MONETARY POLICY FORCE EFFECT BY MEANS OF BANKS MONEY CREATION

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Abstract

In the context of modern economy, banks play an essential role for sustainable growth, by ensuring economy with financial resources and driving impulses of monetary policy to economy. Monetary authorities influence significantly the bank's ability to fulfill this role. Thus, to achieve macroeconomic objectives, there is promoted particular monetary policy and are implemented various practical regulations for banks. In this article, we want to identify the existing relationship between monetary policy followed by the authorities and the ability of banks to create money with its impact on various practical regulations.

Keywords: monetary policy, money creation, bank regulation and supervision survey

JEL Classification: G21, G28

1. Present situation

The international financial crisis triggered by the end of the first decade of the XXI century has imposed monetary authorities together with academia to review the impact of monetary policy on financial stability and its contribution to sustainable economic growth. Successes of recent years in the primary objective of monetary policy, which keeps the price stability, did not bring the expected results for the real sector. In spite of the inflation low rates in the medium term, it is not proving economic recovery expectations.

At the moment, monetary policy changes are undertaken, coming to cheaper financial resources unfocused to the real sector. In this context, as an example can be presented the policies promoted by

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the European Central Bank, which according to the latest statements of its President covers several possible unconventional measures to reduce the risk of installing a low inflation for a long period of negative interest rate for banks liquidity that will redirect to the priority sectors of the economy (ECB, 2014). Thus, different mechanisms of monetary policy attempts to facilitate the process of money creation by commercial banks in such a way that they increase the volume of business funding, in the real sector, in order to achieve real economic growth.

Decisions that are to be taken, were grounded in economic theory by many economists (Fischer, 1986; Friedman, 1969; McCallum, 1987), based on the fact that prevention of disinflation processes in the economy can be made by increasing the money supply in circulation, and create a minimum inflation level required for sustainable economic growth. At the same time, the amount of money supply is not completely directed to the real sector, and a part of it is stored within the financial market.

In this context, a particular interest has the answer to the question related to the effectiveness of liquidity injection measures in the economy, in conditions that commercial banks do not fulfill effectively its function of cash propulsion in the real sector of economy. Especially in condition that any banking lending activity also requires certain costs and limitations that arise from a range of prudential regulations imposed by the authorities, which limit their ability to force the inputs.

2. Tasks and methods

The monetary policy of the central bank, apart from of the objectives and tasks which it proposes, actually seeks indirectly to create conditions for healthy economic growth and development. Conducting a monetary policy focused only on its objectives, do not end with beneficial results for economic growth, if the effectiveness of the used instruments is not monitored. This is because, the central bank can only influence on the economy through commercial banks, which are responsible not only for ensuring the economy with financial resources, but also for the implementation of state monetary policy sending its impulses. When the promoted monetary policy does not lead to expected effects, the causes of failure can be foundnot only in the policy requirements, but also in banking activity, namely in the

performance of its functions, especially in financing function, that is doneby monetary creation.

Commercial banks' ability to create money has a great importance for the economy (Andolfatto&Nosal, 2003). In conditions of bank credit lack, the growth of economic agent's activity becomes impossible or is delayed in time, until thenecessary funds are accumulated from profits or from other sources. Moreover, businesses will be forced to accumulate and save large amounts of money to cover the risks that may arise in their activity. This practice is convictedfrom start, because a large amount of money would have been stored for a long period of time and during thebusiness commencement they could not cover the increased expenses. Economyalways has need of a continuous flow of money, but it should not be very high. The excess of money in circulation, that is much more than the real economy need can generate a harmful inflation for economy. And on the opposite, the deficit of money supply may lead to the stagnation of economic activity which is also opposite to the monetary authority's objectives and goals.

