CAPITAL MANAGEMENT IN FINANCIAL INSTITUTION ACTIVITY IN POLISH BANKING SECTOR

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Abstract: *In this article the basic types of capital characteristic for modern financial institutions were presented. Based on the Polish Financial Supervision Authority, the stability of funding sources in a group of commercial, cooperative banks and credit institutions setting up the Polish banking system in the years 2009-2014 was estimated. The conducted study showed that the main funding sources of commercial banks activity, cooperative banks in particular, are deposits of non-financial sector. The emission of debt commitments represents a very small share in total assets. In addition, the internal analysis of the structure of deposits of non-financial sector structure showed that the dominant source of capital are cash flows from the household sector. It should also emphasize that despite the reduction in central bank interest rates, the dynamics of increase in fundraising, is keeping an upward trend, which greatly reduces the instability of funding sources.*

Keywords: CAPITAL MANAGEMENT, FUNDING SURCES, FINANCIAL SECTOR, DEPOSITS.

1. Introduction

Specific features implemented in the economy by commercial banks in the area of financial intermediation, cause that banks operate in an environment of very strong risk. Thus, next to the security mechanisms of risk's negative impact on the bank's financial results, the proper bank capital management is a very important element. Capital bank will allow, on the one hand, absorption of potential losses, on the other hand, will provide a stable source of funding and enhance the security of not only individual institution but the entire banking system.

2. The meaning of capital in bank's activity

The capital is an ambiguous concept in the theory of economic sciences. Modern interpretation of capital concept is used in terms of macroeconomic and referred to the national economy and in terms of microeconomic, referred to the single company. However the concept of capital does not specify its definition and recognizes its importance, as a two different economic phenomena appearing in the form of real capital (tangible) and financial capital (cash).

The physical capital in relations to the company, reflects an abstract value of its assets involved in the processes of activities, constituting its assets, and financial capital (cash) expresses the general funds destinated for investments, so tangible and intangible assets, financial and securities purchasing, representing its liabilities. The physical and financial capital shot covers all elements of company's economic resources, jointly described as balance resources. The formation of financial capital is the process of converting funds, raised in order to tangible assets financing and inversely, transform the physical capital into financial capital as a result of the company's activities. The financial capital, in the enterprises, is a source of tangible assets coverage. The process of obtaining financial capital is defined as the process of financing the company. On the other hand financing covers all financial decisions in the company, which provide the capital to the company.

Therefore, it is concluded that the basic type of capital in the bank's activity is the financial capital, which is the equivalent of money accumulated in the form of bank deposits. Irena Pyka complements this traditional approach of the specificity of human capital. Also notes that human capital is now identified with the intellectual, which means that in addition to the traditional human capital, represents the knowledge, technology, experience, relationships with clients and professional skills. This is particularly important in the banking activity for which the primary type of activity are services. The intellectual capital concerns the ability of employees to create and multiply the value of the bank, through the knowledge acquisition and dissemination, create lasting and loyal relationships with customers and developing sustainable competitive advantage. According to the Irena Pyka interpretation financial, material and human capital is treated as a process Surface of of bank capital division.

Irena Pyka next to bank capital procedural forms indicates also accounting norm-creation forms of bank capital

It is important, in the category of limiting the impact of risk on the commercial banks, the categories of bank capital implemented in the Basel II play an important role. According to banking supervision two forms of capital are extracted, including regulatory capital and economic capital. Regulatory capital as defined in this part of the financial capital, which includes core and supplementary capital. And is maintained in the amount equal to the minimum cover for liabilities incurred by the bank. The components of core capital are: the founding capital, reserve funds, not separated profit, unabsorbed losses, reserves created against general risk. In contrast, the supplementary capital is referred to the position of corrective asset valuation, differences arising from the use of different methods of valuation of fixed assets and the subordinated position with liability nature.

The component positions of regulatory capital are the so-called. the first pillar of Basel II, which sets the minimum capital requirements, referring to the need to maintain by banks, the size of the equity, adequate to the scale of the involved risk,. The capital's adequacy is, as such its size, which gives him to perform the function of licensing, warranty and cover their losses. Adapted to the size of bank'd conducted activity, the level of equity capital ensures the safety of deposited cash contributions and the continuity of business in the long term. In addition, own funds serve to mitigate the negative financial effects, resulting from events classified in the category of credit, market and operational risk. They are caused respectively by bank's credit operations, fluctuations in interest rates and foreign exchange rates, and the imperfection of its employees, processes, procedures and completely independent factors, ie. external.

