

РОЗДІЛ 1. ЕКОНОМІЧНА ТЕОРІЯ ТА ІСТОРІЯ ЕКОНОМІЧНОЇ ДУМКИ

PROSPECTS FOR IMPROVING THE TRANSMISSION MECHANISM OF MONETARY POLICY IN UKRAINE

ПЕРСПЕКТИВИ ВДОСКОНАЛЕННЯ ТРАНСМІСІЙНОГО МЕХАНІЗМУ ГРОШОВО-КРЕДИТНОЇ ПОЛІТИКИ В УКРАЇНІ

The article is devoted to topical issues of monetary regulation in Ukraine. The concept of transmission mechanism was defined. Were shown and explained all the key channels of monetary transmission used in Ukraine and in the world, and were suggested the ways to improve their efficiency, which in future may lead to the improvement of the economic situation in Ukraine. Was justified the necessity of improving the transmission mechanism for the monetary policy strategic objectives achieving. There were given the recommendations on how to improve the channels of transmission mechanism in Ukraine with the aim of increasing the effectiveness of monetary stabilization policy.

Key words: monetary control, transmission mechanism, transmission channels, money supply, interest rates, Central Bank, change of GDP.

Статтю присвячено актуальним питанням грошово-кредитного регулювання в Україні. Визначено поняття трансмісійного механізму. Показано та пояснено всі ключові канали грошової трансмісії, що застосовуються в Україні й світі, а також запропоновано шляхи підвищення їх ефективності, що в майбутньому може призвести до поліпшення економічної ситуації в країні. Обґрунтовано необхідність удосконалення трансмісійного механізму для досягнення стратегічних цілей грошово-кредитної політики. Наведено рекомендації щодо шля-

хів удосконалення каналів трансмісійного механізму в Україні для підвищення ефективності грошово-кредитної стабілізаційної політики.

Ключові слова: грошово-кредитне регулювання, трансмісійний механізм, канали трансмісії, грошова маса, відсоткові ставки, центральний банк, зміна ВВП.

Статья посвящена актуальным вопросам денежно-кредитного регулирования в Украине. Определено понятие трансмиссионного механизма. Показаны и объяснены все ключевые каналы денежной трансмиссии, применяемые в Украине и мире, а также предложены пути повышения их эффективности, что в будущем может привести к улучшению экономической ситуации в стране. Обоснована необходимость усовершенствования трансмиссионного механизма для достижения стратегических целей денежно-кредитной политики. Приведены рекомендации относительно путей усовершенствования каналов трансмиссионного механизма в Украине для повышения эффективности денежно-кредитной стабилизационной политики.

Ключевые слова: денежно-кредитное регулирование, трансмиссионный механизм, каналы трансмиссии, денежная масса, процентные ставки, центральный банк, изменение ВВП.

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Statement of the problem. The current stage of economic development of Ukraine is determined by the impact of the crisis on all aspects of society, hence the need for development and implementation of active measures of regulatory impact in order to minimize the negative impact of the crisis on the national economy. In such circumstances, the research of problems related to optimization of the Central Bank's monetary policy tools of influence on the real sector of the economy are particularly relevant. Despite the fact that Central Bank has no direct influence on the achievement of the ultimate strategic goals of monetary regulation with the help of own instruments, there is a need of the achievement of defined tactical objectives, which is the direct influence of the Central Bank, i.e. involves the use of an appropriate transmission mechanism of monetary regulation. Therefore, a necessary condition for effective influence of monetary policy on the course of economic processes is the construction of effective mechanism of monetary transmission that provides

transmission of corresponding impulses of monetary regulation on the real sector.

Analysis of recent researches and publications. The issues of the use of appropriate Central Bank instrumentation are very relevant and widely reported in domestic and foreign scientific works. Recently, the problem of the effective monetary transmission mechanism has become widespread and is in the research interests of a significant number of scientists. Among the representatives of western and Ukrainian economic thought, which investigated the issue, it should be noted such scientists as John Keynes [1], V. Stelmakh [2], V. Bazilevich [3], V. Mishchenko [4; 5], S. Arzhevitin [6], T. Slipchenko [7], Ye. Andrushchak [8], A. Dzyublyk [9] and others.

This study examines, among other things, such unresolved part of the general problem as the search of ways to increase the efficiency of the transmission channels.

The purpose of the study is the examining of channels of the monetary policy transmission mechanism in Ukraine and searching for the ways to improve them

with the purpose of the efficiency increasing of the Central Bank influence on the real sector of economy.

