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Evolution and Current State of Money Circulation in Ukraine and the World

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ABSTRACT

The article discusses the theoretical and methodological foundations of the functioning of the institution of monetary relations. The main stages of the evolution and development of monetary relations in the world are shown. The key motives that contributed to the transformation of monetary relations from one type to another are highlighted.

On the example of the monetary system of Ukraine, as a particular case of the world system, the processes of its formation and formation are shown. Shown are the tools by which the country's regulatory authorities have an impact on the main characteristics of the monetary system. As a key participant in the system of monetary relations, the functions and powers of the National Bank of Ukraine are described.

The state of the modern monetary system of Ukraine and its adaptation to crisis phenomena are considered. In the experimental part, the stages of development of the economic crisis are considered, and the regulator's decisions on measures of influence are shown to overcome it. The article examines data on the relationship between inflationary processes and control over the management of the country's gold and foreign exchange reserves.

Keywords: cryptocurrency, fiat money, gold and foreign exchange standard, monetary system.

JEL Classification: E42, E41, E50

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1. Introduction.

It is difficult to overestimate the role of the monetary system in the economic realities of modern society. Since its inception, money has served both as a strategically valuable resource and as a universal equivalent of a measure of value [1-2]. The world economy, being in a permanent state of transformation, similarly influences the evolution of the system of monetary circulation.

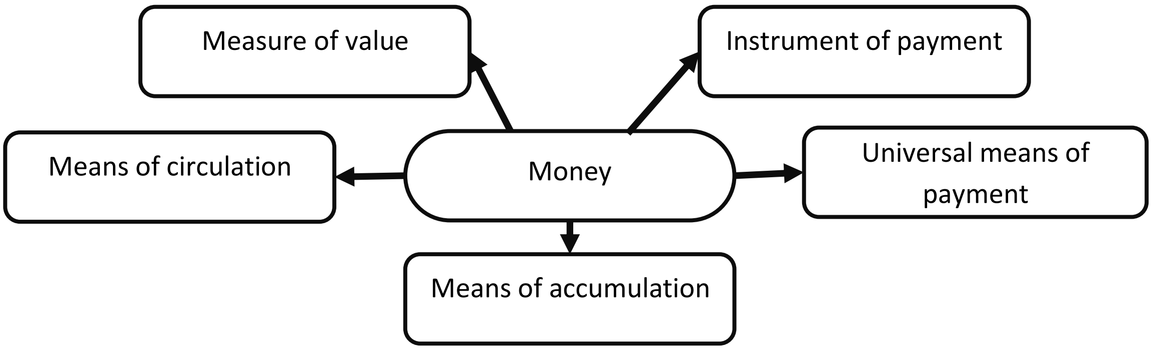
The era of commodity or barter exchange that preceded the emergence of money laid the foundation and served as the first impetus to the process of formation and further evolution of the monetary system. As an integral part of the modern economy, money and the monetary system have passed a long and thorny path of development, changing and adapting to the requirements of the era [3-5].

2. Methodology.

2.1 Characteristics and evolution of the monetary system.

The origin and further evolution of the monetary system was based on a number of key functions performed by money, presented in fig 1.

Figure 1. Functions of money [based on 6; 7]



The measure of value. Dissimilar goods are equated and exchanged with each other on the basis of the coefficient of exchange, expressed in the form of a price; in fact, the value of a good is expressed in the amount of money.

Mean of circulation. Money is used as an intermediary in the circulation of goods. As a function of money, liquidity determines the ease and speed with which money can be exchanged for another commodity. At the same time, unlike barter, it is implemented by the function of the time difference between the sale of goods and the purchase of raw materials for a new batch. Money as a medium of exchange makes it possible to remove temporal and spatial restrictions in exchange.

An instrument of payment. The function of money, which allows you to fix the fact of debt, as well as determine the procedure for its payment. Unlike barter exchange, the amount of debt is determined in monetary form and not in the number of goods, which, as a result, does not change the amount of debt when the price of the goods changes.

Mean of accumulation. Money temporarily withdrawn from circulation makes it possible to realize the function of deferred purchasing power, turning into an instrument of accumulation. Simultaneously, unlike a commodity, when consumed, money changes its owner and does not disappear. Over time, the purchasing power of money changes under the influence of inflation.