The principles of banking risk identification and measurement and estimation methods suitable for their warranty provision amounts of cash, decide about the level of regulatory capital that banks are required to maintain.

The second category of capital according to the Basel II is the economic capital, which is the basis for its second pillar. It's far more difficult to estimate for the bank, because of the difficulty in estimating the possible and potential risks in the bank's operations. The economic capital is also based on the bank's equity capital and includes such size, that is able to cover any financial losses arising from the activities of the market environment in which banking entities are. In the calculation of total economic capital estimates the level of bank's exposure to significant quantified types of risk which measurement is made at the appropriate levels of aggregation, consistent with the established allocation structure. The determined size of the so-called. internal capital must give a real scale of the economical risk incurred by the bank and enable for financial security resulting from the losses, in case of its occurrence. The economic capital therefore applies to the measurement of capital at risk in the bank's scale, the measurement of risk across business units, measuring operating performance corrected by the risk.

In the indicated classification, the identification of bank capital in accounting terms should also be emphasized. In this approach, capital is regarded as a source of funding active operations carried out by banks. In this formula it adopts a dichotomous division taking into account the equity and foreign capital. Miroslaw Capiga emphasizes that a key element of capital management is its level, which in turn can refer to determine the optimal capital structure. Capital management requires consideration of differences between investing bank capital and capital allocation. In the allocation of capital, opposed to investment, there is no any cash investments. In the literature emphasizes that the capital management policy should take into account:

- Bank's long-term capital targets,
- Preferred capital structure,
- Equity emergency plans,
- Delegate the capital management,
- Transformation of risk measures into capital requirements.

An important element of capital management is a capital structure, that defines the relationship between own and foreign sources of capital. In the activity of commercial banks the use of foreign capital is the main source of funding and at the same time identifies the trends of changes in the security of financing.

3. Bank's activity funding sources

The activities of banks, focused on financial intermediation, causes that banks acquire capital and transform it into the credit activity. The primary funding source of active operations is to acquire funds from the retail market in the form of a deposit. The essence of a bank deposit comes to receiving for the temporary disposal of the bank clients' monetary units, stored and operated on bank accounts for such deposits, on terms agreed between the parties. Banks next to the reception of deposit accounts, have the ability to issue securities. The securities, which banks are the emitents can be grouped into two basic types: equity and debt securities.

Equity securities (treasury shares of banks, investment certificates) guarantee the right to property of the owner (shareholder) to participate in the profits of the issuer and the rights of non-pecuniary, granting him the right to vote, similar to the securities amount held by him, indefinite time and factor risks.

Debt securities (certificates of deposit, bonds, debentures) are a confirmation of incurring debt by the issuer of the document, with the creditor or holder of a security, on the amount of money which the issuer agrees to return with the sum of interest at a given date. These are debts securities with transferable character, which means that they are sucjected to trade on the primary and secondary market, transferring the property rights to third parties.

To debt securities issued by banks, certificate of deposit belongs, which is a document certifying the acquisition of the customer the right to receive interest due made by him an earlier payment of designated amount of money for a pre-specified time and rate of return.

A special type of securities issued by mortgage banks only are mortgage bonds. Mortgage bond is a document with the liability character, under which, a relations to the customer, the obligation of the mortgage bank to its redemption on the terms and at the time indicated in the rules of the issue, combined with the payment of the interest amount, arises. Mortgage banks offer two types of mortgage bonds, whose classification is dependent on the base issue, which is the entity that guarantees the repayment of liabilities. For this reason, these banks may issue: mortgage bonds and public mortgage.

The classic type of securities issued by banks are also bonds which are such a financial instrument by which the issuer incurs a liability at the investor (buyer of bonds) in the amount equivalent to the issue price of the bonds. At the same time the debtor obligates to return a debt, after at least one year from the date of maturity.

An important source of capital raising, particular in a short-term is unsecured interbank deposits market. Therefore, a bank with a financial surplus makes an active deposit (where the invested assets are working), and the bank with a deficit of resources, makes passive investments.

It should be emphasized that banks prefer stable sources of funding, which can include, in particular, term deposits and debt issues, in particular the long-term. For this reason, the sources of financing of banking activities in the years 2009-2014 in the Polish banking system have been assesed.

4. The structure of banking system's Polish capital

The analysis of the funding sources of polish banking system will be based on aggregated data presented by the Polish Financial Supervision Authority. According to the division in the Polish banking system commercial banks, cooperative banks and branches of credit institutions can be extracted. Structure of polish banking system represents table 1.

