

WHAT IS THE IMPACT OF MONETARY POLICY ON SYSTEMIC RISK OF REPUBLIC OF MOLDOVA'S BANKING SECTOR?

Phd Student Vadim LOPOTENCO

The Academy of Economic Studies of Moldova, Republic of Moldova

Email: lopotenco.vadim@gmail.com

Abstract: *In a market economy, monetary policy is a strategic tool of the state in balancing the market and influence on economic processes and therefore, the monetary policy has an impact on all economic sectors, including banking. We investigate the impact of monetary policy on systemic risk of Moldovan banks. We will try to find the correlation between interest rates for an extended period of time and increase bank risk. This result allows us to propose measures to prevent and reduce systemic risk, such as macroeconomic and institutional controls, including the intensity of surveillance activities, securitization and bank competition. The results will allow us to analyze the neutrality of monetary policy to financial stability of the banking sector in the Republic of Moldova.*

Keywords: *systemic risk, monetary policy, financial stability, banking crisis.*

JEL Classification: *E51, E58, G32.*

1. Introduction

The monetary policy objectives are macroeconomic, yet it is necessary to analyze its influence on bank activity, in order to understand the transmission mechanism in the economy. The monetary authorities are responsible for implementing monetary policy, but also it has the role of supervision and control of the banking sector. Anti-inflationary actions can put the banking system in difficulty, hence there are contradictions between the objectives of the monetary authority and the effects on banks. National Bank fulfills two roles: control of monetary policy and banking system. In this way it follows that the second objective is subordinated to the first. Such, should be avoided that the interventions of the National Bank, as lender of last rank, compromise monetary policy objectives. Thus, monetary policy can be considered as a factor of influence on a country banks competitors, so it has an impact on systemic risk. In order with the stated issues, we should answer the question to how monetary policy can influence the situation of banking sector and its systemic risk?

2. The influence of monetary policy on the banking sector

The latest crisis has shown that central banks prefer to reduce the interest rates in order to overcome the recession. This reduction comes from previous successes, which have kept inflation low so allowed the monetary authorities to maintain the interest rates below the level proposed by historical experience (Taylor, 2009). Even if the excess liquidity can bring new bank risks, however, it was not considered as a cause of financial instability for 2 reasons. First, many central banks have felt a certain level of inflation target as their greatest contribution to boosting economic growth (Svensson and Woodford, 2004). Second, financial innovation has been considered as a factor that would enhance the resilience of the financial system, contributing to a more efficient allocation of risks (Greenspan, 2005). In this context, monetary policy has gone into the background, being less used in actions of financial stability maintaining.

It is difficult to argue that monetary policy was the basis of the last international crises, but this was a factor in its formation. We find at least two ways in which low interest rates may influence bank risk. First, low interest rates affect valuations, incomes and cash flows, thus affecting the expected risk (Adrian and Shin, 2009a; 2009b; Borio and Zhu, 2008). Secondly, relatively low funding costs in the short term, low returns of government securities stimulate financial institutions to take greater risks (Rajan, 2005).

The current value of a bank is the amount of revenue expected from the exploitation updated bank assets and depends largely on the interest rate margin that is influenced by the level and the structure of interest rates on short and long term. Interest rate variation influences directly, the value of assets and liabilities, these influences are called "price effects". Banking revenues are significantly influenced together with the "effect - price" and with "volume effect" when variations of interest rate influences the level of deposits or loans and, more generally, the business climate and level of economic activity.

It shouldn't be neglect another aspect, namely "risk effect" because the situation of the bank borrowers depends on the interest rate which indirectly have an impact on bank results through credit quality and risk provisioning.

These effects influences differentially activity of banks depending on the structure of the balance sheet whose value is more or less immunized against variations of interest rate and have an overall incidence, depending on the structure of the banking industry and, in particular, depending on the degree of competition in the sector. This determines the market position of the banks and pass on interest rate variations on the conditions that its practice on the customer, or on resistance of demands of old contracts rates renegotiating.

In general, it is recognized that a decrease of short-term interest rate, which corresponds to an expansionary monetary policy is favorable to banks and contribute to their revival. Sometimes these correlations are not universal.