Universal tender. The versatility of money as a means of payment made it possible to more efficiently and successfully implement the function of meeting the need for international settlements and external loans when partners are residents of different countries with different payment systems and currencies.

The evolution of the monetary system is closely related to the evolution of money itself. Changes in the form in which this or that entity performed the function of money led to changes in the system of monetary circulation. It is generally accepted that there are four eras or periods in the branch of the evolution of money:

• Barter period - in essence, the function of money is performed by goods; they have value, which means, with some reservations, they can act as a means of accumulation, goods have a value, which means they can be a measure of value. With all this, they perform the functions of money not quite qualitatively, since the value of this or that is different, and therefore the value is subjective.

• The period of the gold standard - the consolidation of gold as a universal means of payment, preceded the period when various types of metal, materialized in one form or another, acted as cash equivalents. The need for value unification led to the emergence of minted coins, which became the generally accepted standard of the settlement system for a long time.

• The era of the gold and foreign exchange standard - the emergence of paper money, which in its essence has no value, forced the world economy to transform the monetary system and ensure the coverage of paper money with gold reserves of the world's leading economies.

• Current period - the growth of the issue of paper money has led to the impossibility of providing gold for the entire cash money supply. The rejection of gold backing was quite logical and predictable and marked the next stage in the evolution of money into an absolute essence - an intangible equivalent of human labour products embodied exclusively in the public consciousness [8-11].

In the process of evolution of the system of monetary security, for a long time, the most violent disputes arose between the supporters of two main trends: the gold standard and fiat paper currency. Supporters of the gold standard argued their position by the fact that only "true money" in the form of noble metals can perform a monetary function; on the other hand, their opponents pointed to the impossibility of providing the gold equivalent of all the money supply necessary for the growing needs of the real sector of the economy.

It is critically important to understand the fact that despite the undoubted value of gold as a reference meter of material value, the experience of generations shows that any other sufficiently valuable material carrier can be used in this capacity. The rapid development of industry, the crises of the war, and the war periods of the 20th century predetermined the gradual drift of the economy towards rejection of gold backing.

The concept of fiat money turned out to be more viable and expedient for the real sector of the economy; nevertheless, for a long time, gold, having lost its function of a means of payment, retained (and, with some reservations, retains to this day) the functions of a means of accumulation.

Considering the monetary system as an economic concept, it is worth focusing on the characteristic features that make it possible to identify it as such. In various financial publications, the interpretation of the monetary system's signs is carried out in different ways; in this article, we will adhere to the scheme presented in Fig. 2.

In turn, the very existence of the monetary system is determined by the functions it performs, which should include:

• issue - determination of the type, forms and signs of legal tender, as well as the order of their issue and the methods of providing directly;

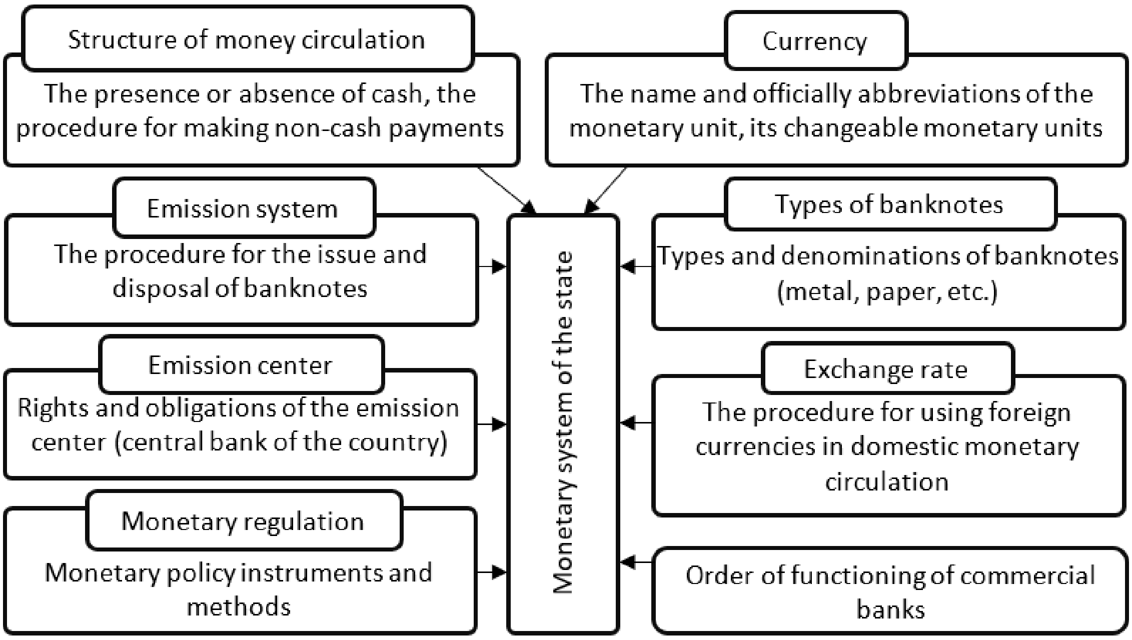
• regulatory - the monetary system determines the rules for the circulation of the money supply, as well as its volume, together with the structure necessary to meet the needs of the economy;

