Financial System in Poland 2013
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Summary

At the end of 2013, the financial system assets to GDP ratio in Poland amounted to 126.1%. Taking into account the existing degree and room for further development of the domestic financial system, it can be expected to positively affect economic growth. While further development of the banking sector would be welcome, it should have a slightly different borrowers’ structure in the loan portfolio. The growth of the size and liquidity of the organised markets for shares and non-Treasury debt securities would also be desirable. The description of individual segments of the financial system in Poland, changes in the related regulations and infrastructure and the results of the analyses, all of which are presented in the study, allow us to formulate the following conclusions and suggestions about the development of domestic financial institutions and markets.

Financial institutions

- In Poland, as in other countries of the region, the banking sector continued to play the key role in the financial system. In 2013, the domestic banking sector was developing slightly faster than the economy and its assets increased by approximately 4.2%. At the end of 2013, the value of loans and advances of the banking sector to the non-financial sector accounted for 50.3% of GDP. In 2013, banks continued to focus on lending to households, and there was only a slight change in the outstanding value of corporate loans. The value of PLN-denominated housing loans increased by 16.9%. A marked recovery was observed in the consumer credit market.

- In Poland, the share of corporate loans in the banking sector’s assets is one of the lowest both in the EU as a whole and among the countries of the region. The ratio of corporate loans to GDP is also one of the lowest in the EU. The observed deepening of a monoculture of domestic banks’ activities, i.e. more focus on lending to households with a fall in the importance of lending to enterprises may be regarded as disadvantageous from the point of view of economic development. While taking into account the diversified role of lending to enterprises and households in enhancing the development of the real economy, more emphasis should be put on increasing the scale of bank lending to enterprises.

- At the same time, the aforementioned monoculture of domestic banks shows how important it is to develop other sectors of the domestic financial system which may provide enterprises with non-banking sources of financing. Leasing has for a few years been the most important source of such funding (in 2013, the value of leasing contracts and loans by leasing companies to enterprises increased to PLN 28.6 billion). Less funds
were raised by enterprises in the capital market – the value of their long-term bond issues amounted to PLN 15.8 billion, while funds raised through the issue of shares on the WSE-organised markets amounted to PLN 6.1 billion. It is worth supporting (therein with the application of public funds) the development of domestic private equity funds, which willingly become involved in innovative projects.

- The practice of granting separate licences to domestic banks for carrying out brokerage and investment activities poses an excessive administrative burden for them. The requirement for banks to obtain a licence to conduct brokerage activities and separate these activities organisationally is seriously hindering their participation in some segments of the domestic financial market, in particular in the organised non-Treasury debt securities market (the Catalyst platform). A single banking license for both brokerage and investment activities conducted by banks in Poland seems justified. However, the implementation of such changes in national law may expose these institutions to new types of risk (e.g. increased exposure to market risk associated with changes in stock prices). Subjecting banks’ brokerage and investment activities to a single banking licence should therefore depend on a simultaneous implementation of such solutions that would help reduce the risk taken by financial institutions, i.e. by imposing an obligation on them to move trading activities conducted on their own account to another entity after exceeding a defined significance threshold.

- The quick increase in the balance sheet total of the cooperative banking sector in recent years has mainly resulted from the fact that cooperative banks attracted household deposits by offering competitive interest rates. These funds were largely invested in affiliating banks. Passing the cost of alluring deposits onto the affiliating banks forced them to take high risk. The way associations of cooperative banks operate needs to be changed not only due to problems associated with such a business model, but also due to the implementation of new capital and liquidity requirements for credit institutions in accordance with CRDIV/CRR. In order to meet the new supervisory requirements, cooperative and affiliating banks may need to establish closer collaboration under the institutional protection scheme, i.e. a group of entities that mutually warrant their liquidity and capital adequacy.

- The significance of credit unions in the financial system remained small (at the end of 2013, their assets accounted for 0.9% of domestic financial institutions’ assets). The capital position of credit unions was difficult and the value of own funds was inadequate compared to the scale and risk of their operations. Due to the regulatory changes introduced in 2013, Polish Financial Supervision Authority (KNF) and the Bank Guarantee Fund (BFG) were equipped with tools enabling them to initiate a restructuring process in this sector. The deposits of credit union members have been covered by the BFG guarantee since November 2013.
According to estimates, in 2013 non-bank lending companies granted PLN 2.7 billion worth of consumer loans and advances, and the value of their claims arising from the loans and advances amounted to PLN 3.1 billion at the end of year. Some of these entities fund their activities with bank loans, bond issues or advances from controlling entities, and they are therefore included in the shadow banking sector. The fact that non-bank lending companies are not subject to supervision has a negative impact on consumers’ safety and the development of Poland’s credit intermediation market as a whole. The malfunctions present in this market generate social risk and may lower confidence in financial institutions. A mandatory reporting requirement for these entities would provide a valuable source of information that will make it possible to, among others, monitor their activities.

In 2013, the largest increase in assets (28.9%) was observed in the sector of investment funds. The growth resulted from both a large net inflow of funds as well as a positive result on investment activity of these entities. The value of funds accumulated by investment funds reached its all-time high and the ratio of funds to household bank deposits increased again. The NBP interest rate cuts and the ensuing cuts in interest on bank deposits prompted households to invest savings in units of investment funds. Private equity investment funds that serve to provide customised investment solutions for enterprises and affluent persons continued to enjoy considerable interest.

The amendments to the functioning of pension funds, adopted in December 2013, will have a significant impact on the asset structure of the financial sector in Poland and the size of some segments of the domestic market for long-term debt instruments. The amendments included, among others, the transfer of 51.5% of net assets to a ZUS sub-account on 3 February 2014, the related redemption of the government bond portfolio held by open pension funds, and the introduction of a voluntary transfer of future pension contributions to these funds.

At the end of 2013, the Polish insurance sector had sufficient own funds to cover the statutory solvency ratios and held deposits higher than liabilities arising from insurance contracts. The decline in premium by 14.1% observed in the life insurance sector resulted from imposing a limit on the distribution of deposits offered as part of bancassurance products in the form of group insurance (polisolokaty), which formed a non-transparent chain of relationships between domestic financial institutions. The limit came on the back of the KNF announcement to take measures aimed at eliminating these products from the market. Insurance companies should adequately prepare for new prudential regulations which will enter into force on 1 January 2016 and will introduce new capital requirements and uniform risk management standards for insurance sectors across the EU countries.
Strong competition on the market for investment services made investment firms seek alternative sources of revenues. Those entities more often enabled clients to conclude cash-settled forward transactions for a large number of currency pairs via the online trading platforms. Retail clients who use these platforms should be aware of the fact that the large information asymmetry present in the foreign exchange market translates into smaller probability of generating a profit. Stipulating that brokerage and investment activities carried out by domestic banks should be covered by a single banking license will probably force investment firms to focus their activities on intermediation in transmitting client orders and on other services not associated with the domestic capital market. If the total value of transactions executed on this market by domestic investors does not increase significantly, some investment firms will look to exploit economies of scale, which will trigger mergers and acquisitions in the sector.

Financial markets and their infrastructure

The structure of interbank deposit transactions in Poland differed significantly from that in the euro area. Interbank unsecured deposits remained the main liquidity management instrument used by domestic banks. The volume and term structure of turnover in the interbank unsecured deposits market were determined by the small number of participants with structural excess liquidity and low credit limits imposed by banks on one another. O/N transactions dominated, and in 2013 their share in the turnover in this market exceeded 90%. FX swap transactions were concluded mainly with foreign banks that financed investments in the domestic capital market, in particular in the Treasury bond market, and speculated on the zloty exchange rate.

A relatively low share of repo transactions in the structure of interbank deposit transactions was primarily driven by banks’ habitual practices and not using uniform legal documentation. The domestic post-trading infrastructure for conditional transactions (i.e. the offer of KDPW group) complies with the standards used in mature financial markets, e.g. in the euro area. The development of the interbank conditional transactions market in Poland depends currently on the measures taken by banks and their liquidity management policy. It would be advisable to introduce relevant amendments to the standard master agreement for the conclusion of conditional transactions that was presented in the Polish Bank Association recommendation. The model should be adjusted to changes in the domestic bankruptcy law, new solutions in post-trading infrastructure and standards of the 2011 Global Master Repurchase Agreement, as well as regulate cross-currency repo transactions which the domestic banks may use in managing risk arising from the currency mismatch of assets and liabilities.
In 2013, changes were made in the system of Money Market Dealers and in the Rules for fixing WIBOR and WIBID reference rates, which were aimed at preserving their reliability and representativeness. Domestic banks, which use the WIBOR/WIBID rates to the greatest extent (among others, as they hold balance sheet receivables indexed by these rates and portfolios of WIBOR/WIBID-based derivative instruments), should participate in their fixing while complying with the supervisory recommendations on the internal process of fixing and providing quotations for its needs.

The changes being introduced in the pension system result in a decline in the Treasury bond debt by around 20%, and, at the same time, lead to a marked increase (by around 10 percentage points) in non-resident share in the structure of buyers of these instruments. Should disruptions in financial markets emerge, the absence of open pension funds in the domestic Treasury bond market may be conducive to a stronger increase in the yields of these instruments. So far, pension funds have had a stabilizing effect on this market as they purchased Treasury bonds even when there was an outflow of other investor groups.