Table 1: *Number of banks and credit institutions*

	2009	2010	2011	2012	2014
Number of commercial banks	49	49	47	45	38
Share of assets commercial banks in total assets banking system (%)	88.7	89,2	91,7	91,7	91,0
Number of cooperative banks	576	576	573	572	561
Share of assets cooperative banks in total assets banking system (%)	5,27	6,07	6,05	6,36	6,84
Number of branches of credit institutions	18	21	21	25	27
Share of assets branches of credit institutions in total assets banking system (%)	5,84	4,72	2,2	2,08	2,15

Source: Own work

The data presented in Table 1 indicate that the basis of the Polish banking system commercial banks create, that in the analyzed period accounted for almost 90% of the total assets of the Polish banking sector. Cooperative banks strengthen its position in the Polish banking system systematically, however, their share does not exceed 7% of the assets of the banking system.

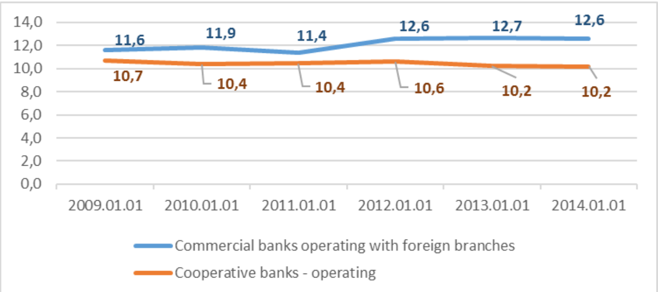


Fig. 1. *The formation of the total equity indicator to total assets in the years 2009-2014 including the types of banks.*

On the figure 1 the share of equity in total assets taking into account including types of banks was diagnosed. It should be stressed that commercial banks have a higher index of equity to total assets. Changes in equity to total assets in the cooperative banking sector indicate that a proportional increase in total assets throughout the study period is proportional to the increase in shareholders' equity, which results in very small changes assessed the relationship. In the group of commercial banks an increase in this ratio in 2012-2014 can be observed. During this period, banks, strongly have been increased the value of equity in relation to the increase in the total balance sheet. It means that commercial banks a substantial portion of the generated profts, have transferred to the increase in own equity, which have increased the safety of the financial sector slightly.

Analyzing the structure of funding sources the share of deposits and issued securities in the total balance sheet should be assessed. Because these components, according to the literature are a stable source of funding. The importance of deposits and the issue of its own securities in the total balance sheet of commercial banks with foreign branches operating in the period 2009-2014 are presented in Table 2.

Table 2: *Structure of liabilities of Commercial banks operating with foreign branches*

	2009	2010	2011	2012	2013	2014
Share of deposits in total liabilities	77,1	77,4	76,5	76,2	77,3	75,8
Share of Liabilities under own issue in total liabilities	2,3	3,0	4,0	5,0	5,0	4,4

Source: Own work based on the literature

From the table 2 analysis shows that in the group of commercial banks, the main source of financing banking activities are disbursed funds in the form of deposits. Their share in 2014 has slightly decreased towards 2009 but still represents more than 75% of total liabilities. A positive occurrence is the noticeable increase in total liabilities arising from the issue of own securities. The growth rate of these liabilities significantly exceeds the rate of progression of total liabilities. Furthermore, it appears that the decrease in the share of total deposits in total assets is accompanied by the increase in their emissions. Analyzing the structure of liabilities of cooperative banks (table 3) it must be emphasized that the deposits are almost the only source of funding for the activities of these banks. In the years 2009-2014 the have been accounted for almost 97% of all liabilities.

Table 3: *Structure of liabilities of cooperative banks*

	2009	2010	2011	2012	2013	2014
Share of deposits in total liabilities	96,1	96,2	95,6	95,9	96,3	96,3
Share of Liabilities under own issue in total liabilities	0,0	0,2	0,4	0,4	0,5	0,5

Source: Own work based on the literature

The share issue of its own securities, plays a marginal role and for the cooperative banking sector is still inaccessible source of funding. Customers of cooperative banks having a surplus of free cash, invest it in those banks almost exclusively in the form of deposits. Much more diversified funding structure of the sector is characterized by credit institutions.

The funding structure of credit institutions sector is much more diversified. In 2009, the share of deposits in the total balance sheet was similar to the structure of commercial banks and have accounted for a little bit over 70%. In subsequent years, this proportion significantly have been reduced and in 2014 has accounted for only 50% of total assets. At the same time, banks have not been acquiring funds through the issue of its own securities. It should be emphasized that this capital structure is not satisfactory and the stability of funding sources need to be increased.

