

POLICIES OF THE COMMERCIAL BANKS LIQUIDITY MANAGEMENT IN THE CRISIS CONTEXT

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The article focuses on liquidity management in Commercial Banks, and presents the steps that a good management has to follow to ensure that the position of the bank is not put into jeopardy following a lack of liquidity. Different management decisions and liquidity strategies are studied, with an emphasis on currency strategies, strategies for funding liquidity risk, financing and planning liquidity after different scenarios. The paper also takes into consideration and studies what happens with the liquidity management during crisis situations.

Keywords: liquidity management, liquidity risk, liquidity planning procedures, alternative scenarios, liquidity crisis management.

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Banking liquidity represents the capacity of a bank to finance itself efficiently the transactions. The liquidity risk, for a bank, is the expression of the probability of losing the capacity of financing its transactions, respectively of the probability that the bank cannot honor its obligations to its clients (withdrawal of deposits, maturity of other debt, and cover additional funding requirements for the loan portfolio and investment) The management of the liquidity risk presents important at least from two points of view: primarily an inadequate level of liquidity may lead to the need to attract additional sources of with higher costs reducing profitability of the bank that will lead ultimately insolvency; and secondly an excessive liquidity may lead to a decrease of the return on assets and in consequence poor financial performance.

A bank has a potential of appropriate liquidities when it's in condition to obtain the funds immediately and at a reasonable cost, when these are necessary. In practice, achieving and maintaining optimum liquidity is a real art of bank management. Maintaining an adequate degree of liquidity in the whole banking system is extremely important, because the registration of a liquidity crisis at a single bank can have negative repercussions over the whole banking system thanks to the risk of contagion through interbank settlements.

The sophistication of liquidity management and liquidity risk depends on the size and characteristics of each bank as do the nature and complexity of activities held by it.

The management of liquidity policies of a bank has to include a decisional structure for the risk management, a pattern (a strategy) for approaching operations and funding, a set of exposure limits to liquidity risk and a set of procedures for planning liquidities after alternative scenarios including crisis situations. (Greuning, Brajovic Bratanovic, 2004, p.102).

The structure of decision-making reflects the importance that the management is showing to liquidity in general: the banks which emphasize the liquidity normally implement a structure for managing liquidity risk from ALCO (Assets and Liabilities Committee) and includes the

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responsibility to establish a liquidity policy and decision – making to the highest level of management.

The banking strategy for funding operations and liquidity

Each bank has to have an approved strategy for the operational management of the liquidity, a strategy that must be communicated within the organization, because in many banks, the liquidity management is no longer the entire responsibility of the treasury (Dănilă, Dănilă, Anghel, 2002, p. 105). New product or business strategies (example: Commercial loans convert into shares to be sold to investors) or the collapse of the information system/information may have an impact on liquidity risk. Therefore all entities with impact upon the liquidity have to know the liquidity strategy and to operate according to the procedures and the organization policies.

The liquidity banking strategy has to present specific policies, relevant to liquidity management such as assets and liabilities aspects of liquidity risk management, liquidity management in different currencies. The liquidity management is connected to the net financing (future needs of liquidities) both short-term and long term, a bank can raise its level of liquidity through asset management, debt management or (and most often) a mix of the two. Management of assets in this case includes the potential to be sold and used as collateral that would increase the incoming cash-flow. Traditionally, many banks, mostly small sized, have covered their liquidity needs by manipulating the assets structure based on the stock of liquid assets, thus having a small influence on debt.

In order to maintain liquidity banks which are based solely on asset management are concentrating on the price adjustment, credit availability and the level of liquid assets that they keep. Their number is however, is rapidly decreasing, because of the evolution of the banking markets evolve. Often, seasonal factors cause increasing demand for loans from the resources available, thus leaving the banks with the alternative to meet liquidity sources through debt on the money markets.

