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## INFLUENCE OF MONETARY POLICY ON THE UKRAINIAN CREDIT MARKET

**Abstract.** In the paper the influence of the monetary policy instruments the National Bank of Ukraine on the credit market was investigated. The problems, the specificity and the extent of the influence market instruments of monetary policy were determined.

Keywords: NBU, monetary policy, credit market, instruments of monetary policy.

Formulas: 0; fig.: 9, tabl.: 0, bibl.: 10 **JEL Classification:** G21, G32

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# ВПЛИВ ГРОШОВО-КРЕДИТНОЇ ПОЛІТИКИ НА СТАН КРЕДИТНОГО РИНКУ УКРАЇНИ

**Анотація.** У статті досліджено вплив інструментів грошово-кредитної політики Національного банку України на кредитний ринок. Розглянуто та визначено ступінь, проблеми і специфіку впливу ринкових інструментів грошово-кредитної політики.

**Ключові слова:** Національний банк України, грошово-кредитна політика, кредитний ринок, інструменти грошово-кредитної політики.

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## ВЛИЯНИЕ ДЕНЕЖНО-КРЕДИТНОЙ ПОЛИТИКИ НА СОСТОЯНИЕ КРЕДИТНОГО РЫНКА УКРАИНЫ

**Аннотация.** В статье исследовано влияние инструментов денежно-кредитной политики Национального банка Украины на кредитный рынок. Рассмотрены и определена степень, проблемы и специфику влияния рыночных инструментов денежно-кредитной политики.

**Ключевые слова:** Национальный банк Украины, денежно-кредитная политика, кредитный рынок, инструменты денежно-кредитной политики.

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**Problem formulation**. Lending is necessary for the development of the national economy. The main source of credit for a business is bank loans. At the same time, bank loans are a money issue through the credit channel. Considering the situation with inflation in Ukraine NBU has to monitor all the emission channels. Therefore, there is a problem of the credit market regulation by the National Bank of Ukraine for ensuring a balance between lending and inflation. For this it's important to determine the extent of influence monetary policy's instruments available to the National Bank of Ukraine.

Analysis of recent research and publications. Today, there is a lot of work of domestic and foreign scholars and analysts devoted to monetary policy and its impact on the economy. Selected issues of influence monetary policy's instruments in credit markets were investigated in the works of V. Mishchenko, S. Mishchenko, V. Stelmah, T. Smovzhenko, J. Ganley, K. Salmon, F. Myshkin, S. Moiseev, S. Andryushin, V. Kuznetsov. In their works some aspects of the monetary policy's impact were researched.

Selection of the unsolved aspects of the problem, which is devoted to this article. Although the scheme of influence monetary policy's instruments on the credit market is known, each country has its own specifics of the monetary policy's instrument's action. Considering the high inflation rates in Ukraine monetary policy's instruments used by the National Bank of Ukraine, may work in the other way. Therefore, a more detailed researches the degree and specificity of influence monetary policy's instruments on the credit market is necessary.

The formulation of the article objectives. The purpose of this paper is to investigate the extent of influence monetary policy's instruments available to the National Bank of Ukraine on the credit market.

Basic material research. Monetary policy is a set of activities in the sphere monetary circulation and credit, aimed at ensuring the stability of the monetary unit of Ukraine through the use of means and methods defined by the Law "On the National Bank of Ukraine" [1]. The main goal of monetary policy is to achieve and maintain price stability in the country according to legislation of Ukraine. The basic principles of monetary policy is to achieve average annual growth of the consumer price index at the level 3-5% per year and growth in the consumer price index by 19% in 2014 [2] and by 9% in 2015 [3]. To reduce the rate of inflation, the National Bank of Ukraine carries out the restriction policy (dear money policy). The basis of this policy is to raise interest rates on instruments of monetary policy for reducing the monetary base. This in turn leads to a reduction of bank liquidity, reduce banking institutions receiving deposits and as a result, reduces the volume of the issue of money through the credit channel. NBU uses the following instruments of monetary policy: the NBU discount rate, the refinancing rate (overnight refinancing loans and credits tender), rates on open market operations (REPO operation and operations with own debt obligations), the rate of mandatory reserves.

Research has shown a high NBU discount rate influence on the credit market (Fig. 1).