The *main objectives* of the study are:

- disclosure of such economic phenomena as channels of the monetary policy transmission mechanism;
- highlight the key features of each transmission channel;
- analyze the transmission channels in Ukraine and in the world;
- finding ways to improve the transmission mechanism in Ukraine for the efficiency increasing of the Central Bank influence on the real sector of economy.

The *research object* is the provision of effective monetary stabilization policy as means of overcoming the negative processes and phenomena in economy.

The *research subject* is the analysis of the transmission channels in context of their impact on the implementation of monetary stabilization policy.

Results. Monetary regulation of economy is carried out by using the so-called transmission mechanism. For the first time this concept was introduced by John M. Keynes. Scientist called so the system of variables through which the money supply affects economic activity [1, p. 205]. Today, there are many points of view on the definition of this concept. In my opinion, most fully the economic essence of the monetary transmission definition displays V. Stelmakh, according to whom "the transmission mechanism is the relationship associated with the transmission of changes in the use of monetary policy instruments on macroeconomic variables through a complex chain of intermediate variables" [2, p. 205].

In the process of transmission mechanism implementation the effect of the Central Bank activity affects the real economy with a certain time lag. First, the effect of using monetary policy is reflected directly in the money supply that causes changes in the performance of the financial sector, such as interest rates, exchange rate, volumes of deposits and loans. These changes in turn affect the adoption of economic actors in decisions about production, consumption, savings, and investments. For example, "high interest rates have a negative impact on the propensity to investment, and taking into account the multiplier, on the economy as a whole" [3, p. 576]. Ultimately, this leads to a change in the gross domestic product.

Thus, schematically, the stages of the transmission mechanism action can be represented as follows:

The change in the money supply → Change in the financial sector (interest rates, exchange rates, volumes of loans and deposits and the like) → Changes in the real sector (investment, consumption, net exports, etc.) → Change of GDP

The impact of monetary policy instruments on the main economic indicators of the country is carried out through a chain of intermediate variables, or in other words, the channels of the transmission mechanism. The formation of various channels depends on the Central Bank transmission mechanism model. The

Central Bank takes into account national peculiarities of the economy, the main of which are the scale of the economy, its openness, level of development, tools and goals of monetary policy [4, p. 8-21].

Today the transmission mechanism model of Ukraine monetary policy is at the design stage. In the structure of monetary transmission mechanism in Ukraine today there are such channels as *monetary, channel of interest rates, channel of assets prices, credit channel and channel of economic agents' expectations*. Let us consider each of them separately.

1. *Monetary channel*, as considered in scientific literature, is the first channel of the transmission mechanism, which really began to be used in practice. Its action is characterized by direct effects of money supply on the monetary market and the price level in economy.

Monetary channel influences due to the fact that the optimum growth of the money base and the money supply to balance the structure of the money market plays a crucial role in the formation of inflation, prices and value of assets. The criterion of the monetary channel effectiveness is the observation of the money base growth, as well as the proportions of money supply growth.

Today in Ukraine, this channel is used quite actively because the operational target of monetary policy is the money base indicator. After the introduction of inflation targeting, the role of this channel will decrease, since the operational target of monetary policy should be the interest rate [5, p. 42].

2. *Interest channel* is the main channel of transmission mechanism. Its effect is that the change in the money supply affects the interest rates. The latter leads to a change in consumption, savings and investment. The ultimate impact indicators is the GDP, inflation or other strategic indicators [2, p. 208; 4, p. 15].

The scheme of functioning of the monetary transmission interest rate channel can be represented as follows:

The change in the money supply → Changes in interest rates → Changes in volume of consumption, savings, investments → Change of GDP

Within this channel, there are two separate channels: substitution and income. The effect of the *substitution channel* is that the change in interest rates affects the ability of subjects to meet their needs, in particular, puts before a choice: to fulfill own needs now, or save and implement them in the future. That is, lowering the interest rate increases current consumption, including the expense of the loans. The latter stimulates the growth of aggregate demand and production volumes. "The increase in interest rates leads to an increase in savings and decrease in consumption, which leads to a decrease in demand for loans. As a consequence will be a fall in aggregate demand and decline in production" [6, p. 10].

