THE FINANCIAL CRISIS AND ITS IMPACT ON BANK LIQUIDITY

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Rezumat
Liquidity risk is the banks, the difficulty in acquiring the necessary resources to meet its own commitments at a time. Analysis of bank liquidity management is required not only to consider the liquidity situation continuously, but also to examine how funding requirements may evolve in different situations, including adverse conditions.

Cuvinte cheie: the Romanian banking system, liquidity risk, capital, Basel III agreement, bank liquidity indicators, actual liquidity

Clasificare JEL: G21

1. Introduction
The recent market developments have highlighted the fact that liquidity risk management is a determinant of the soundness of credit institutions. In Romania, the liquidity risk management has been improved, notably through the completion of the regulatory framework, through the existing reserve requirements detailing of liquidity in the context of the new requirements at international level.

Liquidity risk is the risk of loss or of that estimated profits, resulting from the inability of banks to honor any time payment obligations in the short term, without thereby incur or losses which cannot be borne by banks. Analysis of banks' liquidity management requires not only to analyze the liquidity situation on an ongoing basis, but also to examine how funding requirements may evolve in various situations, including adverse conditions.

To ensure the viability of banks, Bank management should monitor the performance of the banking institution, bank profitability, and liquidity risk. Between profitability and liquidity in banking there are a close interdependence, according to the Bank's ability to create liquidity and the ability of their placement on the market depizând and profitability of banking institution.

Banks calculate the indicator of liquidity separately and for its operations in euro, and for operatțunile in lei, for all the bands maturity as well as the totality of transactions in lei equivalent maturity band for over 12 months. Liquidity risk that any bank would want minimally, is unable to honor the Bank at any time payment obligations in the short term, without massive losses or costs involved.

2. Liquidity risk
The Bank should develop liquidity management strategy that should also include a component of daily administration of it. Liquidity management strategy should be established, including for crisis situations.

The Bank's liquidity management policy should relate to figure no. 1:
The Bank must be assessed and procedures for monitoring the liquidity position established on the basis of future cash flows, determined depending on the future developments of assets, liabilities and off-balance sheet.

The Bank will calculate the liquidity indicators for which will set limits and will set the time horizon in which it determines the liquidity position and the frequency of its determination according to the nature of the activity.

The Bank shall periodically review the scenarios used in the management of liquidity, in order to determine whether they continue to be valid.

To this end, the Bank will take the following measures (figure no. 2):

The Bank must periodically revise its efforts to establish and maintain relationships with suppliers, funding sources to ensure a diversification of these sources by avoiding concentrations in the field of finance.

Implement the Bank's liquidity management strategy in crisis conditions, the Bank must have alternative plans and remedial procedures. An alternate plan in conditions of crisis (figure no. 3) shall comprise at least:
Among the causes that lead to the risk of bank liquidity are as follows:

- the state of the real economy,
- the influence of the media,
- financial indiscipline customers,
- dependence on financial markets,
- the maturity mismatch between deposits and loans.

The main sources of liquidity and liquidity destination are:

<table>
<thead>
<tr>
<th>Sources of liquidity</th>
<th>Liquidity destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>required reserves at the central bank (RMO)</td>
</tr>
<tr>
<td>The central bank deposits</td>
<td>any loan applications and customer needs cash</td>
</tr>
<tr>
<td>Correspondent bank deposits, treasury bills</td>
<td>Cover any application of consumer and / or legal retirement funds</td>
</tr>
<tr>
<td>portfolio, treasury bills and other securities</td>
<td></td>
</tr>
<tr>
<td>loans to other banks</td>
<td></td>
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<tr>
<td>loans from the central bank</td>
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</table>

3. The indicators for the analysis of liquidity:

A task of great importance to the management of a bank is to estimate and cover correctly the liquidity needs, whereas a bank's profitability could be adversely affected on a long-term basis if the Bank holds in portfolio too many liquid assets compared to its needs, but on the other hand, too little liquidities can create big financial problems or even bankruptcy in the case of small banks.

Liquidity risk arises as a result of the non-correlation between due dates by the asset and liability, manifesting itself in practice this phenomenon due to the extension of their assets and liabilities.

The Bank's liquidity needs arise when customers withdrew substantial amounts of deposits at the Bank, according to the non-loan term and interest and, last but not least, as a result of psychological factors, resulting in the so-called phenomenon of "bank run" in existence on the market of certain information relating to payment difficulties of a banking institution which causes lenders to require immediate and full reimbursement, as well as some rumors accompanied by appraisals without a real basis (self-fulfilling profecies) that may cause the loss or even bankruptcy of the Bank's credibility.

For liquidity risk estimation is calculated:

- **liquidity position**, calculated in days, weeks and months, whose optimization consists in balancing liquid assets with liabilities, in the case of a negative Bank positions must resort to emergency sources.
of financing: loans on the interbank market, loans from the Central Bank or the sale of assets, and in the case of a positive surplus liquidity is placed in short term deposits in the interbank market;

- **single or successive net liabilities** is calculated as the difference between liabilities and receivable liquid assets with the same maturity, accumulated for each period or on a specific time-frame;

- **liquidity index** is calculated as the ratio of liabilities to assets weighted and weighted by the average number of days (months, years) corresponding to each reference number or maturities of due to the group in question;

- **liquidity ratio** is expressed as a percentage and indicate the degree of indebtedness (dependence) of the Bank towards the money market as a whole or to a certain segment of it and shall be calculated according to the formula:

\[
\text{new loans contracted} \times 100 \\
\text{loans overdue}
\]

\[(1)\]

- **total credits/total deposits** reflected the proportion of resources raised from depositors loaned to other clients.

