OPTIMIZATION OF MONETARY CREATION BY LINKING MONETARY POLICIES WITH COMMERCIAL BANKS' STRATEGIES

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Abstract

The failure of the economic system by the end of the first decade of the XXI century has extended the fields of research of economists; the most discussed being the problems of the monetary economy, especially the key role of commercial banks versus the central banks' policies in starting and spreading the international financial crisis. The monetary authorities together with academicals researchers have to review the monetary policies and tools, through the impact on financial stability and sustainable economic growth.

Keywords: monetary creation, monetary policies, commercial banks' strategies

JEL Classification: E51, E52, E58

1. Introduction

The role of banks in the process of money creation is undeniable and is proven by economic theory. The involvement of banks in money creation process, especially of the effects of levers adopted by the state to increase the capacity of money creation by banks, may lead to a more efficient implementation of this important role.

The present article focuses on the study of the context in which the banking sector can capitalize the monetary policy of the state through monetary creation and the efficiency of this creation.

The efficiency or inefficiency of banks in the process of money creation was demonstrated by analysis of the applied fields during the global financial crisis. It was proven that the global financial crisis of

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2007 was actually generated by the ability of commercial banks from developed countries to create more money than necessary for the economy. In the search of quick and additional profits the banks took advantage of the abundance of money and invested in risky assets, which eventually failed, undermining not only their own financial situation, but also world economy in general.

As long as the banks had provided a sufficient amount of money – cheap money supply, that was not properly used, they made risky transactions, which led to the financial crisis. The topic interest of this paper consists in the importance of targeting commercial banks (positioned, verified, empowered) within certain limits in order to make them independent on the market growth policy implementation.

The aim of this article is to examine the existing relations of the bi-leveled banking system: the relations between the central bank and commercial banks both in terms of interaction between these two levels, as well as in terms of their possible cooperation in order to achieve a particular purpose. Being aware that the first level is authoritative and the second level is on the market economy level that cannot be forced to perform anything, but maybe only convinced or directed through some instruments and mechanisms.

2. Literature review and proposed guidelines

The mechanism of creation of money supply in circulation is a complex process, due to its dependence on a number of factors that are not always controlled by monetary authorities, and the monetary policy does not generate the expected results. It often happens despite the fact that one of the most important tasks of any central bank is to assure and regulate the optimum quantity of money in circulation according to the demand and needs of the real and banking sector. However, monetary creation is a complex process, in which the leading role has no central bank as a monetary authority but commercial banks, which have the important function of assessing the demand for money in the economy and training their supply, benefiting in the process through various monetary policy tools.

Economists have different views and opinions concerning **the importance of commercial banks in money creation process**. On one hand, there are economists like Robert Lucas (1988), who thinks that the role of financial institutions is exaggerated, judging by the function of financial intermediation of commercial banks and its importance for economic growth, or Dornbusch and Reynoso (1989, p. 204), who believe that financial factors have almost no influence on the level of GDP per capita. And on the other hand, many economists are convinced that the creation of money is important for economic growth, and due to its financial effect through commercial banks leads to a considerable increase.

The economists, who acknowledge the role of commercial banks in the creation of money, consider this ability as a function of their primary bank emerging from its financial intermediation activity. "Banks act as intermediaries between depositors and people who are able and willing to borrow money. This relationship is often described as between depositors and investors, but the debtor is not required to invest in the sense of obtaining new capital goods" (Cameron, 1968).

It can be noticed that economists put particular emphasis on the multiplicity of their functions in order to highlight the place and role of banks in an economy. There are two distinguishable groups of economists (Olteanu, 2003, p. 6):

- Economists who believe that commercial banks are essential simple intermediary bodies between agencies who have capital and those who need additional capital (ex. Herman Schulty, Deletzsch, Albert Shaffle, Karl Knies, etc.)

- Others who consider that the main role of banks is unlimited creative currency (John Law, Mac Loode, Josef Alois Schumpeter).

Commercial banks fulfil their creative function of money creation together with the central bank through lending and investment operations. The ability of commercial banks to create money is of particular importance for the economy (Andolfatto and Nosal, 2003). If there is no increase in the volume of bank loans, the growth of economic activity of economic agents becomes impossible or is delayed in time, until the accumulation of the necessary financial means, from profits or other sources.