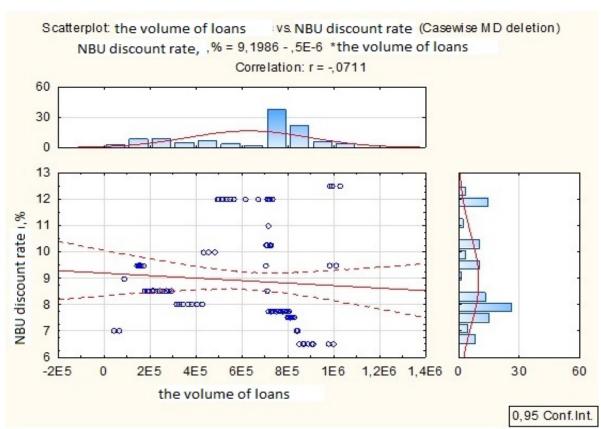


Fig. 1. Correlation between the NBU discount rate and the volume of loans for January 2003 – September 2014 Source: authorial computation

Figure 1 shows that the relationship between changes in the NBU discount rate and the change in the volume of lending is low. The largest change in the discount rate affects the credit market during periods when the banking system depends on the refinancing. Low impact of the discount rate is explained by the large difference between the discount rate and the interest rates on derivative instruments of monetary policy, which changes with a higher frequency.

In Ukraine, the policy of refinancing by the National Bank of Ukraine is widely used to maintain the bank's liquidity especially in times of crisis. For this the NBU by "On amendments to the regulations on the provision of the National Bank of Ukraine stabilization loans to banks in Ukraine" from 24.09.2014 №86 [4] has been canceled limit on the number of possible banks appeals for loans refinancing overnight. This allowed the banking institutions to apply for loans refinancing many times as necessary to support liquidity through a permanent line refinance. In this article, separately considered refinancing overnight rate and interest rates on loans obtained by the tender.

Influence of refinancing overnight rate on the credit market (Fig. 2) is greater than the effect of the NBU discount rate. This is explained by the fact that the refinancing rate is actually the tool by which banks support their liquidity. Time's lags influence of overnight refinancing rate less than the NBU discount rate.

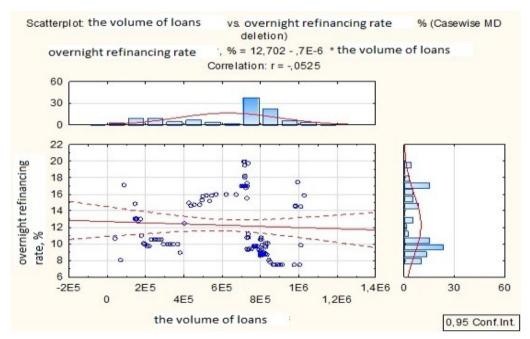


Fig. 2. Correlation between the overnight refinancing rate and the volume of loans for January 2003 – September 2014

Source: authorial computation

But, despite the speedy response the credit market to changes in interest rates on overnight loans, the impact of the National Bank on the credit market using this tool is slightly. Relationship between changes in the overnight refinancing rate and lending volumes, higher than between the NBU discount rate and lending volumes, but still small. This is explained by the fact that banks are able to replenish their liquidity not only by obtaining refinancing loans. This reduces the dependence on loan pricing, and hence the volume of lending from the monetary policy of the NBU.

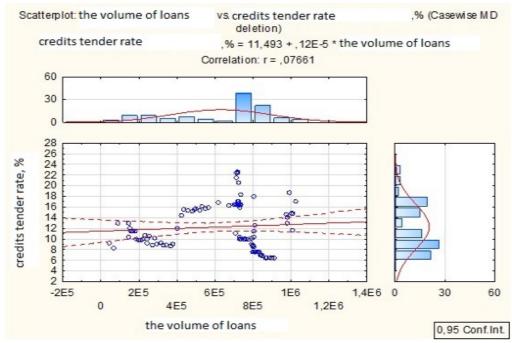


Fig. 3. Correlation between the credits tender rate and the volume of loans for January 2003 – September 2014

Source: authorial computation

Influence of interest rates on loans refinancing, obtained through a tender process on the lending is slightly and increases in periods when the banking system depends on the refinancing (Fig. 3). Influence of the credits tender rate on credit market less the credits tender rate, although similar to the periods of greatest efficiency. In other times there is a decline of influence of the National Bank of Ukraine on the credit market through the use of this tool. The reason for this is that the commercial banks have other sources to replenish liquidity during periods of normal functioning of the economy. As getting credit refinancing is a privilege for the bank, the banks mostly focus on deposit mobilization as a resource for the formation of the loan portfolio. It means that the credit market is more dependent on the regulation of the monetary base and the money supply than the rate of the National Bank of Ukraine.

