

ANALYSIS OF THE MACEDONIAN LEGAL FRAMEWORK ON BANK LIQUIDITY

Abstract

The main purpose of this paper is the analysis of the relevant legal framework providing bank liquidity in Macedonia. The National Bank of the Republic of Macedonia is the most important institution which adopts various Resolutions ensuring successful management of bank liquidity. Within the past years, as well as today, the National Bank of the Republic of Macedonia has adopted an adequate regulation in order to provide the basic directions and measures for managing the bank liquidity.

This paper consists of four parts:

1. Introduction;
2. Analysis of the Law on the National Bank of the Republic of Macedonia, Banking Law and Supervisory circular No.6;
3. Analysis of various Decisions of the National Bank of the Republic of Macedonia, such as: Decision on managing bank liquidity risk, Decision on reserve requirement, [Decision on bill of six-month deposit with the National Bank of the Republic of Macedonia](#), [Decision on insurance, trade and payment of Central Bank bills](#), [Decision on short-term liquidity credit of last resort](#), [Decision on overnight credit](#) and [Decision on intraday credit](#), Decision on purchase and sale of securities on temporal and outright basis by the National Bank of the Republic of Macedonia, [Decision on foreign currency deposits with the National Bank of the Republic of Macedonia](#), [Decision on the reference rate in calculating penalty interest rate](#), Decision on determining the instruments used as collateral in the conduct of monetary operations and many other Decisions that involved amending and supplementing the above Decisions;
4. Conclusion.

According to the relevant regulation in our country, the National Bank of the Republic of Macedonia adopts directions and measures on prudent management of bank liquidity. Nowadays, we experience the consequences of the worst crisis in the economy – a world financial crisis. For this reason, the banks face the challenge to observe the liquidity of the global financial system in Macedonia in order to maintain the fiscal and monetary macro balance.

Key words: *liquidity, bank, The National Bank of the Republic of Macedonia, reserve requirement, treasury bills, liquidity risk.*

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1. INTRODUCTION

The daily financial bank activities imply maintaining an adequate level of liquidity, as almost each financial activity results in certain effects on the banks' liquidity position. The major importance of liquidity risk² for the effective and successful operation of the bank imposes the need for its inclusion in the overall process of risk management.

The National Bank of the Republic of Macedonia is a supervisory authority, responsible for the operations of the banks and the savings banks in Macedonia. It concentrates on the methods and techniques employed by the banks, in order to secure the effective managing of the liquidity risk. This arrangement permits the reduction of the risk profile of each bank, thus eliminating the possibility of transmission of the liquidity problems from one bank to another. This has a positive impact on the stability of the banking system in Macedonia.

Since 2003, when the National Bank of the Republic of Macedonia made the first concrete steps in establishing adequate regulation, until today the National Bank of the Republic of Macedonia adopted many Decisions pertaining to the establishment of a legal framework securing successful arrangement of the issue of bank liquidity. This paper will analyze only those elements of the legal framework which govern the issue of liquidity, without focusing on the other elements regulated by these laws and decisions.

2. LAW ON THE NATIONAL BANK OF THE REPUBLIC OF MACEDONIA, BANKING LAW AND SUPERVISORY CIRCULAR NO.6

According to the *Law on the National Bank of the Republic of Macedonia*³, the National Bank Council determines the conditions, basis and percentage for the calculation of the reserve requirement of banks and saving banks, as well as the manner and deadlines for allocating and maintaining the reserve requirement. The National Bank of the Republic of Macedonia defines the penalty interest in the case of noncompliance with the requirements. The following are the basic tasks of the National Bank of the Republic of Macedonia:⁴ holding and managing the official foreign reserves; issuing and managing the banknotes and coins of the Republic of Macedonia; recording and monitoring the international credit operations and preparing the balance of payments of the Republic of Macedonia; establishing, promoting, registering and overseeing sound, safe and

² According to the Decision on the risk management (*Official Gazette of the RM* No. 42/2011), March 31, 2011 liquidity risk is the risk that occurs when the bank cannot provide sufficient funds for the settlement of its short-term liabilities at the moment when they reach maturity or it provides the necessary funds at very high costs.

³ [Law on the National Bank of the Republic of Macedonia](#) (*Official Gazette of RM* No.158/10), Article 20.