The effect of reducing the interest rate on the bank situation is favorable when it leads to conversion of short-term borrowings in long-term loans with fixed interest rate, ie when bank liabilities are less than the duration of assets. In addition, the structure of interest rate must be normal, increasing. In these conditions, the interest rate reduction pass into an increase of the intermediation margin, at least in the short term, because the cost of refinancing is more elastic on lower interest rate compared to the rate of return of assets. Effect of the interest rate reducing is more favorable if the structure deforms, respectively long-term interest rates reduce more than short-term interest rate (as was the case in the USA in the '91 - '92) mechanism known as the "discount window".

Reducing interest rates is favorable also to banks that have a strong market activity, because it stimulates the commission incomes. Another aspect is the effect of long-term and immediate effects of declining interest rates. On short-term, the result of lower interest rates is positive when the balance sheet structure is normal, but long-term effects of elasticity is focused on loans of interest rates changes compared to resources. If credit performance is adjusted in depending of the interest rate, then the margin of intermediation is reduced.

3. The transmission mechanism of monetary policy on banking sector

According to the National Bank of Romania the transmission mechanism of monetary policy include all channels through which the central bank, using a varied set of instruments of monetary policy, can influence dynamics of aggregate demand and price in the economy.

In the literature we can find many transmission channels, but the most important are:

- interest rate channel,
- the credit channel,
- exchange rate channel.

These channels proved to be relevant for many countries with a market economy. Considering that market long-term financial assets is underdeveloped in the Republic of Moldova, this channel can not have a major influence. Exchange rate channel can not

influence production capacity due to: changes in quarterly revenue from export and import expenses are related. This implies that net exports can not grow considerably after an impairment induced by an expansionary monetary policy. Thus we see that in the Republic of Moldova the most relevant is the credit channel.

The credit channel works by the results of monetary policy decisions on commercial banks to the real economy. The National Bank of Moldova (NBM) can use a set of tools for implementing monetary policy: open market actions, standing facilities, the establishment of minimum reserve requirements and foreign exchange intervention. If the policy becomes more expansionary (in case of the basic rate reduction), then this will lead to an increase of the liquidity held by banks and of the liquidity available on the interbank market. This results from reducing expenses connected by refinancing of banks, which in turn affects banks' decisions on lending and other investments. Banks can increase the supply of credit to lower borrowing rates or providing liquidity on the interbank market at a lower rate. If loan demand is elastic and increase lending, it will stimulate overall demand for goods and investment and will influence inflationary pressure. In this way NBM can achieve its aim through 5% inflation targeting. This can be viewed in Figure no. 1.

