

Cioran, Zina

**Article**

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## EFFECTIVENESS AND LIMITATIONS OF MONETARY POLICY INSTRUMENTS IN ROMANIA AND THE EUROPEAN UNION

Zina CIORAN\*

**Abstract:** *The complexity of the monetary phenomenon as well as the effects that it induces in the social and economic life of the countries around the world have represented and still represent the subject of much controversy and dispute. The current forms of the monetary circulation organization in different countries, internationally as well, represent the result of a continuous process of changes and innovations in the monetary area. The purpose of this article is to present aspects of the monetary policy and its instruments which have evolved according to the historical conditions of each period. The paper is also a presentation of effectiveness and limits of the monetary policy instruments and their role in solving the current economic problems for which the governments seek solutions. As a consequence to the analysis, it can be seen that in most cases it uses a mixture of monetary policy instruments because, when acting in a complementary way, they have a higher efficiency.*

**Keywords:** monetary policy; inflation; Central Banks; monetary policy instruments; money supply  
**JEL Classification:** E31; E43; E52; E58

### Introduction

In order to implement a monetary policy, the monetary authority uses a set of monetary instruments which act in order to achieve objectives both internally (low inflation, the realization of a potential GDP) as well as the performance of correlations externally.

In order to analyze monetary policy instruments we have to start from the monetary policy objectives. The concept of monetary policy is defined by the well-known Professor Costin Kiritescu as being the "ensemble of monetary measures taken by the state and the central bank to achieve a balance between the money supply in circulation and the economy's need for money or to influence in a certain way the economic conjuncture" (Kiritescu, 1982, p. 244).

According to officials of the U.S. Federal System, the "monetary policy refers to actions taken by the central bank regarding the availability and the coin and credit prices, in order to contribute to the performance of the national economic objectives" ([www.federalreserve.gov](http://www.federalreserve.gov)).

Taking into account the objectives, Angelescu (2004, p. 90) states that: "the monetary instruments are represented by actions of the monetary authority on the money supply in circulation to ensure macroeconomic stability."

We can find a clear definition in Bindseil (2004, p. 8) who defines monetary policy instruments as the available means used by the central bank to achieve operational objectives.