• control - is to oversee both the observance of regulations governing monetary circulation and the observance of monetary discipline by all its participants;

• distribution - the monetary system forms and maintains channels for the distribution and redistribution of funds;

• security - in essence, this function predetermines the very existence of the monetary system, its ability to adapt to changing conditions, as well as resist destabilizing factors.

Figure 2. Structure and functions of the monetary system [based on 9-11]



It should be noted that almost every state forms its monetary system while striving to ensure its integrity and complete independence from external influences that may threaten the national economy's interests. The presence of a sovereign functional monetary system is one of the key features of any state's political and economic independence.

2.2 Functions, tasks and nuances of the development of the monetary system of Ukraine.

The formation of the monetary system of Ukraine began during the period of gaining state independence and the collapse of the USSR. The formation process was accompanied by a significant crisis that affected all spheres of society; thus, the process of monetary circulation was not subject to market laws.

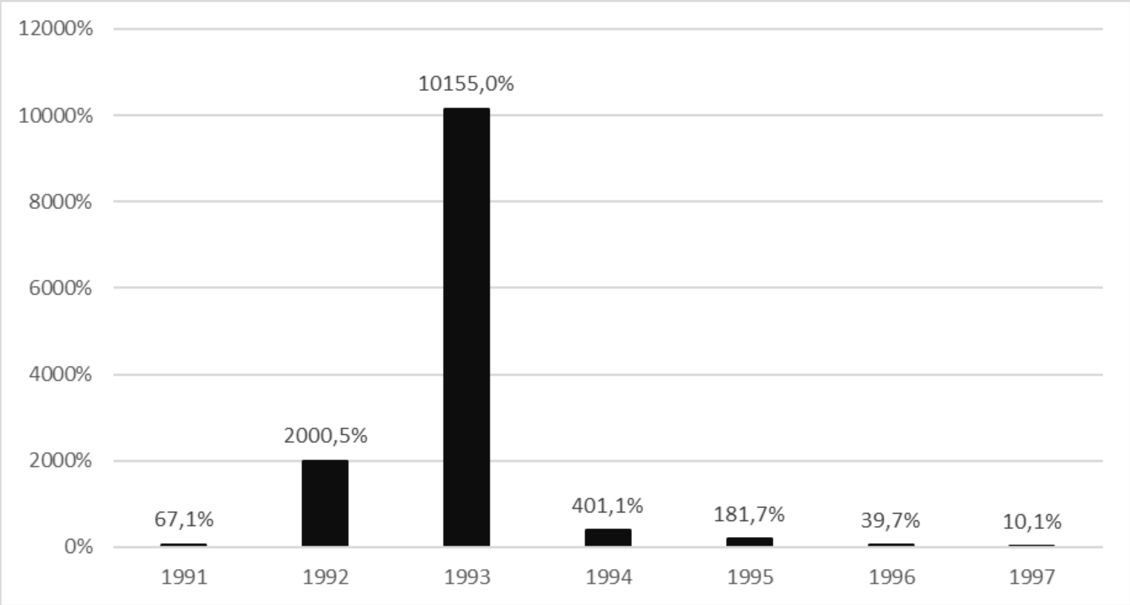
The inefficiency in the new conditions of the system of state regulation of the price level and the resulting hyperinflation (which is clearly demonstrated in Fig. 3) against the background of the growth of unsecured money supply doomed the consumer market to collapse. In such conditions, the introduction of a rationing system to regulate distribution relations seems to be the way out.