The market for non-Treasury long-term debt instruments remains relatively poorly developed and not very liquid although in 2013 the value of outstanding instruments in each of its segments continued to grow significantly. The market for municipal bonds was strongly fragmented, which resulted from minor borrowing needs of smaller local government units and splitting issues into a number of series. Banks issued debt securities to finance their needs only to a minor extent.

The capitalisation of the Polish stock market increased to PLN 851.8 billion in 2013, thus enhancing its significance in Poland’s financial system and in the region. The ratio of capitalisation of domestic companies to Poland’s GDP exceeded 35.7%, which was driven by increases in stock prices, primarily of small and medium-sized companies, and the scale of new issues, including initial offerings. The liquidity of the domestic stock market continued to be low as compared to stock exchanges in developed countries. Increasing the requirements for issuers of shares in the NewConnect market and a further improvement in their credibility should, in the long term, positively affect the development of this market and lead to enhanced investor interest in instruments listed therein.

One of the effects of a quick development of trade infrastructure and a rise in the speed of transmitting and processing information is the popularisation of a new way of executing transactions in the stock market, i.e. high frequency trading (HFT). The new trading system – the Universal Trading Platform, which was launched on the Warsaw Stock Exchange in 2013, makes it possible to use such modern trading techniques. Both the academia and market practitioners are split over their assessment of the benefits and
threats arising from the popularisation of HFT. There is no doubt, however, that the model of competition based on the speed of placing orders does not contribute to improving the effectiveness of financial markets and deepens the structural advantage of the largest investors. Yet, it is much more difficult to assess the impact of HFT on stock market liquidity. It is, therefore, justified to introduce the requirement to flag orders generated by HFT investors as provided for in the MiFID II/MiFIR regulations. This will enable a future comprehensive analysis of the issue in question.

- Average daily turnover on the global spot market for the Polish zloty increased slightly in 2013 and amounted to USD 9.5 billion. The vast majority of transactions (over 80%) were concluded in the offshore market. The EUR/PLN exchange rate was largely determined by developments in the global financial markets and often poorly reflected flows arising from trading between real economy agents or non-resident investments in the domestic capital market.

- In 2013, the total value of transactions in OTC derivative instruments denominated in the Polish zloty in the offshore market was significantly higher than in the domestic market – transactions between non-residents accounted for more than 60% of the turnover in interest rate instruments and over 90% in the case of FX derivatives. This was primarily associated with enhanced activity of banks and hedge funds trading in the London market. A further development of the domestic market for these instruments, particularly interest rate derivatives, will largely depend on the decision of the European Commission on subjecting transactions in these instruments to the central clearing obligation. Even if there is no such obligation, domestic banks should clear transactions in standardised OTC derivatives instruments (as well as repo transactions) in authorised CCPs in order to mitigate counterparty credit risk.

- Polish entities can comply with all obligations imposed by the EMIR regulation relating to their activities in the derivatives market using post-trading infrastructure available in the domestic market. At the beginning of January 2013, KDPW_CCP extended the range of instruments accepted for clearing to include, among others, FRAs, IRSs and OISs denominated in the Polish zloty. In November, TR_KDPW was authorised by the European Securities and Markets Authority to collect reports containing data about all types of derivatives transactions.
1. The role of the financial system in the economy

The financial system is one of the key elements of a modern economy. The course of economic processes in the financial and the real sphere relies, to a great extent, on the quality of the financial system, the way it is organised and effectiveness of its functioning. Therefore, any distortions in the functioning of the financial system that manifest themselves, inter alia, in financial crises are – due to negative effects for the economy – the reasons for increased interest in the form, structure and rules that govern the operation of the system. A financial crisis often stimulates and is a catalyst for changes in the system, which is well illustrated by the initiatives taken in this regard after 2008.

Any recommendations of possible changes in the functioning of the financial system always follow an in-depth diagnosis and a discussion with broad participation of all stakeholders and the academic community, which is shown by the de Larosière¹, Liikanen², Vickers³, or Volcker reports⁴. The reports provided a diagnosis of the crisis and weaknesses of the financial system (on a number of occasions they focused on the banking system) and recommended directions of necessary changes. Consequently, they formed the basis for changes in the financial systems of European Union countries, the United Kingdom and the United States, respectively.

The European Commission document that provides a summary of the financial system reforms points out that “The overriding objective of the EU financial reform agenda is to create a financial system that serves the economy and enables sustainable economic growth.”⁵ It is an important statement indicating the desirable trends in the reconstruction of the financial system. According to it, a financial system is supposed to serve the economy and support economic growth, and not to act for its own sake, while jeopardising sustainable economic development.⁶

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⁶ Such a threat is indicated, inter alia, by A. Turner who points out that “there is no clear evidence that the growth in the scale and complexity of the financial system in the rich developed countries over the last 20–30 years has
1.1. Concept of the "financial system"

A financial system is "the collection of markets, institutions, instruments and regulations and techniques, through which the financial securities are traded, interest rates are determined, and financial services are produced and delivered around the world". According to another definition, a market-based financial system is composed of four links: financial instruments; financial markets; financial institutions; and the principles according to which the first three operate. Financial institutions include, inter alia, banks, non-bank credit institutions, investment funds, insurance companies, pension funds and investment firms. Financial markets include a money market, a capital market, a foreign exchange market and derivatives market. A key role in ensuring an appropriate functioning of the financial market is played by regulations, and also institutions that carry out oversight over individual institutions and financial markets and form a financial safety net. Market discipline alone is not the guarantee of an effective functioning of the financial system. On the other hand, shortcomings in the oversight and improper regulations may be one of the causes of an occurrence of a financial crisis.

A financial system ensures a flow of financial (monetary) means from entities that have net savings (i.e. they spend less than the income they generate) to entities that are net borrowers (i.e. they spend more than the income they generate). The flow of funds takes place via two main channels:

- directly – via financial markets,
- indirectly – through financial intermediaries (mostly banks).

A financial system cannot function properly without modern infrastructure that encompasses not only payment systems and systems of settlement and clearing transactions in financial instruments, but also institutions that enhance information transparency (e.g. credit registers) and market participant protection schemes (e.g. deposit guarantee schemes that are an important element of building stability and confidence in credit institutions).

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8 In addition to a market-based financial system, a public (fiscal and budget) financial system is also identified as part of the financial system. This study discusses a market-based financial system that will be generally called a financial system.

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1.2. Functions of the financial system

The original function of the financial system is to facilitate allocation of economic resources both over time and across space, in an uncertain environment.\(^{10}\) In addition to this function, a financial system should ensure:\(^{11}\):

- Exchange of value, i.e. making payments. A secure and efficient payments system is crucial for the functioning of the economy. The system should comply with the following requirements: be fast and settle transactions in a timely manner; be accessible to everyone who needs to make a payment or who is to receive a payment; be easy to integrate with other economic processes; be easy to use, safe, reliable and accessible and transparent, and its users should be aware of the possibilities of selecting payment methods and related costs.

- Intermediation, i.e. a transfer of funds between savers and borrowers. The financial system helps raise funds from savers by entities interested in obtaining financing. Intermediation may take various forms and does not only consist in deposit-taking and lending. For example, investment companies intermediate between issuers of securities and investors. Depending on the nature of a transaction, intermediation in question includes additional (supplementary) functions such as: the pooling of funds in order to finance large value loans with small-amount deposits; maturity transformation; risk assessment and data processing (e.g. the monitoring of potential borrowers to identify the opportunities of profitable lending growth); the monitoring of borrowers in order to mitigate loan default risk. Effective fund allocation is extremely important in intermediation, i.e. by channelling financial resources to the most effective projects. Thus, the financial system contributes to the growth of the productivity in the economy and to improving living conditions.

- Transfer of risk. A well-functioning financial system facilitates valuation and allocation of various types of risk: credit risk, market risk, insurance risk or operational risk. It is not the role of the financial system to fully eliminate risk, as it is not possible in practice, and would also have an unfavourable impact on innovation in the economy and entrepreneurship. The point is rather to facilitate risk transfer to the entities that are best prepared to manage it.


Liquidity. The financial system provides liquidity to its participants. If it functions properly, economic agents are able to convert their assets into cash over a short period of time and without unjustified loss in value.

The financial systems should also “produce information *ex ante* about possible investments and allocate capital and help monitor investments and exert corporate governance after providing finance”.¹²

Other classifications may also be found in the academic literature. One of these classifications, which presents the functions of the financial system in an illustrative way, is a division into¹³:

- monetary function. It consists in supplying money to the economy and facilitating its circulation. When compared with other classifications, it may be said that the function combines: payment function, liquidity provision function and money creation function (including conduct of a monetary policy).
- capital and redistribution function. The financial system enables the flow of free funds, and financial institutions (or mechanisms of the functioning of the market in financial instruments) facilitate transformation of risk, values and maturities for which the funds are lent.
- control function. As part of this function, the financial system enables control over cash flows, in particular over funds invested, lent and redistributed in the past. Therefore, it provides services that help control the effectiveness of the use of wealth and financial means.