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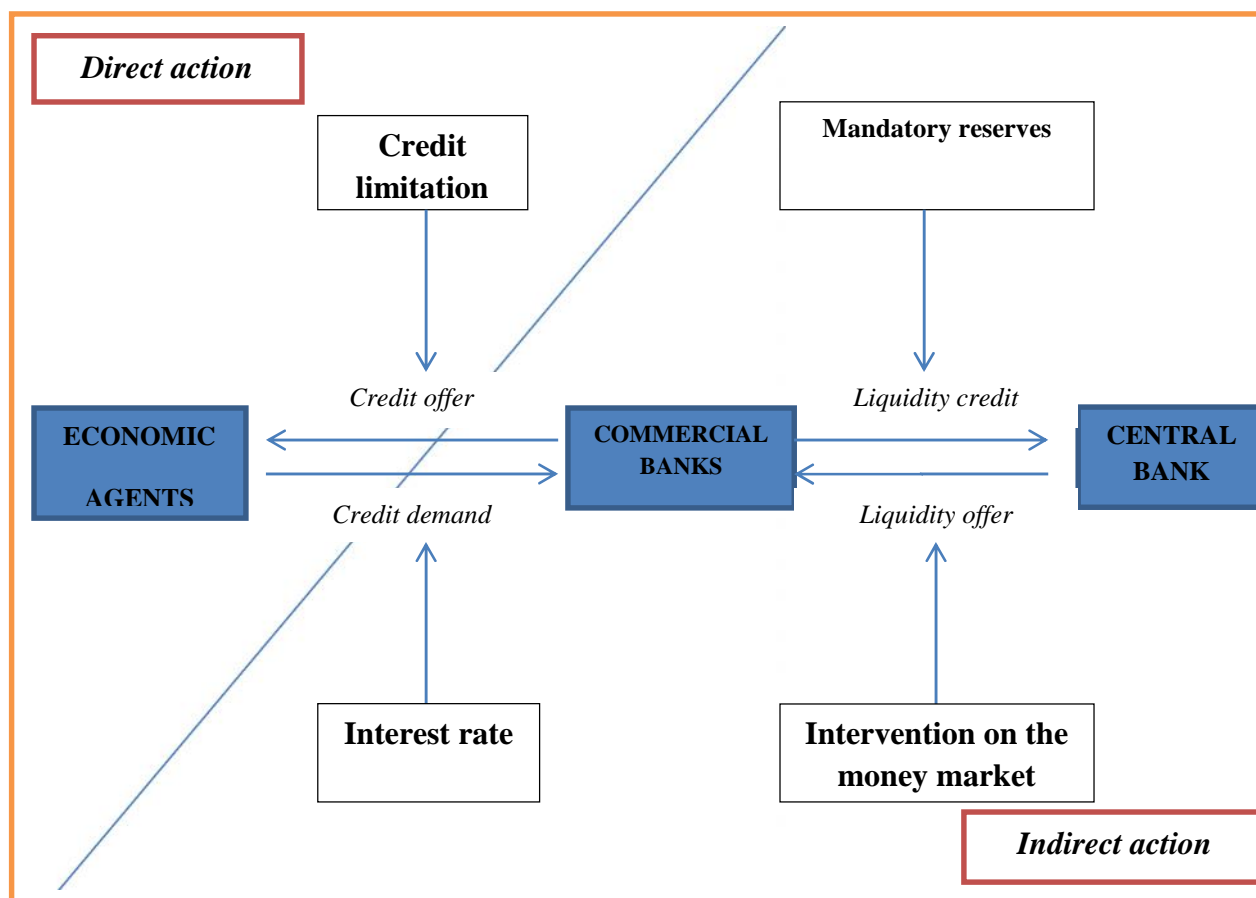
\*Ph.D. student, Faculty of Economics and Business Administration, Alexandru Ioan Cuza University of Iasi, Romania, e-mail: [cioranzina@gmail.com](mailto:cioranzina@gmail.com)

Considering the definition of monetary instruments, we can say that by means of the monetary policy one acts on the overall money supply. But it is quite difficult to directly influence the volume of coin issue because the money supply variations due to external transactions are subject to some factors that escape essentially the monetary authorities.

### **1. Direct and indirect monetary policy instruments used by the National Bank of Romania (NRB)**

To achieve the main objective of the monetary policy, monetary authorities act on the money supply regulation and on the interest rate through monetary policy instruments. The decision to use certain monetary policy instruments should be based on their ability to be used in an effective and appropriate manner to correct the money market and to develop the real economy.

The money policy and its instruments have evolved according to the historical conditions of each period but their main goal remained the price stability. Monetary policy instruments act both internally and externally. Faugère (2000, p. 60) made a classification of monetary instruments in this regard, therefore, internally, to influence the development of money supply and interest rate, one can use two types of instruments: instruments that work in the area of the liquidity bank, acting on the monetary plan and instruments that point to limiting lending practices by banks, acting in terms of credit.

**Figure 1 - Methods of monetary policy action**

Source: Faugere, 2000

The direct action consists in directly influencing the volume of the distributed credit locking it to a specified level, which represents the credit framing. Indirect action focuses on the factors influencing the money supply and credit level. There are two major types of indirect action, that is: on the credit demand through scheduled payments and on the credit offer through bank liquidity.

The monetary policy adjusts money supply through credit, which relies in its action on three components: economic agents that require loans, banks that offer credit but need cash and the central bank that provides liquidity.

The direct action shows that credit demand depends on the interest rate, that is, the credit cost. Credit demand increases as the interest rate decreases. Therefore, when modifying the interest rate, one acts on loan application, on the credit volume, and thus, on the money supply.