Therefore, the bank can cover its liquidity needs through debt management this may be achieved by increasing debt and/or short-term deposits, by increasing the debt maturity and ultimately increasing the capital.

If for small banks, direct loans from the market are not possible or are under contract for the emergency removal of a liquidity crisis, for high prices, major banks, international banks, holding banks have as a main source of liquidity loans in favorable market conditions, since, liquid assets have a major opportunity cost for these banks and are regulated by the requirements of the treasury management (minimum book binding).

A major difference between liquidity of greater banks and the small sized ones is that, beside the deliberate determination of the asset balance part, the higher banks can control their level of debt better. Therefore they have a larger variety of options that would select the most inexpensive method of raising funds from the monetary market as a source for discretionary purchasing funds on a short term, based on the interest rate competition process that can help meet liquidity needs. Although the acquisition of funds on the market at a competitive cost would allow profitable banks to satisfy increasing demand of customers for loans, a wrong or unsuitable implementation of debt management can have hard consequences, materialized in risks associated with the liquidity management based on market financing:

- the funds could not always be available when needed;
- if the market loses confidence in a bank, its liquidity will be threatened;
- the concern of the banks to obtain funds at the lowest possible cost and insufficient attention toward maturity distribution may enhance much exposure of the bank to the risk of fluctuations in interest rates.

Another challenge for liquidity management is the contingent liabilities. Any bank should pay special attention to the influences of off-balance elements (contingent liabilities), such as bank

guarantees, on the cash-flow. In particular, during unsure periods, these can generate significant outflows of funds, output which generally does not depend on conditions of the bank. During a macroeconomic crisis generated by the use of letters of credits, it is highly probable that this will lead to bankruptcy.

Strategy on the foreign exchange

Specific items that will be considered in the liquidity management currency depend on the nature of business conducted by the bank. For some banks use of currency deposits and lines of credit to finance short-term assets in the internal currency can be the main area of vulnerability, while the other banks will fund their activities in internal currency. In general, the bank should have a management system (meaning assessment, monitoring and control) for liquidity positions in all currencies in which it is active. The bank should also assess the needs aside from currency liquidity aggregate, would conduct a separate analysis liquidity strategy for each currency.

A bank that operates with foreign currency but does not have a network of branches abroad usually makes liquidity management of currencies at the head office. For a bank with overseas representation the policy development, the general coordination and supervision is at the head office, but the responsibility for the liquidity of the bank is delegated to the branch of the issuing country.

The strategy for financing liquidity risk represents a key aspect of liquidity management, being materialized particularly in deposits and loans on the market. Debts and diversified funding sources usually indicates that a bank has a well developed liquidity management .Banks holding deposits portfolio in stable and high varied value are likely to face liquidity problems less than the banks without such deposits.

A cardinal principle of liquidity risk management lies in diversifying the deposits in terms of number of clients individuals/corporate, the geographical distribution, the types of accounts and instruments, the maturity spectrum. The diversity insures a proper stability and avoids the output of funds in a certain day or over a specific period. Assessing the structure, type and condition (stability and quality) of deposits is a starting point for assessing risk and liquidity. Thus information is need about:

- product range of existing deposits, with the number of accounts,, balance for every depositors, and following certain classifications such as currency, maturity and interest rates;
- concentration deposits, deposits of individual customers that exceed a certain value of total assets, should be classified after the term and interest rate;
- administration of deposits, information relating to the adequacy of registration and control of operations and depositors with access to the internal customers and the calculation of interest and payment form.

Because of the competition for funds, the management of a bank is interested to adopt a development program for attracting all types of deposits, both in terms of increased volume and quality of the structure of deposits to determine the share of deposits that are stable or basic, fluctuating and volatile, and to have adequate information about anticipated and potential withdrawals.

