

REPO Operations - a Way to Adjust Liquidity Crisis on Banking Institutions

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Money market operations (open market operations) constitute the most important instrument of the monetary policy of the NATIONAL BANK of ROMANIA. They shall be carried out on the initiative of the Central Bank, having the following functions: guiding interest rates, managing the liquidity conditions of the monetary market and signaling the orientation of the monetary policy. In this context, a systematic and a market organization is essential) able to adapt to the new conditions imposed by the relaxation of credit operations. Implementation and operational systematization of such types of transaction can help banking entities in adjusting the liquidity crisis and the support on the way to economic growth.

Key words: repo, reverse repo, BNR, banks

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1. Introduction

As a result of the continuous development of the types of repo and reverse repo, respectively the corresponding values for these transactions reverse repo and repo market has become one of the most important and liquid financial markets in the world.

Repo transactions have generally at the base liquid financial instruments such as titles, but other evidence may be used, such as shares, bonds, municipal and corporate bonds, etc. The use of these types of transactions is very popular among banks and their clients as a result of attractive yield and security under such contracts structure. In addition, central banks use repo contracts as indispensable tools for implementing monetary policy.

As a result of the fact that, in accordance with the legal regulations in force, the Bucharest Stock Exchange (BVB) is going to be used as a secondary market of Government securities, it has been taken into account the need to implement a repo market-oriented model in electronic trading platform, developed in-house by BSE, in compliance with international standards in terms of standardized contracts (repo negotiated contracts and bilateral negotiated contracts^[1], margin system, electronic tagging, negotiation on the basis of collateral for repo rate, etc).

Regulations of the monetary market are:

Regulation NBR No. 1/2000 (republished) concerning money market operations conducted by the NATIONAL BANK of ROMANIA and permanent facilities provided by it eligible participants (MO No. 84/01.02.2008)

Regulation NBR No. 3/2012 to amend Regulation NBR 1/2000 concerning money market operations conducted by the NATIONAL BANK of ROMANIA and permanent facilities provided by it eligible participants.

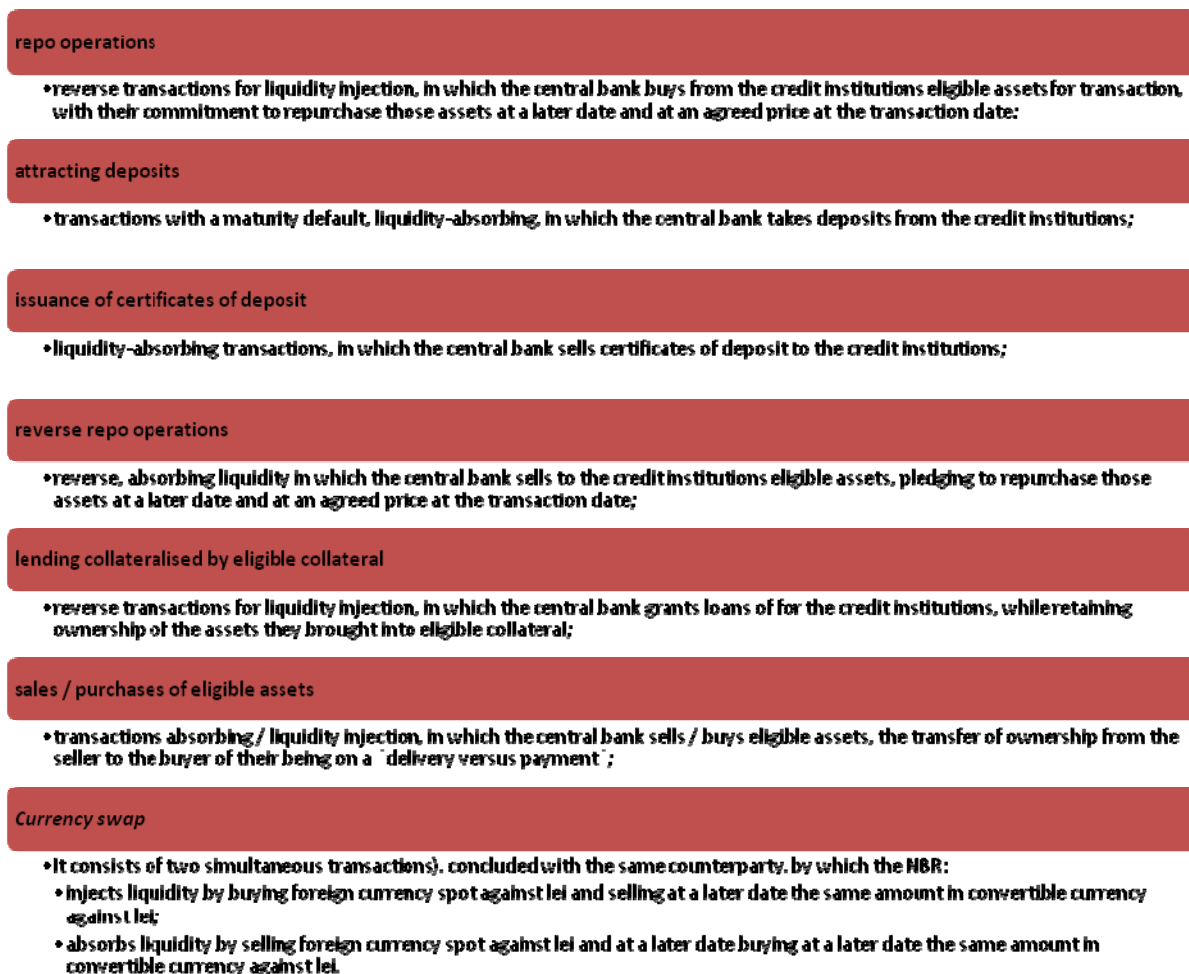
Regulation NBR No. 14/2012 for changing the reg. NBR No. 1/2000 concerning money market operations conducted by the National Bank of Romania and permanent facilities provided by it to eligible participants.