It is important to mention that banking system is relatively independent in its decisions for credits allocation. As to its financing function, banks start with the operations profitability and the assumed risks, in a way that their decisions are influenced more by the level of economy development than the desire to contribute to its growth.It is obvious that the amount of money and the credit worth have different values for an economy. This is because the first depends on monetary policy decisions, taken under the pressure of macroeconomic arguments, based on results indicators. While the second one is caused by anticipated micro-level reasoning, oriented to the most favorable relation between profit and risk that is contributing to the creation of macroeconomic result indicators. Thus, monetary policy decisions are based on indicators that consider the effects of these policies, anticipated by the banking system and therefore you should promote the efficiency of this banking system policy. In this context, it is proposed to follow how the banking system function of money creation is transformed into the financing function, in order to create a *propulsion indicator of money in the economy*, which assesses the relationship between money and the credit amount in the economy.

The efficiency propulsion money to economy indicator shows how the banking system considers the future development of an economy, for the reason that credit is based on the analysis of future

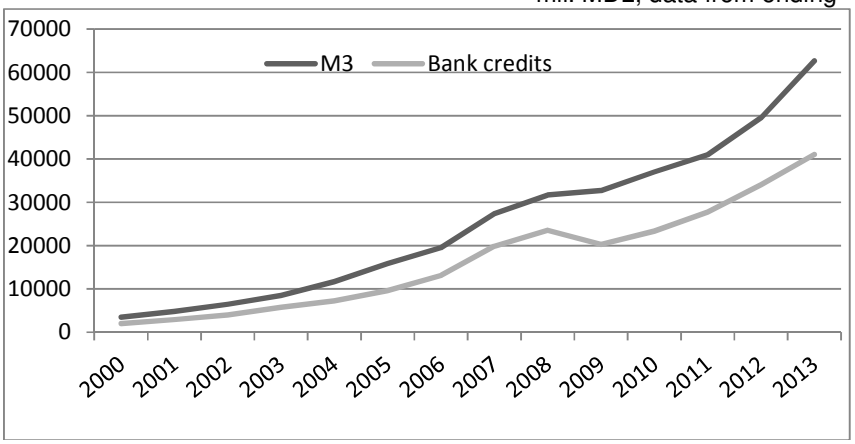
creditworthiness of real sector. By financing real sector, banks do not seek immediate results of monetary policy their decisions are based on the anticipation of future effects.

In order to check theimportance of this indicator, we intend to follow its evolution on the monetary market of Republic of Moldova.

Figure 1

The evolution of money supply M3 and of bank credits within the period of 2000-2013 years, in RM

- mil. MDL, data from ending -

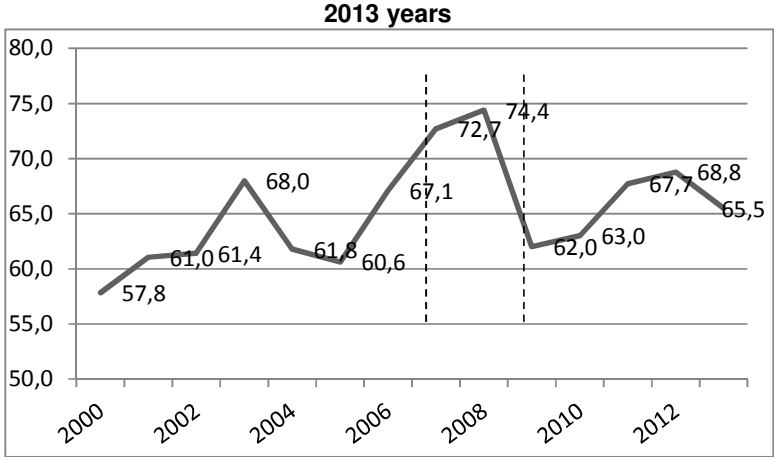


Source:National Bank of Moldova, 2014

It may be noticed a dissimilarsituation during different periods of time, and unusual banks behavior for the monetary policy propulsion taken from money creation into economy point of view. These discrepancies can be noticed much better if the graphic of propulsion indicator evolution is analyzed.