In regards to the second type of action we can say that as long as the credit supply of the banks is related to the amount of money of the central bank owned by the banks, the indirect action on the credit supply passes through bank liquidity. The monetary authorities can act on the demand for

money by modifying the mandatory reserves that banks must constitute at the central bank, or they can act on the money supply, like the central bank through an easier access to this coin.

Given this distinction between direct and indirect instruments of monetary policy, the chart shows that the direct monetary policy instruments establish and enforce certain limits on the monetary activity plan by normative acts, while the indirect instruments act by means of the market to significantly influence certain conditions regarding the supply and demand.

To achieve the objectives of monetary policy, one acts through indirect intervention instruments, that is on the money supply through bank liquidity. Indirect intervention instruments include: bank re-financing, open - market policy and the bank reserve policy's minimal requirements, while direct intervention or secondary instruments include framing or limitation of credit loans and selectivity.

Monetary policy instruments adopted by the NRB were significantly influenced due to the reorganization of the banking system in 1991 on credit and interest rate liberalization. Losing the control over the credit distribution in the economy and over the level of interest rates, NRB had to appeal to a number of regulations to introduce of indirect money policy instruments, such as the mechanism of refinancing commercial banks, bank reserves' minimal requirements and money market operations (open - market).

**The refinancing fee (the rediscount fee)** is an instrument of monetary control that contains a set of requirements imposed by the central bank in order to influence the level of the credit granted by it to the banking system. The Central Bank lends banks directly by rediscount, or indirectly, through interbank market. Rediscounting implies by the central bank's acquisition of the discounted savings bonds from commercial banks, for which it pays an interest called rediscount fee. Thus, the central bank can influence the commercial bank lending, by handling the discounting (or rediscount) fee. The rediscount fee will influence the discounting fee and it will always be less than it. Thus, if the central bank wants to increase the amount of money given to the commercial banks it will reduce the discounting fee, and if it wants to reduce the amount of money, it will increase the discounting fee. This is the price effect of the rediscounting mechanism.

The quantitative and value effects of the rediscount fee demonstrate an increased effectiveness of this monetary policy instrument. Therefore, discounting fee policy represents an instrument of monetary control and a privileged means of central bank intervention on bank liquidity, through this mechanism, commercial banks being able to reconstitute the necessary liquidity to meet their currency conversion obligations.

Rediscount operations represent a requirement for a commercial bank with debts to the central bank, in order to be able to issue currency. This way of refinancing exercises a powerful quantitative effect on the money supply – as a consequence to the possibility of resorting to rediscounting, commercial banks may also grant long-term loans, although the available lending resources are on short-term.

The rediscount fee particularly influences interest rates practiced on short-term loans. In exchange, long-term interest rates are related to the short-term ones, this relationship being established through the intervention as a distinct factor of the securities' deadline and not by the simple substitution of the capital investment on short-term with the long term one.

Rediscounting also has a special influence on the interest rates afferent to the short-term public debt, so that when the state treasury aims placing on the money market the treasury bills, their capacity be at least equal to the rediscount fee.

The rediscount fee also determines the maximum interest rate at which commercial banks agree to get loans, in order to regulate their redundancies and liquidity deficits. Thus, the interest rate on the money market cannot be higher than the rediscount fee because by paying the latter, banks are certain that they will gain refinancing from the central bank. However, there are situations in which the interest rate on the money market exceeds the rediscount fee, banks preferring to pay a higher interest rate in order not to be monitored with debts to the central bank.

As a general rule, however, the rediscount fee represents the maximum limit of the interest rate on the money market with a main role in forming the whole rate structure of interests prevailing in the economy.

