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The Importance of Required Reserves for Banks Liquidity Maintenance[1]

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ABSTRACT *- The basic principles of banking performance are principle of safety, of liquidity and of profitability. The application of these principles is obligatory for the banks in relation to their influence for stable and efficient banking performance. The primary and secondary banks' reserves serve for liquidity maintenance, as one of the conditions for successful bank performing. One of the main indicators of banks liquidity are compulsory reserves deposited at central bank. The reserve requirement rate are differential and determined by central bank in dependence of the bases on which they are calculated. The required reserve on banks deposit potential represents the important foothold of monetary politics with remarkable influence on financial flows through banks.*

KEY WORDS: *principles, liquidity, banks' required reserves, bank*

Basic principles of banking performance

Concerning the legal person business activities, it must be distinguished that those activities are led by determined requirements and principles enabling the highest business results, stable performance and financial risk protection. The principles of correct performance, permanently present at economy activities subjects are profitability, safety, liquidity, over-indebt protection, flexibility and independence. Among the mentioned principles of banking performance three are the most significant, and respected by all over the banking world and without which the banking activities can not be possible. Those three factors are the principle of safety, of liquidity and of profitability. The mentioned principles characterize banking activities and oblige the bank to apply them in order to avoid insecure, non liquid and non rentable performance. Each deviation of the main principles could distract equilibrium and efficiency of banking sector, as well as the country economy efficiency. The bank management aims to find balance in relation to profitability, security and liquidity, which are *condition sine qua non* for realization of good performance and lower risk level.

The safety principle is characterized by the bank certainty that the business partners in contracted terms will realize the accorded responsibilities. In that sense it is realized the monitoring of credit capabilities, liquidity, cost-effectiveness, and credibility of banks business partners. Business relations are established with partners that in all senses respect the good businessman performance principle. The safety principle is particularly distinguished in customer selection and approved credit insurance. When mentioning the safety of banks creditors, the safety factors are bank profitability in function of primary safety and bank capital in the role of secondary creditors' safety. Deposit insurance contributes to the banking sector stability in Serbia giving the population the guaranty that the deposited resources are protected in banks, even in case that the National Bank of Serbia withdraw the license for work and adopt the decision on condition fulfillment for initiating the bankruptcy procedure over a bank.

The market economy, respects the liquidity principle as a key factor of standard performance. The essence of the liquidity principle is the legal person obligation to be capable in every moment to exe-

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cute due payments to the creditors. Banks have to maintain permanently its liquidity, day liquidity included, what is the main sustainability precondition on financial market. Bank liquidity position could define the very balance structure depending on percentage of primary reserve liquidity as the most liquid asset position, the securities of various due terms, as well as the less liquid parts like credits and stable assets. However, on the bank liquidity position affects also the liabilities liquidity, where some positions are more liquid, which means that creditors can require the deposit or credit returning in short term, while some bank balance sheet are less liquid because of longer due terms. However, liquidity is related to off-balance sheet than can be activated and have repercussion on bank liquidity decreasing, likewise approved but not drawn on credit lines, given guaranties, etc. On static aspect, the liquidity is monitoring by assets, liabilities and off-balance sheet items analyses on certain date. A dynamic liquidity analysis is more adequate because it observes the dynamics of money inflow and outflow. The harmonization of money inflow and outflow in monitored period determines the liquidity position, while the liquidity deposit level is not of key importance.

Banks have a goal to maximize the shareholders assets value with acceptable risk level. The main goal positioned on this way requires new possibilities to increase income, business efficiency and more effective planning and control. The basic profitability measures are: Return on Assets, as indicator of management bank assets efficiency; and Return on Equity, as income measure that bank holders realize on assets invested in bank. In modern flows of banking activities development, the priority is given to the stability principle in relation to profitability principle. It is more useful to operate with stable and liquid performance with insured profit, than to create maximum possible profit on behalf of stability and liquidity.

Bank liquidity management

The main bank managers' tasks are liquidity, assets and capital adequacy management.[3] In order to have enough cash to cover the liabilities towards its deponents, the bank has to maintain the liquidity providing enough liquid assets. The banks that have enough reserves surplus over the level of required reserves, the reserves out flow by deponents do not have to provoque the changes in balance state structure. The banks that do not have enough reserves are facing the problem of cash assets lack necessary for the settlement towards their deponents. The debt at other banks can cover the reserves lack, but in the same time it creates the liabilities volume increase based on received credits and expenditure increase on interest behalf. Cash assets lack, the Banks overcome by selling the securities from its portfolio, but it creates the bank's transaction cost increase. The most expensive way that bank assure the resources necessary for deposit out flow, is to decrease the placement in form of credits. Previously mentioned problems and expenditures created by its solving, are the reasons why the banks keep the deposit surplus, although the credits and securities provide the bank greater profit.