Instruments of open market operations policy are: REPO transactions, transactions with the National Bank deposit certificates (operations with its own debt).

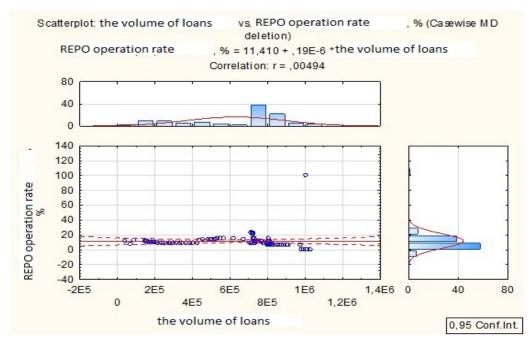


Fig. 4. Correlation between the REPO transactions rate and the volume of loans for January 2003 – September 2014

Source: authorial computation

The influence of this group of instruments on the credit market is much larger than the effect of the NBU discount rate and refinancing rates. But, despite that influence of REPO transaction rate and rates on operations with deposit certificates of the NBU is relatively low.

The REPO transaction rate quickly effect on lending (Fig. 4). In the same month, when the REPO transaction rate has been changed, lending was changed too. This is explained by the fact that the banks deal with REPO operations, not only when they need a loan of last resort from the National Bank of Ukraine and in "normal" mode. As REPO transaction is used for banks the opportunity to self-regulate their liquidity without the need for submission of refinancing applications. The REPO transaction rate is a relatively effective tool for influencing the credit market and liquidity of banks.

The influence of the certificate-of-deposit rate on lending is high because the National Bank of Ukraine constantly uses the tool of monetary policy to withdraw excess liquidity of the country's commercial banks (Fig. 5). Influence of policy instruments of open market operations on lending is greater than the interest rate policy and refinancing policy. As the

volume and frequency of certificate-of-deposit transactions create greater banks' dependence on them than on refinancing loans.

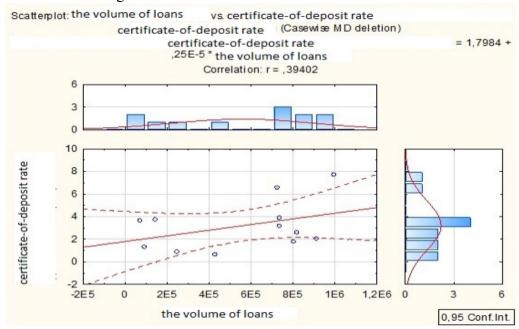


Fig. 5. Correlation between the certificate-of-deposit rate and the volume of loans for January 2003 – September 2014

Source: authorial computation

As rate of mandatory reserves formed separately on current deposits by currency and term deposits by currency, then it's advisable to consider them in 4 types: the rate of mandatory reserves on time deposits in the national currency, the rate of mandatory reserves on time deposits in foreign currency, the rate of mandatory reserves for operating accounts and demand deposits in the national currency, the rate of mandatory reserves for operating accounts and demand deposits in foreign currency.

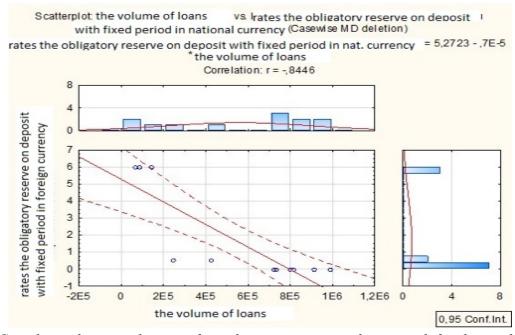


Fig. 6. Correlation between the rate of mandatory reserves on deposit with fixed period in the national currency and the volume of loans for January 2003 – September 2014 Source: authorial computation

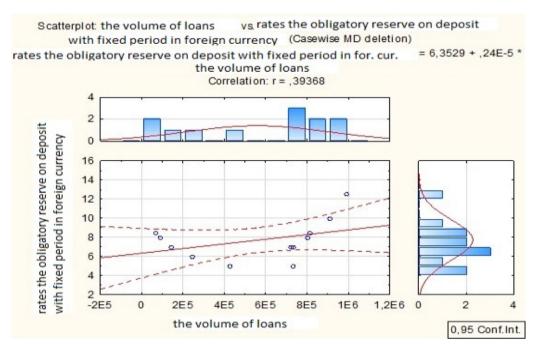


Fig. 7. Correlation between the rates of mandatory reserves on deposit with fixed period in foreign currency and the volume of loans for January 2003 – September 2014 Source: authorial computation