Loans in the financial market

Another key ingredient of the liquidity is the ability to attract other funds-debt (also known as potential liquidity). This is of major importance in evaluating sources of liquidity taking in consideration the additional cost of funds raised (marginal cost of liquidity) and other factors such as: the frequency with which the bank would be due refinancing obligations and its ability to obtain funds from the treasury. For a bank which frequently operates on the money markets in the short term, the crucial determinants capacity to borrow new fund is its location on the respective market.

To control liquidity risk management, the bank requires certain limits for exposure to liquidity risk, through internal regulations correlated with obvious settlements on liquidity imposed by the N.B.R. These limits are in accordance to the annual management liquidity strategy elaborated by the Management Committee.

- sources of liquidity for the bank: - Primary-reserve: cash deposits with NBR , deposits in partner banks corresponding minimum or maximum "x"% in total banking assets;
 - secondary reserves held in a portfolio of securities representing the "x"% in total banking assets;
 - portfolio diversity, the maximum amount for a type of investment is "x"% of total assets, there have to be multiple types of investments;
 - resource deficit – in a currency , the limit would be maximum "x"% equity – in national currency, with a maximum limit (equity-fixes values);
 - resource attracted from partner banks – "x"% of total liabilities;
 - correlation terms/maturities of assets and liabilities: the banks maturity investments have to be adjusted permanent due to its liabilities the gap (RON equivalent) per maturity period, would have its limits of variation contained within a certain "XY"% of total assets, determined on the basis of their objectives of each bank and inclination toward their risk shareholder;
 - maximum admitted tolerance in the establishment of the minimal compulsory reserve (RMO): for lei and for foreign currency;
 - the solvency rating has to be 1;
 - a limit of the report on loans/deposits;
 - a limit of the report on credit/capital;
 - instructions on funding sources and destinations;
 - liquidity parameters, for example, the fact that liquid assets would not be lower as "x" percent or rise above "y" percent of total assets;
 - a rate limit on the relationship between anticipated funding needs and available resources to meet those needs , for example , that the primary sources over the anticipated need would not be lower as " x" percent;
 - a limit percentage on the base of a certain category of debt, for example, the fact that the negotiable certificates of deposit would not be a maximum of "x" percent of total debt;
 - average maturity limit on minimum / maximum of the various categories of debt, for example, the average maturity of negotiable certificates of deposit would not be smaller of "x" months.
- These risk limits are confidential, and are used only for internal use of the bank.

Funding and planning liquidity after alternative scenarios

Although liquidity is generally managed under normal conditions, the bank has to be prepared to realize its management in special conditions (abnormal).The liquidity management in special conditions (abnormal) includes management of assets and liabilities in special conditions.

Thus, under normal conditions, liquid assets can be quickly converted into liquidity and reasonable cost many banks also include assets in the analysis that aimed to identify sources of funds. However, the occurrence of crises in markets have shown that the assets sale would no longer provide a source of viable funds in order of providing liquidity and the bank will have to decide how would the liquidity of an asset be affected by the various scenarios. Certain assets that are very liquid in the current conditions can substantially reduce the liquidity in adverse market conditions. This asymmetry of liquidity is an important element of a growing thanks to instruments developed in the market. Therefore, a bank asset will fall in different maturity bands, depending on scenario forecast.

Regarding liabilities of banks, firstly a bank must examine the evolution of their liabilities under normal business, including establishing the following elements:

- normal level of deposit that is to renew the maturity and other liabilities with similar characteristics;

- maturity deposits that don't present a contractual maturity like current account and other savings accounts;

- the normal growth of new deposits.

The analysis of the cash-flow determined by a bank's liabilities in abnormal conditions (specific to the bank or due to general problems with whom the market confronts itself) needs the following questions:

- what funding sources register a high probability of staying within the bank, regardless of existing conditions and if these sources can be increased?

- what funding sources can gradually leave the bank if certain problems occur and to what extent?

The interest rate subsidy can control the volume output of resources?

- does the bank hold facilities like the back-up that can be held and under what conditions?