The demand for liquidity and the offer of liquid assets in determined moment are often unbalanced, which creates the deficit, or, liquid money surplus. For majority of banks the demand for liquidity is coming because of clients deposit retirement, credit requests by clients that bank desires to keep, repayment of previous obligations, business and tax expenses payment, cash dividends payment to shareholders. In order to fulfill the mentioned liquidity demand, the banks provide the liquid money from a number of potential sources. The most important one is banks clients' deposits. The other sources could be clients' debts repayment and selling securities from banks portfolio, ensuring the fresh means for satisfying new liquidity necessities. The means could be ensured by debiting in foreign countries, too.[4] Regarding liquidity, the various demand and offer sources together define bank net liquidity position in sequence of time.

Commercial bank reserves serve for insurance of its liquidity or as an instrument of monetary and credit policy to regulate banks credit activities and quantity of circulating capital. The prerequisite for normal bank activities is liquidity maintenance, which comprises the capacity to settle claims on its

[3] Mishkin S. F. (2006) The Economics of Money, Banking, and Financial Markets, pg. 208

[4] Rose, P., Hudgins, S. (2005), Banking Management and Financial Services, pg. 348

due date. The liquidity maintenance is important bank performance requirement, comprising the capacity to settle due payments on its due term. The repayment of credits, taking of assets from own accounts opened at bank, or pay-off to customers on behalf of money retirement based on approved credit, payments to deponents on behalf of deposit retirement, are some of liabilities that bank has to settle on customers request. “The bank is liquid when, keeping necessary liquidity reserves, can without obstacles act it credit activities and pay all its due liabilities on time” [5]. The liquidity rate showing the level of deposit covering placement, and required reserve are quantitative indicators of liquidity impaction on financial power, state and excellence of bank performance.

Required reserves as banks liquidity reserves

Required reserve are deposit reserves that banks divide and are obliged to keep on its account at central bank. Together with cash and deposits at correspondent banks, the necessary reserves are primary bank liquidity reserves. Primary liquidity reserves are used in case the outflow money is bigger than inflow one. However, it is essential to define the optimal level of required reserve in order to avoid the creation of non used resources, which in case of placement would contribute to bank transactions profitability. Regarding required reserve the central bank has the responsibility to cover banks liquid necessities, in accordance with disposed reserves. The bank can decide to place its assets into short term securities issued by the state, central bank or great corporations. Being easily converted into cash, the mentioned short term securities are used as secondary liquidity reserves that fulfill bank liquid necessities.

The banks’ required reserves have two main roles. The first one is of prudential characteristics, because through regulation of liquidity it assists to financial system stability, while the other one acts as the transmission instrument of monetary policy measures on economic activity and inflation, through regulating the credit offer. The economic theory the most often mentions two essential required reserves acting guidelines on economic activity and inflation, mainly by credit offer extension and foreign assets in-flow control. Concerning the credit channel theory, the required reserve affects on economic activity and banks’ credit potential because the required reserve rate increase results in banks’ credit offer decrease, and its consequence is the economic activity deceleration and, finally, inflation decrease. On the other side, the fact is that required reserves rate increase impacts on capital in-flow decrease, particularly on the one of speculative character.[6]

The changes of deposit percentage and other assets kept as required reserves could have the great influence on credit expansion in banks and other deposit institutions. The reserves increase requirement signifies that banks have to set aside more cash resources on every deposit. In the same time, it means the less credit banks’ potential, or less disposed assets for approving the new credits. On the other side, the greater reserves requirement could affect the interest rate increase owing to decrease of cash assets volume on disposal for credit approval. The required reserves amount decline activates the cash assets liberation and now, the resources they can be invested in more profitable business activities. The reduction of required reserves setting aside enables the banks to increase their credit potential, and the consequence is the interest rates declination.

The essential goal of cash assets position management is to maintain the required reserves on stipulated level, with no reserves surplus, and as well as, without great reserves deficiency. The quantity of cash assets, which banks have to keep as required reserves, depends on each bank’s deposits volume and composition. When the bank’s amount of required deposit is defined, the next step is to compare this amount to the real daily average required reserves degree. In case that the real required reserves are greater than stipulated, the bank has the reserves surplus. In that situation the bank’s management has to react quickly and invest the reserves surplus. Each reserves surplus extending over required reserves degree results as expenditure regarding the possibilities of income realization based on profit-

[5] Đukić et al. (2004), Banking, pg. 259
[6] www.ubs-asb.com/s/Bankarstvo/2008/14.htm

able bank's activities. If the defined amount of required reserves is greater than real required reserves amount on daily average bases, the bank has the reserves deficiency.

The level of required reserve is stipulated by the National Bank of Serbia in form of reserve requirement rate. In accordance with the Decision on Banks' Required Reserves at the National Bank of Serbia, there are prescribed different reserve requirement rate, depending on basis they are calculated on.