The normal progress of economic life becomes possible when there is a certain well-defined ratio and balance between the mass and the volume of money in circulation of goods and services brought to the market. The existence and maintenance of such a report depends on one hand, on the achievement of monetary equilibrium, in this case the money emissions of the Central Bank must correspond to real needs, and on the other hand, on the functionality of economy, a process when commercial banks become involved.

Commercial banks represent the channel through which the Central Bank executes its objectives and goals in order to maintain the money market. However, "The most important role is played in the creation of money supply by the banking sector ... when banks grant loans, they create additional deposits for those who need money" is written in one of the reports issued by the Bank of England (Bank of England, 2007a).

Theoretical considerations of the role of commercial banks in the redistribution of financial flows in the economy occurred in several stages, from complete ignorance to the total involvement, each economist expressing his opinion depending on the pursued historical circumstances. However, in our opinion**, not the multitude of functions performed by commercial banks underlies the importance of their role in the economy**. Their exceptional value is mainly driven by the specific operations they can do:

- Establishing means of payment;
- Investing means of payment into circulation;
- Withdrawal from circulation of payment means.

These transactions highlight banks among other financial institutions, and have the capacity to change the volume of money in circulation. Proceeding from the above context, we can say that the concept of bank should be viewed not only in terms of its functions to attract temporarily available resources and to place them in the name and on their own terms of reimbursement conditions, interest rate and maturity, but according to their participation in the formation of the money supply in circulation.

A number a modern economists who studied the causes and consequences of the global financial crisis triggered in 2007-2008, asserted the same idea, considering that it happened due to the commercial banks' basic capacity to create money:

"When banks grant loans to customers, they create money by crediting their accounts", says Sir Mervyn King, the governor of the Bank of England (King, 2012);

- The head of Economic Analysis Department of the magazine Financial Times, Martin Wolf, thinks that the essence of the contemporary monetary system is creating money out of nothing, by private banks (Wolf, 2010);

- The financial crisis in 2007/08 took place because we could not limit the private financial system in its function of creating private credit and money, says the President of Financial Services Authority, Adair Turner (Turner, 2012).

- The banking sector has the most important role in the creation of money supply. When banks provide loans, they create additional deposits for those who need money, writes in one of the reports issued by the Bank of England (Bank of England, 2007b);

- The primary function of banks is monetary creation and not the intermediary one, Michael Kumhof, IMF economist (see Conference *Fixing the Banking System for Good, 2013*), highlighting the unfairness of banks in terms of their approach intermediation approach due to the exclusion of monetary financing determinance.

3. Correlation of commercial banks' strategies with monetary policy objectives

The amount of money that can be created by banks in the economy depends both on the need to respond to the demand for money that comes from the nongovernmental sector, as well as on the amount of the offer, which the bank can take from the central bank and multiply it being influenced by monetary policy instruments. But banks' monetary policies are not the only one that are responsible for money supply creation, banks' decisions that are focusing on profitability and caution in their activity are important too. Reality shows that monetary policy mechanisms do not always work efficiently, in some cases the effects claiming the reverse, that is why commercial banks try to avoid restrictions placed by the authorities in a bid to increase their profitability. However, the main function of central bank is that of correcting the level of central bank money supply in the economy through monetary policy instruments, which are used to optimize the monetary mass in the direction of its increase or decrease. Each of the objectives of macroeconomic monetary policy is reflected in the strategic decisions of commercial banks, being transformed into microeconomic objectives, which are designed to increase bank profitability.

In order to optimize the effects of monetary policy, it is necessary to study the behaviour of the banks' reaction to its impulses, because they represent a complex system of relationships, tools and channels through which the Central Bank and government influence over the banking system and the real economy. In this case, commercial banks represent a node for transmitting monetary authority decisions and rulings.

