance product (other products that are rare in Poland are marked with a relevant colour). On the other hand, in Poland, an important role is played by employee package insurance (settled on a monthly basis, which has been functioning for several dozen years. Investment insurance instruments (most often annual insurance policies) were also specific for the Polish market. Both forms of insurance products are characterized by short maturity. From the point of view of financial system stability, there is an analogy between unit-linked insurance and investment funds.
Source: study developed by NBP based on "Life Insurance: focusing on the consumer", 2013, Sigma 6/2013, Swiss Re.

4.2. Pension fund management companies and open pension funds

Since the publication of the previous edition of the *Report*, important changes have taken place in legal regulations relating to pension fund management companies and pension funds managed by them. The changes were implemented in accordance with the law of 6 December 2013 *Amending Certain Acts in Connection with the Determination of principles for Old-age Pension Payments from Funds Collected in Open Pension Funds*. Most of them became effective on 1 February 2014 (see box 4). In the coming quarters, an impact may be expected of the revisions in the pension system on the financial situation of PTEs.

Financial results of pension fund management companies

In 2013, the technical profit of pension fund management companies sector from pension funds' management as well as technical profitability improved (see Table 4.4). This resulted mainly from the increase in revenues from open and voluntary pension funds management. In 2013, revenues from management fees were the main component of PTEs revenues.[78] The growth in revenues from management fees was associated with the increase in OFE assets. At the same time, there was an increase in the revenues of the PTEs sector from contributions transferred to OFEs resulting from the statutory increase in the contribution rate from 2.3% of its base to 2.8%. Moreover, the improvement in technical profit was also due to a further decrease in the cost of pension fund management, i.e. a decline in the cost of acquisition services on behalf of OFE resulting from the prohibition of acquisition services, effective from 1 January 2012.[79]

Despite the increase in technical profit of PTE sector from pension fund management there was a significant decline in the net profit of the PTE sector compared with 2012. This resulted from the revaluation of non-financial assets carried out by PTE in the fourth quarter of 2013. Some of the PTEs seem to have reduced the value of these assets as a result of the changes made to regulations relating to open pension funds implemented by the act. The decline in net profit contributed to a reduction in the profitability of equity capital of the PTE sector.

The increase in technical profitability (see Figure 4.11) was associated with an improvement in technical profit from pension fund management, resulting from a rise in revenues, with a parallel decline in the cost of open and voluntary pension fund management. Despite a positive technical profitability posted by all PTEs, the value of the ratio for individual PTEs varied to a great extent. The ratio of technical profit of individual PTEs to fund management revenues was in the range of 10–65%, with the average amounting to 53%. In view of the changes introduced to the pension system, a decline in the value of this ratio can be expected in the upcoming years following a larger decline in PTEs revenues from pension fund management than the decline in management costs.

[78] Due to the low asset value of voluntary pension funds, revenues and costs of OFEs management had a significant impact on the financial situation of PTEs.

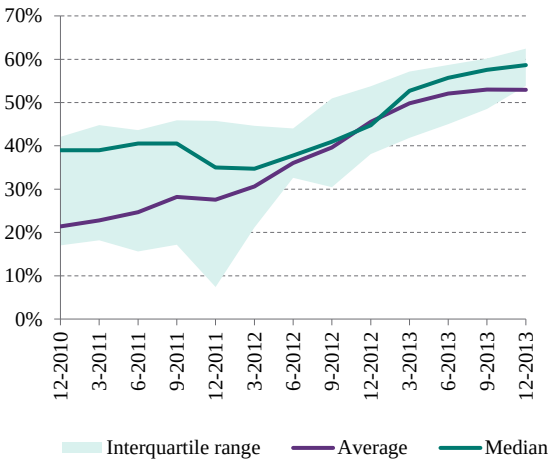
[79] As it is possible to calculate acquisition costs over time, some of the PTEs continue to present them in their financial statements. The prohibition of acquisition services does not apply to voluntary pension funds.

Table 4.4. Financial results and profitability of PTEs

	2011 (zloty million)	2012 (zloty million)	2013 (zloty million)	Change 2013/2012 (%)
Revenues from funds' management:	1 683	1 515	1 665	9.9
- contribution fee	554	290	390	34.4
- management fee	981	1 032	1 120	8.4
Funds' management costs:	1 025	728	707	-2.9
- obligatory costs	428	400	401	0.3
- other costs, including:	597	328	306	-6.7
costs of aquisition	385	125	101	-19.5
Technical profit on funds' management	658	787	958	21.7
PTEs net profit	619	715	361	-49.6
Technical profitability on funds' management (%)	39.1	51.9	57.5	5.6 pp.
ROE (%)	19.4	21.0	9.6	-11.4 pp.

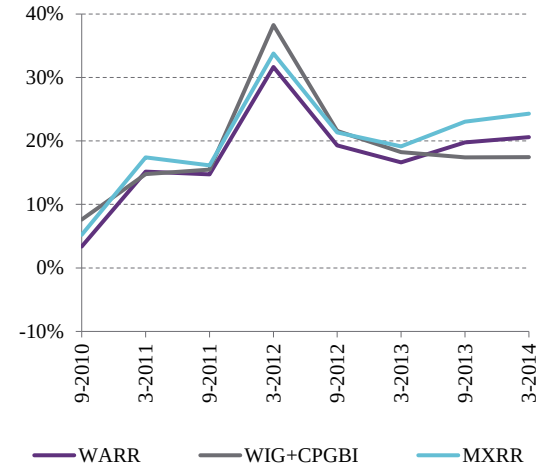
Source: UKNF.

Figure 4.11. Technical profitability of pension fund management companies



Source: NBP calculations based on UKNF data.

Figure 4.12. Rates of return of open pension funds



Note: SWSZ/MXSZ – weighted average/ maximum rate of return of OFE. WIG+CPGBI - WIG and CPGBI rate of return, in proportion corre-sponding to the average share of equities and bonds in OFE portfolio in the time horizon of calculating the 36-month rate of return. CPGBI - Citigroup Poland Government Bond Index. The rate of return calculated on the basis of changes in the WIG index and CPGBI does not take into account the management fee.
Source: UKNF, GPW, Bloomberg.

Rates of return of OFEs

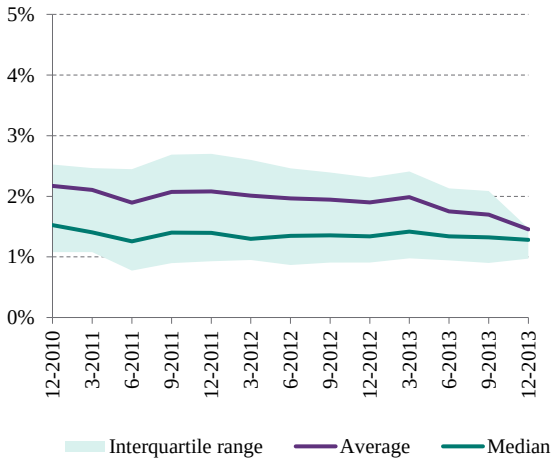
One of the changes introduced in the functioning of open pension funds in December 2013 was the lifting of the minimum required rate of return and the shortfall mechanism. Therefore, the only rates that were determined as at the end of March 2014 were the 36-month rates of return of individual OFEs and the weighted average rate of return. Since the publication of the previous *Report*, rates of return posted by OFEs have improved slightly (see Figure 4.12).