The lack of coordination in the actions of the state institutions of the newly formed countries led to the collapse of economic ties between the former republics, which led to a significant drop in production volumes and an aggravation of the crisis.

To protect the domestic market, a coupon system was introduced, and the export of goods outside the country was regulated, which in reality is even stronger due to the non-market nature of the monetary system. On the other side of the state apparatus, the population turned out to be, which, in conditions of a depreciating national currency, had to find an alternative in the form of freely convertible foreign currency, which gave rise to even more negative consequences for the national economy.

In order to stabilize the situation and in an attempt to get out of the economic crisis, strict restrictions on the functioning of private monetary systems were introduced in Ukraine at the legislative level. In particular, Article 32 of the Law of Ukraine "On the National Bank of Ukraine" prohibits the issue and circulation of other monetary units on the territory of Ukraine and the use of monetary surrogates as a means of payment. To resolve the problems of the functioning of private international payment systems like VISA and MasterCard, a law "On payment systems and transfer of funds in Ukraine" was adopted in the country, providing that any payment systems have the right to operate in Ukraine only after entering information about them in the register National Bank of Ukraine.

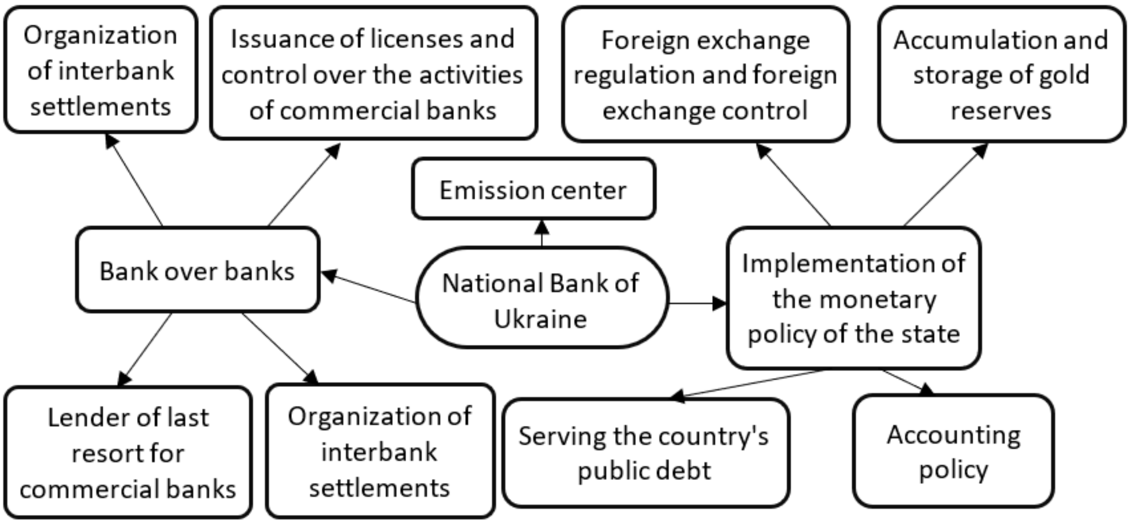
Figure 3. Annual inflation rate in Ukraine in 1991-1997



(source: compiled by the authors based on [12])

The formation of the Ukrainian monetary system was established with the adoption in 1991 of the Law of Ukraine "On Banks and Banking Activities", which designated the creation of an independent two-tier banking system, at the first level of which was the National Bank of Ukraine (NBU), and commercial banks occupied the second. In accordance with the law, the NBU was defined as the central bank of the state and its emission centre and received the authority to pursue a unified state policy in the field of monetary circulation [13; 14]. The list of functions is shown in Fig. 4 for clarity.

Figure 4. Main functions of the National Bank of Ukraine



A feature of the National Bank of Ukraine was the fact that at the time of its formation, there were practically no commercial banks in the country; therefore, until 1994, the NBU performed part of its unusual functions - providing loans to commercial organizations, maintaining accounts of individuals and legal entities.