The development of the financial system and achievement of its functions is not a goal in itself. The financial system serves other spheres of the economy. Its main task is to provide non-financial entities with access to a specific type of services. As a result, the financial system should support growth in the effectiveness of the functioning of other sectors of the economy, inter alia, by reducing transaction costs (costs of exchange). However, the services provided by the financial system involve resources and generate costs. Therefore, it is important to guarantee the high effectiveness of the services (given the required safety and quality levels) so that costs of financial intermediation are not an excessive burden on the economy.

The financial system affects the course of real economic processes and, consequently, may support economic development. If it does not function properly, it may also bring economic growth to a halt or even result in a severe economic crisis. The real sphere also has an impact on the financial system. The varied and changing needs relating to financial services, reported by households and enterprises, have an influence on the form, structure, size of the financial system, as well as the way it is functioning.

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1.3. Models of financial systems

When discussing the concept of a financial system, two main methods of capital flows have been set out (from surplus agents who have net savings to agents who are net borrowers), i.e. direct financing through financial markets, and indirect financing via financial intermediaries. The division into those two types of financing provides the basis for identification of two models of the financial system:\(^\text{14}\):

- market-oriented models (based mostly on financial markets) in which direct financing through financial markets prevails. It is also called Anglo-Saxon, Anglo-American or market-based model. United States and United Kingdom are the examples of countries typical of a market-based financial system.

- bank-oriented models (based mostly on banks) in which financing provided via financial intermediaries prevails. It is also called a continental or bank-based system. Germany and Japan are often indicated as the examples of countries whose financial systems are characteristic of this model.

In the academic literature, economists have long debated which of the models helps to better achieve functions of the financial system, most notably which model ensures the most effective transfer of funds from savers to investors. Theoretical arguments are cited in this context and empirical evidence is presented in the debate.

When analysing a bank-oriented financial model, the following advantages are highlighted:\(^\text{15}\):

- Banks, specialising in borrower assessment, may limit the cost of acquiring and processing of information on enterprises and potential investment projects. Thus, these institutions may contribute to a rise in savings and accumulation of capital in the economy. By identifying the


most valuable projects and enterprises, banks support innovation and effective capital allocation. Banks may also influence proper exercise of corporate governance, as well as control and enforce repayment of liabilities (loans granted) more effectively than the market.

- Banks may mitigate liquidity risk by building up savings and investing them both in short-term instruments and long-term securities.
- Banks enable individual investors to share risk, which helps to aim at projects with higher risk and higher rates of return.
- Banks can help mobilise capital to exploit economies of scale.

For a market-based system the following advantages are highlighted:

- higher liquidity, characteristic of the stock market, provides more incentives to investors to invest in acquiring and processing of information. Therefore, taking profits via transactions executed in the market is more likely.
- the capital market may improve allocation of resources and strengthen corporate governance, facilitating takeovers and tying managerial compensation to company’s performance.
- markets may also facilitate risk management and also reduce liquidity risk by enabling fast sale of financial instruments in more liquid markets.
- markets also play a positive role in aggregating diffused information and transmitting it to investors, which has beneficial implications for enterprise financing and performance.
- markets help more effectively finance projects with higher risk and higher expected rate of return, which helps to carry out innovative projects.

In addition to advantages associated with a specific financial system model, advocates of both a bank-oriented model and a market-oriented model try to highlight the weaknesses of a rival model.

Results of the empirical research provide no arguments in favour of one of the financial system models. The study of the relationships between a financial system and economic growth

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16 The literature cited in footnotes 14 and 15.
17 The following weaknesses are mentioned: the deficiencies of the market mechanisms, banks’ corporate control is better due to a fuller access to enterprises’ inside information, more effective risk diversification. On the other hand, advocates of a financial system based mainly on markets criticise the functioning of the banking sector and highlight the banks’ negative impact on the implementation of innovative projects by enterprises, ineffective corporate governance and a limited – compared to markets – offer of risk diversification and hedging instruments. More, inter alia, in: T. Beck, Financial Development and Economic Growth: Stock Markets versus Banks?, op. cit.
18 The research shows that the role of market-based financial intermediation increases when GDP per capita rises. The diversified behaviour of two different financial system models during downturn is also emphasised. Banks are more willing to provide the supply of credit in the period of normal economic slowdown, thus cushioning the impact of a recession. The shock absorption capacity is decreasing when the recession is associated with a financial crisis. In such a case, the downturn in countries with bank-based financial systems is more severe than in countries with market-based financial systems. More in: A. Demirgüç-Kunt, E. Feyen, R. Levine, The Evolving...
indicates the relevance of a general level of financial system development rather than its structure.\textsuperscript{19} Therefore, the results of the research are consistent with the approach that points to the significance of the quality of services provided by the financial system and not of its structure. Specific legal solutions and an applicable legal system play an essential role.\textsuperscript{20} It is also suggested that the component of financial development – explained by the entitlements of external investors and efficiency of a legal system in enforcing these rights – is strongly and positively related to long-term economic growth. The obtained relationship converges with the presented view that an effective legal system is an important factor influencing financial system development, which in turn affects long-term economic growth.

Therefore, setting banks against financial markets is not justified. In practice, we deal with a combination, in different proportions, of the two methods of financing economic agents. Banks and financial markets are very often complementary or expand together.\textsuperscript{21} By way of illustration, the following interdependencies can be indicated:

- a well-developed and liquid equity market may offset the negative effects associated with an excessive prevalence of banks over enterprises,
- banks and markets finance various corporate segments. Providing financing with capital raised in the equity market is mostly available to large enterprises with a long business record.

The results of comparative studies on the financial system structure in different countries allow to identify groups of countries whose financial systems are mostly market-based or are bank-


\textsuperscript{19} R. Levine, \textit{Bank-based or Market-based financial systems: Which is Better?}, op. cit.

\textsuperscript{20} The literature presents various views on factors influencing the design of the structure of the financial system. The views point out, inter alia, the relevance of political, cultural factors, geographical conditions or legal solutions. In the case of legal determinants, the relevance of the differentiation between legal systems based on Anglo-Saxon tradition and continental legal systems is emphasised. Countries with the Anglo-Saxon tradition of law (\textit{Common Law}), i.e. with a strong protection of shareholders’ and creditors’ rights, sound accounting regulations seem to be more market-oriented. In turn, countries that use a (French-styled) continental legal system, i.e. with weaker protection of shareholders’ and creditors’ rights and lower accounting standards are less market-oriented, and their financial systems are to a greater extent based on banks. More in: A. Demirgüç-Kunt, R. Levine, \textit{Bank-based and market-based financial systems: cross-country comparison}, op. cit.; R. La Porta, F. Lopez-de-Silanes, A. Shleifer, \textit{Law and finance}, Journal of Political Economy, Vol. 106, Issue 6, 1998; M. Thiel, \textit{Finance and economic growth – a review of theory and available evidence}, op. cit.; M. Siems, S. Deakin, \textit{Comparative Law and Finance: Past, Present and Future Research}, Journal of Institutional and Theoretical Economics, Vol. 166, 2010.

\textsuperscript{21} F. Song, A.V. Thakor, \textit{Financial system architecture and the co-evolution of banks and capital markets}, op. cit. The authors identify 3 forms of mutual relationships between banks and financial markets: competitiveness, complementarity and co-evolution.
The role of the financial system in the economy

The classification of 27 EU member states, which takes into account the relevance of banks and markets in the financial system and comparisons with the United States and Japan, was conducted on the basis of 23 various indicators that provide a description of financial systems. Four groups were identified:

- countries with financial systems based mainly on markets – the Netherlands, the United Kingdom, Belgium, France, Finland and Sweden. The structure of the financial markets of these countries is more similar to the financial system of the United States than to other EU countries.
- countries with bank-oriented systems – Austria, Denmark, Germany, Greece, Italy, Portugal and Spain. The structure of these countries’ financial systems is more similar to Japan’s financial system.
- Eastern European countries – Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. This group includes countries that joined the EU in 2004 or 2007. Generally speaking, their financial systems (both banking sector and financial markets) are smaller than the financial systems of the countries that had joined the EU prior to 2004.
- other countries – Ireland, Malta, Cyprus and Luxembourg. These countries were classified separately as differing from the remaining countries. The financial system of these four countries is characterised by a large banking sector and a high loan value to GDP ratio.

Countries with bank-oriented financial systems include Central and Southern Europe. The new EU member states also form a separate group because of the specificities of their financial systems. Countries with financial systems that are mainly market-based lie in north-western Europe and their banking sectors are large. This may chiefly stem from the banks’ cross-border activity. The assets and foreign liabilities of banks in these countries are much higher than in the neighbouring countries with bank-oriented systems. The sources of income of the two bank groups also differ significantly. In the case of countries with financial systems based mainly on markets, a substantial portion of banks’ income comes from fees and commission and not from interest, as is the case in countries with bank-oriented systems.

A mature and well-functioning financial system should be complete and diversified. Only then it is possible to gain benefits arising from complementarity or co-evolution of the system’s sub-sectors. The vulnerability of the financial system to distortions also diminishes, which facilitates maintaining its stability.