Equity capital of pension fund management companies

As at the end of 2013, equity capital of pension fund management companies amounted to 3.6 billion zlotys and was relatively low compared to the value of assets they managed. Compared to the end of June 2013, this ratio decreased and amounted to 1.5% on average (see Figure 4.13).

So far PTEs equity capital has been of particular importance for the stability of the capital part of the pension system. PTE equity capital was used to cover potential shortfall arising from an open pension fund failing to attain the minimum required rate of return.[80] As the above-mentioned act introduced a change to the functioning of open pension funds, consisting in lifting the shortfall mechanism, pension fund management companies will not increase the value of an accounting unit by making payment from their capital should the OFE return rate deviate from the benchmark.

Figure 4.13. Ratio of pension fund management companies' capital to the value of open pension funds' net assets that they manage

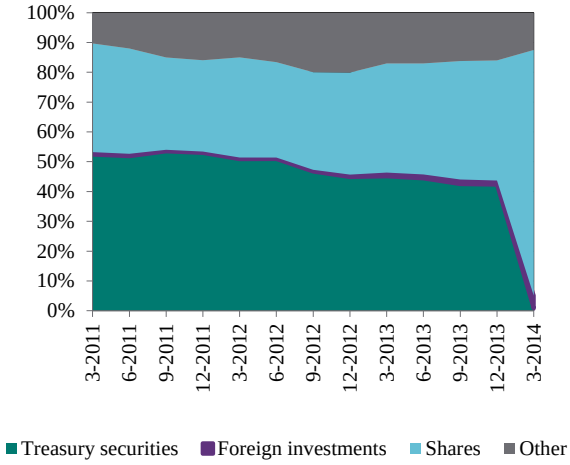


Source: NBP based on UKNF data.

Structure of OFE investments

There have also been significant changes in the structure of OFE investment portfolios. The Act of 6 December 2013 introduced changes that had an impact on the investment policy of open pension funds. One of the changes was the requirement for OFEs to transfer Treasury securities to the Social Insurance Institution (ZUS) and the introduction of a prohibition to invest in these instruments. Following the entry into force of these provisions, the share of Treasury securities in OFE investment portfolios decreased from 42.5% as at the end of September 2013 to 0.7% at the end of March 2014[81] (see Figure 4.14).

Figure 4.14. Structure of investment portfolios of open pension funds



Source: UKNF.

As a result, the shares of companies listed on the GPW were the main investment category of pension funds as at the end of March 2014. Their share in OFE portfolio amounted to 82.4% on average, compared with 39.7% at the end of September 2013. Exposure to equities differed significantly among pension funds and was between 77.9% and 93.5%. The introduction of a minimum share of these instruments in pension funds' assets at the level of 75% until the end of 2014 had an impact on the high share of equities in OFEs' investment portfolios. The act provides for a gradual reduction of the minimum limit for OFEs' investments in equities and a lifting of the limit altogether from 1 January 2018.

[80] A shortfall at an OFE was covered from PTE equity capital, when funds accumulated on the reserve account and in the additional section of the Guarantee Fund were insufficient to adequately increase the value of an accounting unit of the fund.

[81] Pursuant to Article 32 of the Act of 6 December 2013 *Amending Certain Acts in Connection with the Determination of Principles for Old-age Pension Payments from Funds Collected in Open Pension Funds*, OFEs are allowed to hold Treasury securities in their assets until 4 February 2016 provided they had been purchased before 4 February 2014 and have not been transferred to ZUS.

Moreover, the above mentioned act introduced a higher limit for foreign investments. The maximum exposure of OFEs to assets denominated in the currencies of EU Member States, of parties to the agreement on the European Economic Area or members of the Organisation for Economic Co-operation and Development will be gradually raised to 30% of assets from 1 January 2016. In the period analysed, the share of foreign investments in OFE portfolios increased on average from 1.6% to 4.4%. This resulted mainly from the purchase of securities listed on foreign stock markets.

Box 4. Changes in the pension system

On 6 December 2013, the law *amending certain acts in connection with setting principles for the payment of pensions from funds collected in open pension funds* was approved.[1] This introduced important changes in the Polish pension system. The act was developed as a result of a review of the functioning of the pension system carried out by the Council of Ministers. The key changes are as follows:

- transfer by Open Pension Funds (OFEs) of assets corresponding to 51.5% of the value of the accounting units to a sub-account in the Social Insurance Institution (ZUS),
- introduction of the transfer of future retirement contributions to open pension funds on a voluntary basis,
- gradual transfer of capital accumulated by the insured from OFEs to ZUS starting 10 years before reaching retirement age,
- entrusting ZUS with payment of pensions from funds accumulated in OFEs,
- changes in the investment policy of open pension funds,
- increase in the contribution rate transferred to OFEs from 2.8% of its base to 2.92%,
- reduction in the maximum contribution fee from 3.5% to 1.75%,
- lifting of the internal benchmark and the shortfall mechanism,
- introduction of an external benchmark based on the WIG index and WIBOR.

In accordance with the above-mentioned act, on 3 February 2014, all open pension funds redeemed 51.5% of accounting units recorded on the account of each member as at 31 January 2014 and made a transfer to ZUS of assets with the total amount of 153.15 billion zlotys (including securities with the nominal value of 146.05 billion zlotys and 1.86 billion zlotys in cash).[2] OFEs transferred the following asset categories: bonds and bills issued by the State Treasury, bonds issued by Bank Gospodarstwa Krajowego on behalf of the National Road Fund guaranteed by the State Treasury, other securities with cash flows from coupons, guaranteed by the State Treasury and funds denominated in the Polish currency. OFEs transferred the above-mentioned asset categories in the order indicated, up to the amount allowing to reach the value equal to the sum of the redeemed accounting units' value.

Another key change entailed the possibility for the members to decide on the transfer of future retirement contributions to OFEs. The insured who want to have part of their retirement contribution transferred to OFEs are required to notify ZUS of their decision in the period from 1 April 2014 to 31 July 2014. After filing a declaration a contribution in the amount of 2.92% of its base will be transferred to the selected pension fund. If no such declaration is filed the whole contribution in the amount of 19.52% of its base will be transferred to ZUS. The first time the insured will be able to change their decision with regard to 2.92% of the retirement contribution rate will be in 2016 (from 1 April to 31 July) and next, every four years.

The act also provides that pensions from funds accumulated in OFEs will be paid in the form of an annuity by ZUS, together with the pension from the Social Insurance Fund (FUS). ZUS will determine the right to the pension and its amount.

The legal act referred to above introduced changes in investment policy of open pension funds. Pursuant to the provisions adopted in the law, OFEs are not allowed to invest in bonds, bills and other securities issued or guaranteed by the State Treasury or Narodowy Bank Polski, governments and central banks of countries that are members of the EU or are parties to the agreement on the European Economic Area or members of the Organisation for Economic Co-operation and Development, deposits, credits and loans, guaranteed by these entities, and bonds, securities or mortgage bonds issued by BGK, which are guaranteed by the State Treasury.