If we are referring to the rediscount fee limits, these can be summarized as follows (Capraru, 2009):

- the central bank's practice of a simple, rigid policy (with a single fee and no limit) - this limit affects the effectiveness of the central bank's monetary policy, which may run without a result on the commercial banks' activity even in case they resort to refinancing;
- limited use - only if commercial banks need refinance can we speak of the rediscount fee. This limitation emphasizes the commercial banks' degree of dependence regarding refinancing from the central bank. Thus, applying the rediscount policy is only manifested if there is a refinancing demand from the commercial banks. If it does not exist, the rediscount policy is devoid of purpose, having no applicability;
- the appearance of the "financing effect", which may prevent this monetary policy instrument's application - this effect is triggered when commercial banks are not motivated to provide certain

categories of loans and therefore the central bank stimulates them by agreeing to rediscounting of the commercial effects afferent to these loans;

- the central bank's impossibility to deter, in times of high inflation, by means of the rediscount tax, the excess of demand for loans, since the loan demand elasticity compared to the interest rate is very low.

Despite these limitative aspects that sometimes delay the implementation of the rediscounting policy, handling this tax is one of the main monetary policy instruments, with a wide applicability in the contemporary world, signals sent through this channel by the monetary authorities modifying indeed the bank and monetary behaviors in the economy.

The refinancing fee (the rediscount fee) is a monetary policy instrument with great implications in the market economy and one of the most used instruments in Romania for the regulation of bank liquidity.

**The reserve ratio (RRMO)** is the only instrument that directly influences the economy and the money demand and supply. An increase of the RRMO – deflationary measure - has an impact in reducing lending at the level of commercial banks, to which the amount of money will be decreased, therefore so will the bank liquidity and the economic activity. To revive the lending, the minimal reserves should be reduced - inflationary measure - and the amount of money will grow and will also generate an increase in the economic activity, but in an inflationary environment. Commercial banks must maintain in the central bank, as deposits, a percentage of the deposits drawn from the population and economic agents. The minimal capital investments from the central bank have a low interest, but the main reason for constituting these deposits is not a benefit in money, but to maintain a certain level of liquidity of the commercial banks. We can say that RRMO is a money policy and credit instrument by means of which one can control the volume of loans granted by commercial banks, but it does not favor or disadvantage any bank since the RRMO level depends on the volume of deposits drawn from the population or the economic agents.

Due to the strong quantitative effect exercised on bank liquidity, minimum reserve policy is very effective especially in theory. It helps to improve the accuracy with which the central bank can guide its monetary policy towards achieving its objectives. It also helps to reduce the credit multiplier, achieving a control of the money supply. Applied gradually, this monetary policy instrument accelerates the accomplishment of long-term objectives.

Minimum reserve policy effectiveness also results from the fact that it is the only one able to intervene promptly when in the economy there would be a steady currency inflow. Under these circumstances, the application of the open-market policy would not be successful, the central bank

not being able to absorb this liquidity through the sale of deeds, because this would lead to lower deeds and to an increase of the afferent interest rates.

Among the limitations which decrease the effectiveness of the application we mention that the central bank rarely resorts to this monetary policy instrument because it requires a difficult use in the case of the money supply's fine-tuning. Therefore, the mandatory reduction reserves or the mere anticipation causes monetary inflation, while the increase of mandatory reserves or the anticipation of this growth creates monetary deflation. Given the fact that this policy generates instability, changes in the reserve rates are low, they are announced in advance and accompanied by opposite interventions of the central bank on the money market to alleviate this action's type of brutality.

Another limitation is that, unlike the open-market policy, the minimum reserve policy is not selective: the modification of minimal reserve ratio influences the liquidity of all banks, notwithstanding their specific situation.

Also, two major disadvantages of this monetary policy instrument are represented by the reduced flexibility compared to other instruments, especially in the short term and by the increase of the bank intermediation cost due to insufficient compensation of minimal reserve requirements.

Reserve ratio (RRMO) first appeared in the U.S. in 1913 and was introduced in Romania in 1992, aiming at both controlling liquidity in the economy and limiting commercial banks to create money of account through granted loans.