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1.4. Financial system and economic development

According to the accepted theoretical assumptions, a well-functioning financial system, which carries out all its functions effectively, should support economic development processes. This positive link has for years been reflected in results of the empirical research. The results have shown that there is a positive long-term link between the indicators that describe financial system development and economic growth. The research evidence has shown that effective financial intermediation helps improve capital allocation and drives GDP growth by increasing total factor productivity. The research conclusions have emphasised a strong positive link between financial system development and economic growth and the relevance of the level of financial development as a good predictor of future economic development.

The global financial crisis and its implications helped revise earlier optimistic views on the role of financial system and its influence on the development of real economic processes. It has turned out that the “deficiencies in the functioning of the financial system and shortcomings in the supervisory and regulatory framework” were one of “key contributors to the crisis”. The recent empirical research on relationships between the financial system and economic growth has shown that such a relationship is not linear, but is inverted U-shaped. It means that after exceeding a size threshold, the financial system ceases to positively impact economic growth. It may not only bring this growth to a halt but even reduce real economic processes.

According to the IMF paper, in countries with very large financial sectors no positive correlation has been found between financial system depth and economic growth. On the other hand, there is a positive correlation in countries with small and intermediate financial sectors, but

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24 M. Bijlsma, A. Dubovik, ibidem, p. 2.


only to certain threshold. When loans provided to the private sector are above 80-100% of GDP, the financial system starts to exert a negative effect on economic growth.

The study conducted under the auspices of the Bank for International Settlements\(^\text{29}\) has found that when the value of credit to the private sector reaches 90-100% of GDP, the financial system becomes a drag on productivity growth (measured as GDP-per-worker growth). Using another measure of the size of the financial system – employment in the financial sector – it has been found that when the share of employment in the financial sector is above 3.5% of total employment in the economy, this has a negative impact on productivity growth.

In another study, three financial sector size indicators were analysed (all indicators in relation to GDP): the value of private sector credit, the amount of liquid liabilities, and the value of total domestic credit (credit to private and public sectors). The threshold values obtained in the study beyond which one can speak of an adverse effect of the financial system on economic growth are as follows: for private sector credit – 88-95% of GDP, for liquid liabilities – 91% of GDP and for total domestic credit – 99% of GDP.\(^\text{30}\)

Among reasons for such relationships between financial system size and economic growth, the academic literature primarily identifies the implications of high banking sector growth. An excessive expansion of the banking system increases the risk of ineffective allocation of (human and capital) resources and enhances probability of severe financial crises.\(^\text{31}\)

At the same time, the need to deepen analyses and make more refine measures is emphasised. For example, using the measure of credit to the private sector, one should identify lending to households (consumer and housing loans) and lending to enterprises. As it turns out, only lending to enterprises is positively correlated with GDP growth. The growth effect comes therefore through lending to enterprises rather than to households. These conclusions confirm the results of research on various industries, according to which industries that are more reliant on external finance grow faster in countries with higher levels of lending to enterprises. In the case of lending to households, there is no such a relationship.\(^\text{32}\)

The conclusions presented above should be taken into account in the assessment of Poland’s financial system. Given the present level of its development, it may be expected that a further development of the financial system should have a positive effect on economic growth. However, taking into consideration the different role of lending to enterprises and households in


supporting expansion of the real sphere, more emphasis should be put on the growth in the scale of bank lending to enterprises.
2. Directions of the evolution of Poland’s financial system

In 2013, Poland’s economy was developing in an environment of low growth rates in major world economies and a decrease of the GDP in the euro area. Poland’s GDP growth rate was 1.7%, compared with 1.8% in 2012, and was accompanied by low inflation. The annual CPI amounted to 0.9% at the end of December 2013, mainly due to weak demand pressure and a fall of prices of a number of products in the global markets.\textsuperscript{33} From January to July, the Monetary Policy Council lowered the NBP interest rates six times, each time by 25 basis points. The NBP reference rate remained at 2.50% since 4 July 2013.

In such an environment, the economic condition of enterprises improved and gross fixed capital formation, including machinery and equipment, increased. Corporate investments were partly financed with external sources.\textsuperscript{34} This was supported by a less restrictive policy of banks in the second half of the year, and, in particular the easing of the standards of granting loans to small and medium-sized enterprises (SMEs), and moderate increases of the stock prices on the WSE-organised markets. The financial standing of households did not change significantly (stable unemployment rate and real disposable income). At the same time, household financial assets rose by 9.1% in 2013, but the growth of savings (bank deposits) was the lowest since 2005 (it amounted to 5.4%).

In the period analysed, sentiment in the world financial markets improved substantially, which was driven by an expansionary monetary policy of major central banks and sound macroeconomic data from some well-developed countries. The global fall in risk aversion was conducive to an inflow of investment to the financial markets of emerging economies, including to the domestic capital market. Foreign investors’ interest in the bond market dropped in late May in response to a higher likelihood of an earlier tapering of the quantitative easing programme by the Federal Reserve.

In 2013, these macroeconomic conditions and trends in the world financial markets fostered further financial system growth in the Polish economy. The ratio of domestic financial system assets to GDP rose by 4.9 percentage points compared with the end of 2012 and amounted to 126.1% at the end of December (Table 2.1). Compared to the ratio’s average value in the euro area

\textsuperscript{34} Sytuacja finansowa sektora przedsiębiorstw w IV kw. 2013 r. [Financial situation in the enterprise sector in 2013 Q4]. Warsaw, April 2014, NBP, p. 2.
countries, the Polish economy, similarly to other Central and Eastern European countries, still exhibited a relatively low level of financial intermediation (Figure 2.1). Given the extent and room for further development of the domestic financial system, it can be expected to have a positive effect on economic growth. At the end of 2013, assets of the institutions comprising the Polish financial sector amounted to PLN 2,095.1 billion, i.e. they were 7.0% higher than a year earlier. The increase was primarily caused by a rise in the value of the banking sector assets and the net assets of investment funds and open pension funds.

Table 2.1. Assets of the financial system as percentage of GDP in selected Central and Eastern European countries and in the euro area, 2010-2013 (%)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>116.2</td>
<td>116.4</td>
<td>121.2</td>
<td>126.1</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>140.7</td>
<td>147.0</td>
<td>153.2</td>
<td>167.0</td>
</tr>
<tr>
<td>Hungary</td>
<td>166.8</td>
<td>150.7</td>
<td>137.5</td>
<td>136.4</td>
</tr>
<tr>
<td>Euro area</td>
<td>493.0</td>
<td>493.8</td>
<td>498.3</td>
<td>480.8</td>
</tr>
</tbody>
</table>

Notes: Data for the euro area refer to 16 countries in 2010 and 17 countries in 2011-2013. Due to the change of the data source, inclusion of assets of money market funds in the financial system assets and adjustments sent by central banks, the data are not comparable with the data released in the previous editions of the report.
Sources: For the euro area – ECB Statistical Data Warehouse and Eurostat; for other countries – data provided by national central banks and the Central Statistical Office (GUS).

Figure 2.1. Financial system assets in selected EU countries at the end of 2013

Sources: Calculations based on data provided by ECB, Eurostat, GUS and NBP.

The analysis of financial institutions and markets of various countries against the level of their economic development implies that some segments of Poland’s financial system, including the banking sector, remain relatively poorly developed (Figure 2.2). The Polish financial system is also characterised by a relatively low level of stock market capitalisation and a low value of outstanding private sector debt securities, including corporate and bank bonds. At the same time, evidence from the recent global financial crisis shows that banking sectors, being a main element
of a number of financial systems, were too large in some countries and inadequate for the needs of the real economy.\footnote{Changing Global Financial Structures: Can They Improve Economic Outcomes?, in: Global Financial Stability Report. Restoring Confidence and Progressing on Reforms, Washington, October 2012, International Monetary Fund, pp. 150-152.}

**Figure 2.2.** Financial system development depending on the level of GDP per capita

Sources: NBP calculations based on data provided by the International Monetary Fund (World Economic Outlook, 04/2013), the World Bank (Financial Structure Dataset, 04/2013) as well as Central Statistical Office (GUS), Office of the Polish Financial Supervision Authority (UKNF), Warsaw Stock Exchange (WSE), Fitch Polska and NBP.

Note: The values of the regression function presented in the Figure were estimated for panel data which included information on the financial systems of 203 countries for the years 1991-2012.

The following development measures of the individual sectors of the financial systems were used:
- banking sector: loans to non-public sector to GDP (for Poland – banking sector’s loans and advances to the non-financial sector in domestic and foreign currency),
- equity market: capitalisation of domestic companies of the WSE Main List to GDP,
- insurance market: non-life and life insurance premium to GDP,
- public sector debt securities: outstanding value of general government debt securities to GDP,
- debt securities of other sectors: outstanding value of debt securities of financial institutions and enterprises to GDP.


In Poland, as in the majority of other countries of the region, the banking sector continued to play the major role in financial systems, although the Polish financial system can be viewed as the
least banking-oriented in Central and Eastern Europe (Figure 2.3). It results from a larger sector of collective investment undertakings, i.e. pension and investment funds, as compared to other countries in the region.

In Central and Eastern European countries, the level of banking sector development remained low in comparison with the euro area countries (Table 2.2). Domestic banks focused on providing traditional banking services, mainly on taking deposits from and lending to non-financial clients.