The act provides that the limits on OFEs investment in shares will be lifted effective 1 January 2018. In the period from the entry into force of the act to the end of 2014, the minimum limit on OFEs investment in shares is 75%,in 2015 – 55%, in 2016 – 35% and 15% in 2017. In addition, the new provisions provide for a gradual increase in OFEs limit on investment in assets denominated in the currency of the countries which are members of the EU or are parties to the agreement on the European Economic Area or members of the Organisation for Economic Co-operation and Development. In 2014 the maximum investment of pension funds in this category will amount to 10% of assets, in 2015 – 20%, and – 30% beginning from 2016.

The changes introduced in the pension system will have an impact on the financial condition of pension fund management companies in the upcoming years. The incomes of PTEs are likely to decrease as a result of decisions made by the insured to cease transferring future retirement contributions to OFEs and due to the reduction in the contribution fee charged by PTEs. As at the end of April 2014, only around 100 thousand persons from among 16.7 million OFE members had declared they would stay in the selected pension fund.[3]

Pursuant to the above mentioned act, open pension funds have been obligated to gradually transfer assets of the members to ZUS starting 10 years before they reach retirement age. On 31 October 2014, ZUS will inform OFEs about the obligation to transfer funds for these insured in the adequate amount and pension funds will be required to transfer the funds to ZUS by 12 November 2014[4] It will be possible for the funds to finance these transfers from the incoming contributions whose future value depends on the number of persons who declare further participation in OFE and from portfolio earnings.

The changes introduced in the pension system have had an influence on the domestic financial market. Due to the transfer by OFEs of Treasury securities to ZUS and the introduction of prohibition to invest in these instruments the share of non-residents in the structure of Treasury bond buyers rose from 32% as at the end of January 2014 to 41% as at the end of Feb-ruary 2014. If there is turmoil in the financial markets and a rise in global risk aversion it may support a higher volatility of these instruments' prices.

Given the requirement to transfer assets of the insured from OFE to ZUS and the likely fall in the value of contributions paid to the funds, a significant decline may be expected in OFEs demand for the shares of companies quoted on markets regulated by GPW. Pension funds have so far systematically purchased equity instruments, including in periods of declines in stock exchange indices. The situation was similar with regard to Treasury securities where OFE increased investments in the market of domestic Treasury securities also in times when there was an outflow of foreign investors. Due to the likely decline in OFEs demand for equity and the prohibition to invest in debt securities issued or guaranteed by the State Treasury, the stabilising impact of funds on the domestic equity and Treasury bond market will be limited.

Despite the impact of changes introduced in the pension system on the financial condition of pension fund management companies and the domestic financial market, the changes should not generate risk to financial system stability.

[1] Law of 6 December 2013 *amending certain acts in connection with setting principles for the payment of pensions from funds collected in open pension funds* (Journal of Laws of 2013, item 1717).
[2] According to the press release of the Ministry of Finance of 3 February 2014.
[3] Based on press information.
[4] Pursuant to the rationale for the proposal for the law of 10 October 2013 *amending certain acts in connection with setting*

principles for the payment of pensions from funds collected in open pension funds in 2014 OFEs will be required to transfer funds to ZUS in the amount of 4.4 billion zlotys, in 2015 – 6.6 billion zlotys, in 2016 – 7.4 billion zlotys, and in 2017 – 5.7 billion zlotys.

4.3. Investment fund management companies and investment funds

Given the specific nature of services offered, the investment fund management companies and investment funds sector does not generate risks to financial system stability. A potential deterioration in the financial condition or capital position of TFIs should not negatively impact the assets accumulated in the investment funds they manage. Investment fund management companies and investment funds are separate legal persons and funds' assets are separated from the assets of TFIs. Holders of participation units are also unlikely to suffer the consequences of a potential bankruptcy of custodians entrusted with keeping investment funds' assets, as these funds are separated from their bankruptcy estate. Domestic legal regulations prohibit the establishment of constant net asset value (CNAV) money market funds. Investment funds do not guarantee attaining the investment goal set and the risk related to their operations is borne by their participants in whole. The potential impact of investment funds on the financial system may, however, be that of influencing prices of financial instruments.

Financial results of investment fund management companies

The financial condition of investment fund management companies improved in 2013 (see Table 4.5). Unlike in 2012, the increase in investment funds' net assets translated into an increase in revenues[82] and in the financial result of the TFI sector.

Table 4.5. Financial results and basic indicators for the TFI sector vs. average monthly net asset value of investment funds

	2011 (zloty million)	2012 (zloty million)	2013 (zloty million)	Change 2013/2012 (%)
Total revenues:	2 425	2 169	2 654	22.4
- management fee	2 243	1 978	2 416	22,1
Total costs	1 896	1 764	2 129	20.7
Pre-tax profit	530	405	525	29.7
Net profit	428	325	426	31.1
Equity capital	1 268	976	1 102	12.9
Equity capital requirement	232	232	249	7.7
Average value of investment funds net assets	122 386	138 251	176 961	28.0
Equity capital coverage ratio	5.5	4.2	4.4	0.2
Pre-tax profit margin (%)	21.8	18.7	19.8	1.1 pp.
ROE (%)	35.4	31.7	42.2	10.5 pp.

Note: due to the adjustments, data on the investment funds' net asset value may differ from those presented in the previous *Report*.
Source: UKNF, NBP.

[82] The fee for investment fund management is the main source of TFI revenues. In 2013, these revenues accounted for 91% of the sector's total aggregate revenues

The funds' net assets increased by nearly 44 billion zlotys in 2013. The increase was driven both by good results from management and a high positive balance of inflows and outflows. In 2013, all types of investment funds recorded a net inflow, with the total net inflow amounting to 29.6 billion zlotys. The largest amount of funds (53.1% of the balance) was paid to funds classified as other funds in terms of the investment policy they carried out, mainly to non-public assets funds addressed to specific investors. The net inflow to investment funds set up solely to entities from the PZU capital group amounted to nearly 6 billion zlotys.

Equity capital of investment fund management companies

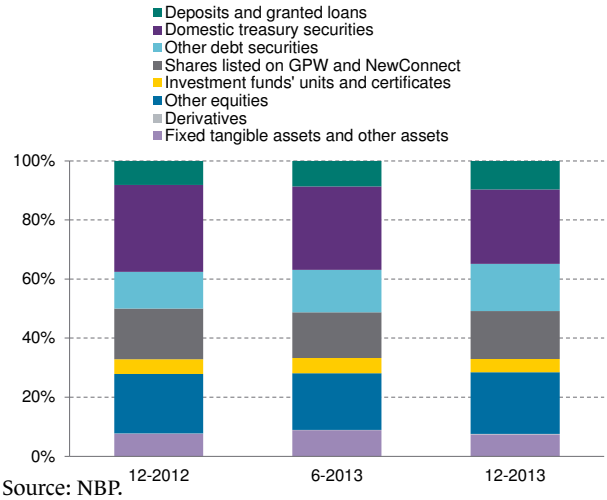
As at the end of 2013, equity capital of investment fund management companies amounted to over 1 billion zlotys. Equity capital increased mainly due to the improvement in the sector's results and was additionally supported by the increase in TFIs other reserve capitals. Due to the higher growth rate of the financial result than that of equity capital, there was also an increase in the aggregate ROE of the TFI sector. At the same time, ROE for individual investment fund management companies was very discrepant. Its average value increased from 15.9% at the end of 2012 to 21.4% at the end of 2013.