⁴ [Law on the National Bank of the Republic of Macedonia](#) (*Official Gazette of RM* No.158/10), Article 7.

efficient payment, settlement and clearing systems; regulating, licensing, and supervising banks, savings banks houses, e-money companies and other financial institutions; supervising the application of the regulations governing foreign currency operations, exchange operations, money transfer services and anti-money laundering systems and customer protection which are further specified in the relevant laws; organizing trading and settlement of securities on the OTC markets and other tasks.

In order to achieve all of the above mentioned objectives and to carry out its tasks, the National Bank of the Republic of Macedonia may:

- ✚ operate in the financial markets by issuing securities for monetary purposes, buying and selling outright (spot or forward) or under repurchase agreement and by lending or borrowing claims and marketable instruments, as well as precious metals; and
- ✚ conduct credit operations with banks operating in the Republic of Macedonia, with lending based on adequate collateral⁵.

In exceptional circumstances, the National Bank of the Republic of Macedonia may, on terms and conditions determined by the National Bank Council, act as *lender of last resort* for the banks in the Republic of Macedonia. The National Bank of the Republic of Macedonia may provide credit of last resort only if⁶:

- ✓ the bank, in the opinion of the National Bank of the Republic of Macedonia, is solvent;
- ✓ the credit is approved for the purposes of improving liquidity; and
- ✓ the bank provides adequate collateral.

The National Bank of the Republic of Macedonia approves credits of last resort to the bank, or for the bank's benefit, for periods not exceeding 90 calendar days that may be renewed for a period of maximum 90 days, on the basis of a program specifying the measures that the bank concerned will take. The National Bank of the Republic of Macedonia provides conditions, organizes, participates in and operates to ensure safe, sound and efficient operations of the payment, settlement and clearing systems⁷.

Banking Law regulates the methodology for liquidity risk management.⁸ The bank is under an obligation to maintain the liquidity, i.e. to manage the assets and the liabilities in a manner ensuring the settlement of due liabilities at all times. For the purposes of maintaining the liquidity, the bank manages the liquidity risk,

⁵ [Law on the National Bank of the Republic of Macedonia](#) (Official Gazette of RM No.158/10), Article 19.

⁶ [Law on the National Bank of the Republic of Macedonia](#) (Official Gazette of RM No.158/10), Article 22.

⁷ [Law on the National Bank of the Republic of Macedonia](#) (Official Gazette of RM No.158/10), Article 31.

⁸ The National Bank Council determines this methodology in accordance with the international standards, in order to provide adequate risk management.

including in particular:⁹ establishment and maintenance of an adequate maturity structure, planning and management of inflows and outflows of funds and providing an adequate amount of liquid assets, tracing the sources of funds and their concentration and liquidity testing.

Analyzing the *Supervisory circular No.6*,¹⁰ we may conclude that it aims to integrate all questions related to the liquidity risk management, as well as to provide guidelines for an effective implementation of the liquidity risk management process by the banks and its involvement in the overall process of management of all risks the banks are exposed to in their operations. This includes the establishment of adequate *conditions* for their implementation, including: designing and adoption of a liquidity risk management policy and its basic elements; establishment of a proper organizational structure (Board of directors, Risk management board, Competent liquidity risk management body and Internal audit department); establishment of a suitable IT system and development of a liquidity risk management plan in the cases of emergency.

3. ANALYSIS OF THE DECISIONS ADOPTED BY THE NATIONAL BANK OF THE REPUBLIC OF MACEDONIA

3.1. Analysis of the Decision on managing banks' liquidity risk¹¹

This Decision prescribes the liquidity risk management methodology, which includes:

a) *System of liquidity risk management*, involving at least the following components:

- *Organizational structure of liquidity risk management*, (i.e., clearly defined competencies and responsibilities of the bank's bodies – the bank's Supervisory board, the Risk management board, the bank's Managing board and/or Special body, as well as a definition of their tasks and responsibilities);
- *Steps and procedures for internal control and audit* (the bank is under an obligation to: establish the limits on the approval of the cash flows over a certain amount and to monitor the compliance with the determined limits; report about the possible exceeding of the limits and control the data and information used when the bank's liquidity was determined);
- *Information system* ensuring timely and constant measuring, monitoring, controlling and reporting in the decision-making process of managing the liquidity risk;
- *Stress-testing* (the bank is under an obligation to test at least once a year the bank's liquidity under various conditions – stress scenarios); and

⁹ [Banking Law](#) (Official Gazette of RM No.67/07, 90/09 and 67/10), Articles 79 and 80.