**Figure 2.3.** Composition of financial systems in Central and Eastern European countries at the end of 2013, by value of assets

![Figure 2.3](image)

Sources: For Slovakia, data were derived from the website of the central bank of Slovakia http://www.nbs.sk and ECB Statistical Data Warehouse; for other countries – data provided by national central banks; for Poland – NBP.

**Table 2.2.** Banking sector development levels (commercial and cooperative banks) in selected Central and Eastern European countries and in the euro area, 2011-2013 (%)

<table>
<thead>
<tr>
<th></th>
<th>Assets/GDP</th>
<th>Loans¹/GDP</th>
<th>Deposits²/GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>83.3</td>
<td>83.5</td>
<td>84.6</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>117.1</td>
<td>120.5</td>
<td>132.4</td>
</tr>
<tr>
<td>Hungary</td>
<td>104.2</td>
<td>93.8</td>
<td>87.8</td>
</tr>
<tr>
<td>Euro area</td>
<td>355.8</td>
<td>344.8</td>
<td>317.8</td>
</tr>
</tbody>
</table>

¹ Loans and advances from the banking sector to the non-financial sector in domestic and foreign currency.
² Deposits of the non-financial sector in the banking sector in domestic and foreign currency.
³ The data also include loans to non-bank financial institutions and deposits of those entities.
⁴ Assets, loans and deposits of the monetary financial institutions sector. The data for the euro area refer to 17 countries. The data are not fully comparable with the data published in previous versions of the report due to the change of the source and adjustments sent by central banks.

Sources: For the euro area: ECB Statistical Data Warehouse; for other countries – data provided by national central banks and GUS.
The year 2013 saw an increase in the value of assets of almost all types of financial institutions in Poland (Tables 2.3 and 2.4). The balance sheet total of investment firms decreased for the second year in a row, and the highest asset growth rate was registered in the investment funds sector.

Table 2.3. Assets\(^1\) of financial institutions in Poland, 2006-2013 (PLN billion)

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial banks(^2)</td>
<td>624.0</td>
<td>727.1</td>
<td>963.2</td>
<td>977.2</td>
<td>1,062.1</td>
<td>1,187.9</td>
<td>1,233.7</td>
<td>1,276.7</td>
</tr>
<tr>
<td>Cooperative and affiliating banks(^2)</td>
<td>57.8</td>
<td>65.7</td>
<td>75.9</td>
<td>82.4</td>
<td>96.4</td>
<td>106.1</td>
<td>115.8</td>
<td>129.5</td>
</tr>
<tr>
<td>Credit unions</td>
<td>6.0</td>
<td>7.3</td>
<td>9.4</td>
<td>11.6</td>
<td>14.0</td>
<td>15.6</td>
<td>16.8</td>
<td>18.7</td>
</tr>
<tr>
<td>Insurance companies</td>
<td>108.6</td>
<td>126.9</td>
<td>137.9</td>
<td>139.0</td>
<td>145.2</td>
<td>146.1</td>
<td>162.7</td>
<td>167.3</td>
</tr>
<tr>
<td>Investment funds(^3)</td>
<td>99.2</td>
<td>134.5</td>
<td>76.0</td>
<td>95.7</td>
<td>121.8</td>
<td>117.8</td>
<td>151.3</td>
<td>195.0</td>
</tr>
<tr>
<td>Open pension funds</td>
<td>116.6</td>
<td>140.0</td>
<td>138.3</td>
<td>178.6</td>
<td>221.3</td>
<td>224.7</td>
<td>269.6</td>
<td>293.3</td>
</tr>
<tr>
<td>Investment firms(^4)</td>
<td>10.8</td>
<td>11.8</td>
<td>8.6</td>
<td>9.9</td>
<td>10.1</td>
<td>9.0</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,023.0</td>
<td>1,213.3</td>
<td>1,409.3</td>
<td>1,494.4</td>
<td>1,670.0</td>
<td>1,808.3</td>
<td>1,958.9</td>
<td>2,095.1</td>
</tr>
</tbody>
</table>

\(^{1}\) Net asset value for banks, investment funds and open pension funds.
\(^{2}\) Banks that conduct operating activity. Commercial banks also include branches of credit institutions.
\(^{3}\) Due to the change of the data source, data on assets of investment funds since 2010 differ from data published in previous editions of the document. The data starting from 2010 are not fully comparable with the data concerning earlier periods.
\(^{4}\) Up to and including 2009, assets of investment firms included assets of brokerage houses and offices. Starting from 2010, assets of investment firms include exclusively assets of brokerage houses, due to the lifting of the obligation to financially separate the brokerage activity of banks.

Sources: NBP, Office of the Polish Financial Supervision Authority (UKNF), Analizy Online, National Association of Credit Unions (KSKOK).

Table 2.4. Growth in assets\(^1\) of financial institutions in Poland, 2010-2013 (y/y, %)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial banks(^2)</td>
<td>8.7</td>
<td>11.8</td>
<td>3.9</td>
<td>3.5</td>
</tr>
<tr>
<td>Cooperative and affiliating banks(^2)</td>
<td>17.0</td>
<td>10.1</td>
<td>9.1</td>
<td>11.8</td>
</tr>
<tr>
<td>Credit unions</td>
<td>20.7</td>
<td>11.4</td>
<td>7.7</td>
<td>11.3</td>
</tr>
<tr>
<td>Insurance companies</td>
<td>4.5</td>
<td>0.6</td>
<td>11.4</td>
<td>2.8</td>
</tr>
<tr>
<td>Investment funds</td>
<td>27.3</td>
<td>-3.3</td>
<td>28.4</td>
<td>28.9</td>
</tr>
<tr>
<td>Open pension funds</td>
<td>23.9</td>
<td>1.5</td>
<td>20.0</td>
<td>11.0</td>
</tr>
<tr>
<td>Investment firms</td>
<td>-7.1</td>
<td>9.8</td>
<td>-10.9</td>
<td>-4.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11.8</td>
<td>8.3</td>
<td>8.3</td>
<td>7.0</td>
</tr>
</tbody>
</table>

\(^{1}\) Net asset value for banks, investment funds and open pension funds.
\(^{2}\) Banks that conduct operating activity. Commercial banks also include branches of credit institutions.

Sources: NBP, UKNF, Analizy Online and KSKOK.

In 2013, assets of the banking sector grew by 4.2%. Their growth rate was similar to the 2012 figure but substantially lower than in 2010-2011, which was caused by persisting slowdown. The significant reliance of banking sector development on the general condition of the economy
largely stems from the prevailing share of loans to the non-financial sector in the banks’ asset structure (at the end of 2013, it was approximately 56%).

Banks continued to focus on lending to households. The value of housing loans denominated in the Polish zloty rose by 16.9% in 2013, which represents a slowdown in lending in comparison with previous years. The value of foreign currency-denominated loans declined, although they still accounted for half of the housing loan portfolio. A pronounced recovery was observed in the market for consumer loans (a 2.4% increase following the two-year long period when their value was falling), which was driven by banks’ lending policy easing in the second and third quarters of the year. In the second half of the year, the value of investment loans taken by enterprises increased, which may be related to improved economic outlook and investment demand growth. Despite this, the value of corporate loans rose only slightly compared with the end of 2012. As a result, the importance of financing enterprises as part of banks’ activity diminished again, which can be viewed as an unfavourable development from the point of view of sustainable economic development.

A substantial increase in investment fund net assets (by 28.9%) was driven by both large net inflows and a positive financial result on investment activity of these funds. The value of assets accumulated by investment funds was at its all-time high, and their ratio to bank deposits of households increased again (Figure 2.4). The NBP interest rate cuts were followed by cuts in interest on bank deposits, which made households seek more attractive forms of investing their savings than deposits. Households invested most savings in units of domestic bond funds, mainly investing in non-Treasury debt securities. Compared to 2012, households showed more interest in equity funds, which was related to strong price increases of the shares of domestic SMEs.

**Figure 2.4.** Assets of investment funds as percentage of bank deposits from households, 2006-2013

![Graph showing the percentage of bank deposits from households by investment funds from 2006 to 2013.](image)

Sources: NBP and Analizy Online.
The value of assets accumulated in open pension funds rose markedly in the period analysed. The net value of assets of open pension funds was strongly affected by the financial result from investment activity (PLN 19.9 bn) and, to a lesser extent, contributions transferred to the funds. The value of funds received by open pension funds from the Social Insurance Institutions (ZUS) in 2013 amounted to PLN 11.1 billion (compared to PLN 8.4 billion in 2012). The growth resulted from the statutory increase in the contribution transferred to open pension funds from 2.3% to 2.8% of its calculation basis.

These trends led to a slight decline in the banking sector’s share in the structure of financial sector assets, while the share of non-credit financial institutions rose (Figure 2.5 and 2.6).