Order NBR No. 7/2006 on working procedures for the conduct of operations with deposit certificates issued by the National Bank of Romania.

The norm NBR No. 2/2015 concerning electronic transmission of documents related money market operations conducted by the National Bank of Romania through auction and permanent facilities provided by it to eligible participants.

According to the regulations in force, the main types of money market operations available at the NATIONAL BANK of ROMANIA are:

Figure1 - Schematic of money market operations available at the
NBR



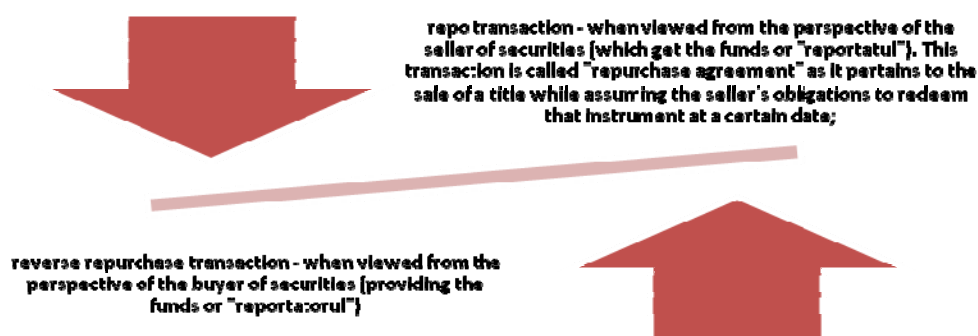
Source: Own contribution

2. Characteristics and repo market participants

Repo and reverse repo contracts are hybrid transactions that combine both the characteristics of collateralized loans (secured loans), as well as separate transactions of buying or selling (outright purchase/sale transactions), nevertheless not making distinctly a part in one of the two types[2].

Repo or reverse repo transactions may be concluded by central banks (which can carry out such transactions to implement monetary policy), commercial banks, clients, etc. According to the two parties to the contract, such a transaction is called:

Figure 2 - Types of repo transactions



Source: Own contribution

Repo market participants are grouped into categories, namely:

Figure 3-types of repo transactions



Source: Own contribution

Characteristics of repo contracts (repo and reverse repo transactions)

- ② Collateral-theoretically, for the conclusion of a repo transaction may be used as collateral any negotiable financial instrument. In practice, however, lenders prefer liquid titles that can be sold easily in the event of any disabilities^[3].
- ② Maturity-repo contracts are generally concluded for a very short term (1 day-overnight repo or a few days). Longer-term contracts are concluded for the standard as their maturity is 1, 2 or 3 weeks, as well as 1, 2, 3, even 6 months (term). In addition to these maturity standards, repo contracts can be concluded for an indefinite period and continue based, called "repo agreements continuing" or open "(continuing/open repo). These contracts are similar to those of overnight type, but are renewed every day and the rate or repo collateral shall be adjusted in the light of market conditions.
- ② Principal's value
- ② Yield-the part that borrows funds ("the lender", i.e. the buyer of securities), is entitled to be compensated by the counterparty ("the borrower", i.e. the seller- of the titles) for the use of the amounts of money involved^[4].