**Open - market operations** used by the NRB to adjust the money supply were conditioned by issuance of government securities. In 1997, the NBR initiated the first open market operations. According to art. 1 of Regulation no. 1 of March 30<sup>th</sup>, 2000, NRB's open - market operations involve at least one of the following transactions:

- repo operations - reverse transactions by means of which they want to increase liquidity (NRB buys from credit institutions eligible assets for transactions, which will be bought back later at a price set at the time of the transaction);
- reverse repo operations - reverse transactions by means of which they want to increase liquidity (NBR sells assets to credit institutions);
- Issuance of deposit certificates - NBR sells certificates of deposit to credit institutions, absorbing liquidity;
- drawing deposits – NRB draws deposits from credit institutions to reduce liquidity;
- currency swap - are simultaneous operations by means of which NRB injects liquidity - by sight buying convertible currency against leu and selling at a later date the same amount in convertible currency against leu - and absorbs liquidity – by sight sale of convertible currency



against the leu and the purchase at a later date of the same amount in convertible currency against leu;

- granting of collateralized loans by eligible assets for guarantee - NBR provides loans to credit institutions, leading to an increase of liquidity.

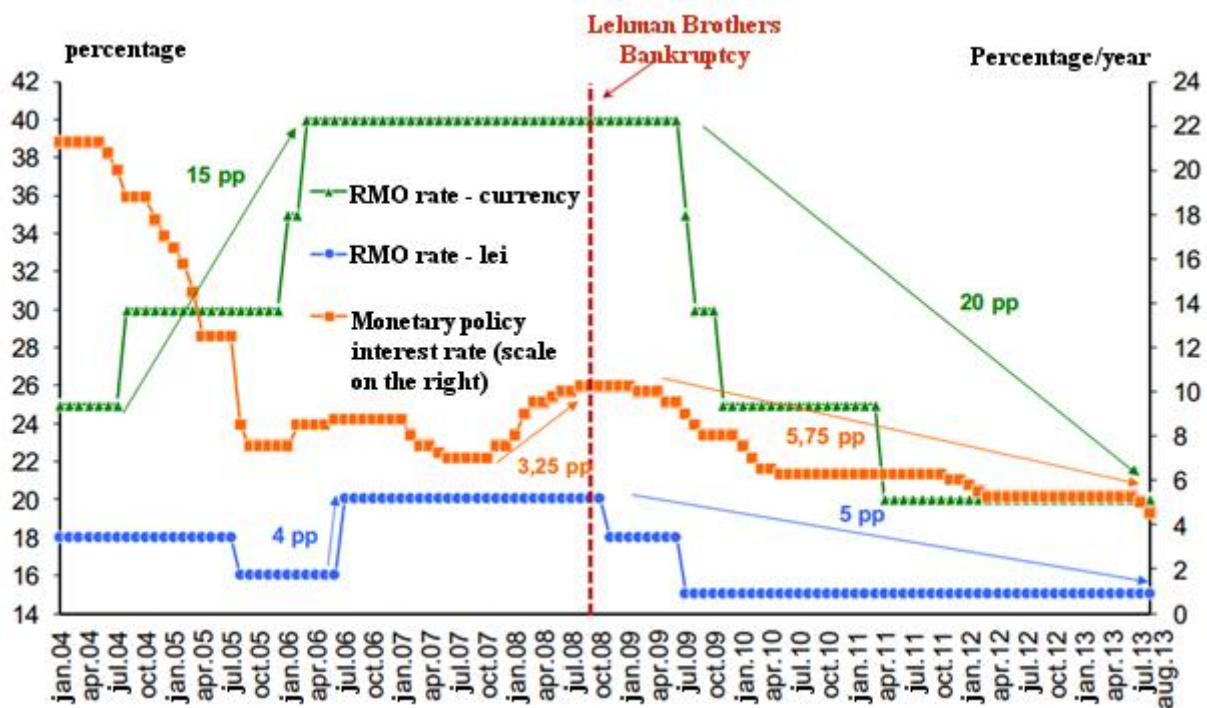
A greater effectiveness of the open - market policy compared to the rediscount policy can be demonstrated both by the quantitative and the price effect.