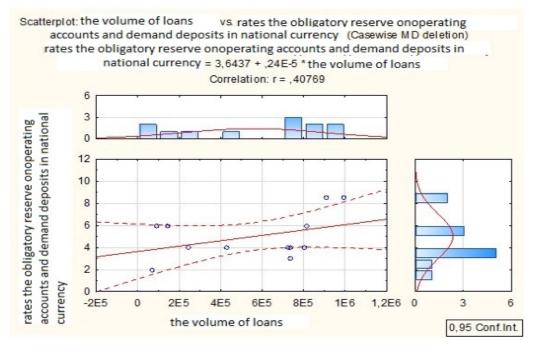


Fig. 8. Correlation between the rate of mandatory reserves for operating accounts and demand deposits in the national currency and the volume of loans for January 2003 – September 2014

Source: authorial computation

Figures 6-9 show that a relatively large impact on the credit market have rates of mandatory reserves on deposit with fixed period, for operating accounts and demand deposits in the national currency. As the deposits in national currency is the main source of the banks resource base to maintain credit activity.

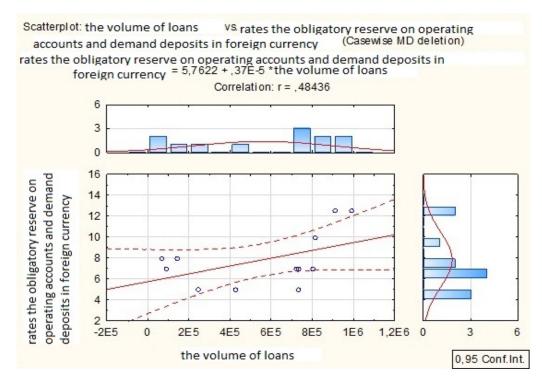


Fig. 8. Correlation between the rate of mandatory reserves for operating accounts and demand deposits in the foreign currency and the volume of loans for January 2003 – September 2014

Source: authorial computation

Besides the reserve ratio is a tool for "rapid response" to the situation since the change of the instrument immediately affects the change in lending volumes. Especially it concerns of fixed deposits, as short-term deposits are the bulk of deposits in Ukraine.

Conclusions. So, after analyzing all the monetary policy methods and its instruments can be concluded that the greatest effect on credit market have the instruments with the influence of which the banks have to work all the time that is instruments of open market operations policy (REPO transaction rate and certificate-of-deposit rate) and the mandatory reserves policy (rate of mandatory reserve). In this case, the main instrument of monetary policy of the NBU (the discount rate) has the lowest impact on the credit market. The discount rate varies from a lower frequency than the rates on its derivative instruments and actually separated from the other instruments. Although it should be a key influence means on the banking sector and credit market.

Influence of refinancing in 2014 increased because the volume of refinancing in 2014 has increased significantly. This makes banks dependent on refinancing rates therefore it gives a high impact on the bank's liquidity and credit market. In the long-term influence of refinance rates on the credit market is weak, as banks have other sources of the resources for active operations (foreign capital). The REPO transaction rate and certificate-of-deposit rate have a few more influences, despite the fact that the National Bank of Ukraine for maintaining the bank's liquidity as a main source elected refinancing, rather than open market operations.

Rate of mandatory's influence on the credit market is relatively high. Although the basic rate mandatory reserve has the greatest impact not on the lending of currency and credit terms. The rising rate of mandatory on foreign currency loans and a decrease rate of mandatory on deposits in local currency increased the share of loans in the national currency. The influence of all monetary policy instruments of the National Bank of Ukraine on credit

market during the study period can be characterized as insignificant. Especially noticeable decrease in monetary policy instruments' influence in situations where commercial banks are less dependent on the support of their liquidity by the National Bank of Ukraine or have other sources of replenishment their resource base, in addition to attracting deposits. Also, a significant impact on the credit market has inflation and growth of the monetary base, despite the restriction policy of the National Bank of Ukraine.

To strengthen the effectiveness of the monetary policy instruments' impact is necessary to abandon the additional channels of monetary emission, which are not connected with the tools of monetary policy and increase the monetary base. Another step should be to strengthen the role of the NBU discount rate and reduce the gap between the tool and its derivatives. Moreover, during crises need to reduce the volume of consumer loans to individuals, trade and speculative sectors of the economy. In fact, it is money supply without any real economic growth. And, in return, increase lending to the real sector of the economy and small businesses. It should lead to spur real GDP growth and consequently, to "justified" credit issue.

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