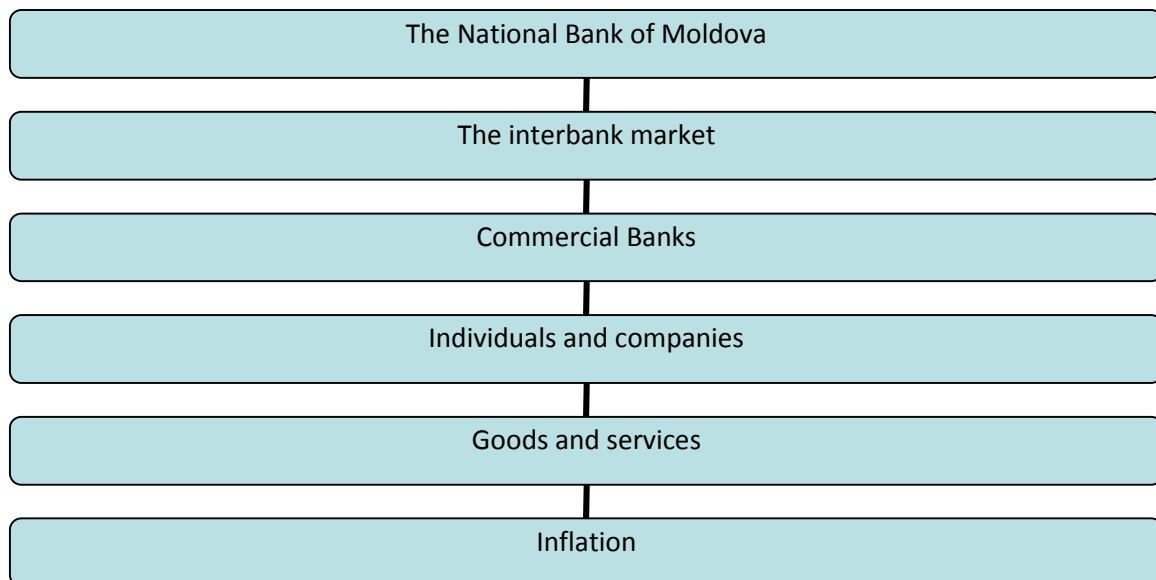


Figure no. 1. The transmission mechanism through the credit channel

Source: realized by author

This transmission channel activates impaired in the Republic of Moldova. This is observed from the fact that banks do not show a stronger reaction to changing conditions on lending refinancing determined by BNM. This can be explained by the small size of the interbank market and obstacles to lending of individuals and companies.

The most plausible explanation for the weak development of the interbank market is the lack of trust among banks. The aim of interbank market is to facilitate changing liquidity needs. If a bank has an insufficient temporary short-term liquidity while another bank has excess of liquidity, then there is a possibility of mutually advantageous lending between these banks. However, if the bank granting a loan is not considered reliable, the transaction will not occur. If such a situation prevails in the entire banking sector and for this reason the interbank market is low, banks will hold greater reserves of liquidity in the environment, in order to facilitate their changing liquidity needs. This will represent a loss of efficiency in the financial system and the whole economy because small portion of

banks' assets may be used to finance efficient investments. This prevents the transmission mechanism.

Another reason that bank lending reacts slowly to a better refinancing conditions determined by national bank may be the prevalence of information asymmetries between banks and potential borrowers. If banks do not know their customers, they will not give a loan, regardless of the refinancing. To overcome these obstacles are necessary institutions and instruments.

The World Bank gives us such instrument by making ranking "Getting Credit" from Report Doing Business. Analyzing suggested data we find that the Republic of Moldova has a small credit bureau coverage, only 11.4 %. Considering that the average for Europe and Asia is 40.3%, for Romania – 51.1% and for the Ukraine – 40%, results that the access to loans is very small. The loans are available in Moldova, but not engaged enough.

3.1. The effects of monetary policy in overcoming the banking crisis

Whereas the last period was marked by crisis or banking difficulties in many countries, it is interesting to analyze how monetary policies contributed to the improvement or acceleration of these crises.

Lowering the interest rate facilitate the economic recovery and lending activity, improves borrowers situation and avoid their bankruptcy, limits assets decreased. It also allows banks to "digest" the crisis even if delays restructuring that seems to be inevitable.

In the USA, the countries of Northern Europe and Japan, macroeconomic policies have played a decisive role in overcoming the crisis. Largely due to cyclical monetary policy, creditworthy banks have found prosperity and were able to manage crises. In other European countries, the monetary authorities were "paralyzed" by the need to achieve the Maastricht criteria and did not accept changes in macroeconomic policies.

During 2014 and early 2015, the Moldovan banking system was disrupted by a series of bank fraud of historic proportions, which risks undermining not only economic prospects, but also the European integration of the country. In October, three banks (Banca de Economii S.A. - BEM, JSCB Banca Sociala - BS and JSCB Unibank- UB), which represents over a third of the entire banking system of the country have remained without license of activity, and the National Bank of Moldova (NBM) established regime of special surveillance over 3 other banks – JSCB Moldova Agroindbank, JSCB Moldindconbank and JSCB Victoriabank.

Liquidation of the three banks, a significant increase of the base rate, and increasing reserve requirements had great impact on the Republic of Moldova economy and private sector. There was a massive injection of liquidity into the banking system through insolvent banks, in the form of liquidity support for these banks came up from zero in September 2014 to about 14 billion lei in March 2015. To counter the impact and limit the effects on the national currency and inflation, NBM tightened aggressively monetary policy. Thus, in less than a year, the NBM increased the monetary policy rate in several stages, from 3.5 percent to 19.5 percent in lei and the reserve requirements from 14 percent to 35 percent. The private sector had to bear this cost of crisis very obvious, faced with high credit rates and limited credit availability.