**Figure 2.5. Asset structure of the Polish financial system, 2006-2013**

![Asset structure of the Polish financial system, 2006-2013](image)

Sources: NBP, UKNF, Analizy Online and KSKOK

**Figure 2.6. Share of individual financial institutions in the asset structure of the Polish financial system in 2012 and 2013**

![Share of individual financial institutions in the asset structure of the Polish financial system in 2012 and 2013](image)

Sources: NBP, UKNF and Analizy Online.
At the end of 2013, 67 commercial banks, including 28 branches of credit institutions, operated in Poland. Also 571 cooperative banks and two affiliating banks carried out their operations on the domestic market. A further consolidation in the banking sector, the insurance sector and the pension fund management companies sector was accompanied by a marked increase in the number of investment funds (Table 2.5). This stemmed mainly from the establishment of private equity investment funds (in the form of closed-end investment funds) that serve to provide customised investment solutions for companies or affluent individuals. The Polish Financial Supervision Authority was also notified by foreign financial entities of their intention to conduct business activity in Poland.

<table>
<thead>
<tr>
<th>Table 2.5. The number of financial institutions in Poland, 2006-2013¹</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial banks²</td>
<td>60</td>
<td>61</td>
<td>67</td>
<td>64</td>
<td>67</td>
<td>66</td>
<td>68</td>
<td>67</td>
</tr>
<tr>
<td>Affiliating banks²</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cooperative banks²</td>
<td>584</td>
<td>581</td>
<td>579</td>
<td>576</td>
<td>576</td>
<td>574</td>
<td>572</td>
<td>571</td>
</tr>
<tr>
<td>Credit unions</td>
<td>70</td>
<td>67</td>
<td>62</td>
<td>62</td>
<td>59</td>
<td>59</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>Insurance companies³</td>
<td>65</td>
<td>67</td>
<td>66</td>
<td>64</td>
<td>63</td>
<td>61</td>
<td>59</td>
<td>58</td>
</tr>
<tr>
<td>Investment funds (investment fund management companies)⁴</td>
<td>241</td>
<td>277</td>
<td>319</td>
<td>369</td>
<td>407</td>
<td>482</td>
<td>580</td>
<td>636</td>
</tr>
<tr>
<td></td>
<td>(26)</td>
<td>(33)</td>
<td>(39)</td>
<td>(43)</td>
<td>(50)</td>
<td>(50)</td>
<td>(54)</td>
<td>(55)</td>
</tr>
<tr>
<td>Open pension funds (pension fund management companies)⁵</td>
<td>15</td>
<td>15</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Investment firms⁶</td>
<td>47</td>
<td>53</td>
<td>58</td>
<td>59</td>
<td>50</td>
<td>51</td>
<td>53</td>
<td>57</td>
</tr>
</tbody>
</table>

¹ The table presents the number of institutions whose assets were taken into account in Table 2.3. It does not include foreign entities which may pursue cross-border activity (without their legal and organisational presence in Poland), branches of insurance companies and branches of foreign investment companies.

² Banks that conduct operating activity. The number of commercial banks also includes branches of credit institutions. In 2006 there were 12, in 2007 – 14, in 2008 and 2009 – 18, in 2010 and 2011 – 21, in 2012 – 25, and in 2013 – 28 branches of credit institutions.

³ Entities carrying out operating activity in the area of insurance and reinsurance.

⁴ Up to and including 2007, the number of established investment funds and investment fund management companies (pursuant to a KNF decision), in 2008 and 2009, the number of entities registered with the Investment Fund Register kept by the Regional Court in Warsaw; since 2010, the number of operating funds.

⁵ The number of pension fund management companies equals the number of open pension funds.

⁶ Up to and including 2009, the number of investment firms included the number of brokerage houses and offices. Since 2010, the number of investment firms applies exclusively to brokerage houses.

Sources: NBP, UKNF and KSKOK.

The capitalisation of the Polish stock market rose to PLN 851.8 billion in 2013, which increased the significance of this market in Poland’s financial system and in the region (Table 2.6). Trends on the stock markets of emerging economies pushed down stock prices of the largest and most liquid companies listed on the Warsaw Stock Exchange (WSE). At the same time, domestic factors led to strong increases in the stock prices of SMEs. As a result, the broad market index WIG rose by 8.1% in 2013. Shares of twenty three companies (19 in 2012) were admitted to trading in the regulated market, and in the non-regulated organised NewConnect market – 42 companies (89 in
The value of new shares issued by these companies stood at PLN 0.7 billion (PLN 1.4 billion in 2012). The liquidity of the Polish stock market remained low compared to stock exchanges in developed countries. The growing share of non-residents in the WSE capitalisation was observed, which amounted to 45.2% at the end of 2013.

Table 2.6. Characteristics of stock markets in selected Central and Eastern European countries and in the euro area, 2011-2013

<table>
<thead>
<tr>
<th></th>
<th>Domestic companies capitalisation (EUR billion)</th>
<th>Domestic companies capitalisation to GDP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>107.5</td>
<td>134.8</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>29.2</td>
<td>28.2</td>
</tr>
<tr>
<td>Hungary</td>
<td>14.6</td>
<td>15.7</td>
</tr>
<tr>
<td>Euro area</td>
<td>4,481.2</td>
<td>5,049.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Liquidity ratio (%)</th>
<th>Number of listed companies (including new companies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>65.3</td>
<td>37.2</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>51.8</td>
<td>35.4</td>
</tr>
<tr>
<td>Hungary</td>
<td>94.3</td>
<td>53.6</td>
</tr>
<tr>
<td>Euro area</td>
<td>137.4</td>
<td>95.5</td>
</tr>
</tbody>
</table>

1. All values also include alternative trading systems, if such platforms were run by the operator of a given stock exchange.
2. Indices calculated for the euro area include the following stock exchanges: Athens Exchange, Deutsche Börse, NYSE Euronext (the European part), Irish Stock Exchange, Ljubljana Stock Exchange, Luxembourg Stock Exchange, NASDAQ OMX Nordics & Baltics (formerly NASDAQ OMX Helsinki), Spanish Exchanges (BME), Wiener Börse, Cyprus Stock Exchange, Malta Stock Exchange and Bratislava Stock Exchange.
3. The ratio of net turnover value to stock market capitalisation.
4. Includes domestic and foreign companies.

Note: Due to the data revisions, the data may differ from the data presented in previous editions of the report.

Sources: Federation of European Stock Exchanges, Eurostat and WSE.

The money bills market remained the largest segment of the short-term debt securities market in 2013. The significant increase in the value of the instruments observed in recent years came on the back of growing excess liquidity in the domestic banking sector. The public debt maturity-extending strategy, consistently pursued by the Ministry of Finance, resulted, inter alia, in a

36 The value of new issues pertains to domestic and foreign companies that conducted IPOs in the WSE Main List and the NewConnect market.
substantial reduction of the scale of Treasury bill issues (starting from August 2013, no Treasury bills have been outstanding). Enterprises and banks issued short-term debt securities for financing their needs only to a minor extent.

The size of the Treasury bond market grew substantially in recent years, which was strictly associated with the scale of the state’s borrowing needs and the implemented public debt management strategy. Poland’s Treasury bond market was the largest market for these instruments in Central and Eastern Europe and the 9th largest market in the European Union. At the same time, it remained a dominant and most liquid segment of the domestic debt securities market (Table 2.7). In 2013, the average daily turnover of unconditional transactions in Treasury bonds amounted to PLN 14.3 billion. The market for non-Treasury long-term debt instruments remained relatively poorly developed, although the value of outstanding instruments in each of its segments continued to grow markedly. As a result, the share of non-Treasury instruments in the domestic debt securities market increased from 11.1% at the end of 2012 to 11.9% at the end of 2013.

Table 2.7. Outstanding value of individual instruments of money and capital markets as of year-end, 2010–2013 (PLN billion)

<table>
<thead>
<tr>
<th>Instrument</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treasury bills</td>
<td>28.0</td>
<td>12.0</td>
<td>6.1</td>
<td>0.0</td>
</tr>
<tr>
<td>NBP bills</td>
<td>74.6</td>
<td>93.4</td>
<td>127.5</td>
<td>131.4</td>
</tr>
<tr>
<td>Short-term bank debt securities</td>
<td>2.6</td>
<td>7.7</td>
<td>5.9</td>
<td>4.2</td>
</tr>
<tr>
<td>Short-term corporate bonds</td>
<td>11.7</td>
<td>15.9</td>
<td>18.5</td>
<td>16.2</td>
</tr>
<tr>
<td>Marketable Treasury bonds</td>
<td>471.3</td>
<td>495.2</td>
<td>520.0</td>
<td>565.7</td>
</tr>
<tr>
<td>BGK bonds for National Road Fund</td>
<td>14.7</td>
<td>22.6</td>
<td>25.6</td>
<td>25.4</td>
</tr>
<tr>
<td>Long-term corporate bonds</td>
<td>21.6</td>
<td>29.7</td>
<td>32.3</td>
<td>37.8</td>
</tr>
<tr>
<td>Municipal bonds</td>
<td>10.9</td>
<td>14.4</td>
<td>15.6</td>
<td>18.6</td>
</tr>
<tr>
<td>Long-term bank debt securities¹</td>
<td>4.4</td>
<td>9.5</td>
<td>17.2</td>
<td>20.0</td>
</tr>
<tr>
<td>Covered bonds</td>
<td>2.5</td>
<td>2.9</td>
<td>3.1</td>
<td>3.3</td>
</tr>
</tbody>
</table>

¹ The data include only bonds and bank securities, denominated in the Polish zloty and in foreign currency, issued by banks operating in Poland. European Investment Bank bonds and bonds issued by EU credit institutions were also traded in the domestic market.