Although the majority of repo transactions and reverse repo are based on the transfer of very liquid securities and/or without risk or low risk, such as titles issued by State and federal agencies or Government-backed securities, etc, both sides are at risk. In the case of longer term repo, both the risk of interest rate and the loan appears.

3. Case study analysis of repo transactions statistics at the level of the NATIONAL BANK of ROMANIA

From June 1997 to the third quarter of 2008, money market operations of the NATIONAL BANK of ROMANIA were used almost exclusively for the purpose of liquidity excess drainage from the banking system. In the last quarter of 2008, on the basis of the continuing reduction in structural surplus liquidity from the banking system, the net liquidity position of banks has become negative as a result, the main role in managing liquidity and in influencing short-term interest rates was intended to be liquidity-providing operations. Subsequently, as a result of extensive movements of autonomous liquidity factors, periods characterized by negative values of net liquidity position of banks have alternated with those in which the sign was positive, causing an alternation, not necessarily in sync, the position of operational liquidity, meaning the use of principal money market instrument of the Central Bank.

From the statistical point of view the repo market transactions had a dynamic development:

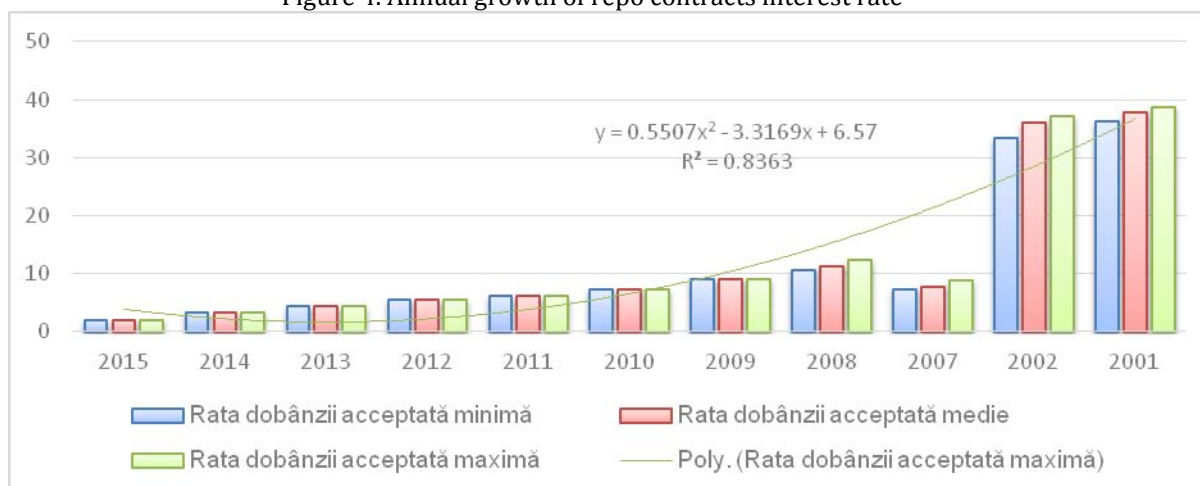
Table No. 1-presentation of repo transactions market during 2001-2015

Date	Maturity	Amount tendered	The amount awarded	The minimum interest rate supported	The average interest rate on accepted	The maximum accepted interest rate
	(days)	(million HUF)	(million HUF)	(AP)	(AP)	(AP)
	REPO_NRZ	REPO_SO	REPO_SA	REPO_DBMIN	REPO_DBMED	REPO_DBMAX
2015	7	15,754.30	15,754.30	1.85	1.85	1.85
2014	7	12,673.60	12,673.60	3.29	3.29	3.29
2013	7	264,705.40	92,041.10	4.33	4.33	4.33
2012	7	619,032.40	359,626.40	5.34	5.34	5.34
2011	7	46,743.40	46,743.40	6.17	6.17	6.17
2010	7	25,447.10	25,447.10	7.2	7.2	7.2
2009	20	137,759.90	137,759.90	8.96	8.96	8.96
2008	7	3,759.40	2,373.90	10.6	11.31	12.25
2007	8	13,076.30	11,007.50	7.2	7.59	8.7
2002	7	222	219.5	33.33	36.03	37.17
2001	14	218.5	192.2	36.17	37.87	38.77
Total	9	1,139,392.30	703,838.90	6.57	6.67	6.76