Currently, the National Bank of Ukraine's primary function is to ensure the stability of the national currency and the organization of the state's credit and monetary policy. Through the implementation of monetary policy, the country's government seeks to ensure the solution of the state's general economic goals, particularly the development of the national sector of the economy, a balanced balance of payments and stabilization of the foreign exchange market.

As the centre of emission, the NBU has a monopoly on the issue of the national currency, while the Ministry of Finance of Ukraine does not have the right to issue money and finances public expenditures from the revenue side of the budget and received loans. This provides a credit basis for the country's aggregate monetary turnover. Simultaneously, to prevent uncontrolled growth of the money supply, the law prohibits the NBU from financing the state budget deficit.

In order to fulfil its functions as a controlling bank over commercial banks, as well as a central body is organizing interbank settlements. The NBU introduced an electronic payment system (BOT); the key novelty of this system at the time of implementation was the use of exclusively electronic document management using the software of the system itself.

The NBU used a number of new products to expand the toolkit for cashless money issuance, which was called the primary credit issue. In particular, the use of so-called "credit windows", types of short-term lending (up to 5 days) of commercial banks, which had a negative balance on the correspondent account due to a delay in the receipt of funds. The interest rate on such loans was set at the level of the NBU discount rate. Another innovation of the NBU was the refinancing of banks for periods of up to 30 days secured by government securities in a pawn loan.

These measures made it possible to prevent the growth of inflation due to the excessive issue of cash, and also stimulated banks to actively develop non-cash forms of monetary circulation, in particular, based on the SEC interbank system, the National System of Mass Electronic Payments was subsequently implemented, which is used to serve individuals and legal entities using chip smart cards.

At the time of the formation of the monetary system of Ukraine, the country was under challenging conditions of building a market economy, complex social transformations and overcoming hyperinflation. It took titanic efforts to prepare and implement the regulatory framework, technological re-equipment, and comprehensive organizational reorganizations to ensure the stable operation of both the monetary system itself and keep the national currency from collapse.

2.3 Instruments for regulating the cash supply in Ukraine.

As noted above, the formation and evolution of the monetary system of Ukraine, in the first years of its creation, took place against the background of the developing economic crisis caused and aggravated by various factors. In the future, this left a strong imprint on the monetary policy of the state and also revealed several negative factors that should be taken into account when using instruments to influence monetary relations:

- high level of the shadow economy;
- instability of the deposit and foreign exchange markets;
- low level of income of the population;
- underdevelopment of financial markets;
- insignificant share of non-cash forms of payments of the population;
- economic and political instability;
- devaluation and inflation expectations

It should be noted that a number of restrictive measures taken by the government in times of crisis (in particular, bans on early termination of deposits, restrictions on the free conversion of foreign currency) led to a situation when the first reaction of the population to signs of an impending economic crisis is to transfer their savings into cash form and to convert them into foreign currency. Mistrust in the banking system has led to a situation where the dominant form of monetary transactions belongs to the cash segment; this applies not only to individuals but also to legal entities.

The shadow sector of the economy is another attack on the monetary system of Ukraine, which affects almost all segments of the national economy. Its origins lay in the period of the beginning of the formation of the market economy when the imperfect legislative framework contained many loopholes that unscrupulous entrepreneurs used. Over time, this gave rise to a whole institution based on money laundering and tax evasion schemes. Ukraine's accession to international programs to combat the laundering of illegal proceeds was expressed in adopting several legislative measures, including the Law of Ukraine "On Preventing and Countering the Legalization (Laundering) of Criminally Obtained Incomes". Within the framework of the program, since 2003, strict measures of financial monitoring were introduced, which made it possible to significantly, if not eliminate the problem, then close the banking sector from the possibility of using it in illegal schemes.

Further measures to control monetary transactions included adopting restrictions on cash payments. The NBU decree "On setting the limit for the number of cash settlements" introduced restrictions for individuals and entrepreneurs on payments using cash. Although it caused a rather sceptical assessment of society, this initiative of the government contributed to the normalization of money circulation in the country and an increase in the share of non-cash transactions.

As the central bank of the country, the National Bank of Ukraine acts as the main lever for the application of instruments of influence on the country's monetary system and acts as a key executor of the state policy in the monetary sphere. The available persuasion tools are schematically presented in Fig. 5, which in one way or another impact the amount of cash.