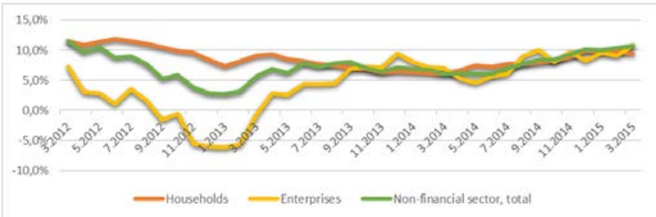
Table 4 *Structure of liabilities of branches of credit institutions*

	2009	2010	2011	2012	2013	2014
Share of deposits in total liabilities	74,1	77,7	68,2	62,8	56,0	50,5
Share of Liabilities under own issue in total liabilities	7,1	0,0	0,0	0,0	0,0	0,0

Source: Own work based on the literature

Disturbing financing structure applies to credit institutions whose share in the Polish banking system is not significant (table 4). Such a low share of deposits in the total balance sum means that banks should be focused to improve the stability of funding sources of economic activity. To assess the possibility of financing the banking activity the rate of change in the value of non-financial sector deposits in the entire banking system has been also assessed. Evolution of this indicator is shown in figure 2

Fig. 2 *Annual growth rate of deposits (non-financial sector)*



Source: Own work based on Raport o stablinosci finansowej posliego systemu bankowgeo. Warszawa, NBP 2015

From the presented data results that the rate of deposits value growth currently stands at a satisfactory level. In 2013 the dynamic growth rate of deposits located by enterprises was negative, which meant that the companies deposited the lower values of free cash in banks than in 2012. In the following years this trend has stopped and the growth rate of acquired deposits remained positive. On this background it should be emphasized that in the households group the value of deposits derived in 2013 was still positive, however, their growth rate slightly decreased. Similar as for the corporate sector in the coming years, ie. 2014-2015, the level of invested funds coming from domestic households have been significantly expanded. Despite the sharp decline of deposits located by enterprises in 2013, the total value of funds raised from the non-financial sector have been only slightly decreased. This was due to significantly lower decrease of deposits from households in comparison to enterprises sector. It can therefore be assumed that household deposits are a stable source of funding, that ensure continuous funding the Polish banking system. It should also be noted that even in 2015 a high positive trend has remained, despite the record interest rates cuts carried out by the NBP.

Assessing the financial structure of banking activity, the internal structure of the non-financial sector deposits should also be assessed. This is due to the fact that the deposits from the household sector are more stable and thus secure financial system even more. Given the fact that commercial banks account for about 90% of the assets of the banking system, the internal structure of the non-financial sector deposits were evaluated in this group of banks (table 5).

Table 5. The structure of deposits from non-financial sector

	2009	2010	2011	2012	2013	2014
Corporates deposits	30,6	31,2	30,6	27,5	28,5	28,2
Household deposits	66,9	66,3	67,2	70,2	69,3	69,7
Deposits of non-profit institutions serving households	2,5	2,5	2,1	2,3	2,2	2,1

Source: Own work based on the literature

The analysis shows that household deposits are an essential source of financing the Polish commercial banks activity. Their share in the reporting period, ie. In the years 2009-14 have increased slightly. At the same time the share of corporate deposits has slightly decreased for the period 2012-2014.

5. Conclusions

The study shows that the level of own equity in the total balance sheet is slightly different depending on the type of business banking. In the group of cooperative banks, in the analyzed period, ie in the years 2009-14 fluctuated around 10%, whereas in the group of commercial banks was slightly higher in 2013-14. The analysis of the structure of liabilities of Polish banks showed that the dominant source of funding are deposits. On this background, own securities issues, in both the commercial banks and co-operative are not high. Analysis of the dynamics of changes in the value sector deposits acquired. Analysis of the dynamics of changes in the value of deposits of non-financial sector in the Polish banking system showed, that the deposits of the household sector are more stable source of funding to the funds obtained from the corporate segment. From the analysis of an internal structure of the non-financial sector deposits, shows that deposits of households account for nearly 65% of their total value. Maintaining a positive and high growth rate of deposits acquired in the Polish banking system means that commercial and cooperative banks are characterized by relatively stable deposit base. A worrying situation only occurs in a group of credit institutions, however their share in the total balance sheet is not significant, which should not endanger the safety of the entire banking sector.

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