Aggregate equity capital of investment fund management companies was 4.2 times higher than the capital requirement for the whole sector.[83] The aggregate TFIs' equity capital coverage ratio, similarly to the aggregate capital requirement, was slightly higher than at the end of 2012. The sector's equity capital relative to investment funds' net assets was insignificant and did not exceed 1%.

Structure of assets of investment funds

The structure of investment funds assets did not change significantly (see Figure 4.15). Domestic government bonds continued to account for the largest share of the structure – 25.2%. The second most important position in investment funds' assets were other equities, which included mainly unquoted shares. In 2013, the share of other debt securities in assets increased, with instruments issued by enterprises constituting the major category.

Figure 4.15. Structure of assets of investment funds



Source: NBP.

Due to a substantial exposure to corporate bonds with low liquidity, the redemption of participation units of Copernicus Dłużnych Papierów Korporacyjnych subfund, which had been separated under Copernicus FIO fund, was suspended in December

[83] As provided for in Articles 49 and 50 of the Act of 27 May 2004 on Investment Funds, an investment fund management company is obliged to keep its shareholder's equity at a level not lower than 25% of the difference between the value of overall costs and the value of variable distribution costs incurred in the preceding financial year, and, at the same time, at a level not lower than the zloty equivalent of EUR 125 thousand, or EUR 730 thousand if the object of its activities is extended to include managing portfolios including one or more financial instruments. Moreover, from the time when the value of assets of investment funds and the value of assets of collective portfolios of securities managed by a management company exceeds the zloty equivalent of EUR 250 million such management company is obliged to increase the level of its shareholders' equity by an additional amount, equal to 0.02% of the difference between the sum of the value of assets of the investment funds and the value of assets of collective portfolios of securities, and the zloty equivalent of EUR 250 million.

2013.[84] The reason for the two-month long suspension was the high level of withdrawals made by the subfund's participants.[85] For the same reason, in October 2013 KNF imposed the suspension of sale and redemption of participation units of Idea Premium SFIO fund for 2 weeks. In this case, the decision on the suspension was made as a result of a delay in the fund's payment for the redeemed units.[86]

Single cases of suspending the sale and redemption of funds' participation units do not have a material influence on the situation in the sector. A prolonged time when investors cannot withdraw funds invested in participation units may, however, negatively affect investor confidence in entities operating in the market for investment funds.

In March 2014, KNF published two opinions addressed to TFIs relating to certain irregularities in the functioning of investment funds.[87] The opinions drew attention to, inter alia, cases of misleading investment fund participants by publishing unreliable information in Key Investor Information Documents, in summary prospectuses and in promotional materials (inter alia, publishing information that suggests no investment risk was involved when investing in the fund's participation units, presenting the funds' participation units as a substitute for a bank deposit, pointing to a high liquidity of investments in funds with significant exposures to corporate bonds) and using investment funds to carry out the policy of capital groups to which TFIs managing them belong (including also ignoring the regulatory investment limits and criteria for the selection of investments provided for in the statutes of investment funds as well as taking up securities by investment funds that are offered by associated investment firms in the amount enabling an effective sale of the issue organized by these companies).

The publication of the above-mentioned opinions was connected with the situation of Idea TFI[88] and investment firm Dom Maklerski IDM. Idea TFI entrusted the management of investment portfolios of some of its funds to this investment firm which was also a shareholder of the TFI and an entity operating as the organiser of securities issue. When performing the entrusted activities, IDM did not duly take into account the interests of investment funds' participants. Securities offered by IDM were purchased and formed part of the funds' portfolios. However, these securities did not meet the criteria laid down in the Act on Investment Funds and in funds' statutes. In March 2014, KNF imposed pecuniary penalties on both entities and requested that the TFIs analyse their operations and eliminate situations that may point to a conflict of interests. The problems of IDEA TFI did not have a material impact on the situation in the sector. The scale of this TFI's operations is relatively narrow. As at the end of March 2014, the share of net assets managed by Idea TFI in the assets of the sector as a whole did not exceed 1%.

[84] According to the semi-annual and annual financial statements, the fund's investments in 2013 included bonds that had not been redeemed in time. The fund carried out a number of revaluations of the bonds held in its portfolio.

[85] In accordance with Article 89 para 4 and 5 of the Act on Investment Funds, a fund may suspend the redemption of participation units for 2 weeks if in the preceding 2 weeks, the aggregate value of the units redeemed or requested to be redeemed exceeds 10% of the value of the fund's net assets or it is not possible to make a reliable valuation of a material part of the fund's assets for reasons beyond the fund's control. The redemption of units may be suspended for a period longer than 2 weeks, but no longer than 2 months only with the consent of and on the terms and conditions specified by KNF.

[86] The reasons for the delay of payments to the clients given in press releases of the Management Board of Idea TFI published at its website were procedural issues that obstructed the transfer of cash collected on the account of the closed-end investment fund established with the aim of intensifying restructuring and debt collection activities to Idea Premium SFIO fund and the handling of the delayed redemptions.

[87] Opinions of 17 March 2014 and 20 March 2014.

[88] At the end of March 2014, Idea TFI changed its name to INVENTUM TFI.

Chapter 5.

Credit unions

The capital position of credit unions remains difficult and the value of regulatory capital, despite its growth in 2013, is not adequate to their operations.

In the second half of 2013, the deposit-taking activities of credit unions were developing slower than lending, but they continue to report a surplus of deposits over loans extended. The liquid assets of credit unions constituted a significant part of their total assets.

The scale of direct interconnectedness between unions along with the National Association and the banking sector is relatively small.

Credit unions (SKOK) are non-bank institutions classified as monetary financial institutions. Credit unions are excluded from the observance of the provisions of the CRD4/CRR package.

Although credit unions have been recently developing, their role in the Polish financial system remains insignificant. At the end of 2013, their assets (19.2 billion zlotys) equaled in value 1.4% of the banking sector's assets. The loans and deposits of the non-financial sector at credit unions accounted for, respectively, 1.7% of loans and 2.2% of deposits of non-financial entities in the banking sector.

The sector's assets (55 credit unions) are concentrated at several unions. Poland's six largest credit unions have an over 73% share in the total credit union assets. The assets of the majority of credit unions (29) are below 100 million zlotys.