The open-market policy is a contractual policy, not a regulatory one, being achieved on a specific market (money market) to which circumstance it adapts instantaneously. The open market operations are flexible, precise, easily reversible, the decisions regarding market interventions can be implemented easily without administrative delay. Also, the central bank exercises a great control over the volume of open market operations, being able to trade bonds in the amounts it desires, practically, with no limits on their size. The central bank can alter the traded shares' negotiability degree, their ability to serve as a support for the open market operations, by means of the decision to buy or not certain types of securities or their purchase quota system. Also, open market operations can be performed with small steps, some with very small steps if necessary, this allowing the central bank to adjust its reserves correspondingly. By these instruments, the central bank can continuously adjust the monetary base, according to fluctuations of the interest rates and as information concerning impact of market factors on reserves is received. Although the open - market policy is more effective than the rediscount policy, both are based on the bank refinancing process. Therefore, this instrument also has a series of limitations.

The inelasticity of credit demand in relation to interest may diminish the price effect of open market operations and the foreign floating capital inflows drawn by high interest rates of the native market also reduces the price effect of the open market operations. Depending on the depth of the government securities market, open market operations can produce larger or smaller variations in the price of such securities, forcing the state to intervene in the bond market to maintain stable courses that impose the trust of security holders. Also, price variations that traded securities may incur through open-market operations may trigger negative effects on the value of the portfolio of banks securities, in case imbalances or sudden changes occur. Another limitation is that an increase in the public effect market volume leads to the increase of the public debt and budget deficit perpetuation, factors that may diminish the regulating role of open market operations on the banks' lending capacity and on the money supply in circulation. Meanwhile, if the central bank is not independent enough through open-market operations, the budget deficit can be indirectly financed, even if the Treasury's direct financing is forbidden.

The most important monetary policy instrument used by NRB is represented by the open market operations, its main functions being: guiding interest rates, money market liquidity control and providing information on the monetary policy direction. Both in certain developed countries, as well as in some that are in currently developing, open - market operations are the main instrument of monetary control, due to the favorable effects. They offer more flexibility in terms of volume of monetary policy operations initiated by the central bank, allow the establishment of impersonal relationships between market participants and allow the avoidance of market and economy inefficiencies as a result of direct control.

**Figure 2 - Central Bank's action by means of monetary policy instruments**



Source: BNR, available at: <http://www.bnr.ro/PublicationDocuments.aspx?icid=6885>

Monetary policy interest rate curve in the last decade highlights two essential aspects:

- On the one hand, monetary policy has foreseen the inflationary shocks;
- On the other hand, the interest rate also responds to some possible inflation sources that are latent in the case of the Romanian economy and only externalizes under stress: the inefficiency of the public sector (provision of resources in the public sector is achieved with increased costs and with minimal results) and substantial influence of exchange rate on inflationist anticipations (the exchange rate being easily influenced by internal and external events).

## 2. Monetary policy instruments used by the European Central Bank (ECB)

Monetary policy in the European Union has as feature a high level pragmatism in managing monetary issues, which means that, depending on various economic situations, to recur to any kind of instrument, whether direct or indirect.

ECB uses, at the euro zone level, a set of monetary policy instruments comprising various operations, facilities, restrictions or interventions regarding liquidity management, trading control terms on the financial market, deposits and credit evolution and exchange rate management. Specific instruments of ECB monetary policy define all the procedures, techniques and methods of direct or indirect intervention on monetary-financial variables of the Euro-system, whose operation aims primarily to maintain price stability and in the background, to stimulate the economic development of the integrated monetary area. The implementation procedure as well as that of application of these operations is delegated on the actions decentralization principle at the level of national central banks of the EMU Member States, coordinated in their approach by the resultant of the decision-making process exercised by the governing ECB bodies.

The main instruments used by the ECB are: open market operations, permanent financing facilities (Standing Facilities) and adjustment operations reserve (Reserve Operations).