However, without an aggressive monetary policy, the costs to the economy and society would be much higher. Previous banking crises, with a high level of monetization (Ecuador, Venezuela, Paraguay in the middle of 90s) have generated rampant inflation episodes, often accompanied by sudden depreciation of the national currency. Another obvious cost would be increase of the public debt that will have be repaid by taxpayers, and future generations.

It is important to note that government guarantees associated with the bailout of banks and, consequently, the securities issued to replace these guarantees are part of the public debt, which increased from 37 percent of GDP in 2014 to over 50 percent today.

4. Can we reduce systemic risk of the Republic of Moldova banking system using monetary policy?

During the last period of time NBM reduce the base rate began to fall as cost of credit to the real economy. As inflationary pressures are reducing, NBM may reduce the base rate. So far, the policy rate was reduced by 4.5 percentage points in 2016. The NBM should continue to exercise with caution reducing of the size of the monetary policy rate, given the degree of uncertainty about the outlook, coupled with the falling inflation. The reduction of the base rate, ideally, should lead to lower rates of bank loans; however, monetary transmission mechanism has been plagued by problems in the banking system. Restoring financial stability and confidence in the banking system will improve the transmission mechanism.

The Republic of Moldova's banking sector was shocked by "mega-transactions" made at the end of 2014. As a result of these transactions, the three banks involved have found themselves in a critical situation. During 2014 Banca de Economii S.A., JSCB Banca Sociala and JSCB Unibank significantly increased their balance investments abroad. Thus in October 2014 the three banks had investments outside the country amounting to approximately 9.4 billion lei, representing 63.9% of the funds owed to foreign banks financial institutions in Moldova. As a result of these suspicious transactions, the financial sector has created a huge capital hole.

The banking sector was embezzled by huge amounts of foreign currency through dubious transactions. This indicates the special currency interventions made by BNM directly in favor of the three banks, operations were conducted during December 2014 - February 2015. The NBM has made special interventions in form of currency sales with the Banca de Economii S.A., JSCB Banca Sociala and JSCB Unibank in December 2014. It was about 221 million USD, 75% was used for closing the open foreign exchange swaps previously.

Monetary policy tightening initiated in December 2014 led increasing of interest rates. Increasing rates of monetary policy instruments influenced more expensive loans in MDL. Increasing interest rates on deposits was higher compared to the rising cost of bank loans. Thus, in February 2015 compared with November 2014 the interest rates on deposits in MDL increased by 3.2 pp, while bank lending rates in MDL increased by 2.1 pp. The faster growth of interest rates deposit was influenced by the willingness of banks to get more liquidities in MDL.

The processes that led price increase took place long before the BNM intervention. Thus, the effect of restrictive policies through basic rate and required reserves had a significant lower effect on inflationary trend, it is experiencing continuous growth throughout the year and an increased negative effect on economic development. The consequences of monetary erosion has yet to take effect.

In the context of economic uncertainty, increasing policy rates and the reduction in activity of banks under receivership lending volume was reduced. At the same time a worsening of the credit portfolio, which is characteristic for the entire banking sector. The worsening loan quality should be associated with worsening economic situation, which makes it harder the repayment of loans, and the tightening of monetary policy, leading to restrict lending activity.

The NBM and other public institutions, that ensuring the economic security of the state, are responsible for the deteriorating situation in the Republic of Moldova banking

sector. In general, there were undertaken actions regarding risks related to transactions made. Special administration, lending activity or NBM actions were delayed and had only role of fraudulent transactions mitigation. In fact, although it had the necessary tools, public institutions have not been used to thwart implementation of obscure operations.

The NBM may limit bank activity and may restrict, suspend or prohibit certain transactions or operations given that jeopardized the interests of depositors or bank was engaged in risky or dubious transactions. This wasn't made.