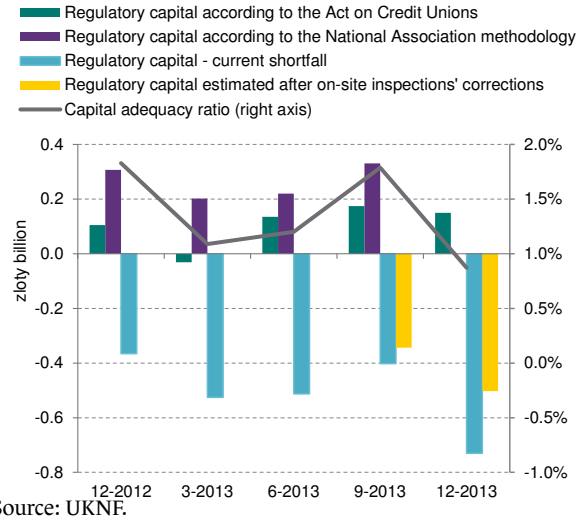
The scale of direct interconnectedness between credit unions along with the National Association and the banking sector is relatively small. At the end of 2013, credit unions' receivables from banks and funds on bank accounts amounted to approximately 1.2 billion zlotys, whereas their liabilities to banks were around 0.5 million zlotys. On the other hand, the National Association's receivables due to bank deposits decreased significantly from the end of 2012 (by 0.8 billion zlotys) and amounted to 0.8 billion zlotys at the end of 2013.

The capital position of credit unions[89]

The capital position of credit unions remained difficult and the value of regulatory capital was inadequate to the scale and risk of their operations.

Credit unions' regulatory capital, calculated according to the act on credit unions[90], rose by 14.2 million zlotys in the second half of 2013 (and by 44.6 million zlotys since the beginning of the year) and amounted to 149.6 million zlotys. However, the data do not take account of corrections following UKNF's on-site inspections at 11 credit unions. In line with the inspectors' findings, the total value of regulatory capital should be decreased by 652 million zlotys, which would push it down to -502 million zlotys. The revision of regulatory capital resulting from the inspection findings would push up the current shortfall of regulatory capital from 736 million zlotys to 1.4 billion zlotys (see Figure 5.1).

Figure 5.1. The regulatory capital and the capital adequacy ratio of credit unions



Source: UKNF.

The average capital adequacy ratio of credit unions, calculated in accordance with the regulation of the Minister of Finance, amounted to 0.85%.[91] After adjustments suggested by the UKNF inspectors were taken into account, the capital adequacy ratio would

[89] Chapter 5 was prepared on the basis of a report of the Office of the Polish Financial Supervision Authority (UKNF): "Information on the Condition of Credit Unions in 2013", April 2014, UKNF. The report is based on reporting data and individual surveys sent directly to credit unions. The annual results sent to UKNF by credit unions have not been reviewed by auditors. Moreover, in UKNF's view, although the quality of credit unions' reporting data has improved substantially, incidental errors found in the reports make the documents internally inconsistent.

[90] Act of 5 November 2009 *on Credit Unions* (consolidated text: Journal of Laws of 2013, item 1450, as amended.).

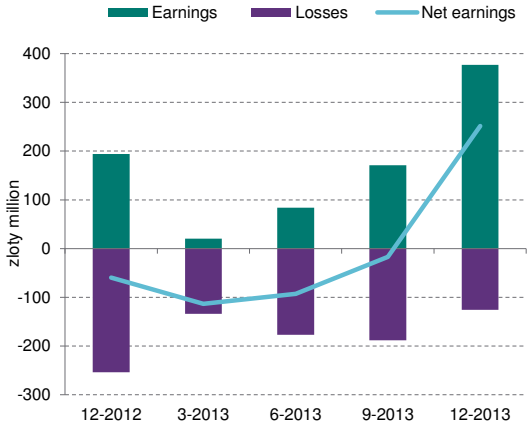
[91] The capital adequacy ratio calculation rules, which have been in force since October 2013, were introduced by the regulation of the Minister of Finance of 27 August 2013 *on the capital adequacy ratio of a credit union* (Journal of Laws of 2013, item 1102).

be negative and amount to -2.87%.

The earnings of credit unions

At the end of 2013, credit unions reported total earnings of 251.5 million zlotys (12 credit unions reported a loss of 125.7 million zlotys, see Figure 5.2). In the second half of 2013, their earnings improved by around 344 million zlotys compared with the first half of 2013, mainly on the back of one-off transactions, i.e. selling of receivables, separating organised parts of an enterprise and contributing them in kind to set up companies as well as cash donations provided by the National Association.

Figure 5.2. Net earnings of credit unions (cumulative)



Source: UKNF.

In line with the findings of the UKNF inspection, the earnings of credit unions that were subject to examination should be revised downward by 652 million zlotys, which would lower their total earnings to - 400.7 million zlotys.

Lending and credit risk at credit unions

Loans and lending facilities were the largest item of the assets of credit unions. At the end of 2013, the portfolio (10.6 billion zlotys) accounted for around 55% of the assets. In the second half of 2013, net loans and lending facilities rose by 2.5%, while assets were up 4.4%. Consumer loans had the biggest share in the portfolio (around 60%), and real estate loans were its second largest item (around 37%) (see Figure 5.3).

Figure 5.3. The structure of credit unions' loan portfolio

Source: UKNF.

At the end of 2013, 22.9% of the portfolio of loans and lending facilities extended by credit unions (3 billion zlotys) were overdue (arrears in repayment 3 months and more than 3 months).[92] Among overdue loans, around 80% were loans with arrears in loan repayment of more than 12 months.

Credit unions sold a portion of the portfolio of overdue loans and lending facilities. The gross value of sold loans, mostly overdue more than 3 months, stood at around 2 billion zlotys, of which 0.3 billion zlotys were sold in 2013. Credit unions obtained debt securities or/and cash for the sold overdue receivables. The end-of-2013 balance-sheet value of debt securities obtained from the sale of overdue receivables was 0.8 billion zlotys (4.3% of total assets). After taking into account the value of the debt securities, the share of overdue portfolio in the loan and lending facility would amount to around 27%.

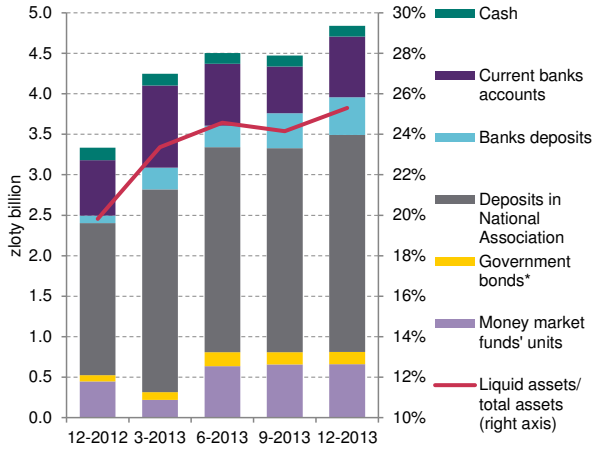
[92] For loans and lending facilities overdue more than 1 day, the ratio was 29.4%.

Around 14% of the whole loan portfolio was subject to restructuring, of which 60% were large-sized loans – with the value exceeding 1 million zlotys.