¹⁰ National Bank of the Republic of Macedonia, *Supervisory circular No.6 – Liquidity Risk Management*, June 2004, p. 2-4.

¹¹ Decision on managing banks' liquidity risk (Official Gazette of the RM No. 126/2011), September 15, 2011, p. 1-11.

- *Liquidity contingency plan* (including: clear segregation of tasks, competences, responsibilities and decision-making regarding the implementation of the Plan, early warning indicators as signs of emergency and designation of bank's employees responsible for monitoring and reporting on such indicators).

b) *Maintaining an appropriate level of liquidity.* In order to provide it, each commercial bank in Macedonia should: plan and monitor the inflows and outflows of funds, establish and maintain adequate maturity structure of its assets (claims) and liabilities (commitments), monitor the sources of funds and their concentration, comply with the liquidity ratios prescribed by this Decision, determine and monitor the internal liquidity indicators.

c) *Methods and structure of the National Bank's reports* with different Instructions.¹² The National Bank of the Republic of Macedonia adopts the implementation of the Decision on managing banks' liquidity risk. The bank is obligated to prepare the following Reports of these Instructions:

- Report on contractual maturity structure of assets and liabilities, consisting of three parts: RSD Form - Denars, RSD - foreign exchange and RSD – total;
- Report on expected maturity structure of assets and liabilities, consisting of RSO Form;
- Report on the largest depositors and concentration level, consisting of two parts: ND Form and NK Form;
- Report on liquidity ratios, consisting of two parts: SL 30 and SL 180; and
- Report on internal liquidity indicators, consisting of LP Form.

The commercial banks in the Republic of Macedonia have an obligation to prepare all of the above mentioned Reports on a monthly basis.

3.2. Decision on reserve requirement

This Decision¹³ regulates the calculation and fulfillment of the reserve requirement for banks and foreign bank branches, as well as for savings banks possessing founding and operating license, issued by the Governor of the National Bank of the Republic of Macedonia. The first part of the Decision explains *the basis for calculation of the reserve requirement*. The banks and the savings banks have an obligation to report to the National Bank of the Republic of Macedonia on the liabilities outstanding, comprising the reserve requirement base for each day of the calendar month until the last working day at the latest, before the beginning of the fulfillment period.

The banks' reserve requirement base for a certain fulfillment period is calculated as an average of the liabilities for each day of the

¹² Instructions for implementing the Decision on managing banks' liquidity risk (*Official Gazette of the Republic of Macedonia* no. 139/2011), September 30, 2011, p. 1-17.

¹³ Decision on reserve requirement (*Official Gazette of the RM* No. 126/2011), September 15, 2011, p. 1-10.

calendar month preceding the fulfillment period. The average of the foreign currency liabilities can also be presented in Euros by applying the middle exchange rate of the National Bank of the Republic of Macedonia, valid on the last day of the calendar month.

The official reserve requirements rates for banks are: 10% of liabilities in domestic currency; 20% of liabilities in domestic currency with FX clause and 13% of liabilities in foreign currency. These rates are also valid today. The remuneration rate of the reserve requirement in Denars is 1.00% and in Euros is 0.10%, on an annual level.

3.3 Decision on Bill of six-month deposit with the National Bank of the Republic of Macedonia

This Decision¹⁴ regulates the manner and the conditions that should be fulfilled in order to place the banks' funds in a bill of six-month deposit¹⁵ with the National Bank of the Republic of Macedonia in Denars. The right to place the funds in the bill of six-month deposit is given to all banks and foreign banks' branch offices. The maturity of the bills is six months and the interest rate on the bill of six-month deposit is set by the National Bank of the Republic of Macedonia, depending on the six-month Euribor, increased by 0.5 percentage points.