Figure 2

The evolution of propulsion indicator in RM during the period of 2000-2013 years



Source: National Bank of Moldova, 2014

Analyzing the graphics of the propulsion indicator evolution can be noticed that the maximum value it has reached during the analyzed period was of 74% (fig.2). This level may be considered very close to the highest one, as for the prudential requirements obligatory to banks related to maintaining liquidity. According to the second principle of liquidity imposed to banks by NBM, these should have liquidity of 20%from its assets. Thus, in RM, the credits quantity offered to the economymay have a tendency to the maximum of 80%.

Though, it may be noticed that during the reference period there are three specific periods of the propulsion effect development:

- During the 2000-2006 is noted that the ability of banks to create money is quite low, with the exception of 2003, when on the background of a relative stability, the banking system anticipated the mitigation of credit risk in the economy. But this advance was not substantiated by reality, that's why in 2004 the indicator propulsion returned to the level of 2002 year.
- The ability of banks create money during 2007 - 2008 year is improved to maximum, reaching 74.4%.

- From 2009 it is noticed that in spite of the fact that money supply grows, the ability of banks to create money again falls to low levels.

Thus we see that the trend of economy financing by banks is not always equivalent to the quantity of money in the economy trend, which indicates the existence of certain factors influencing the ability of banks to transmit monetary policy impulses to the economy. Identifying these factors and their impact on the ability of banks to create money, in terms of economic growth is a key task of this paper, the formulation of proposals for the correlation of the monetary authorities and banking needs of the real economy.

3. Factors of influence

So, if the central bank, by different means, is trying to stimulate commercial banks to create liquidity for real sector financing. There are a lot of factors that may encourage or block this process at the bank sector level. Most of these factors that may promote or block the commercial banks' money creation process can be distinguished in conditions of an evident sustainability of central banks. Thus:

- *The real economy capacity to absorb a larger quantity of money.*Since the real sector still suffering the consequences of the global financial crisis or in a state of recession, economic agents mostly do not meet all the requirements to get a bank loan, being less creditworthy or having unfavorable credit history. In these conditions, in spite of the facilities provided by central banks, the liquidity insertion into the economy by credits at the commercial banks level is strictly regulated in order to reduce risks andits effects. After an assessment of future solvency of its customers, banks will decide forcash holding, ignoring lending. Thus, with the economy worsening, its capacity to absorb the amounts of money provided by monetary policy will decrease and diminish the effectiveness of monetary policy. So the economy capacity of money absorption and propulsion effect is a contrary relationship, and the level of these indicators depends on the economic situation.

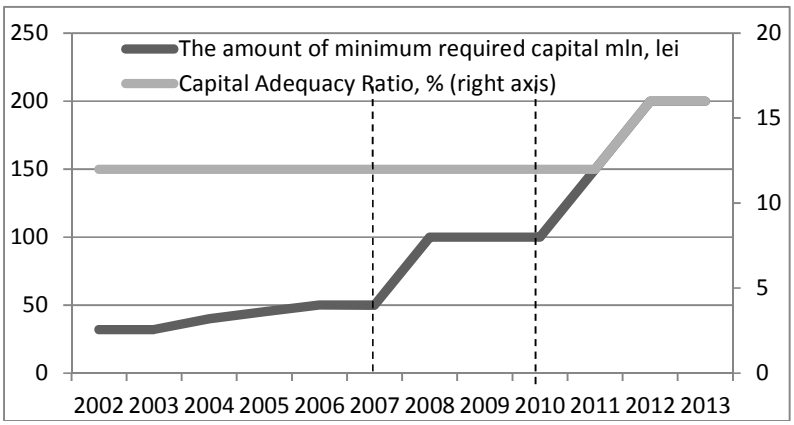
In order to argument this hypothesis we will return to fig.2, where it is shown that from 2009 year (the year when the global financial crisis effects were mostly felt in national economy) the money creation decreased. This effect can be explained by the worsening of economic solvency which influenced their eligibility in the contracting of loans from commercial banks. The verification of borrower's

eligibility is actually a prudential measure of the central bank, which banks cannot avoid.

