

MANDATORY RESERVES – THE MAIN TOOL OF THE ROMANIAN MONETARY POLICY IN THE CONTEXT OF EU AND INTERNATIONAL DEVELOPMENT

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Resume:

The mandatory reserves represent a very important instrument of the monetary policy. Their aim is to participate in the accomplishment of the objectives of the economic policy. They should have an impact on limiting the inflation rate and support the economic growth. They represent the amount of money that banks should put (in local currency or foreign currencies) to the National Bank. They have a double role:

- Monetary policy instrument used by the Central Bank in order to regulate the liquidity level on the market by increasing/decreasing the volume of loans granted to the population based on the customers deposits. This fact is emphasized also by the loan **multiplier** which shows a reverse relation between lending and mandatory reserves rate. In this way the inflation may be kept under control;
- Assure the minimum level of liquidity for each bank so that this one could be able to honor the customers' cash withdrawal requests;

The higher the reserves, more they became restrictive for the banks, limit the consumption, limit the inflation increase and sustain the economy growth.

The mandatory reserves are used as tools of the monetary policy in multiple countries in the world.

For the EU member countries this tool may be used differently.

For instance, in the Euro-system countries the reserves are remunerated at the average market rate so there is no opportunity cost related to the reserves and no consumption limitation through this. The tool is used only to assure the necessary liquidity on the market and avoid liquidity crisis.

In the EU countries, non Euro-system members, there is no unique reserves level and remuneration rate and each country may establish these levels based on the importance that the reserves have in the monetary policy of the country.

The countries which intend to adopt EURO reduce in time their mandatory reserves level toward the 2% requested in the Euro-system.

Key words: reserves, National Bank, monetary policy, economic growth

Instruments of the monetary policy

The monetary policy is the mechanism through which the Central Bank exercises its influence over the economic equilibrium. It controls the amount of money on the market and ensures the national currency stability. The Central Bank uses for this purpose many instruments such as:

- Discount instruments,
- Mandatory minimum reserves,
- Open market operations,
- Refinancing,
- Exchange rate...

Mandatory minimum reserves (MMR)

The mandatory minimum reserves – represent the amount of money that the deposit banks have to create in national currency or foreign currency, at the Central Bank. These amounts are calculated by multiplying a fixed coefficient, established by the Central Bank as the average balance of the customer deposits or resources from abroad, for a certain period.

The aim of the mandatory reserves is double:

- Ensure a minimum liquidity for commercial banks so that they may be able to respond to the withdrawal demands;
- Monetary policy instrument used by the Central Bank in order to regulate the level of liquidity on the market, by increasing or decreasing the granted amount of loans based on the deposits level. This is rendered also by the loan multiplier, which shows the indirect connection between lending and mandatory reserves level.

The base for calculation the mandatory reserve is the sum of all the money in local and foreign currency (deposits and other funds) except:

- resources from the Central Bank;
- funds from the banks which also keep mandatory reserves at the Central Bank;
- money in transit

If banks do not comply with the mandatory reserves requirement, the Central Bank may apply penalties to them.

Remuneration of mandatory reserves – differs from one country to another and we may have:

- reserves with no remuneration;
- reserves remunerated - used by the banks to fund the State needs;
- mixed reserves - which contain in different proportions remunerated and non remunerated reserves.

Mandatory reserves are considered a strong instrument as their rate may be modified by the Central Bank and generates additional costs for the commercial banks.

Short history of mandatory reserves

The mandatory reserves were introduced for the first time in the United States of America at the beginning of the XIXth century. They were created for a prudential purpose in order to protect the depositors against the illiquidity of banks. The banks were obliged to maintain a

minimum level of liquidity, with no remuneration, and in a certain proportion compared to the deposits of customers.

Even at that time, the mandatory reserves represented an indirect policy instrument, through which the Central Bank controlled the offer of money, the banks' money (in local and foreign currency) kept in their account to the Central Bank.

Ways of mandatory reserves intervention

In accordance with market conditions, FED may use them as instrument of monetary policy in order to increase the lending volume sustaining the economy's growth (ease the lending conditions) or to limit the lending activity and slow down the economy growth (by increasing the reserves level). In the FED approach, the seasonality effect is considered when the mandatory reserves level is established. Therefore for crises periods (e.g. terrorist attacks of 11 September...), the historical data were adjusted in order to eliminate the extraordinary effect.

The higher the reserves, the more restrictive they are for the banks.

If case of mandatory reserves increase, the demand from banks for local currency is increasing because they need more to place to the Central Bank. This way the liquidity in the banking system is reduced and may cause liquidity problems to the banks. The banks may even resort to refinancing from the Central Bank. If the Central Bank generated, through its interventions, high liquidity rates, than the banks will also have a high refinancing cost. In addition to this, considering that the mandatory reserves do not bear high rates, banks may have "an important lack of income". This last effect, cumulated with the high refinancing cost, determine banks to limit their contribution to create money.