Liabilities which constitute the first category could be considered to remain in the bank's system even in the most pessimistic scenario. Some basic deposits, generally, remain at the bank because in some countries (including Romania), deposits of individuals and small businesses are guaranteed or thanks to bank transfer cost, which are prohibited for very short term, these deposits cannot be transferred.

The second category are the liabilities with a high probability to remain within a bank in case of certain problems of average intensity. These resources will come gradually in the case of a crisis, may include some deposits that can be equated with basic stores and were not included in the first category. Aside from these basic deposits, a certain level of interbank deposits can remain within the bank during such periods.

A third category of resources is those without contractual maturity.

One essential part of liquidity planning and managing the risk, represents forecasting of possible future events. Banks must regularly estimate expected cash-flows instead of focusing on the contract during periods in which the inputs or cash outflows may appear. Management of the liquidity risk would be taken into account the different variants to determine if a bank is or isn't liquid enough depending on the cash-flows under different conditions. Thus, understanding the context of liquidity risk management involves the examination of the approach toward a bank of financing and after planning alternative liquidity scenarios.

A bank has to analyze the liquidity using a variety of scenarios type "what if". Within each scenario a bank has to evaluate the fluctuations of the liquidity assess (positive and negative). These scenarios would take into account internal factors (specific to that bank) and external (market dependent). Scenario „continuous activity” (Greuning, Brajovic Bratanovic, 2004 p. 110) is usually applied to the management of the bank deposits destination, setting a benchmark for the cash-flows related to balance during the normal activity.

A second scenario refers to the bank's liquidity in a crisis situation specific to the bank, when a significant part of its debt cannot be replaced or refinanced, requiring measures of liquidity supervision.

A third scenario applies to general market crisis which affects the liquidity of a significant part or even the entire banking system. Liquidity managing under this scenario reflects on the loan quality; there are significant differences in accessing finances between banks. From the perspective of liquidity management, the implicit presumption can be made that the central bank will ensure access to finance in a certain form, because the central bank has a special interest in studying this scenario, thanks to the need of creating a total „buffer ” liquidity for the banking sector and an operational liquidity burden-sharing issues between the most important banks.

The table below provides a simple tool to forecast liquidity needs under normal business conditions, in liquidity crisis conditions and conditions general market liquidity crisis:

Table no. 1: Stairs maturities under alternative scenarios

Cash entries	Normal activity conditions	Specific banking crisis	General market crisis
Maturing assets (contractual)			
Receivable loan interest			
Selling assets			
Interbank Transfers			
Others			
Total entries			
Cash entries			
Maturing debt (contractual)			
Loan interest of payment			
Payment lending commitments			
Withdrawals before the deadline for deposits			
Operational expenditure			
Others			
Total output			
Surplus (deficit) of liquidity			

Liquidity management in crisis situations

Liquidity crisis manifests itself in two stages:

- apparent stage (operative) – observed in real time by the functional entities of the bank, who work directly with clients; is manifested through increasing the resource output from the bank in a short period of time through various ways – withdrawal of cash, payment orders and other substitutes for cash;

- confirmation stage – in which the actual dimensions of the crisis quantify; they calculate data contained in the balance and accounting databases of the bank.

The potential crisis is operational signaled by constant and continues lowering of the positive difference between inflows and payment at the bank, and constantly lowering excess of the amount recorded on the first band of maturity , calculated daily in the indicator of liquidity situation.

A bank has to own plans regarding the management of unanticipated events in order to realize the strategy regarding liquidity crisis management and procedures to cover the shortage of liquidity in times of crisis.

Developing plans, projections on a liquidity bank at crisis has to begin in a systematic and rigorous way, as soon as the bank anticipates persistent liquidity shortages or confronts itself with difficulties of refinancing or replacement of its debt. In case of a period of market crisis, liquidity projections would need to be made at the first sign that the *macroeconomic* situation is changing or that the presumption of assets or bank debts under normal activity are not valid. A bank can avoid a potential crisis by changing deliberately the behavior of its assets or debts, for example , becoming more aggressive on the market, giving up anticipated profits or breaking relationships with certain types of customers. The plans should answer the following two major questions:

Does the bank have a strategy to manage a crisis?