Table 1
Monetary policy objectives and response policies of commercial banks

Monetary policy objectives	Components of monetary policy	The purposes of monetary policy	Commercial bank's response policies	The purposes at commercial bank
Price stability	Monetary emission	Enough quantity of money supply	Credit policy and politics storage	Maximizing profits from the accumulation and efficient resource placement
External stability	The stability of exchange rates and balance of payments	National currency stability	Foreign and external exchange policy	Business subjects' demand for foreign currency
Sustainable growth	Crediting	Credit availability for business subjects	Credit policy	Business subjects' demand for credits
	Storage	Creating the conditions for economic growth as a primary source of increasing potential investments	Storage policy	Creating conditions for growth generating sources of funds - sources of loans and investments increase
The stability of interest rates	Interest rate	Meeting the demand for money within the means of subjects of economic activity to pay the right to use financial resources temporarily available	Policy interest rate and fees	Meeting the demand for money within the means of subjects of economic activity to pay the right to use financial resources temporarily available
Financial system stability	Financial system stability	The regulation of the banking system liquidity	Risk management, liquidity management	Application of central bank regulations, ensuring the stability of the bank

Source: elaborated by authors.

So, it can be said that in the process of monetary policy drafting it is essential to establish correctly the goal and selection of tools for its realization, and the goal must be as simple as possible and accessible to perception. In this case, a single monetary policy will determine the final objectives of banking system development, banking policy and the position of each bank separately, which while adopted and implemented by the management or owners of commercial banks, will condition their behaviour and their relationships with customers, influencing dynamic economic development of the country in general.

To clear up the existing interdependences from the banking system, it is necessary to make the analysis of monetary policy objectives in terms of the aims and policies of the banking system (Table 1).

Each objective pursued by the central bank that is highlighted in the table, has its own implementation methods and tools, which in one or another way influence the banking system activity (Semionov, 2005).

Since the monetary policy implementation takes place through a range of techniques and monetary instruments, which target mostly are commercial banks, the study and research of commercial banks' reactions on monetary policy, are of major importance for the functioning of an effective mechanism for transmission.

4. The influence of monetary policy instruments on the ability of commercial banks to create money

The effects of the instruments of monetary policy on money creation ability of commercial banks are different. Currently, the set of monetary policy tools that the central bank has at its disposal and through which it implements monetary policy in order to achieve its primary objective, can be divided into two groups, depending on the desired effects, namely:

1) Tools that have an impact on monetary mass in circulation:

• minimum reserves

• open market operations (open market)

2) Tools impacting the cost of money

• monetary policy rate (the refinancing rate), that is a quantitative tool of monetary policy, reserve requirements have a direct impact on money creation by commercial banks which have the following effects:

→ restrictive, the rise of the required reserves makes commercial banks' excess liquid reserves to fall, because it is required higher reserves in accounts at the central bank, reducing the potential creation of money;

→ incentive, rate reduction of required reserves makes reservations excess liquidity of commercial banks to increase, because a considerable amount of the money previously held as required reserves is released, becoming available for lending, in other words, increase the potential for creation banks.

The impact of mandatory reserve rate needs two clarifications. The action of the first factor may be different, depending on the structure of bank resources. Second, there are countries where the system of required reserves is such that those reserves can be used partially as a source of liquidity, which makes sometimes decrease below the required level, providing on their reconstruction in due time. In these countries, the rise of increased volume enhances the possibility to draw from them necessary liquidity in the short term, thus reducing optional liquid reserves. As a result, the effects of changing coefficient required reserves are partially canceled in this case by the reverse effects of changing coefficient of optional liquid reserves.

There are also other tools that influence the volume of money supply - **open market operations (open market)** performed by the Central Bank which initiates the sale or purchase of certain trade effects, thus creating a demand or a supply of currency at a certain price. However, open-market policy has a reversible influence: the effects purchase by the Central Bank leads in increased liquidity and vice versa. The effects of central bank securities trade are the following:

- constraining, through the sale of securities by the central bank to commercial banks, occurs liquidity absorption in the economy and a reduction in the amount of money available to commercial banks for multiplication;

- incentive, by buying bonds from commercial banks, the central bank provides liquidity and enhances the creation of money by commercial banks.