Instruments of influence of an economic nature are aimed at adjusting the necessary indicators by influencing the economic foundations of activities, these include the impact on the liquidity of banks, through the provision of funds to the NBU on a paid basis, the establishment of quoted prices for securities, or, for example, the formation of favourable dynamics of the exchange rate national currency.

On the other hand, administrative instruments also affect the economic component, but their approach is of a regulatory nature, defining the rules of the game necessary to implement monetary policy. Compliance with such rules ensures the subjects of monetary relations, trouble-free functioning; otherwise, business entities' interests come into conflict with national strategic objectives. Such instruments include limiting the money supply's growth rate, withdrawing excess funds from the monetary sphere, regulating the demand for banking resources, lending to priority sectors at lower interest rates, etc.

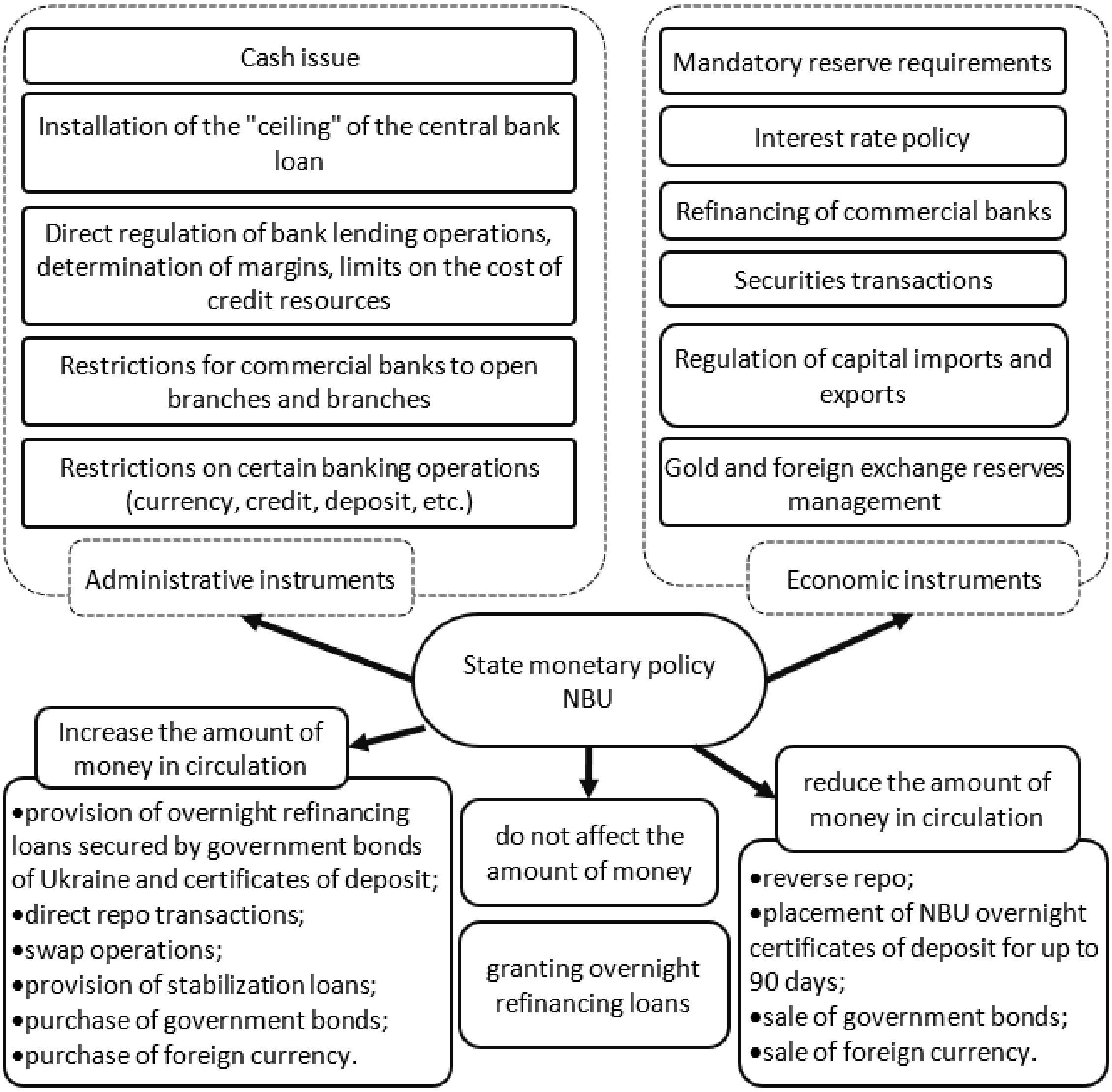
3. Experiment and analysis of results.