Note: Due to data revisions, the data may differ from the data presented in previous editions of the report.

Sources: The Ministry of Finance, NBP, National Depository for Securities (KDPW) and Fitch Polska.

A continuation of changes in the structure of turnover that started in 2012 was observed in the deposit transactions market, which is used mainly by financial institutions to manage liquidity. The most liquid segment of the Polish money market was the conditional transactions market, where SBB operations collateralised with Treasury bonds prevailed. The average daily value of conditional transactions rose by almost 15%, while at the same time the turnover in the market for FX swaps and unsecured interbank deposits declined (Table 2.8).
### Table 2.8. Average daily net turnover in the domestic financial market, 2010-2013 (PLN million)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equity and debt instruments market</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shares and allotment certificates</td>
<td>933.3</td>
<td>1,076.1</td>
<td>820.0</td>
<td>1,042.0</td>
</tr>
<tr>
<td>Treasury bonds</td>
<td>23,923.6</td>
<td>29,555.3</td>
<td>28,491.7</td>
<td>30,113.8</td>
</tr>
<tr>
<td>Treasury bills</td>
<td>2,110.3</td>
<td>1,250.3</td>
<td>520.0</td>
<td>286.9</td>
</tr>
<tr>
<td><strong>Deposit transactions market</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FX swap transactions</td>
<td>10,855.2</td>
<td>12,928.0</td>
<td>11,520.8</td>
<td>9,508.6</td>
</tr>
<tr>
<td>Repo/SBB transactions</td>
<td>9,143.2</td>
<td>11,572.5</td>
<td>12,557.5</td>
<td>14,508.2</td>
</tr>
<tr>
<td>Unsecured interbank deposits</td>
<td>7,025.4</td>
<td>6,195.4</td>
<td>5,874.2</td>
<td>5,833.4</td>
</tr>
<tr>
<td><strong>Derivatives transactions market</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FX forwards</td>
<td>1,318.1</td>
<td>1,379.6</td>
<td>1,210.7</td>
<td>1,396.1</td>
</tr>
<tr>
<td>CIRS transactions</td>
<td>154.4</td>
<td>113.3</td>
<td>200.9</td>
<td>188.3</td>
</tr>
<tr>
<td>Currency options</td>
<td>341.7</td>
<td>321.5</td>
<td>220.6</td>
<td>273.3</td>
</tr>
<tr>
<td>FRAs</td>
<td>3,504.9</td>
<td>5,572.6</td>
<td>5,116.4</td>
<td>5,772.7</td>
</tr>
<tr>
<td>IRSs</td>
<td>1,353.0</td>
<td>2,218.8</td>
<td>1,698.4</td>
<td>2,100.0</td>
</tr>
<tr>
<td>OISs</td>
<td>963.7</td>
<td>1,215.0</td>
<td>633.5</td>
<td>441.4</td>
</tr>
<tr>
<td>WIG20 futures</td>
<td>1,319.6</td>
<td>1,381.6</td>
<td>832.8</td>
<td>813.8</td>
</tr>
<tr>
<td><strong>Spot FX market</strong></td>
<td>4,280.0</td>
<td>5,219.1</td>
<td>5,179.9</td>
<td>5,106.8</td>
</tr>
</tbody>
</table>

Notes: 1. Average daily net turnover means the value of the transactions (transactions calculated individually). In the case of FX swap market, turnover value was calculated for only one currency of the transaction.
2. The value of turnover in the Treasury bond and bill market takes into account unconditional and conditional transactions (repo and sell-buy-back). In 2013, the average daily value of unconditional transactions in the market for these instruments amounted to PLN 14.3 billion and PLN 70 million.
3. The value of conditional transactions (repo and sell-buy-back) was calculated according to the initial exchange value. For FX swap transactions, the net turnover value was calculated according to the initial exchange value.
4. For the following markets: FX swap, spot FX, FX forwards, currency options and interest rate derivatives the values represent the value of an exchange transaction involving the Polish zloty or PLN-denominated instruments. The influence of changes in the population of Money Market Dealers was eliminated.
5. The turnover in shares includes the value of session and block transactions.
6. The turnover in WIG20 futures was calculated according to settlement values, taking into account session and block transactions.
7. The turnover in the foreign exchange market includes domestic transactions only. It does not include the offshore market.
8. The turnover in the markets for interest rate derivatives refers to domestic money market rates instruments.

Sources: NBP study based on data from the WSE, the Ministry of Finance and NBP.

The turnover also fell in the domestic market for spot FX transactions and in the OIS market. The FRA market was the most liquid OTC derivatives market. As in previous years, the majority of zloty exchange transactions and OTC FX derivatives operations were concluded in the offshore market, mainly in London and New York. This means that the zloty exchange rate is to a large extent determined by operations executed between non-residents. Investor activity in the exchange-traded derivatives market concentrated on the segment of WIG20 futures.

The year 2013 saw a development of post-trade infrastructure of the market for financial instruments in Poland. In early January, KDPW_CCP extended the range of instruments accepted
for clearing to include, among others, FRAs, IRSs and OISs denominated in the Polish zloty and repo transactions collateralised by domestic Treasury bonds. In November, TR_KDPW was authorised by the European Securities and Markets Authority to collect data on all types of derivatives transactions. In addition, in the period analysed changes were made in the Money Market Dealers system and in the Rules for fixing WIBID and WIBOR reference rates, aimed at preserving their reliability and representativeness.
3. Households and enterprises in the financial market in Poland

The financial system facilitates the flow of capital between entities with surpluses and entities in need of funds. The circulation of funds in the financial system takes places via banks or the financial market, where businesses issue securities (shares or bonds). Investors, including households, may acquire securities either directly in the financial market or via financial institutions (i.a. investment funds).

3.1. Financial assets of households

The choice of the form of saving made by households is determined by both microeconomic (e.g. their financial standing) and macroeconomic factors (economic situation of the country). Depending on the impact of individual determinants, households decide about the amount of savings and choose specific savings and investment products. The level of savings of domestic households and the form thereof are important for economic growth and financial system development.

Surveys of the living conditions and quality of life of households in Poland show that in 2013 40% of respondents said that they had had savings.\(^{37}\) In terms of value, the structure of the savings has been similar for years – households with savings below three times their monthly income prevail among households having available funds. Although the slowdown in the growth of real disposable income was observed in the analysed period, consumer sentiment improved both with regard to the current financial position and forecasted saving trends (Figure 3.1.).

In 2013, household financial assets\(^{38}\) grew by 9.1% and amounted to PLN 889.5 billion at the end of December 2013. They represented 54.4% of GDP, i.e. 4.6 percentage points more than in the previous period (Figure 3.2.). Similarly to 2012, the asset growth was primarily driven by changes


\(^{38}\) In this analysis, household financial assets include the following items: deposits at banks and credit unions, investment fund units purchased by households, unit-linked assets and life insurance saving premiums corresponding to the value of technical provisions in life insurance, Treasury securities, shares listed on the WSE-organised markets, cash in circulation (excluding vault cash) and non-Treasury debt securities. Funds kept on accounts at open pension funds are different in their nature than the above categories of financial assets in which households invest their savings, as it is not possible to freely use the funds.
in the value of bank deposits and investment fund units. A decline in value was registered only in the case of non-Treasury securities held in households’ portfolios.

**Figure 3.1. Public sentiment surveys on savings and dynamics of disposable income, 2006-2013**

Notes: Quarterly values of disposable income were deflated by the quarterly CPI. Quarterly dynamics are calculated with reference to the corresponding quarter of the previous year. A positive average of household assessment balances means the preponderance of consumers who take a positive view of the changes over consumers who take a negative view of the changes.


**Figure 3.2. Households’ financial assets, 2006-2013**

Note: Due to adjustments, data for 2012 may differ from the data presented in the report’s previous edition.

Sources: Based on GUS, UKNF, Analizy Online and NBP data.
The structure of household financial assets is derived from the declared goals of saving (in Poland, these are primarily current consumption needs and unexpected events\(^{39}\)), and also demographic and social features of society, such as age, sex, place of residence, education or income. The development of Poles’ attitudes towards saving is substantially hindered by the insufficient level of education on the basic concepts in economics and finance. The types of assets most preferred by households in Poland are those that enable their owners to use funds instantly or withdraw them easily, and are at the same time regarded as the safest funds (Figure 3.3.). At the end of 2013, deposits at banks and credit unions, and cash accounted for a total of 74.6% of household financial assets (Table 3.1.). The value of cash accumulated by households totalled PLN 109.8 billion.

**Figure 3.3. Structure of household financial assets, 2006-2013, as at period-ends**

![Graph showing the structure of household financial assets from 2006 to 2013](image)

Notes: Units of unit-linked funds include life insurance saving premiums. Sources: NBP estimates based on UKNF, Analizy Online and NBP data.

In 2013, the value of deposits placed by households at banks rose by 6.4%, i.e. less than in 2012. The Poles’ propensity to save by depositing funds with banks was hindered by a further fall in interest on deposits caused by continued interest rate cuts by the Monetary Policy Council (average interest on new zloty deposits dropped by 160 basis points, from 4.2% in December 2012 to 2.6% in December 2013), and to some extent, by lower wage growth. The value of deposits grew most in December. The increase was largely seasonal and was related to the payout of additional benefits by employers (bonuses) that are commonly observed in this period of the year.