In conclusion, the effect of the policy of open market of Central Bank influences the ability of commercial banks to create money based on its willingness to engage in the process of lending to non-banks, which in the end, has repercussions on monetary mass in circulation. At the same time, the decision of banks to create money depends on the rentability it offers to those central bank securities, because this instrument can have dual effects: trying to limit liquidity, central bank can completely neutralize the creation of money. Namely, in case the central bank attempts to reduce the money supply, it provides securities state with an attractive interest rate, creates favorable conditions for banks to remain active buyers in the money market, which also leads not only to decrease design capabilities of money by banks but even counter it (remaining banks remain on the money market as active speculators and will not provide credit to the economy).

An instrument that influences the value of money is **refinancing rate**, which is the interest rate used for the main open market operations of the central bank. The refinancing rate performs a valuable effect on existing interest rate structure in the economy and an indirect impact on the size of money supply in circulation. The alteration of refinancing rate towards its reduction is perceived by the public as relaxation of the monetary policy pursued by the authorities, leading to the decrease of interest rates in the economy, increased demand for money to carry out investment and therefore enhancing the capacity of banks to create money and increase money supply in the economy.

And on the contrary, the increase of the refinancing rate leads to higher interest rates in the economy, higher price of credit and ensuring savings to the detriment of investment, which will also lead to the decrease of the demand for money, and will reduce banks' ability to impel the money into the economy or to create money.

Thus, when the central bank changes refinancing rate, it encourages financial institutions to change the interest rate on deposits and short-term loans, leading to changes in interest rates on assets and liabilities in nominal and real terms, and request of money supply.

However, if the Central Bank promotes a restrictive monetary policy, trying to limit the ability of commercial banks to create money by lending, the latter shall endeavor to avoid the restrictions by appealing to various financial innovations. The main types of financial innovations in developed economies in the last third of the twentieth century were:

a) Deliberate increase of liabilities by borrowing on the interbank market (although normally, bank liabilities are created independently of the bank's shares, based on the behavior depositors of banks);

b) Securing credits, financing method by converting bank loans into securities and selling them to new loans;

c) Credit lines between various financial institutions, whereby they are obliged to grant loans to another financial institution on first demand.

All these innovations allow commercial banks to avoid financial restrictions and the Central Bank and to grant new loans, even in the absence of mandatory reserve surplus (restrictive monetary policy imposed by the Central Bank).

5. Conclusions

The efficiency of monetary policy, which consists of a series of measures and methods by which the monetary authorities tend to influence macroeconomic conditions changing the money supply in the economy is determined by how this offer is compensated by money demand coming from the real economy to maintain an optimal balance for expected inflation target. In this respect, monetary authorities have three essential levers: increasing the money supply by printing banknotes used only in exceptional cases; direct control of the quantity of money in the monetary sector and open-market operations. The second option aims at the ability of banks, at a lower hierarchical level of the power to issue currency by specific financial intermediation. The response effect of these three levers banks, in turn, is unquantifiable and unpredictable.

Commercial banks, in terms of their ability to create money, play an indispensable role in the modern economy sustainable growth, by providing the economy with the necessary financial resources. These are essentially the only institutions that perform the interconnection between the monetary authorities and the real economy through the transmission of monetary policy impulses, interconnection which depends on the ability of banks to meet the demand for currency influences that come from the real sector and stimulating or restrictive monetary authorities. Thus, when the monetary policy pursued by the monetary authorities does not lead to the expected effects, the cause of failure can be sought not only to the provisions of the policy itself, but also in the activity of the banking system, especially in its degree of correlation policy with monetary banking supervision.

Since commercial banks can be positioned on the same position as the central banks in promoting macroeconomic policies, due to their increased ability to create money, even compared with the bank of issue, and the purposes of the central bank and private banks are different (banks are private individuals who have one goal - to create profits) and the way they perform these functions is identical - both create money. The classification of commercial banks within certain restrictive limits is very complicated, because in this case, there is a risk that banks simply will not meet their proper function. In these circumstances, it should be found such a mechanism of influence on commercial banks that on one hand will be interested in creating money in the economy, on the other hand not be restricted by various levers risk mitigation, and not at least, is not hazardous to involve a major risk - one of the causes that led to the financial crisis. Only in this case the application of instruments of monetary policy by central banks will have the desired effects, banks acting simultaneously at both levels will contribute to economic development.

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