Liquidity risk at credit unions

The liquid assets of credit unions (4.8 billion zlotys) represented a substantial part of their total assets (around 25% at the end of 2013). When compared with the end-of-June-2013 balance, the level of liquid assets was up 0.3 billion zlotys. Credit unions deposited their liquid assets mainly at the National Association (approximately 2.7 billion zlotys), in current bank accounts and participation units of money market funds (see Figure 5.4).

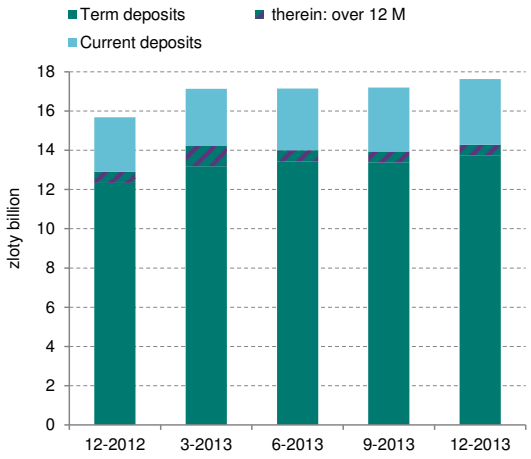
Figure 5.4. The structure of liquid assets and their share in credit unions' assets



* Incl. debt instruments guaranteed by the State Treasury.
Source: UKNF.

The activities of credit unions were mainly funded with members' deposits (17.6 billion zlotys at the end of 2013, i.e. 91.7% of the balance-sheet total). In the second half of 2013, the value of deposits grew by 2.2%. Term deposits, with maturity of up to 12 months inclusive, prevailed in the structure of deposits of credit unions (see Figure 5.5). Deposits with the value over 100,000 zlotys accounted for more than 31% of deposits' total value (the deposits were accumulated at 4.1% of accounts operated by credit unions).

Figure 5.5. The structure of deposits of credit unions



Source: UKNF.

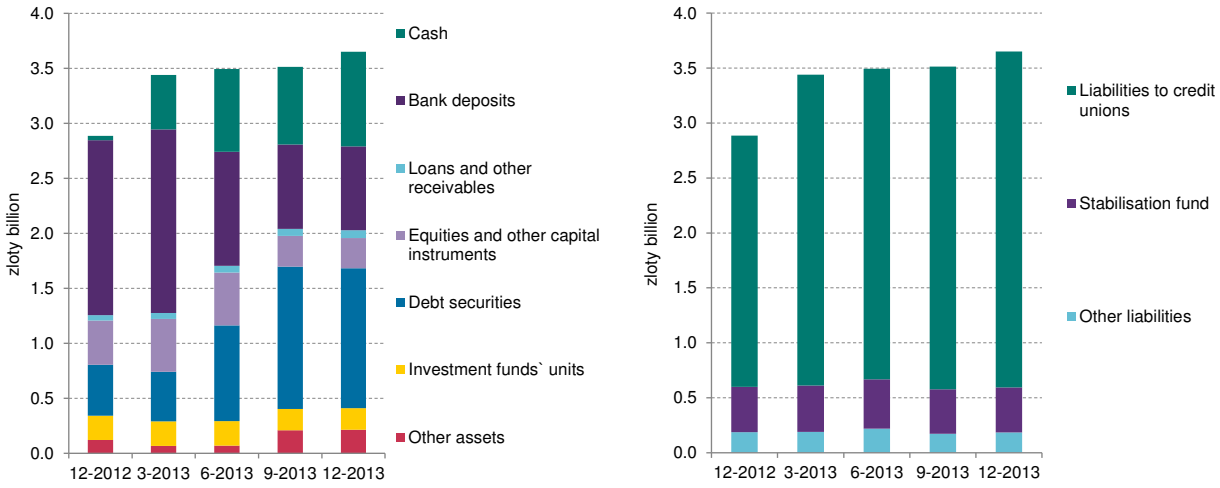
Credit unions reported a big surplus of deposits over extended loans and lending facilities. The value of funds not used for lending amounted to around 7 billion zlotys at the end of December 2013.

Composition of the balance-sheet of the National Association

Liquid funds were a significant part of assets of the National Association (see Figure 5.6). At the end of 2013, cash and cash equivalents and receivables in the form of deposits at banks accounted for around 44% of assets of the National Association, i.e. 1.6 billion zlotys, (down 0.2 billion zlotys from the end of June 2013.). Funds from credit unions in the form of (mandatory and non-mandatory) deposits and charges were the most significant source of funding for the National Association (around 84% of liabilities).

The National Association runs a stabilisation fund for, inter alia, supporting the activities of credit unions. At the end of 2013, its unused funds amounted to 158 million zlotys. In the course of the year, the National Association decided to provide support to 32 credit unions subject to recovery proceedings for a total amount of 193 million zlotys.

Figure 5.6. Composition of the balance-sheet of the National Association: assets – left-hand panel, liabilities – right-hand panel



Source: UKNF.

The restructuring processes at credit unions

On 12 June 2013, the act of 19 April 2013 amending the *Act on Credit Unions and Certain Other Acts* entered into force, under which the KNF is able to implement a set of instruments to conduct the restructuring of credit unions. At the end of 2013, 44 credit unions were covered by the recovery proceedings by the KNF. In July and August 2013 and in May 2014, the KNF decided to establish an administrator at four credit unions.

Under the provisions amending the act on the Bank Guarantee Fund[93], deposits of credit union members have been covered by the BFG guarantee since November 2013.

[93] Act of 26 July 2013 *Amending the Act on the Bank Guarantee Fund and Certain Other Acts* (Journal of Laws of 2013, item 1012). The provisions took effect on 4 October 2013.

Glossary

Activity monitoring ratio – the ratio of insurer's capital to the statutory capital requirement, which is the value of solvency margin or the guarantee capital (whichever is higher).

Adjusted net interest margin – the ratio of net interest income posted in a given period less interest income on securities held and net charges to provisions for impaired loans to assets (or the relevant loan portfolio) in this period.

Adjusted one–month liquidity gap – the difference between the book value of assets of up to 1 month (adjusted for the value of overdue claims and for the value of Treasury securities earmarked to cover the fund for protection of guaranteed deposits of the Bank Guarantee Fund) and the surplus of deposits from non-financial customers of up to 1 month over the core deposits and other liabilities of up to 1 month.

Annualised data – in the case of data on flows – the value of cash flow in the preceding 12 months; in the case of data on balance (stock); – average value of balance in the preceding 12 months.

Assets of limited liquidity – category of assets specified by KNF Resolution No. 386/2008 defining liquidity standards for banks. Approximately it consists of assets resulting from banking activities outside the wholesale financial market.

Auto casco insurance AC – comprehensive auto insurance of land vehicles, excluding track vehicles, covering damage in automobiles or land vehicles lacking own drive — subsector no. 3 of the non–life insurance sector according to the Act on Insurance Activity.

Automobile third party liability insurance OC – third party liability insurance for land vehicles with own drive – subsector no. 10 of the non–life insurance sector according to the Act on Insurance Activity.

Availability of housing – measurement defining the number of square metres of a flat, which a person with average income in corporate sector in a given city could afford to buy at average transaction price in a given market. The average price consists of 40% of the price in the primary market and 60% of the price in the secondary market, which is reflected in the distribution of transactions in these markets.