- *The regulation system of the banking sector.* Themodern banking system is a highly regulated. Although this is very good for stability and economic sustainability it may reduce the propulsion of liquidity in the economy. Even if the banks would like to increase risk perception and provide credits, relying on their own experience and anticipation capacity, they could not do this because of the existing regulatory system.

Figure 3

The evolution of total regulatory capital requirements (million) and risk-weighted capital adequacy ratio (%) in RM



Source:National Bank of Moldova, 2014

For proving this statement, we will follow the influence of prudential norms prudential on banks' ability to create money. In a previous paper (Cociug and Timofei, 2014), we have already managed to prove that the increase of capital requirements for banks in Moldova did not cause credit reduction in the economy and did not negatively affected the ability of banks to create money. What we see now is that increasing the amount of total regulatory capital in 2007-2008, while maintaining risk-weighted capital adequacy ratio favored the growth index propulsion (Fig. 1 and 3). But we have also noted that since 2012, when the central bank raised the risk weighted capital adequacy ratio from 12% to 16%, the ability of banks to create money has decreased.

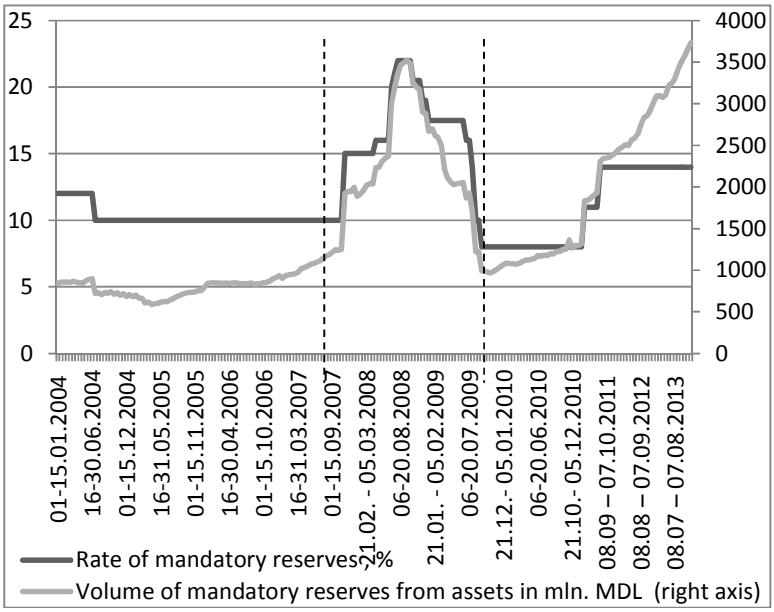
This fact explains the decrease of banks possibilities to finance risk-weighted assets from the equity account.

- *The necessity of risk financing*. Increase in loans assumes extra costs that not all banks may grant. Here again, appears the special banking regulation effect, under which commercial bank is obliged to form reserves for losses on balance sheet assets / engagements subject to credit risk (at least 2% for those classified as standard) (NBM, 2007). Creation of additional funds requires availability of capital for loan maturity period, which increases the cost of credit allocation, so some banks due to the lack of additional funds waive lending. Furthermore, these provisions being components of bank charges increase the cost of credit allocation, and some banks that work at the limit of the projected profitability of shareholders are not ready to accept.
- *Cost effect.* Monetary policy instruments have an effect on interest rates, which represent the base of money flows costs that further are propelled by banks in the economy in the credit form. For example, any increase in required reserves will result in increased costs to the bank for the involved funds, which will eventually create increase of lending rate. In this context, the increase of credit price has a negative influence on their demand limiting the ability of banks to create money (purposes of this instrument), and decrease propulsion indicator.