Does the bank have procedures for accessing funds in unpredictable cases?

The management of the bank should answer these questions in order to identify how the bank would act in crisis situations.

a) The strategy

A plan for managing crisis situations in liquidity assurance has to contain several components. More important are the actions that involve the management's coordination. This plan would need the assurance procedures of continuance flow of information and would provide the executive leadership of the banks' accurate information on making quick decisions. A clear division of the responsibilities has to be established so that all staff would understand what is expected from them in case of critical situations.

Another important element in the strategy plan to be used is the altering of assets and liabilities „behavior” during the crisis. The banks should be able to change „behavior” of assets and liabilities through various forecast scenarios. For example, if a bank concluded that it will suffer a shortage of liquidity in a crisis, the bank will have to decide what assets to sell even if at a lower value in order to cover a deficit of liquidity. In general, banks review the entire portfolio of available assets to be sold and which generates a smaller impact on public opinion and perception of market on balance of the bank.

Other components of the plan on unpredictable events involve maintaining relationships with leading providers of funds in the trade and the sheet. The banks' strategy may need to maintain an intense relationship with commercial counterparties, correspondent banks, corporative customers, payment systems and owners of important deposits whereas the construction of such lasting relationship with major suppliers of funds may be a „defensive line „within the period of crisis, which would allow a better position in the accumulation of funds in the abnormal circumstances of the market.

b) The liquidity Back-up

The liquidity back-up lines refers to funding back-up. Depending on the severity of liquidity problems, a bank can choose – or can be forced to choose – to use one or more funding sources. The plan should be made possible by consistently anchored in reality and so it would know the amount that the bank may rely for funding from these sources and in which scenario. The banks have to be careful not to rely solely on these funding lines like back-up plans, they should have management plans of liquidity crisis and if those lines can't be used and have to know the conditions (in which circumstances and to what purposes can I use these lines for which I pay commission, which will be shot in the abnormal market conditions) that would impair the ability to access them in the short term.

Procedures to be followed in case of crisis

The message received of a potential crisis requires setting up a headquarters for crisis – including people from the Treasury and the coordinator of the Management Committee. The command of the crisis decides operational measures and the order in which the will be taken, the powers of the members of this command are:

- Director-General has the powers of strategic decision both in relation to Treasury direction, and in relationship with Executive Committee and Board of Directors;
- Director is responsible for treasury operations, he is the one who receives information from all branches and departments of the plant, the one who analysis and applies operational decisions taken by crisis command.

In the case of crisis liquidity, there will be taken measures in the following order of priority:

1. use of cash and money from the bank account;
2. resources attracted from banks – limited by the maximum exposure limits of partner banks toward that specific bank;
3. suspension of uncommitted lines of credit, temporary limiting of lending through the usual commercial levers, keeping under control maturities of rates charged by credit, interest, charges and commissions;

4. reduction in foreign exchange position limits at the level of regulations in force;
5. liquidating of the portfolio of government bonds or by operation repo/reverse repo, either by definitive selling;
6. obtaining loans for longer periods from corresponding banks and/or NBR;
7. measures that violate the laws of which sanctions are quantifiable, reducing currency position below the minimum required standards , the use of available RMO (failure to meet RMO standards);
8. expanding social capital, subordinated loans.

After our analysis we have concluded that, liquidity management represents one of the most important tasks of running a bank. Thus, in case of general market crisis due to internal or external political changes, seasonal effects, economic cycles, management would be likely to evaluate the effect of these trends and events on the financing of banks. A healthy financial management can counteract negative changes and accentuate the positive.

Interaction risk with the liquidity and solvency of credit, generally, leads to produce systemic risk, which defines, in fact, „collective nightmare" of financial markets.

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