The effect of *channel of income* is based on the fact that the change in interest rates leads to a redistribution of income between creditors and borrowers. For example, higher interest rates contributes to the redistribution of income in favor of the lenders. Because

creditors are less inclined to spend savings than borrowers, the result will be a decrease in aggregate spending, which will restrain the growth of aggregate demand, particularly investment. Ultimately will be a decrease in production volumes [6, p. 10; 7, p. 252].

Enhancing of the effectiveness and efficiency of the interest rate channel functioning requires the following steps:

- development of a clear strategy for monetary policy;
- development of indicative interest rate and money market indicators;
- improvement of operating system of the banks liquidity regulation;
- development of the secondary securities market.

3. *Channel of assets prices* operates through changes in relative prices of financial and real assets. The Central Bank with tools of monetary regulation changes the volume of the money supply, which affects interest rates. The changes of the past affect the price of assets, such as securities, foreign currencies, real estate and the like. This is because, for example, in the case of lower interest rates the yield of money as an asset reducing. Economic actors starts to look for alternative objects of investment capital, the prices of which, due to increase in demand, grow [2, p. 208].

Some scientists allocate as a composite channel of assets prices channel in Ukraine monetary policy the *channel of the exchange rate*. The latter is a key element of monetary regulation in an open economy. "The action of the exchange rate channel is that in case of domestic interest rates reducing, which is a consequence of the increase in money supply, the demand for the national currency decreases, which leads to a decrease of the national currency, and consequently, to growth of net export and aggregate demand" [8, p. 108]:

The change in the money supply → Changes in interest rates → Change of the national currency exchange rate → Changes in net export and investment → Change of GDP

The effect of the influence of national currency exchange rate on the total expenditures can be decomposed into the effect of changes in relative prices and balance sheet effect.

The effect of changes in relative prices turns out in changes in the demand for domestic goods and services, which during the reduction in the national currency exchange rate become cheaper on the world market. This leads to an increase in aggregate demand through higher net export, which is an integral part of the gross domestic product of the country.

Balance sheet effect of change in national currency exchange rate is associated with the presence of liabilities in foreign currency in economic entities balance. If these liabilities are not fully covered by assets in a foreign currency, the rates growth may lead to changes of equity and the cost of servicing foreign currency obligations [4, p. 18].

The main directions of the exchange rate channel efficiency increase should be:

- increasing the liquidity of the foreign currencies market;
- clear permanent conditions of the Central Bank release on the currency market;
- reducing the level of the economy dollarization;
- improvement of currency risks hedging mechanisms.

4. The impact of the Central Bank's monetary policy on the availability of credit resources reflects the *credit channel*. It is based on the assumption that the Central Bank affects by instruments of monetary regulation on the change in supply of credit resources by changing the amount of the banking system free reserves [2, p. 210]:

Tools of monetary policy → Change in free reserves → Change of the credit volume → Changes in volume of consumption, savings, investment → Change of GDP

The main directions of improving the effectiveness of the credit channel should provide:

- improvement of credit and investment climate;
- the financial recovery of the banking system and its stability enhancing;
- development of mechanisms for the provision by Central Bank refinancing loans for investment projects financing (only for investment banks);
- improvement of credit conditions and strengthening of the creditors' rights protection mechanisms.

5. *Channel of expectations* characterizes the impact of changes in monetary policy on the economic agents expectations regarding future prices and macroeconomic situation and, accordingly, on their decision on consumption, savings and investment.

It is worth to notice that the instruments of monetary regulation are reflected directly in short-term rates on the money market. The reaction of long-term rates on the Central Bank operations depends on market expectations and confidence of market participants in targets of monetary policy. If monetary policy is consistent with the goals, and the macroeconomic situation is stable, the effect of the expectation channel will be negligible. When there is uncertainty in economic conditions due to low confidence in the governmental and monetary policy, generated pessimistic expectations that block incentives for economic growth.

The negative expectations of economic agents may be the cause of disruption in the transmission mechanism and reducing of the monetary regulation instruments impact that could cause significant deviation of actual values from the targets of monetary policy.

"The presence of economic agents' negative expectations could be shown by such indicators as growth in money velocity, the share of loans and deposits issued in foreign currency increasing, a significant share of cash in the money supply structure and other" [4, p. 19].

It should be noted that in addition to the channels, which are characteristic for the Ukraine's economy,

in the framework of the monetary transmission mechanism allocate such channels as *liquidity channel*, *channel of changes in equity*, *Tobin's q*, which relate to the *channel of asset prices*, etc.