But if we analyze the minimum reserve volume and coefficient compared with propulsion progress indicator, we observe that minimum necessary reserves do not influence the propulsion effect at the expected extent. Moreover, the effect is converse, the growth of mandatory reserves volume due to the imposition of higher standards by monetary authority's leads to store cash accounts of commercial banks, which diminishes their efforts to remain liquid, and banks are willing to direct available resources for lending. Application of increasing levels of reserves as a rule is, on the background of persistent inflation (for example in RM, in this period inflation reached 10 to 14%), where the banking system predicts growth and is willing to credit, and the economy is able to absorb the financial resources for higher costs.

Figure 4

Evolution of compulsory reserves maintained by banks NBM (mln. lei) and mandatory required reserves imposed by BNM (%)



Source:National Bank of Moldova, 2014

- *Banks internal strategies effects*. As independent economic agents, banks are working to gain profit, which has more effect than purpose the propulsion ofmonetary policy impulses to the economy. In this context, banks may not be willing to credit economic agents, under the influence of internal decisions of shareholders or other internal decision-making bodies and the risk perception of each bank. The risk perception is the risk level that the bank may accept or the existing exposures or exposure face additional risks from existing exposure in its portfolio. The banking system low risk approach will adversely affect any intention of the central bank to raise money supply in circulation through the banking sector.

4. Conclusions and recommendations

Propulsion effect of monetary policy by means of banks money creation can be used as an information indicator for the analysis of the monetary policy effectiveness to stimulate growth.

It was noted that there is some discrepancy between how to promote monetary policy and its effects. This is due to the fact that the monetary authority insists on objectives without their association in one complex of measures for real economic growth. Thus the banking supervisory decisions are in contradiction with the objectives of monetary policy on money creation. The restrictions established for banking activity decrease the efficiency of propulsion for created money in the economy.

Banking system stability in Republic of Moldova andbanks'abilityto create money and monetary policy are seen separately. In some cases, supervisory decisions are in contradiction with the monetary policy set goals being excessive and leading to higher costs of allocated credits resources in the economy. An example in this case is the increase of capital adequacy from 12% to 16% when the banks are sufficiently capitalized and able to assume higher risks for what is hold in the portfolio. But this measure has led to lower banks credit capacity, so that the effectiveness of banks monetary creation is being diminished.

We believe that the actions of monetary authorities should not only focus on maintaining the stability of the banking system but also should act in the interests of economic sustainability using thosemeasures that could bring a maximum propulsion effect of monetary policy.

References

1. Andolfatto D., Nosal Ed. (2003), "A theory of money and banking", Working Paper 0310, Federal Reserve Bank of Cleveland. http://www.clevelandfed.org/Research/Workpaper/2003/WP03-10.pdf
2. Cociug V., Timofei O. (2014), "The impact of capitalization requirements on the banks ability of money creation", The conference: Monetary, banking and financial issues in central and eastern EU member countries, April 10-12, IAŞI – ROMANIA. http://www.mbf-eu.info/Files/ec1127d0-e71f-4b72-a829-9c507a66fd51/Paper_COCIUG.pdf
3. ECB (2014), http://www.ecb.europa.eu/press/key/date/2014/html/sp140526.en.html

4. Fischer S. (1986), "Monetary Rules and Commodity Money Schemes Under Uncertainty", Journal of Monetary Economics 17: 2 1-35
5. Friedman M. (1969), "The Optimum Quantity of Money and Other Essays", Chicago: Aldine
6. McCallum B.T. (1987), "The Optimal Inflation Rate in an Overlapping-Generations Economy with Land", in W.A. Barnett and K.J. Singleton(eds.), New Approaches in Monetary Economics. Cambridge: CambridgeUniversity Press
7. NBM (2007), http://www.bnm.org/files/index_16462.pdf
8. NBM, www.bnm.org