Available housing loan – the value of a potential maximum housing loan expressed as the multiplicity of a monthly wage in the corporate sector in a given market. The value is calculated taking into account a bank's credit requirements and average market parametres for loans (i.e. interest rate, amortisation period, minimum income after loan instalment payment).

Banking sector – all domestically incorporated commercial and cooperative banks as well as branches of foreign credit institutions operating in Poland.

Capitalisation rate – quotient of net operating income, which may be generated in the market and the property market price (in accordance with Common General Rules of Valuation).

Combined Operating Ratio – the ratio of gross claims and expenses to premiums earned.

Commercial banks – all domestically incorporated commercial banks and branches of foreign credit institutions.

Consumer loans – credit card lending, consumer instalment loans and other consumer loans to natural persons.

Core liquidity reserve – category of assets specified by KNF Resolution No. 386/2008 of 17 December 2008, defining liquidity standards binding for banks. Approximately it consists of other receivables and other assets in the amount obtainable within 7 days.

Credit Default Swap – a credit derivative whose seller undertakes to pay the buyer the face value of a third party's contractually specified defaulted obligation in case of a credit event pertaining to a third party (reference entity) in exchange for a premium. A credit event may be the reference entity's declaration of bankruptcy, a contractually specified change to the credit rating of the entity or a change to the rating of a specified debt security.

Credit losses – net charges to provisions for impaired loans.

Cross Currency Interest Rate Swap – commits both sides of the transaction to the exchange of periodic interest payments calculated on the basis of a given nominal amount over an agreed period of time and, if so determined in the terms of a transaction, the exchange of nominal amount (at the agreed exchange rate) at the end of the transaction date and potentially at its inception. Interest payments are denominated in different currencies and calculated on the basis of interest rates agreed for each currency.

Deleveraging – reducing exposures in host country entities by foreign investors. Deleveraging may take the form of reducing foreign investors funding to financial institutions (especially their subsidiaries) as well as a reduction of investments in financial instruments of the host country, such as host country Treasury debt securities or shares listed on host country stock exchange.

Deposit rating (long–term) – a measure of the capacity of a financial institution to repay its liabilities with a maturity of 1 year or more. It reflects the risk of default and the scale of possible losses in the case of default of a financial institution.

Deposit rating (short–term) – a measure of the capacity of a financial institution to repay its liabilities with a maturity of less than 1 year. It reflects the risk of default and the scale of possible losses in the case of default of a financial institution.

Developer apartment – an apartment from the primary market constructed by a developer. It is sold both as a contract for its construction and as a newly constructed finished apartment.

Domestic banking sector – domestic commercial banks and cooperative banks.

Domestic commercial banks – domestically incorporated banks operating in the legal form of joint–stock company or state bank.

Effective interest rate – the ratio of interest income (cost) to average value of claims (liabilities) in a given period.

Equity capital coverage ratio (TFI) – ratio of the value of TFI equity capital and the value of the minimum capital requirement.

Financial strength rating – a measure of long–term capacity of a financial institution to conduct its business independently, without support of third parties, calculated by Moody's on the basis of fundamental data, franchise value, and the scale of activity diversification as well as the level of development of the financial system in which the institution operates, the quality of supervision, and the strength of the economy.

Forward Rate Agreement – a transaction under which the parties are obliged to pay interest on an agreed nominal amount for a defined period beginning in the future. The interests are accrued according to the FRA rate set on the contract date.

Funding gap – the difference between the amount of loans to non-financial customers and the general government sector, and the amount of deposits accepted from those sectors, expressed as percentage of the value of loans.

Gross written premium – the value of gross premium (before taking into account the share of reinsurers): in the case of life insurance sector – payable under the contract within the reporting period, whether or not the premium has been paid; in the case of non–life insurance sector, where the duration of coverage is determined – amounts payable for the whole period of liability, notwithstanding its duration, arising from the agreements concluded during a particular reporting period, whether or not the premium has been paid; in the case of non–life insurance, where the duration Financial of the period of liability is not determined – amounts payable during a particular reporting period, whether or not the premium has been paid.

Housing production indicator – twelve-month moving sum of the number of dwellings whose production is in progress (dwellings which construction has begun after deduction of dwellings completed).

Illiquid assets – category of assets specified by KNF Resolution No. 386/2008 defining liquidity standards binding for banks. Approximately it consists of assets not resulting from banking activities.

Impaired loan ratio – the ratio of loans with identified impairment to total loans.

Individual rating (SACP) – (the assessment of the rating agency S&P), a measure of long-term capacity of financial institution to perform its activities without the support of third parties, calculated on the basis of the assessment of the risk of operating in different countries in which it is active and the individual characteristics of this financial institution.

Internal Capital Adequacy Assessment Process (ICAAP) – process of estimating the internal capital by bank. The estimated internal capital is the the value of capital which is necessary to cover all identified and significant types of risk involved in the bank activity and changes in the economic environment, including the forecasted level of risk.

Insurance provisions – provisions of an insurance company to cover current and future liabilities from written insurance contracts.

Interquartile range – the difference between the value of the third quartile and the value of the first quartile in the distribution of a variable.

Large enterprises – enterprises that employ at least 250 persons.

Leverage – the ratio of assets to core capital before regulatory deductions.

Loan spread – difference between banks' interest on loans and market interest rate.

Loan-to-Value – the ratio of the value of loan outstanding to current value of property on which the loan was secured.

Loans with identified impairment – loans from portfolio B for which objective evidence of impairment and decrease in the value of expected cash flows have been recognised (in banks applying IFRS) or loans classified as irregular pursuant to the Regulation of the Minister of Finance regarding principles for creating provisions for the risk of banking activity (in banks applying the Polish accounting standards).

Loss ratio – the ratio of insurance claims and benefits paid, taking into account the changes in the amount of provisions for unpaid claims, to premiums earned – gross or net (after reinsurance).

M2 liquidity ratio – supervisory measure of bank's liquidity defined by KNF Resolution No. 386/2008 on the establishment of liquidity standards binding for banks, in case of banks with total assets over 200 million zlotys. It is defined as the ratio of the sum of primary and supplementary liquidity reserves to the value of unstable external funds. The minimum value of the ratio is 1.00.

M4 liquidity ratio – supervisory measure of bank's liquidity defined by KNF Resolution No. 386/2008 on the establishment of liquidity standards binding for banks, in case of banks with total assets over 200 million zlotys. It is is defined as the ratio of the sum of own funds and stable external funds to the sum of non–liquid assets and assets of limited liquidity. The minimum value of the ratio is 1.00.

Net charges to provisions for impaired loans – charges to provisions for impaired loans less releases of provisions for impaired loans in a given period.

Net income from banking activity – the sum of net interest income and net non–interest income.

Net interest margin – the difference between interest income and interest expenses, divided by average assets in a given period.

Net percentage – a measure aggregating qualitative survey results; in the NBP senior loan officer opinion survey, the net percentage is calculated as the difference between the percentage of asset–weighted banks which eased credit policies (or observed a growth in loan demand) and the percentage of asset–weighted banks which tightened credit policies (or observed a decline in loan demand). Negative values of the net percentage reflect the tightening of credit policy (decline in loan demand) in net terms.