Liquidity channel defines the relationship between the financial assets owned by households, and their (households') expenditures on the durable goods (cars, home appliances, real estate). In the basis of functioning of this channel is the desire of households to distribute the proceeds between the various assets in such way as to be able at any time to avoid financial difficulties. In this regard, households tries to store part of the cash revenues in the form of cash or highly liquid income-bearing financial assets. If in the household's assets structure investments in financial assets have a significant place compared to the debts of this subject, we can conclude that the probability of financial distress for this subject is low. Such households will be able to buy consumer durable goods.

Based on these assumptions, the effect of the liquidity channel can be characterized as follows: money supply growth leads to higher stock prices, resulting in a lower likelihood of financial difficulties, and households begin to increase their spending on durable goods. As a result, the aggregate demand and, consequently, production volumes will increase.

The influence of the *channel of changes in equity* on the real economy is as follows: increase in money supply leads to an increase in the value of firms' equity. The consequence of this, given that equity can be used as collateral, is the increasing of its cost. This has a direct impact on the creditworthiness of borrowers, because when it grows commercial banks begin to expand lending, which leads to production volumes increasing.

Thus, since the equity of the borrower indicates the stability of its activity and can be a guarantee of fulfillment of obligations under loan agreements, changes in bank clients equity influences the banks' decisions regarding the expansion or narrowing of their customers crediting. Consequently, this will affect the consumption and investment and will have an impact on production [6, p. 9-10].

Some scientists identify this channel as a *broad channel of lending* and call it balance channel. Then, respectively, the influence of Central Bank on money supply through a change in reserves is called the *narrow channel of lending*.

The basis of the *Tobin's q channel* action is the relationship between the stocks' price and the investment costs of the company. The Tobin's q is defined as the ratio of a firm market value and of replacement cost of its capital. The first one is the price at which the firm can be sold on the market, while replacement cost is the value of the firm in case if all its capital (machines, equipment, buildings and the like) were replaced with a new equipment at prices that have formed at the current moment on the market. If Tobin's q is high, this means that the cost of the firm's capital equipment is lesser compared to the market value of the company.

The effects of monetary impulses into the real sector through this channel are as follows: the increase in money supply raises the prices of securities that leads to an increase in the market value of firms compared to the replacement value of its capital. In this case, firms can issue new shares and sell them in the market at high prices. Additional financial resources will be directed to investment expansion, the purchase of new machinery and equipment. Thus, under conditions of constant prices for capital equipment growth in the Tobin's q will increase the level of investment spending. The consequence would be an increase in aggregate demand and production [6, p. 10-11].

"The strategic goals of economic development and successful application of the entire set of anti-crisis measures crucially depend on the effectiveness of market-oriented instruments of the Central Bank's monetary impact on the economy, a standard set of which is represented by the minimum reserve requirements, discount policy and open market operations. However, there is a problem of achieving maximum effect in a relatively short time" [9, p. 63].

Conclusions. In summary, we can conclude that the implementation of monetary policy occurs via the transmission mechanism. Under this concept understand the relationships associated with the transmission of changes in the use of monetary policy instruments on macroeconomic variables through a complex chain of intermediate variables. The latter are also known as channels. Each of them conveys the monetary impulse from the specific tools of the Central Bank to the real sector of economy. The effectiveness of these channels is determined by the result of influence on the final targets, in particular on gross output.

Analyzing the considered channels of the transmission mechanism of monetary regulation, we can conclude that for Ukraine due to the lack of a developed stock market is characterized a limited number of channels: monetary, channel of interest rates, channel of assets prices, credit channel and channel of economic agents' expectations. In addition to these, there are also liquidity channel, channel of changes in equity, Tobin's q and others.

Today in Ukraine the transmission mechanism of monetary policy is not effective enough, as evidenced by a weak relationship between monetary measures of Central Bank and the dynamics of financial market and real sector development. The cause is because until recently in monetary policy of Ukraine were used monetary aggregates and exchange rate targeting regimes. In conditions of post-crisis recovery, the implementation of the basic principles of the transmission mechanism of monetary policy occurred against the background of macroeconomic instability and monetary strain associated with the imperfection of the institutional framework, methods and tools of monetary policy implementing, as well as of the main approaches in operations of Central Bank.

A promising direction for further research in the area of improving the functioning of the transmission mechanism in Ukraine is the rationale for the development of secondary securities market, which will lead to not only revive the monetary and financial markets, but also to the more significant influence of the Central Bank on the real sector of economy.

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