**Open market operations** are those operations conducted by the Euro-system's central banks, at the ECB's initiative, being grouped into four categories, as follows: main refinancing operations, long-term refinancing operations, fine-tuning operations and structural operations.

The main refinancing operations represent the most important instrument of European monetary policy and consist in short-term loaning for the bank system (one week at the most). These refinancing operations of bank crediting services are guaranteed by collateral security, or are based on a repo transaction and are executed by the central banks of the Euro-system, by a standard procedure set by the ECB, decentralized and equitable for all bank institutions, provided that a set of minimum criteria required by the ECB regulation be fulfilled. Long-term refinancing is a wider version of the short-term refinancing one, the difference being in the period of maturity of the given loans, increased to a limit of three months;

Fine-tuning operations are actions preferentially achieved by the ECB in order to ensure their own liquidity or partial immediate absorption of market operations liquidities executed on the basis of some special agreements with partners selected in advance by an open ECB procedure.

Structural operations incorporate all the instruments used to regulate money supply and liquidity in the long term, oriented especially to concrete actions for the issuance and transaction of

the deposit certificates or similar operations with treasury bills and other securities with maturity term.

The object of the **permanent credit facilities** is the "overnight" credits, immediate and short term cover, liquidity deficits in exchange for interests charged by the central banks and established at ECB's indication. These tools enable the ECB to control needs and excess of immediate liquidity on the market and to fix the fluctuation margins of the referred short-term interests on the credit market.

By means of the **minimum mandatory reserve policy** promoted by the central banks of the Euro-system, a minimum mandatory reserve level is required in relation to the volume of liabilities held, other than those to central banks or the ECB. The minimum mandatory reserve mechanism strategically stabilizes on the one hand, the interest rates level on the money market by balancing the supply and the indirect control on the money demand permanently adapting to market conditions the liability structure from the financial intermediation department. On the other hand, using this tool reduces the risk of system crisis by optimizing the degree of credit institutions liquidity and of the market in general, it increases the policy credit control, thus leading to increased stability in the financial system. Remuneration of minimum mandatory reserves is executed at the interest rate level set for the main refinancing operations.

### **3. Necessity of a mix of monetary policy instruments**

The need to mix monetary policy instruments results from the various needs that the central banks manifest in their actions by developing and implementing the monetary policy program. These needs involve (Isarescu, 2001, p. 166):

- ensuring the objectives related to money supply control in terms of existence of strong shocks generated at the level of money demand and supply;
- the possibility of a rapid adaptation both of the instruments and the operational objectives in order to reflect the institutional constraints that may adversely affect the action generated by the instruments;
- ensuring the achievement of other adjacent targets (the possibility of crisis prevention, normal functioning of the payment system in the economy);
- reflection of the macroeconomic conditions, generally, of the monetary policy type and the exchange rate regime adopted by the monetary authority.

The chosen mix of monetary policy instruments must ensure the interaction between macroeconomic dimension of monetary policy and the structural one. The necessary conditions to choose an effective mix of monetary policy instruments refer to:

- there is a close connection between various monetary policy instruments, so there must be an excellent coordination;
- monetary policy instruments must be continually adapted to the economy needs;
- between the used type of instruments and the level of development of the financial market there is a cause and effect relationship;
- choice of instrument type should be made based on economic and financial context;
- technology development has important implications in the field of monetary policy instruments.

### **Conclusions**

Therefore, we can say that monetary policy instruments demonstrate their effectiveness when the central bank interferes among them to mitigate imbalances in the economy. In most cases it uses a mix of monetary policy instruments because acting in a complementary manner, they have a higher efficiency. That is why, to mitigate imbalances in the economy, the central bank does not use a single instrument. It is forced to turn to complementary actions using monetary policy instruments simultaneously or sequentially to achieve its own objectives. The limits particular to the monetary policy instrument can be compensated by the complementary action of another instrument. That being said indirect intervention instruments on liquidity must be applied in a complementary manner in order to achieve positive results in terms of monetary stability as the primary objective of macroeconomic policy.

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