Non-interest income – the sum of income on fees and commissions, equities, other securities and other financial instruments with a variable income amount and the gain/loss on the swap position.

Non-interest margin – non-interest income for a given period to average value of assets in this period.

Operating costs – the sum of bank's general expense and amortisation.

Overnight Index Swap (OIS) – a transaction under which two parties are obliged to exchange interest payments from given nominal amount for a fixed term. Payments are denominated in the same currency and calculated with interest rate defined for each party. OIS rates presented in the Report are the fixed rates paid in exchange for interest based on average O/N rate for the duration of the contract.

Portfolio B – a portfolio of assets separated in banks' prudential reporting, comprising claims classified as available for sale or held to maturity as well as all financial instruments (including debt securities) classified as loans and receivables.

Premiums retention ratio – relation of premiums net of reinsurance to gross written premiums.

Pre–tax profit margin (TFI) – the ratio of gross financial result and total revenues.

Price–to–book value ratio – ratio of the price of one share of a company to accounting value of capital per share.

Property Market Database (BARN) – database of prices and features of flats in the primary and secondary market for commercial property developed by Narodowy Bank Polski under the programme of statistical studies of public statistics.

Small– and medium-sized enterprises – enterprises that employ fewer than 250 persons.

Solvency margin – defined by law parameter that determines the level of the insurance company's own capital.

Stable external funds – category of assets specified by KNF Resolution No. 386/2008 defining liquidity standards binding for banks. Approximately it consists of funds that the bank includes in stable funding sources, in particular core deposits, own securities issued that are not included in regulatory capital, other liabilities with the original maturity over 1 year, which the bank intends to renew and other liabilities resulting from banking activities, whose plan of obtaining and renewing has been approved by the supervisory board.

Supplementary liquidity reserve – category of assets specified by KNF Resolution No. 386/2008 of 17 December 2008 defining liquidity standards binding for banks. Approximately it consists of receivables and other assets in the amount obtainable within 7–30 days.

Systemic risk – a risk of disruption in the financial system with the potential to have serious negative consequences for the internal market and the real economy (in accordance with the Regulation of European Parliament and Council (EU) No. 1092/2010 of 24 November 2010 on the EU macroprudential oversight of the financial system and establishing a European Systemic Risk Board).

Technical profitability of the insurance – ratio of technical result and premiums earned, net of reinsurance.

Technical profitability on pension fund management – ratio of technical profit from pension fund management to revenues from pension fund management.

Technical profit/loss of PTE from the management of pension funds – the difference between revenues from managing pension funds (inter alia, fees from premiums paid–in and remuneration for pension fund

management) and the costs of pension fund management (inter alia, commissions for ZUS on premiums paid–in, the costs of acquisition, PTE general costs).

Technical result – the difference between income from premiums as well as the so-called other technical income and claims and benefits paid, changes in insurance provisions, the costs of conducting insurance activity (inter alia, administrative and acquisition expenses), the so-called other technical costs and a part of income from investments.

Unstable external funds – category of assets specified by KNF Resolution No. 386/2008 defining liquidity standards binding for banks. Approximately it consists of funds not included in stable external funds.

Vacancy rate – relation of vacant space to the accumulated (total) supply of commercial space in a particular location, e.g. town or district.

Value at Risk – maximum loss that can be incurred in a given time horizon with a given confidence level, estimated on the basis of historical data.

Viability rating – individual rating assigned to institutions by Fitch Ratings advising of the financial condition of single entities.

ZKPK Index – cumulated index of changes in banks' credit standards.

Abbreviations

ABS	Assed-backed securities
AC	Auto Casco
BFG	Bank Guarantee Fund
BGK	Bank Gospodarstwa Krajowego
BGŻ	Bank Gospodarski Żywnościowej
BIK	Credit Information Bureau
BOŚ	Bank Ochrony Środowiska
BPS	Bank Polskiej Spółdzielczości
CCP	Central counterparty
CDS	Credit Default Swap
CESEE	Central, Eastern and Southeastern Europe
CIRS	Cross Currency Interest Rate Swap
COR	Combined Operating Ratio
CPGBI	Citigroup Poland Government Bond Index
CPI	Consumer Price Index
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
DFE	Voluntary Pension Fund
DJIA	Dow Jones Industrial Average
EBA	European Banking Authority
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECB	European Central Bank
EMIR	European Market Infrastructure Regulation
ESA	European System of Accounts
ESMA	European Securities and Markets Authority
EU	European Union
EURO STOXX 50	Stock index of the biggest companies in the euro area
EURO STOXX BANKS	Stock index of the biggest banks in the euro area

Fed	Federal Reserve System
FI	Investment fund
FIO	Open–end Investment Fund
FOMC	Federal Open Market Committee
FRA	Forward Rate Agreement
FSB	Financial Stability Board
GDP	Gross domestic product
GPW	Warsaw Stock Exchange
GUS	Central Statistical Office
ICAAP	Internal Capital Adequacy Assessment Process
IFRS/IAS	International Financial Reporting Standards / International Accounting Standards
IMF	International Monetary Fund
IRS	Interest Rate Swap
KDPW	Central Securities Depository of Poland
KNF	Polish Financial Supervision Authority
LFS	Labour Force Survey
LIBOR	London Interbank Offered Rate
LTRO	Longer–term refinancing operations
LtV	Loan-to-value
MdM	“Housing for the Young”
MSCI EM	Stock index of companies from emerging economies
MXSZ	Maximum rate of return of Open Pension Fund
NBP	Narodowy Bank Polski
NC	NewConnect
NEG	Negative rating outlook – expected downgrade
NIF	Non-bank financial institution
NIM	Net interest margin
NSFR	Net Stable Funding Requirement
O/N	Overnight
OC	Third party liability insurance
OFE	Open Pension Fund
OIS	Overnight Index Swap
OTC	Over-the-counter
PAS	Polish Accounting Standards
PHM	Primary housing market
PTE	Pension fund management company
ROA	Return on Assets
ROE	Return on Equity
RPP	Monetary Policy Council

S&P	Standard & Poor's
S&P 500	Stock index of US companies
SACP	Stand-Alone Credit Profile
SFIO	Specialised Open–end Investment Fund
SHM	Secondary housing market
SKOK	Credit unions
SME	Small and medium-sized enterprise
SP	Treasury
STA	Stable rating outlook
SWSZ	Average weighted rate of return
TFI	Investment fund management company
TLTRO	Targeted Longer–Term Refinancing Operation
UFK	Insurance investment fund
UKNF	Office of the Polish Financial Supervision Authority
VaR	Value at Risk
WIBOR	Warsaw Interbank Offered Rate
WIG	Main index of the Warsaw Stock Exchange
WIG250	Warsaw Stock Exchange index of small companies
WIG30	Warsaw Stock Exchange index of large companies
WIG–Banki	Warsaw Stock Exchange index of banks
ZBP	Polish Bank Association
ZU	Insurance company
ZUS	Social Insurance Institution

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