The bank is obligated to notify the National Bank of the Republic of Macedonia about the amount that is going to be placed in the bill of six-month deposit, through SWIFT or other form of written notification in the case of withdrawal before the maturity date. The National Bank of the Republic of Macedonia calculates and pays an interest on the withdrawing funds on the day of withdrawal. On March 7, 2012, the National Bank of the Republic of Macedonia announced the conditions for placing funds in the bill of six-month deposit. It determined the interest rate amount on 1.729%, a six-month Euribor (1.229%) increased by an additional fixed percentage point of 0,5. Due to the last condition, the banks in Macedonia have placed funds in this instrument.¹⁶

3.4 Decision on issuance, trade and payment of Central Bank bills

This Decision¹⁷ concerns the terms and the manner of issuance, trade and payment of Central Bank bills¹⁸ in Denars, as they

¹⁴ Decision on bill of six-month deposit with the National Bank of the Republic of Macedonia (*Official Gazette of the RM* No. 14/2011), February 3, 2011, p.1-2.

¹⁵ According to this decision, the bill of six-month deposit with the National Bank of the Republic of Macedonia is a time-deposit instrument with the National Bank of the Republic of Macedonia and it is non-transferrable.

¹⁶ According to: <http://www.nbrm.mk/?ItemID=2B63397B9D9CC143B0E994187BE155A7>: Announcement of the National Bank of the Republic of Macedonia of March 7, 2012: State on bill for six-month deposit with the National Bank of the Republic of Macedonia.

¹⁷ Decision on issuance, trade and payment of central bank bills (*Official Gazette of the RM* No. 42/2011), March 31, 2011, p.1-7.

have been determined by the National Bank of the Republic of Macedonia. This Decision details the auctions of Central Bank bills (regular and non-regular) and it concerns the contents of the published prospect for auction, the rules on making an offer for auction, as well as its content. Several types of tenders for the Central Bank bills auctions have been envisaged: volume tender or interest rate tender;¹⁹ principles of bid allotment and auction results (principle of proportional allotment or principle of priority of the bidding price (interest rate); realization of the accepted bids; explaining the reasons for disruption of the auction process; settlement process and penalty provisions.

The settlement of the transactions with Central Bank bills²⁰ in the secondary market is performed immediately, according to the "delivery vs. payment" principle, but no later than one business day from the day of conclusion of the transaction. On the maturity date there is no settlement of transactions with Central Bank bills. Participants in the settlement of transactions with the Central Bank bills are the banks and the National Bank of the Republic of Macedonia which submit instructions for settlement of outright transactions and report transactions with Central Bank bills, in the capacity of purchasing bank, i.e. selling bank. The result of the settlement must be reported to both the purchasing bank and the selling bank through the Matching system. Today, the interest rate of the Central Bank bills is 4,00%.

3.5. Decision on short-term liquidity credit of last resort

This Decision²¹ of the National Bank of the Republic of Macedonia established the terms and conditions, the manner of extending a short term liquidity credit of last resort in Denars (hereinafter: liquidity credit), as well as the terms, conditions and the manner of its repayment. The National Bank of the Republic of Macedonia may extend liquidity credit to a bank for which it has been ascertained that there are liquidity problems, on the condition that the bank is solvent. Before submitting a request for using a liquidity credit, the bank with

¹⁸ The central bank bills are the most useful instrument in the open market operations. They provide an opportunity for the National Bank of the Republic of Macedonia to sterilize the liquidity in the banking system.

¹⁹ In the case of a *volume tender*, the interest rate for the auction is determined by the National Bank of the Republic of Macedonia and the commercial banks will bid only with volume. The National Bank of the Republic of Macedonia may limit the amount on the auction or it may determine an unlimited amount of central bank bills.

In the case of an *interest rate tender*, the National Bank of the Republic of Macedonia announces the amount of the auction and the banks will bid both with amounts and prices (interest rates). The funds can be allocated by prices (interest rates) from the banks' bids (American type of auction). The National Bank of the Republic of Macedonia is entitled to set the minimum price (maximum interest rate).

²⁰ Instructions on settlement of transactions with issued CB (*Official Gazette of the RM* No. 42/2011), April 1, 2011, p.1-2.

²¹ Decision on short-term liquidity credit of last resort (*Official Gazette of the RM* No. 82/2004), p.1-4.

liquidity problems is obliged to use all available sources of liquid funds existing in the market. The use of the liquidity credit begins after the bank to which the liquidity credit is granted transfers the property and rights to the National Bank of the Republic of Macedonia. After the repayment of the liquidity credit, the property and rights to the assets are returned to the bank.

The transferred securities and claims are evaluated according to the market value which should cover at least 105% of the amount of the credit at the moment of its extension. The National Bank of the Republic of Macedonia may extend a *liquidity credit* in cooperation with other banks to the bank with liquidity problems, if the last one has fulfilled the conditions²² and it has no assets on disposal. The Governor sets the interest rate on the liquidity credit at a level which is higher than the interest rate in the money market, in accordance with the Decision on the interest rates of the National Bank of the Republic of Macedonia.

In case of a potential financial crisis or a financial crisis that could jeopardize or has jeopardized the stability of the financial system, the National Bank of the Republic of Macedonia may also approve the credit of last resort which has been backed by a guarantee of the Republic of Macedonia. The guarantee of the Republic of Macedonia will cover the amount of the credit of last resort, including the interest²³.

3.6. Decision on overnight credit and Decision on intraday credit

The Decision on overnight credit²⁴ determines the conditions and the manner of extending available overnight credit, in order to respond to the short-term liquidity needs of the banks. The Decision on intraday credit²⁵ envisages the conditions and the manner of extending credit for the purposes of smooth conducting of the bank payment transactions. The National Bank of the Republic of Macedonia can extend intraday credit to a bank by concluding a repo transaction with maturity on the same day and it may not charge an interest. The National Bank of the Republic of Macedonia may extend an overnight credit to a bank by concluding a repo transaction with maturity of one working day (overnight), as well as the instruments used as collateral²⁶ on the overnight credit, or the securities indicated on the List of securities for conducting monetary operations.

The National Bank of the Republic of Macedonia charges interest²⁷ on the overnight credit at an interest rate which is today 5,50%. The

²²One of the conditions for liquidity credit is the extension with a maturity of up to three months. It can be rolled over, but the whole maturity of the credit cannot be longer than six months.

²³ Decision on a credit of last resort (*Official Gazette of the RM* No. 02-15/IX-5/2011), p. 4.

²⁴ Decision on overnight credit (*Official Gazette of the RM* No. 42/2011), March 31, 2011, p.1-3.

²⁵ According to the Decision on intraday credit (*Official Gazette of the RM* No. 42/2011), March 31, 2011, p.1-2.

²⁶ This is also valid in the case of the intraday credit.

²⁷ The interest rate on the overnight credit is an upper limit of the short term interest rates on the money markets. The interest rate is obtained by adding

overnight credit is approved upon request of the bank. The bank shall repay the overnight credit during the subsequent working day of the MIPS, as the first payment transaction initiated by the bank. If the bank fails to repay the overnight credit, the National Bank of the Republic of Macedonia will collect the credit, as well as all claims arising thereof by full foreclosure of the collateral instruments.

The bank shall also repay²⁸ the intraday credit until the moment when the MIPS ceases receiving funds transfer messages from the institutions responsible for conducting payment operations for their clients. The settlement of both the overnight and the intraday credit is made on the basis of the elements indicated in the confirmation.

3.7. Decision on purchase and sale of securities on temporal and outright basis by the National Bank of the Republic of Macedonia

This Decision²⁹ envisages the terms and manner of the purchase and sale of securities on temporal and outright basis, employed by the National Bank of the Republic of Macedonia for injecting or withdrawing liquidity from the banking system. The National Bank of the Republic of Macedonia performs repeated transactions on a temporal basis through the conclusion of bilateral transactions with individual banks or through organizing an auction. The National Bank of the Republic of Macedonia submits a prospectus to all banks and the banks will participate in the auctions by submitting bids to the National Bank of the Republic of Macedonia within the period envisaged for receiving bids. The minimum amount for participation in the auction is 10 000,000 Denars. Each increase above the minimum amount shall be made by adding rounded amounts of Denar 1 000,000. When conducting the auction, the Governor of the National Bank of the Republic of Macedonia decides on the type of tender - volume tender or interest rate tender.³⁰ The National Bank of the Republic of Macedonia may determine a minimum interest rate in the

1.50 percentage points to the central bank bills interest rate with maturity of 28 days.

²⁸ If the bank fails to repay the intraday credit within the deadline, it may submit an application for converting the intraday credit into available overnight credit, as it has been specified in the Decision on overnight credit. Provided that the bank fails to repay the intraday credit and it fails to submit the application for converting the intraday credit into an available overnight credit, the National Bank of the Republic of Macedonia will collect the intraday credit and all claims arising thereof by full foreclosure of the collateral instruments.

²⁹ *Decision on purchase and sale of securities on temporal and outright basis by the National Bank of the Republic of Macedonia* ("Official Gazette of the RM" No. 81/2011), p.1-6.

³⁰ -In the case of a volume tender, the interest rate of the auction is determined by the National Bank of the Republic of Macedonia and the commercial banks bid only in amounts. The National Bank of the Republic of Macedonia can set limited or unlimited amount of the auction.

In case of interest rate tender, the National Bank of the Republic of Macedonia determines the amount of the auction and the commercial banks bid in amounts and interest rates. The determined amount is distributed by an interest rate from the bank's bids (American type of auction).

conduct of the auction for injecting liquidity or a maximum interest rate in the conduct of the auction for withdrawing liquidity.

This Decision also concerns the contents of the published prospectus for auction, the way of providing the bids for auctions and their content, the principles of bid allotment and auction results, the reasons of disruption of the auction process, the purchase and sale of securities on an outright basis, as well as the settlement of transactions for the purchase and sale of securities on temporal and outright basis.

3.8. Decision on foreign currency deposits with the National Bank of the Republic of Macedonia

This Decision³¹ regulates the manner and terms for placing Euro deposits (foreign currency deposits) with the National Bank of the Republic of Macedonia. The banks and the foreign bank branches are entitled to place foreign currency deposits with the National Bank of the Republic of Macedonia. The National Bank of the Republic of Macedonia defines the interest rates which are equal to the interest rates on the funds placed in the central banks of the Euro area, in the international financial institutions and the returns on treasury bills of the member states of the Euro area. This Decision concerns *the auctions of foreign currency deposits* that are conducted by applying volume tenders within the scheduled period of conducting. The National Bank of the Republic of Macedonia submits to all banks a prospectus, indicating the terms and conditions for participating in the auction, through the National Bank's electronic system for market operations (Electronic System). The commercial banks submit the bids for participation in the auction through the Electronic System, using their own user name and password. After the expiration of the deadline for receiving the bids, the submitted bids are irrevocable and the bids that do not correspond to the terms specified in this Decision will be rejected. When the National Bank of the Republic of Macedonia offers a limited amount of foreign currency deposits and the total demand exceeds the supply, the bids are allotted proportionately to the bid amount (principle of proportional allotment). If in the cases of proportional allotment it is necessary to increase the realized amount as a result of mathematical rounding up of the allotted amount, the National Bank of the Republic of Macedonia has the legal right to increase the realized amount relative to the offered one. The National Bank of the Republic of Macedonia will inform the banks about the auction results electronically, including the final interest rate on foreign currency deposits. Each bank has an access to its own auction results and to the total results of each auction, through the Electronic System. The banks will be obliged to pay the foreign currency deposits on the account (i.e. on the National Bank of the Republic of Macedonia) at the settlement date specified in the prospectus. On the maturity date, the National Bank of

³¹ Decision on foreign currency deposits with the National Bank of the Republic of Macedonia (*Official Gazette of the RM* No. 42/2011), March 31, 2011, p.1-4.

the Republic of Macedonia will pay the amount of the placed foreign currency deposits and interests.³²

In the second part of this Decision the *usage of foreign currency deposit* is explained. The bank can request early withdrawal of the foreign currency deposit, in part or in full. At the end, this Decision explains the *penalty provisions* and if the commercial bank fails to pay the adequate amount of foreign currency deposits in line with the auction results, the National Bank of the Republic of Macedonia may calculate a compensation for the unpaid funds at an interest rate equal to the Euribor for the respective maturity days. The bank will pay the compensation on the first working day after the date of occurrence of the obligation.

3.9. Decision on the reference rate for calculating the penalty interest rate

This Decision³³ of the National Bank of the Republic of Macedonia regulates the manner of determining and announcing the reference rate for calculating the penalty interest rate.³⁴ The National Bank of the Republic of Macedonia announced that the reference rate for calculating the penalty interest rate for the period January 01 - June 30, 2012 will be 4.00%.³⁵

3.10. Decision on determining the instruments used as collateral in the conduct of monetary operations³⁶

The instruments employed by the National Bank of the Republic of Macedonia as collateral in the conduct of monetary operations with the banks are high-quality debt securities, as well as liquidity securities that are registered in the securities depository of the National Bank of the Republic of Macedonia or in the Central Securities Depository AD - Skopje. During the monetary operations ensuring the Denar liquidity in our banking system, the nominal value of the securities used as collateral is higher than the approved funds. During the monetary operations related to the absorption of the Denar liquidity in our banking system, the nominal value of the securities used as collateral is equal to the approved funds. The securities that

³² Decision on foreign currency deposits with the National Bank of the Republic of Macedonia (*Official Gazette of the RM* No. 42/2011), March 31, 2011, p.1, 2.

³³ Decision on the reference rate for calculating the penalty interest rate (*Official Gazette of the RM* No. 42/2011), March 31, 2011, p.1.

³⁴ The reference rate for calculating the penalty interest rate for a period of half a year is the interest rate on the main instrument of the open market operations - central bank bills, registered on the last auction in the preceding half a year. In the case of volume tender, the reference rate for calculating the penalty interest rate is equal to the interest rate determined by the National Bank of the Republic of Macedonia, but in the case of interest rate tender, it is equal to the average weighted interest rate of the auction.

³⁵ Announcement of the reference rate for calculating the penalty interest rate (*Official Gazette of the RM* No. 42/2011) December 28, 2011, p.1.

³⁶ Decision on determining the instruments used as collateral in the conduct of monetary operations (*Official Gazette of the RM* No. 126/2011)

the National Bank of the Republic of Macedonia uses as collateral in these monetary operations and the margin ratios are defined in the “List of securities for conducting monetary operations,”³⁷ adopted by the Governor of the National Bank of the Republic of Macedonia.

4. CONCLUSION

Since the end of 2003 when the National Bank of the Republic of Macedonia made the first concrete steps toward establishing adequate regulation until today, the National Bank of the Republic of Macedonia adopted many Decisions pertaining to set up a sound legal framework for the successful arrangement of the issue of bank liquidity in Macedonia. According to the existing regulation, the National Bank of the Republic of Macedonia provides directions and guidelines for the liquidity management of banks.

In the case of larger banks, an informal body³⁸ is established (‘committee on liquidity’³⁹) and an internally adopted “Decision on managing banks”⁴⁰ regulated the liquidity risk. On the basis of the analysis of several Decisions adopted by the National Bank of Republic Macedonia, we may conclude that there is in Macedonia an adequate and solid legal framework for maintaining the bank

³⁷ List of securities for conducting monetary operations (*Official Gazette of the RM* No. 126/2011) September 15, 2011, p.1.

³⁸ The Committee is responsible for operational management and weekly monitoring of liquidity which is based on weekly projections for the state's bank account and the projected payments and payments from the account. That determines the global activities undertaken during the week, as guidance for the decision.

³⁹ The Committee for liquidity by function includes: the managing directors, the manager of the Department of Treasury and the Financial Markets Division and the manager of risk management.

⁴⁰ The larger banks determine the percentages of investments in individual assets relative to total assets, as well as the limits of resources in respect of the guarantee capital. For maintenance of foreign exchange liquidity, banks set daily limits on the amount of foreign assets in terms of off-balance sheet foreign currency liabilities and structure prescribed percentage of the amount of currency held by the bank in respect of the guarantee capital of the bank. They define the elements of moderate insolvency, substantial illiquidity and extreme illiquidity and define the specific instruments that banks will tend to hold in their portfolios. They determine and calculate specific information that follows the bank's liquidity (through historical monitoring of movement of the odds), usually the following: liquid assets/total assets, liquid assets/unstable deposits, net loans/stable deposits and net loans/total deposits. They set daily limits on loans and deposits with banks at home and abroad since maturity dates and according to the ranging of the banks (under the List of National Bank of the Republic of Macedonia) and authorized levels of hierarchical decision making in the bank. They are obliged to establish quarterly limits on exposure to individual banks in the amount and types of individual transactions. Besides monitoring and controlling the concentration of the deposit base and general portfolio of the bank, they follow the link and the correlation between inflows and outflows in the bank account through the coefficient of linear correlation, as well as the percentage of variation of the deposit base in order to determine the behavior of the stable and unstable deposits.

liquidity. In the period which follows, in order to preserve the future stability and to provide further continuous service, the banks will have to devote greater attention to liquidity management and to make further efforts to increase the liquidity potential. This paper refers to those exciting possibilities for the banks in the Republic of Macedonia for managing liquidity and it analyzes the future steps in the development of liquidity management.

Although we may conclude that this year (2012) there is a stable environment for the implementation of monetary policy, some uncertainty remains. This will underline the necessity for continuous assessment of the risks resulting from the efforts to meet the monetary targets. The regular tasks of the National Bank of the Republic of Macedonia for this year involve management of the banking system liquidity in order to ensure the effective implementation of the monetary policy. This year, the National Bank of the Republic of Macedonia plans to continue with the following measures:⁴¹

- ❖ Preparation of liquidity projections, using the established techniques for short-term liquidity planning of autonomous factors, the model for the design of currency in circulation, as well as the model for the amount of interventions;
- ❖ Implementation of interventions using the instruments for monetary regulation;
- ❖ Analysis of supply, demand, participants of exchange market and implementation of interventions in the foreign exchange market;
- ❖ Monitoring of foreign exchange position of individual banks and the banking system, in order to consider timely certain trends or pressures in the foreign exchange market;
- ❖ Analysis of movements in financial markets;
- ❖ Monitoring the status and trade in securities of non-residents in financial markets in the Republic of Macedonia; and
- ❖ Preparation of information on the liquidity of the banking system and the movements of financial markets in the country, as well as information on the implementation of monetary policy by individual central banks.

References:

1. Announcement of the reference rate for calculating the penalty interest rate (*Official Gazette of the RM* No. 42/2011), December 28, 2011.
2. [Banking Law](#) (*Official Gazette of RM* No.67/07, 90/09 and 67/10).
3. Decision on the risk management (*Official Gazette of RM* No. 42/2011), March 31, 2011.
4. Decision on managing banks' liquidity risk (*Official Gazette of RM* No. 126/2011), September 15, 2011.

⁴¹ *Program of the National Bank of the Republic of Macedonia in 2012*, National Bank of the Republic of Macedonia, Skopje, p. 19 - 20.

5. Decision on amending the decision on managing banks' liquidity risk (*Official Gazette of RM* No. 19/2012).
6. Decision on reserve requirement (*Official Gazette of RM* No. 126/2011), September 15, 2011.
7. Decision on bill of six-month deposit with the National Bank of the Republic of Macedonia (*Official Gazette of RM* No. 14/2011), February 3, 2011.
8. Decision on issuance, trade and payment of central bank bills (*Official Gazette of RM* No. 42/2011), March 31, 2011.
9. Decision on short-term liquidity credit of last resort (*Official Gazette of RM* No. 82/2004).
10. Decision on a credit of last resort (*Official Gazette of RM* No. 02-15/IX-5/2011).
11. Decision on overnight credit (*Official Gazette of RM* No. 42/2011), March 31, 2011.
12. Decision on intraday credit (*Official Gazette of RM* No. 42/2011), March 31, 2011.
13. Decision on purchase and sale of securities on temporal and outright basis by the National Bank of the Republic of Macedonia (*Official Gazette of RM* No. 81/2011).
14. Decision on foreign currency deposits with the National Bank of the Republic of Macedonia (*Official Gazette of RM* No. 42/2011), March 31, 2011.
15. Decision on the reference rate for calculating the penalty interest rate (*Official Gazette of RM* No. 42/2011), March 31, 2011.
16. Decision on determining the instruments used as collateral in the conduct of monetary operations (*Official Gazette of RM* No. 126/2011).
17. Instructions for implementing the Decision on managing banks' liquidity risk (*Official Gazette of RM* No. 139/2011), September 30, 2011.
18. Instructions on settlement of transactions with issued CB (*Official Gazette of RM* No. 42/2011), April 1, 2011.
19. [Law on the National Bank of the Republic of Macedonia](#) (*Official Gazette of RM* No.158/10), December 9, 2010.
20. List of securities for conducting monetary operations (*Official Gazette of RM* No. 126/2011), September 15, 2011.

21. Announcement of the National Bank of 07.03.2012: State on bill for six-month deposit with the National Bank of Macedonia. Available at:

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22. *Program of the National Bank of the Republic of Macedonia in 2012*, National Bank of the Republic of Macedonia, Skopje.

23. The National Bank of the Republic of Macedonia, “*Supervisory circular No.6 – Liquidity Risk Management*”, June 2004.

24. Official web site of the National Bank of the Republic of Macedonia. Available at: www.nbrm.mk