Source: BNR

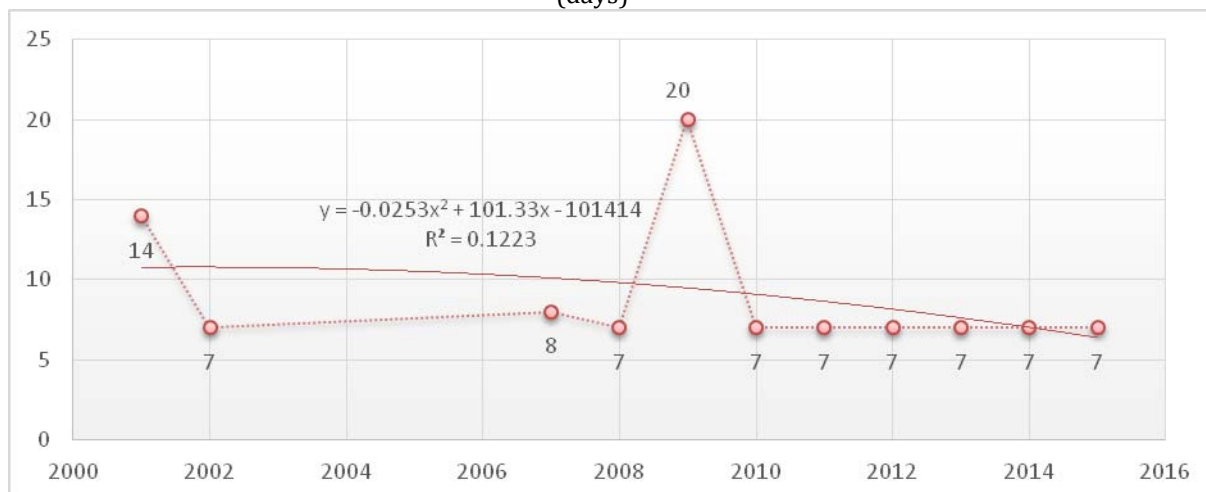
The interest rate for repo contracts has decreased significantly in the range, and its peak in 2001 to 38.7%, minimum rate touching in 2015 at 1.85%.

Figure 4. Annual growth of repo contracts interest rate



Source: Processed copyright based on data of table 1

Figure 5: The dynamics of annual repo contracts maturity (days)



Source: Processed copyright based on data of table 1

The maturity of repo contracts shows a fluctuating trend between 2001-2009, from 2010 it stabilizes, the number of days during which repo contracts reach their maturity being 7.

4. Conclusions

Repurchase agreements are included in the category of financial instruments, other than transferable securities and are defined as contracts where one party buys securities with immediate payment, with simultaneous resale at a price and term determined, of securities of the same species and effective remission with securities data to report, in accordance with the provisions of the commercial code. From this definition it follows that only the securities may be subject to repurchase agreements, which theoretically would exclude titles of State term of less than one year (T-bills) which are not currently included in the category of securities.

Operations with repurchase agreements having as their object transferable securities are exempt from the requirement to be determined solely on a regulated market, i.e. only through investment companies and other authorized financial intermediaries.

Operations with repurchase agreements are treated together with derivatives, in case the operations in respect of repurchase agreements will be carried out on a regulated market (such as the recording of transactions, managing margins), they will be administered by the market in question, and the compensation and reimbursement shall be made in accordance with the mechanisms provided for by the regulations laid down by the market in question.

Although the majority of repo transactions and reverse repo shall be based on the transfer of very liquid securities and/or without risk or low risk, such as titles issued by State or federal agencies or Government-backed securities etc., both parts are at risk. In the case of longer term repo, both the risk of interest rate and credit appears.

The importance and necessity of such operations can be substantiated by the following aspects:

- does not have significant effects on the price of assets;
- the Central Bank flexibility manifested in monitoring the operations on the money market, as it establishes the level and duration of the contract and also renewal or not at maturity;
- increase in repo operations reserves or reducing them, in the case of reverse repos, when titles reach maturity, thus a flexible tool for the management of the reserves, which presents a great variability;
- Unlike direct sales and redemptions of securities, which may lead to fragmentation of the financial system, by refinancing operations, it does not produce such an effect, since the ownership of the securities is changed only temporarily.

Repo and reverse repo transactions have in recent years become the most important tool used by NBR for use of excess liquidity.

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