In case of decrease of mandatory reserves, the need of the commercial banks will be lower. Therefore the banking liquidity will increase; the banks will be able to comply more easily with the need of money for the central bank resulting from the current activity.

The advantages of the mandatory reserves on the banking system liquidity may be summarized as follows:

- mandatory reserves allow for the intervention over the lending cost without modifying the money market rate;
- they represent a stable base for the liquidity forecast which compensates for the unpredicted factors/events which may influence the Treasury activity of banks;
- mandatory reserved are useful especially when the market is flooded with liquidity, respectively when the current deficit is financed through creation of money;
- mandatory reserves influence the cost of banking resources as they diminish the placement opportunities on the money market.

Mandatory reserves – strong and weak points

The **strong points** of using the mandatory reserves may be:

- equally affect all the banks;
- determine the decrease of the volatility of the money multiplier; its stability makes the offer of money easier to control;
- banks become more dependant on the monetary authority and its regulation. This facilitates the control of the Central Bank over the monetary expansion;
- may be used to sterilize (on the long term) the excess of liquidity, especially if this becomes chronic.

The **weak points** of using the mandatory reserves are:

- the impact on banks, especially on the management of its resources, is very strong and this is why it is difficult to use the mandatory reserves to balance the offer of money;
- the gap between the observation and application date of the mandatory reserves date may render inefficient the usage of the reserves for balancing the monetary fluctuations;
- the frequent and unexpected increase of the mandatory reserves level may cause temporary liquidity problems to some banks;
- the reserves effect may be avoided by banks through innovative solutions.

The minimum mandatory reserves regime in the European Union

The main objective of the Eurosystem is price stability. This objective is ensured through a set of monetary policies: open market operations, outstanding facilities and minimum reserves imposed on credit institutions.

According to the Maastricht treaty, the Eurosystem minimum mandatory reserves serve the following functions:

- Stabilizing market rates- the collected amounts are used in order to aid credit institutions in surpassing the temporary effects of liquidity fluctuations.
- Setting the level of market liquidity - mandatory reserves also strengthen sustained shortfalls of liquidity in the banking sector of the euro area.

The ECB applies uniform “non-zero” reserve ratio (at 2.0 percent) against most of the items included in the reserve base. The “zero” reserve ratio applies solely to deposits with an agreed maturity over two years, deposits redeemable at notice of over two years, repurchase agreements, and debt securities with an agreed maturity of over two years.

The reserves over the requested level are not remunerated.

An important characteristic of the mandatory reserves in the Eurosystem is neutrality. This is expressed by the fact that the mandatory reserves are entirely remunerated with the average of the main refinancing rates. Thus, the credit institutions have no opportunity cost generated by the reserves.

MMR in EU countries not part of the Eurosystem

European states which have not yet adopted the single currency have the freedom to set their own monetary policy without having to comply with the Eurosystem’s single monetary system norms.

They independently set their minimum reserves level and the remuneration rate according to the importance they give to mandatory reserves as a monetary policy instrument.

However, the countries seeking to adopt the single currency reduce, in time, the minimum reserves rates, bringing them closest to the Eurosystem level of 2 percent.

MMR in the Czech Republic

In the Czech Republic open market operations are the basic monetary policy instrument. The minimum reserve mechanism is used for prudential purposes in order to avoid potential crises which may appear at the level of the payments system.

In the beginning, the minimum reserves level grew (from 8.5 percent in 1995 to 11.5 percent in 1996), then its role diminished, and the rate relaxed down to 9.5 percent in 1997.

The reserve requirement is currently of little significance as a monetary policy instrument, but the money held on these accounts fulfils another important role: it serves as a cushion for the smooth functioning of the interbank payment system at CNB Clearing. In 1999, the CNB completed the process of gradually lowering its reserve ratio to 2%, which is equal to that set for the Eurosystem by the European Central Bank, this objective being correlated with EU accession and future adopting of the single currency. Since 12 July 2001, the funds on this account have been remunerated at the CNB two-week repo rate up to the pre-specified volume of minimum reserves (before this date they were not remunerated).

To keep the interbank payment system functioning smoothly following the lowering of the reserve requirement to its present level, a collateralized (i.e. extended to banks in exchange for securities) intraday credit facility was introduced after the reserve requirement was lowered. Within this facility, the CNB - as the operator of the payment system and the short-term bond settlement system - provides short-term intraday credit to banks to enable them to make payments even if they do not have sufficient funds on their payment system accounts with the CNB.

MMR in Poland

During the transition period, the mandatory reserves were together with the open market operations the main instruments of the monetary policy in Poland.

The basic function of mandatory reserve is to limit volatility of interest rates by cushioning the impact of movements in the banking sector.

Main features of the required reserve system:

- ❖ The counterparties of the system are banks exclusively ,
- ❖ Since October 2003 the ratio is 3.5% (from 5%),
- ❖ The length of the maintenance period is approximately one month (starting on the last day of each month and ending on the day before last day of the following month).

The central has been gradually adjusting its framework bringing it very close to the Eurosystem one. The NBP uses similar monetary policy instruments as those applied by the ECB and conducts monetary operations in a similar way.

The required reserves system is highly harmonized with the Eurosystem one:

- introduction of uniform reserve requirements (reduction of the “non-zero” requirement from 3.5% to 2% and introduction of 0% reserve requirements against liabilities with maturity over two years,
- introduction of a uniform maintenance period (it is approx. one month in Poland),
- introduction of a uniform lump-sum allowance (it amounts to 100 thousand euro in the Eurosystem and to EUR 500 thousand in Poland),
- change in the reserve remuneration rate from 0.9 of the rediscount rate to the average of maximum profitability obtained through tenders for main operations.

MMR in Hungary

The MNB gradually harmonized its system of required reserves with the regulations of ECB. In early 2004 there was a significant change, the result of which is that the regulations related to the base of the required reserves and data supply concerning the reserve requirements are now in conformity with the ECB's relevant regulations.

However, two important differences between the reserve systems have remained in place.

First, the MNB applies a 5 per cent reserve ratio, as opposed to the 2 per cent applied by the ECB, for several reasons. Liquidity surplus in the Hungarian banking sector is relatively high, which would further increase following a reduction of the reserve ratio. Second, in the Hungarian environment, reducing the reserve ratio would hinder the handling of the relatively greater liquidity shocks as well, as the settlement account holding those credit institutions would also decline. Finally, the current level of development of financial markets also restricts credit institutions' liquidity management, due to which they also need a higher settlement account to be held (which pays interest up to the extent of the required reserves, therefore, there is no interest loss). Since Hungary joined the EU, the MNB has paid market interest rate on the required reserves, thus ensuring that, in spite of the higher reserve ratio, domestic credit institutions do not have a competitive disadvantage vis-à-vis foreign institutions.

Another important difference between the two systems is that the MNB determines maintenance periods according to calendar months, while the ECB adjusts them to the interest rate decisions.

As described in connection with the policy instrument, this difference is justified by the differences in the two environments.

MMR in Romania

In Romania, mandatory reserves represent a very strong monetary policy instrument, both in term of rate and remuneration.

The fix coefficient applied to the calculation base is very high:

- 40% for resources in FX
- 20% for resources in RON

In Romania the Central Bank remunerates the reserves with very small rates, increasing in this way the cost of funds. NBR is enforcing in this way the mandatory reserves' role as monetary policy instrument.

Reserve Requirements (RR) level:

RR Type	Reserve Ratio (%)	
	RON	FX
RR for liabilities with residual maturity of up to 2 years	20	40
RR for liabilities with residual maturity of over 2 years	with early repayment clause	40
	without early repayment clause	0

Reserve Requirements (RR) remuneration:

RR Type		Interest Rate % p.a.
RON-denominated RR		3.05 %
FX-denominated RR	EUR	1.25 %
	USD	0.85 %

These very strict regulations make commercial banks very creative in finding different solutions in order to avoid the mandatory reserves effect and decrease the cost of their funding.

Ways to avoid mandatory reserves effect

In order to avoid mandatory reserves effect banks developed some operations which may reduce the effect of this instrument:

1. They created subsidiaries, which could grant loans without being subject to the Central Bank regulations. But Central Bank enlarged the regulations' application also over the non-financial institutions increasing the control over the lending process in economy.
2. One of the most common practices applied by the banks which are international group members is to transfer the FX loans to the parent company. As the population savings in FX are much smaller than the loans granted in FX, commercial banks cover their funding needs from the parent company, but these resources are subject to mandatory reserves. This increases the cost of funding and consequently has effect on the lending activity: banks have to increase the loans rates (but risk to loose customers) or to accept lower net interest margin (but this affects their profit). Considering the fierce competition between banks in acquiring market share (by promoting very small rates), their profitability is significantly reduced and therefore they continue to look for new solutions in order to avoid the RR effect. By transferring the loans to the parent company, where the reserves level is smaller (2% in Eurosystem), banks no longer have the loans in their balance sheet and they don't have to borrow money to fund these loans. So they don't have to create anymore reserves for these funds. In exchange for the transferred loans banks may receive a commission which should be at least equal with the net interest margin that banks would have obtained if the loans remained in their balance. The gain from avoiding the reserves effect is generally split between the banks which transfer and the banks which receive the loans.
3. Other innovative solution is to find funding sources which are not subject to mandatory reserves: RON loans with residual maturity of over 2 years, without early repayment clause. But this solution is risky for the parent company (which is granting the loan) as it is exposed to the exchange rate volatility and the gain from the reserves effect may be easily lost if an opposite FX exchange volatility occurs.

Still all these solutions are too complex and expensive and they affect profitability of the bank on the long term and make them reduce the lending activity growth. Finally, the objective of the Central Bank is accomplished: control of the lending activity, limiting consumption and influencing the economy equilibrium.

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