Liquidity index calculation can be done through three methods (figure no. 4):

![Figure no. 4 „Methods of calculating the liquidity index”](image)

The method consists in calculating successive gaps for each class of maturity of a gap as the difference between assets and liabilities, that highlights these discordances of maturity, and massive outflows of funds which the Bank must face.

The cumulative gap method involves aggregating the graph of maturity classes on maturity, namely calculation of aggregate assets and liabilities with the same maturity.

The numbers method is the weighting of the assets and liabilities of each class due to the average number of days of each class.

## 4. Liquidity risk in the banking system, under present circumstances of Romania

According to the Report on the Financial Stability of the 2013 made by National Bank of Romania, the liquidity position of the banks continued to be comfortable. Systemic risk remains low, bilateral exposures on the inter-bank market in Romania is small relative to the own funds and the liquid assets available to the creditor banks. Adjusting funding attracted from the parent banks was generally orderly, but, starting from September 2012, at a rate significantly higher than that recorded at the time of preparation of the report on 2012. Adjusting the balance sheet assets of credit institutions amid a restricted allocation of new loans, especially the euro, contributed to the improvement of impedance mismatch currencies the relationship between loans and deposits. National Bank of Romania has secured the adequate management of the liquidity of the banking system, including through the completion of the regulatory framework and providing liquidity through repo transactions per week, liquidity position of the banking sector in Romania is improving in the course of the current year.
The imbalance between the non-governmental sector loans and funding from local sources has been alleviated since the second half of 2012, amid stock reduction, coupled with a slight increase in the volume of deposits attracted. Indicator value of credit deposits was gradually improved during the period considered reaching a minimum value at the beginning of the financial crisis of 109% in August 2013 (compared with a value of 120% recorded in June 2012), in line with regional developments.

Graphic no. 1 „Indicator development credits/deposits”
Source: BNR

High proportion of foreign funding with maturities on the medium and long term effect of mitigation of liquidity. Orderly, but significant reduction of external financing led to a gradual increase in the average maturity of the sources drawn from the parent banks, reaching in August 2013 to over 23 months. Seen in the structure of currencies, financing is carried out mainly in euros (74,8% of total funding from parent banks to August 2013) financing in RON, representing 15,2%, while financing in dollars and other currencies remains marginal.

Liquidity risk management is a determinant of the soundness of credit institutions, especially in conditions of high volatilități of financial markets. The Central Bank attaches great importance to the management of liquidity in the system, including the appropriateness of the regulatory framework.

During the year 2012 and the first half of 2013, National Bank of Romania has assured the adequate management of liquidity in the banking system, with the exception of the period November 2012-2013, in which range the Central Bank has adopted a policy of strong liquidity management. The monetary policy interest rate unchanged at 5,25% for 14 months, between April 2012-June 2013. During the months of July, August and September 2013, National Bank of Romania has reduced the monetary policy rate successively with 25, 50 and 25 basis points respectively to the current level of 4,25%, thus sending a positive signal for the economic environment for the purpose of printing a cheapening of the gradual trend of credit in RON and of stimulating lending activity. Also in June 2013 was decided corridor formed by narrowing interest rates relating to standing facilities around the monetary policy interest rate at plus or minus 3 percentage points from plus or minus 4 percentage points for the sluggish interest volatility in monetary and banking markets.

In the context of the financial crisis, the maturity of the loans on the imbalance and funding resources and dependency on foreign sources, ensuring liquidity in the banking system in 2012 depended, to a significant extent, the confidence of domestic depositors and foreign investors in the banks and therefore their willingness to renew funding to maturity. Thus, the liquidity indicator (established according to regulations in force issued by the National Bank of Romania), calculated for all operations in lei equivalent of maturity bands, recorded a comfortable level over the covered on each tape.

According to data provided by the National Bank of Romania, it has ensured the adequate management of liquidity in the banking system, as well as widening the range of assets eligible for operations intended to provide liquidity. At the same time, in November 2011, the Central Bank resumed its cautious reduction cycle of the monetary policy interest rate, and it was stopped in May 2012. The recent market developments have highlighted the fact that liquidity risk management is a determinant of the soundness of credit institutions and, in doing so, liquidity risk management has been improved, including through adequate management of liquidity in the system and the completion of the regulatory framework.
5. Conclusions:

Under the terms of an external environment unpredictable and modest evolution of the national economy, the Romanian banking system has paid special attention to maintaining the level of performance-by exercising a more sever over cost/income indicator and through careful management of risks in a volatile environment-as well as aligning to customer requirements.

The introduction of new regulations at the national and international will force banks to review its business model, with a return to traditional activities ("back to basics") and a possible reduction in the activity of trading (especially proprietary trading activity). The need to extend deadlines to funding and to harden the stable funding will produce reductions in interest margins and competitive will put pressure on deposits (especially retail ones). Also the new regulations regarding the maintenance of a liquid and highly liquid assets can induce the effect of "crowding-out" (increased government financing needs and reducing private consumption and investment).

Basel III introduces two new standards for liquidity risk: the more coverage ratio and the net stable funding ratio. The uncertainties in the international financial market could generate mutations leading to the structure of the balance sheet of the banking sector, in terms of a potential future even more significant manifestations of the phenomenon of disintermediation amid restructuring of băncilormamă activity. An attenuator is to strengthen their capital bases in the context of the gradual implementation of the new Basel III requirements.

Measures that banks could adopt in order to mitigate the impact of the alignment to the new standards are adjusting the business model and the restructuring of the bank balance sheets. Banking corporate governance effective, depending on the business model and the corresponding risk profile, is paramount for successful implementation of Basel III.

6. Bibliography: