

# THE IMPACT OF STATE SECURITIES PROFITABILITY ON THE EFFECTIVENESS OF MONETARY POLICY IN MOLDOVA

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## **Abstract:**

The recent decision of the Central Bank of Japan, regarding the adoption of a monetary policy aimed to control interest rates on government securities issued in the long term, which involves reducing the profitability of these values and increase their maturity to 24 years, determined our interest for state securities profitability impact on the effectiveness of monetary policy in the Republic of Moldova. Due to the fact that NBM has recently provided state securities with an interest that is very attractive to banks, which on the one hand, keeps the banks on the money market, on the other hand, this leads not only to lower bank interest for lending economy but even to counter this activity, which has adverse effects on the efficiency of provided monetary policy.

**Key words:** state securities, state securities profitability, open-market policy, monetary policy, Taylor function, the interest rate on the state securities

**JEL classification codes:** E42, E43, E52, E58

## **Introduction**

The present topic discusses one of the most acute problems of the monetary policy in Republic of Moldova and has always been a topic of great interest for both scientific researchers and monetary authorities as well, who are interested in developing the efficient ways of the monetary policy promoted by local authorities. The article deals with both, the objectives of this policy, as well as the mechanisms and instruments to achieve these objectives. Although there is a lot of literature that offers different researches and studies in this field, proposing various solutions to achieve the objectives of monetary policy depending on the type and size of the economy, after the international financial crisis, a major disagreement could be seen between the objectives of monetary policy promoted by authorities and the effect on the real economy as a whole.

Experiences have shown that the most viable way to annihilate the shock is the pursuit of price stability by macro policy and thus the monetary policy. (FISCHER, S., SAHAY, R., 2000; WALSH, C., 2001). This in turn requires a more flexible approach to monetary authorities to fight inflationary pressures, "going even so far as to establish a numerical inflation target that should be achieved over a specific time period" (BORIO, Claudio E.V., 1997). But the final target of monetary policy can be achieved only by pursuing some precise intermediate targets of monetary policy, implementation of which is able to highlight the effectiveness of the measures. There are several monetary variables that can be taken into consideration as intermediate targets of monetary policy: the exchange rate; market interest rates; monetary aggregates; the price of credit in the economy or other financial assets.

Whatever the pursued objective is, the major instruments of the central bank through its monetary policy should be grouped into two categories: direct, which usually are likely regulatory (rules, regulations); and indirect, for which we must underline and substantiate their orientation on the market mechanism of transmitting monetary impulse.

To achieve its objectives, the central bank has at its disposal a set of monetary policy instruments: open market operations, standing facilities and minimum reserves. Taking into consideration the latest events in the world, I noticed that at the moment a special attention is paid to market operations: for example, in September 2016 the Central Bank of Japan's decision on the adoption of a monetary policy to control interest rates on government securities issued in the long term, reducing their profitability and increasing their maturity to 24 years. This decision increased our

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interest in the impact profitability of state securities on the effectiveness of monetary policy in the Republic of Moldova especially now, on the background of events, where the central bank provides banks with state securities at a very attractive interest rate for a short-term.

## Literature review and empirical evidence

The approach to the monetary policy in terms of its effectiveness involves identifying the possibilities for evaluation of the transmission mechanism on economic activity: it means the way in which monetary policy decisions influences, through various channels, the behaviour of partners on markets, economic activity and the general price level.

The main transmission channels of monetary policy are well known, these being: the interest rate channel, exchange rate channel, the credit channel, channel wealth and balance sheet effects, channel operators inflation expectations. At the same time, the focus on the evaluation is done on certain specific channels depending on how the transmission mechanism from one country to another works.

Traditionally, the first transmission channel of monetary policy is the **interest rate channel**. This channel reflects the impact on the economy through central bank interest rate change. Interest rate changes, determined by the action of the monetary authorities, has as main effects on the economy the following: the substitution effect, the effect of income and wealth effect (BAILLY, J. L. and other. 2000).

The classical schemes of the interest rate channel are:

$$\checkmark M \uparrow \rightarrow i \downarrow \rightarrow I \uparrow \rightarrow Y \uparrow$$

Where: M - money supply, and - the interest rate, I - investment, Y - production;

$$\checkmark M \uparrow \rightarrow i \downarrow \rightarrow S \downarrow \rightarrow P \uparrow \rightarrow Y \uparrow$$

Where: S - savings, P - consumption;

$$\checkmark M \downarrow \rightarrow i \uparrow \rightarrow C \uparrow \rightarrow D \uparrow \rightarrow Y \uparrow$$

Where: C - loans population D - income population.

The mechanism of the interest rate channel enables its use in removing systemic risk, which led central banks in developed countries to use this tool actively to overcome the liquidity crisis in the banking system. However, in 2009, lowering the reference rate to zero, has drastically limited the possibilities of monetary authorities to influence on the economy through traditional measures. This fact ultimately led to the need for adoption of unconventional monetary policy measures by the central banks of the euro area countries, the US, the UK and Japan. *In this case the interest rate channel can be revived by substituting interest rates on primary operations of the central bank on monetary market by rates of return of government securities.*

On one hand, due to the specific mechanism of channel interest rate, the lowering of policy rates can lead to economic growth, but on the other hand, on the contrary, it can increase the risk aversion of commercial banks and can trigger the risk of adverse economic developments in the future. In this case, the interest rate channel, will act more like a multiplier of systemic risk. For this reason, primary decrease in interest rates on the money market, where banks have access to resources, increase their appetite for risk, so in this case more would be recommended orientation profitability of state securities.

If we refer to the case of Republic of Moldova, for one reason or another, there is no a transmission channel that can operate efficiently at the moment, which is also true and for the interest rate channel.

**The main preconditions for effective functioning of the interest rate channel, reported to VMS profitability, include:**

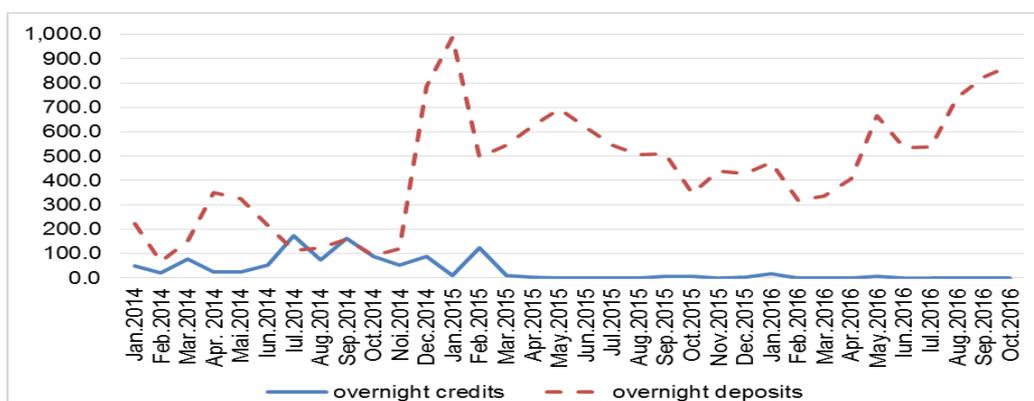
- *for the substitution effect*: the widespread development of consumer credit in the economy, credit cards and other retail financial services;
- *the effect of hoarding*: a fixed minimum level of inflation, as any change in interest rates would immediately have an impact on consumer credits;
- *the income effect*: the existence of a well-developed financial market and a high share of foreign direct investments (ISKHAKOV, P.J., 2011).

At present, Republic of Moldova does not combine any of these preconditions. The rate of inflation for the previous year considerably exceeded its target fluctuation corridor of the central bank and the trend of decrease in the current year is so sudden that, it is too early to talk about stability in this sense. In addition, there is a total lack of a functional money market as well as a foreign financing. This state of affairs is due largely to the high cost of bank loans on the background of a weak economic growth. Since the price of credits exceeds in most cases business profitability, the credit role in supporting investment in fixed assets is essentially reduced.

The cost of credit resources has negative effects on the competitiveness of domestic companies on foreign market. Therefore, it is necessary to find measures that will reduce the cost of loans and ensure the functioning of the interest rate channel.

The interest rate channel operation depends on the implementation of the refinancing mechanism. In current conditions, the share of resources provided by the NBM to credit institutions in the country is very low, which proves on one hand, a limited access to credit, and on the other hand, the incapacity of the central bank to use this monetary policy tool effectively (See Figure 1). In this respect, controlling the growth of broad money - by changing the refinancing rate, will not have any significant influence on the amount of cash or the level of interest rates.

**Figure 1 - Standing facilities extended to banks by NBM, average daily balance (mil. mdl)**



Source: Developed by the author based on NBM data. Available: <http://www.bnm.md/>

Accordingly, this transmission channel has already a limited role in promoting the monetary policy decisions for a long period of time. In the current conditions of the Moldovan economy, neither the volume of money nor the monetary base, affects the value of the average interest rate on long-term loans given to non-financial organizations. We cannot also say that the refinancing rate in turn affects long-term interest rate policy of commercial banks. However, the value of interest rates on short-term loans proved to be more sensitive to monetary policy decisions.

Thus, the interest rate channel in the RM in its classic sense is not working. Its real action being modified ( $M \uparrow \rightarrow i_1 \downarrow \rightarrow i_2 \downarrow \rightarrow I \uparrow \rightarrow Y \uparrow$ , where  $i_1$  and  $i_2$  represent interest rates in the short and long term loans of non-financial), reflecting its complex impact on the economy as a result of separation in the chain mechanism of interest rates on short and long term.

The identified channel is less fixed and less effective than a classic one. Transformation of the interest rate channel, in its classic form, is associated with underdevelopment of the financial market in Republic of Moldova.

This creates a premise for selecting a more effective channel, which will reflect an interest rate appropriate to the investment decisions of banks as well as of those of the real sector. Because an interest rate that reflects the cost of the financial resources available, such as the current refinancing rate, determines banks to select less "costly" investments and that effort to stay on the financial market, to multiply the money supply through loans. In order to make the channel more efficient, it is required to switch to a refinancing interest rate that is close to VMS, which actually represents the profitability of bank assets. Thus, this rate is perceived as minimal rate of bank investments income, correlated to risk, similar to the  $\beta$  coefficient on the financial assets market. In this case, when banks choose to return their investments, they will compare the rate of "active" interest, it means the equivalent of investments with minimal risk and not at a rate liabilities, which

is now the refinancing rate, because that rate interest on liabilities is compared to the rate at which you can buy resources, and those resources are not necessarily invested later in loans, but they often remain on the market of risky financial assets. As a conclusion it can be said that the small refinancing rate is harmful for the banking system because it increases the risk of banking activities. At the same time this interest does not promote the direct monetary policy.

## Open market operations in Republic of Moldova

Open-market operations are tools that are based on trade in government securities, which apparently could improve the interest rate channel. But this tool influences the volume of money supply, being conducted by the Central Bank through the sale or purchase of certain commercial paper, thereby creating a currency demand or an offer at a certain price. However, open-market policy has a reverse effect: the purchase of effects by the Central Bank leads to the liquidity increase and vice versa. The transmission of price impulses to the real economy through interest in this case has a lasting effect. In fact, central bank trade obligations with securities are the following:

- constraining obligation: by selling Central Bank securities to banks liquidity absorption occurs in the economy and a decrease in the quantity of money available to banks for multiplication;
- stimulating obligation, by buying securities from banks, the Central Bank provides liquidity and enhances their ability to create money.

Thus, the effect of Central Bank open-market policy influences the ability of banks to create money depending on its will of engaging in the process of lending to non-bank sector that finally has an impact on the volume of money supply in circulation. However, the decision of banks to create money depends also on the rentability that Central Bank offers to these securities, because this tool can have dual effects: trying to limit liquidity, the Central Bank can completely neutralize the creation of money. Namely, if the Central Bank, trying to reduce the money supply, offers state securities with an attractive interest rate, creates favourable conditions for banks to remain active buyers on the money market, which leads not only to the decrease of the bank ability to create money by banks, but even to counteract this (banks remain on the money market as active speculators and will not provide credits to the economy). In this situation the interest rate channel is not working as a mechanism of monetary policy because banks use only purchases of VMS to store assets with a decent return at minimum risk.

All tradable instruments that are the main component of Eurosystem monetary base or other countries with well-developed financial markets have an insignificant structure in Republic of Moldova due to underdevelopment of the stock market on monetary market. We decided to investigate the evolution of interaction of state securities and interest rate in Republic of Moldova in order to identify the reason and the possibility of application of these tools, especially open-market, which uses securities.

**Figure 2 - Evolution of state securities in the short term, allocated to banks in Republic of Moldova during 2011-2015.**



Source: Developed by the author based on NBM data. Available: <http://www.bnm.md/>

The securities that are used on the monetary market in the RM are state securities in the form of treasury bills with maturities of up to one year and bonds with terms of 2 and 3 years. Lately the NBM offered to SS at a very attractive rate to banks, which on the one hand, keeps the banks on the money market, but on the other hand, leads not only to lower banks' interest in creating and

providing money in economy, but even to its counteract (remaining banks on the money market as active speculators that will not provide credit to the economy).

We can easily notice from the state securities provided to banks in recent years (See Figures 2 and 3) that the high share of short-term state securities in total state securities, which demonstrates short-term orientation of monetary policy promoted by local monetary authorities. It is also obvious that raising the interest rate on state securities does not have its effect on the volume of state securities purchased by banks, while the periods of lower interest rates are characterized by fixed sales volumes, which we consider to be an irrelevant element (not recommended to be applied in the RM). Hence, we can conclude that the decisive elements in the process of SS purchase of banks is not the interest rate, but the offer and the settling day. Therefore we believe that establishing a high rate of SS in order to maintain banks' securities on the market is not only unwarranted, but also increases the value of state debt, which will further affect more the involvement of banks in monetary policy (raises the amount of debt compared with the interest rate offered by state securities)

**Figure 3 - Evolution of state securities issued with a maturity of 2 to 3 years, allocated to banks from Republic of Moldova in 2011-2015.**



Source: Developed by the author based on NBM data. Available: <http://www.bnm.md/>

At the same time, effects of diminishing inflation increase interest rates on state securities. Thus, the high discordance between the refinancing rate, the rate of return on government securities and average loan rate proves the lack of interest and at the same time maintaining profitability at banks within state securities. (See Figure 4)

**Figure 4 - The evolution of refinancing, interest rates on government securities and bank loans, and inflation in RM, 2011-2015.**



Source: Developed by the author based on NBM data. Available: <http://www.bnm.md/>

In these circumstances, the formation of bank interest is not focused on refinancing rate, but on the rate of return on risk-free assets.

We realize that high rates of interest on government securities have currently another connotation than the interests of monetary policy - namely to refill the state budget and at the same time, they have a negative indirect impact on effects of monetary policy, as banks pursuing high profitability, co-reported with zero risk, invest, in particular, on money market, which does not allow the granting of loans, and thus respectively –

investment of money into the economy. We believe that, if it is desired an efficient monetary policy which is orientated to economic development, the mechanism of financing the budget deficit may be directed from a rollover term and an cointerest related to financing (incentives for banks to procure state securities for long term, e.g., by using them as collateral to obtain loans to refinance in the short term).

## Conclusion

The efficiency of using the rate interest is based on the mismatch of refinancing system. Thus, although the refinancing rate is an important instrument of monetary policy in most developed countries, in Republic of Moldova it does not have any influence on the cost of long term resources in the banking sector, and has no significant effect on the money supply.

1. The inefficiency of monetary policy tools can be explained by the fact that the transmission channels of results of these instruments are non-profitable in Republic of Moldova; there is not a clear and precise relationship between the Central Bank and banks. Thus, the instruments used by the Central Bank do not reach and have no response effect on commercial bank. For example, the interest rate channel: increasing compulsory reserves has not led to a significant increase in interest rates. In this respect it is necessary to improve the monetary policy in the economy, the release of monetary transmission channels, by pursuing objectives correlated with central bank targets banks, by motivating them to participate in the efficient financing of the economy.
2. The base rate, to which should be directed the commercial banks in setting interest rates on placements of non-banking sector are often lower than the refinancing rate, due to their ability to mobilize the resources efficiently and fierce competition on the market of solvent debtors.
3. It may be noted another paradox of the effects of current monetary policy, which consists in the fact that the increase of refinancing rates during 2015 has increased the liquidity of the banking system, contrary to the purpose of applying of this instrument. In this case we conclude that the only instrument that has had the effect is the mandatory reserve rate, which is extremely high - 35.5%, or, at such rate any channel of monetary policy is no longer effective. Thus, in order to ensure the effectiveness of interest rate channel of monetary policy it is necessary to solve problems in refinancing system.

The importance of ensuring the efficiency of refinancing in modern conditions is explained by the fact that, currently, at the high rate of development, required by the real economy, there are few opportunities to use traditional measures. If monetary policy is ineffective, the real economy, stifled by high interest rates and uncertainty about macroeconomic developments will abandon long-term projects, opting for short-term investments that do not lead to sustainable economic growth.

Low efficiency of the interest rate channel can have several reasons, either fundamental or structural, but one that cannot be neglected is distrust. Therefore it is necessary to act in order to improve confidence in the banking system reliability and stability of monetary policy.

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