We can say that the greatest systemic risk was created by the national bank, which then came to rescue the banking sector from it. The systemic risk of the Republic of Moldova banking sector can be mitigated through monetary policy. Even if the transmission mechanism is not perfect and effects of monetary policy come with delay on the economy, however, the National Bank has enough tools to reduce systemic risk. This is true not only in case when it wants to create by themselves.

5. Conclusion

The latest crisis drew attention to the link between monetary policy and banking risk, including systemic risk. Lower interest rates in the short term can influence the activity of banks towards risk. Monetary policy action has a measurable effect, but also limited on the borrowing rate. Thus we can expect that lending would be likewise affected.

The Republic of Moldova interbank market is undeveloped. To overcome the lack of trust on interbank market is necessary to enhance and strengthen banking supervision and regulation. With a better financial reporting and disclosure of ownership structures, supervisors and regulators will be better informed about fraudulent business activities, which will allow an intervention at early stage. In addition, it will be easier for supervisors to assess the solvency of individual institutions. With such an improved system of supervision and regulation, information asymmetries between banks will be mitigated and mutual trust will be restored because the supervisors act as guarantors of confidence in individual institutions and the financial system in general.

The interbank market may rise considerably and inefficient of the financial system will be exceeded with a restored trust. A higher interbank market will mean that it will play a greater role for the refinancing of banks and expects that the loan interest rate and the loan offer will react more strongly to monetary policy actions. So, the systemic risk of banking sector in the Republic of Moldova will be lower.

Another aspect of the influence of monetary policy on systemic risk of the Republic of Moldova banking sector is the credit channel. A credit bureaus increased coverage would also help expand lending without insurances. Banks in many countries have gained experience in loan without insurances, especially for micro, small and medium companies. If a bank would like to have a profitable loan portfolio without insurances, especially when these are small loans, is required to have a thorough credit analysis and advanced risk management. This requires a continuous training of bank staff in assessing ability to repay a loan from the business plans and cash flows, good standards of financial reporting by firms and measures to maintain the share of bad loans at a low level. Thus knowing the credit history of the borrower that are doing by the credit bureaus is extremely valuable for lending practice.

It is absolutely necessary to change the approach on the financial sector supervision and sanction the persons involved in shadow transactions. It takes a responsible attitude and severe from the relevant public institutions to organizations that venture into dubious transactions and to persons performing or complicit in fraudulent operations. Currently some success in this regard may be made only under pressure from development partners,

particularly the IMF and the EU. In a more distant time horizon broader progress will be achieved only in the context of growing political class.

References

1. Adrian, T. and Shin, H.S., 2009b. Financial Intermediation and Monetary Economics. *Federal Reserve Bank of New York Staff Reports*, No. 398.
2. Adrian, T., Estrella, A. and Shin, H.S., 2010. Monetary Cycles, Financial Cycles, and the Business Cycle. *Federal Reserve Bank of New York Staff Report*, No. 421.
3. Borio, C. and Zhu, H., 2008. Capital Regulation, Risk-Taking and Monetary Policy: A Missing Link in the Transmission Mechanism? *Bank for International Settlements Working Paper*, No. 268.
4. Cihak, M., Wolfe, S. and Schaeck, K., 2009. Are Competitive Banking Systems More Stable? *Journal of Money, Credit, and Banking*, 41, pp.711-734.
5. Demirgüç-Kunt, A. and Huizinga, H.P., 2010. Bank Activity and Funding Strategies: The Impact on Risk and Return. *Journal of Financial Economics*, 98(3), pp.626-650.
6. Maddaloni, A. and Peydro, J.L., 2011. Bank Risk Taking, Securitization, Supervision, and Low Interest Rates: Evidence from Lending Standards. *Review of Financial Studies*, 24(6), pp.2121-2165.
7. Shin, H.S., 2009. Securitisation and Financial Stability. *Economic Journal*, 119(536), pp.309-332.
8. Taylor, J.B., 2009. The Financial Crisis and the Policy Responses: an Empirical Analysis of What Went Wrong. *National Bureau of Economic Research Working Paper Series*, No. 14631.