\(^{39}\) According to the results of the survey *Postawy Polaków wobec oszczędzania* [The Poles’ Attitudes towards Saving], a report by the Kronenberg Foundation at Citi Handlowy, TNS Polska, October 2013, p. 39 and p. 50.
Table 3.1. Value of household financial assets and their structure, 2010–2013, as at period-ends

<table>
<thead>
<tr>
<th>Financial assets</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank deposits</td>
<td>413.1</td>
<td>467.8</td>
<td>504.2</td>
<td>536.5</td>
</tr>
<tr>
<td>Deposits at credit unions</td>
<td>13.2</td>
<td>14.7</td>
<td>15.7</td>
<td>17.6</td>
</tr>
<tr>
<td>Units of investment funds</td>
<td>73.8</td>
<td>62.4</td>
<td>72.5</td>
<td>90.4</td>
</tr>
<tr>
<td>Units of unit-linked funds and life insurance-saving premiums</td>
<td>74.1</td>
<td>69.9</td>
<td>77.9</td>
<td>80.0</td>
</tr>
<tr>
<td>Treasury securities</td>
<td>10.1</td>
<td>8.8</td>
<td>8.5</td>
<td>9.3</td>
</tr>
<tr>
<td>Non-Treasury securities</td>
<td>2.4</td>
<td>2.2</td>
<td>1.8</td>
<td>1.3</td>
</tr>
<tr>
<td>Shares listed on the WSE</td>
<td>51.1</td>
<td>38.7</td>
<td>37.2</td>
<td>44.6</td>
</tr>
<tr>
<td>Cash in circulation (excluding bank vault cash)</td>
<td>86.8</td>
<td>96.9</td>
<td>97.7</td>
<td>109.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>724.6</td>
<td>761.4</td>
<td>815.5</td>
<td>889.5</td>
</tr>
</tbody>
</table>

Structure of household financial assets (%)

<table>
<thead>
<tr>
<th>Financial assets</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank deposits</td>
<td>57.0</td>
<td>61.4</td>
<td>61.8</td>
<td>60.3</td>
</tr>
<tr>
<td>Deposits at credit unions</td>
<td>1.8</td>
<td>1.9</td>
<td>1.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Units of investment funds</td>
<td>10.2</td>
<td>8.2</td>
<td>8.9</td>
<td>10.2</td>
</tr>
<tr>
<td>Units of unit-linked funds and life insurance-saving premiums</td>
<td>10.2</td>
<td>9.2</td>
<td>9.6</td>
<td>9.0</td>
</tr>
<tr>
<td>Treasury securities</td>
<td>1.4</td>
<td>1.2</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Non-Treasury securities</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Shares listed on the WSE</td>
<td>7.1</td>
<td>5.1</td>
<td>4.6</td>
<td>5.0</td>
</tr>
<tr>
<td>Cash in circulation (excluding bank vault cash)</td>
<td>12.0</td>
<td>12.7</td>
<td>12.0</td>
<td>12.3</td>
</tr>
</tbody>
</table>

Note: Due to adjustments, data for 2012 may differ from the data presented in the report’s previous edition.
Sources: The study based on UKNF, Analizy Online and NBP data.

The value of units of investment funds\(^{40}\) in the household portfolio increased by 24.7%. The change in value of this part of the household deposit portfolio resulted primarily from net capital inflow to these financial institutions. The interest rate cuts made households seek more attractive forms of investing their savings than bank deposits. Households purchased mainly units of funds investing in non-Treasury debt securities, and withdrew money from Treasury bond funds.\(^{41}\) Compared to 2012, equity funds attracted greater interest, which was mainly related to strong increases in stock prices of small and medium-sized companies. The highest inflow of funds to investment funds was recorded in the second quarter of 2013, when it amounted to net PLN 4.7 billion (Figure 3.4.).

\(^{40}\) Excluding the units purchased by insurance companies as a result of life insurance agreements concluded by natural persons with unit-linked funds.

\(^{41}\) T. Miziołek (ed.), *Rynek funduszy inwestycyjnych w Polsce w 2013 r.*, [Investment fund market in Poland in 2013], Warsaw 2014, Chamber of Fund and Asset Management.
The value of units of unit-linked funds and life insurance saving premiums in the household portfolio saw a slight increase in 2013. The growth of this household financial asset category was primarily driven by natural persons’ greater interest in buying units of unit-linked funds. At the same time, in the period analysed there was a decrease in the sale of short-term life insurance products (polisolokaty). Fewer banks were engaged in intermediation in the sale of these financial products, which was related to the 2013 entry into force of Recommendation M42 aimed at improving operational risk management at banks and to scheduled developments in tax regulations concerning insurance-wrapped deposits.

The value of shares in the investment portfolio of Poles went up by 19.9% to PLN 44.6 billion in the period analysed. The change in the portfolio’s value was primarily associated with the rising prices of equity instruments on the markets organised by the WSE.

The value of Treasury bonds in households’ portfolio rose by 9.4% to amount to PLN 9.3 billion at the end of 2013. The rise in investment in retail government bonds was primarily driven by the high demand for a one-off issue of fixed-interest 13-month bonds.

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42 Resolution No. 8/2013 of the Polish Financial Supervision Authority of 8 January 2013 on issuing Recommendation M on operational risk management at banks (Official Journal of KNF 2013, item 6). The resolution entered into force on 8 January 2013.
3.2. External sources of financing of Polish enterprises

The economic condition of non-financial enterprises improved in 2013. The growth of revenues (by 2.4% in nominal terms) was higher than the growth of costs (by 1.3%), resulting in an increase in their pre-tax profit by 8.8% compared to 2012. Profit from operating activity totalled PLN 388.9 billion. Capital expenditures rose by 5.9% in real terms, and 36.3% of entities expanded their investments (indicator above the long-term average).43

In the first half of 2013, banks tightened lending terms and criteria, especially for long-term loans. In the second half of the year, these criteria were eased, mainly for SMEs, on the back of the improved growth outlook for Poland. However, at the same time spreads on riskier loans widened.44 The value of loans granted to enterprises by banks, was 0.2% higher at the end of 2013 than at the end of the previous year.

Leasing was an important non-banking external source of financing for non-financial enterprises, in particular for SMEs (Figure 3.5). Leasing provides financing of tangible fixed assets to entities with short business record that face difficulties in accessing alternative external sources of funding, such as loans or debt securities issuance. The acceleration of the turnover growth rate in Poland’s leasing market was observed in 2013 which also saw a rise in the number of enterprises that entered into leasing contracts to around 129.3 thousand from 124.6 thousand in 2012. These developments were supported by the improved economic condition of enterprises and the growth of fixed capital formation in this sector.45

In 2013, the value of new share issues by non-financial enterprises, admitted to trading in the WSE markets (the WSE Main List and NewConnect), amounted to PLN 6.1 billion. Increases in equity prices in the WSE markets, in particular of SMEs, and the improved growth outlook for Poland in the second half of the year encouraged enterprises to issue shares in these markets. Initial offers on the WSE Main List and NewConnect were conducted by a total of 65 domestic enterprises, of which 65% floated their shares in the alternative trading system. Even small entities and entities with short business record were able to raise capital on NewConnect due to relatively low issue costs and fees charged on the issuer for listing its shares.

43 Sytuacja finansowa sektora przedsiębiorstw w IV kw. 2013 r., Warsaw, April 2014, NBP.
44 Senior loan officer opinion survey on bank lending practices and credit conditions – 2013 and 2014 Q1 editions, Warsaw, 2013 and 2014, NBP.
Figure 3.5. Selected non-banking external sources of financing of Polish enterprises, 2010-2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Long-term bond issues on the domestic market</th>
<th>Stock issues on the WSE</th>
<th>Leasing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>7.8</td>
<td>5.6</td>
<td>23.3</td>
</tr>
<tr>
<td>2011</td>
<td>13.2</td>
<td>8.2</td>
<td>27.2</td>
</tr>
<tr>
<td>2012</td>
<td>12.9</td>
<td>5.6</td>
<td>25.3</td>
</tr>
<tr>
<td>2013</td>
<td>15.8</td>
<td>6.1</td>
<td>28.6</td>
</tr>
</tbody>
</table>

Notes: Data on leasing do not include loans granted by leasing companies and therefore may differ from data released in the previous editions of the report.
Sources: The calculations based on data provided by Fitch Polska, GUS, KDPW, WSE and NBP.

In 2013, the value of capital raised by enterprises on the domestic long-term bond market was substantially higher than in 2012. Companies from the energy sector issued long-term debt securities on a large scale as a result of their high investment activity. Demand for these securities by, inter alia, investment and pension funds seeking higher rates of return than those on investments in Treasury bonds, helped these entities to place their issues on the market. Moreover, the further expansion of the Catalyst platform for trading in debt instruments created favourable conditions for enterprises to obtain financing by issuing bonds. Compared to the OTC market, buyers of debt instruments traded on Catalyst know the source of their valuation and bear lesser investment liquidity risk. The value of corporate bonds issued in 2013 on Catalyst was PLN 7.2 billion.