Table 1. Reserve requirement rate at NBS

	In use on:		
	1/2007	**11/2007**	**10/2008**
Rate on:			
Basis in dinars	10	10	10
Except:			
Term deposits over 1 month		5	5
Liabilities indexed by currancy clause	45	45	45
Basis in foreign exchange			
Except:			
New foreign exchange savings	40	40	40
Subordinated capital	20	20	/
Leasing foreign exchange	100	100	/*
Credits from abroad	45	45	/

Source: National Bank of Serbia; authors own

* Reserve requirement on money leasing companies from abroad

Banks' required reserves are calculated on deposits liabilities in Serbian dinars, credits and securities, as well as on all other liabilities in dinars. On the other side, the required reserves are calculated on liabilities in foreign currency deposits, credits, securities and all other foreign money liabilities, including subordinated liabilities in foreign currency, and foreign currency resources received from abroad according to transactions that bank execute in name and on behalf of third person[7]. Required reserves accounting is realized on every 17th in month on the amount of average daily accounting state of assets in dinars and foreign currency for the previous month. The accounting period is from 18th to 17th in current month.

Required reserves in dinar are calculated on liabilities based on deposits in dinars, short term securities and other liabilities in dinars by 10% rate. The stipulation of necessary reserves lower rate level in relation to previous years (21% in 2004, 20%, and then 18% from 2005. to 2006, when the rate is decreased on 15%) was aiming to stimulate banks to collect accumulation sources in dinars. The required reserves rate on basis in dinars composed by liabilities in dinars based on deposits termed more than one month is decreased on 5%, in 2007.

On liabilities per foreign exchange deposits, short term securities the foreign exchange required reserves are calculated on 45% rate. The increase for 2% in relation to March 2006 and 7% in relation to the end of 2005 is aimed to delimitate the banks indebting abroad. For deposits in dinars indexed by foreign currency clause, it is adopted the 45% rate of foreign exchange required reserves, because they are equalized, for foreign currency clause, as deposits in foreign money.

From April 2006, on inflow from abroad based on deposits and commercial banks credits it was applied the 60% foreign currency reserves rate, in case of two years repayment period. This National Bank of Serbia measure ought to contribute to deceleration of commercial banks credit activities based on abroad debits. By the new National Bank of Serbia Decision on Banks' Required Reserves from December 2006 and stipulated necessary reserves rate of 60% on short term credits, is withdrawn. The National Bank of Serbia cancelled the required reserves on banks credits from abroad, retroactive too, since October 1, 2008, while this rate till now was 45%. By taking the mentioned measures the banks will provide more circulating currency and better credit conditions.

[7] Decision on Banks' Required Reserves Held at the National Bank of Serbia.

The step-by-step required reserves rate decreasing based on new foreign exchange savings[8], measures will ultimately decrease the banks debits abroad and stimulate the credit activities based on domestic accumulation, through even more intensive foreign exchange savings collection. The required reserves rate on foreign exchange population deposits is 40% and keeps staying stable in 2008.

The Law on financial leasing, adopted by the National Bank of Serbia, stipulates the decree that obliges leasing companies to keep reserves on special bank account and calculate reserves on loans, other borrowing and supplementary payments from abroad, aiming to decrease the debit rate in foreign countries. From 2006, the required reserves on foreign exchange leasing assets was 100%, but the National Bank of Serbia, adopting new measures in October 2008, withdrew the required reserves on currency that leasing companies borrow from abroad. Also, the banks will be disburdened from the extraction of 20% required reserve on subordinated liabilities that was adopted since March 2006. The basic goal of these measures is to facilitate the refinancing abroad, as well as to assure the untroubled credit insurance for national companies' financing product activities.

The National Bank of Serbia changed the very structure of foreign exchange required reserves. Instead of previous dividing of 90% in Euro and 10% in dinars, from October 2008 the calculated necessary reserves in euros are 80% and 20% in dinars, providing better foreign currency bank liquidity.

The National Bank of Serbia statements quarterly demonstrates daily bank liquidity. On 30.06.2008 in the Republic of Serbia the total assets on giro - account was amounting 73.447.906 thousands dinar, while the calculated required reserves were 65.907.570 thousands dinar. As the indicators of liquidity were quoted credits for liquidity maintenance, and deposit of liquid assets surplus, at the National Bank of Serbia, which represent the permanent bank benefit. In the second quarter of 2008, the credit for liquidity no bank has used, in comparison to the first quarter of 2008 when the credit value for liquidity on behalf of securities deposit have amounted 950.000 thousand dinar.

Conclusion

The financial institutions survival and prosperity depends, among other, from public trust. The lack of trust can ruin the bank liquidity by unexpected deposit withdrawal by banks deponents. The liquidity maintenance is profitability prerequisite, but liquidity accomplishing presents the limit factor in expected profitability achieving.

The required reserve rate represents the important instrument of credit regulating, and bank liquidity regulating instrument. The change of required reserve rate influences on decrease, or extension of commercial banks credit potential, and on the other side, on creation of additional banks liquidity. The new measures of the National Bank of Serbia from October 2008 related to required reserves withdrawal on certain basis parts will disburden the banks, but hardly insure the same credit volume as before, owing to more expensive money factor in foreign countries.

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[8] New foreign exchange savings reffered to saving paritions payed in after 30.06.2001.