The key task of the National Bank of Ukraine, as an instrument of the government of Ukraine, even at the time when the government led the bank, one of its main tasks was to stabilize and strengthen the national currency.

Stable functioning of the monetary system is impossible without the availability of a sufficient amount of money in the structure of monetary circulation. The volume of money supply at the disposal of economic entities is one of the key characteristics of the state of the country's monetary system.

It is also worth noting that the hryvnia, like any other modern currency, is fiat money; that is, it is not exchanged for gold, but the country's gold and foreign exchange reserves serve as a guarantee of its stability. Their size indirectly shows the national currency's reliability, and here it is worth looking at the graph shown in Fig. 6, it shows the dynamics of changes in the gold and foreign exchange reserves of Ukraine.

Figure 5. Government monetary policy toolkit

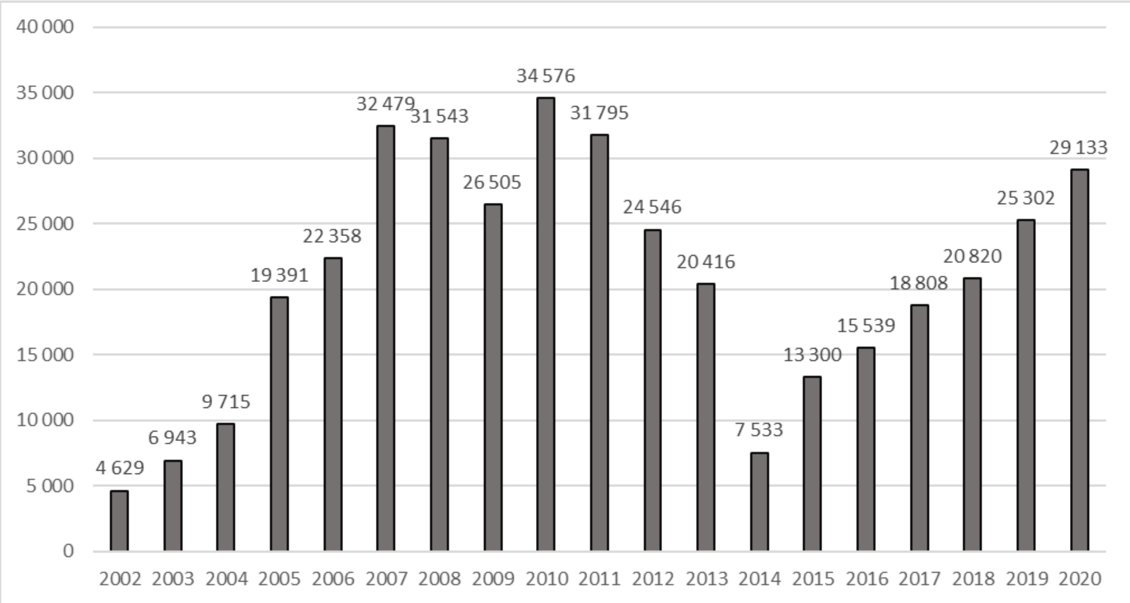


These indicators clearly illustrate the country's crisis in 2008-2009 (caused by the global financial crisis) and the crisis of 2014, which led to the loss of a part of the sovereign territory. Both of these situations have caused serious damage to both the national economy and the national currency's stability. It was at this time that the government of the country took the most severe anti-crisis measures.

In the period 2008-2009, due to negative terms of trade, the fiscal imbalance caused by falling budget revenues. The depreciation of the national currency led to an increase in inflation to 22.3%, which at that time was a new maximum after the crisis of 1992-1996. The inflation graph for the same period is shown in Fig. 7.

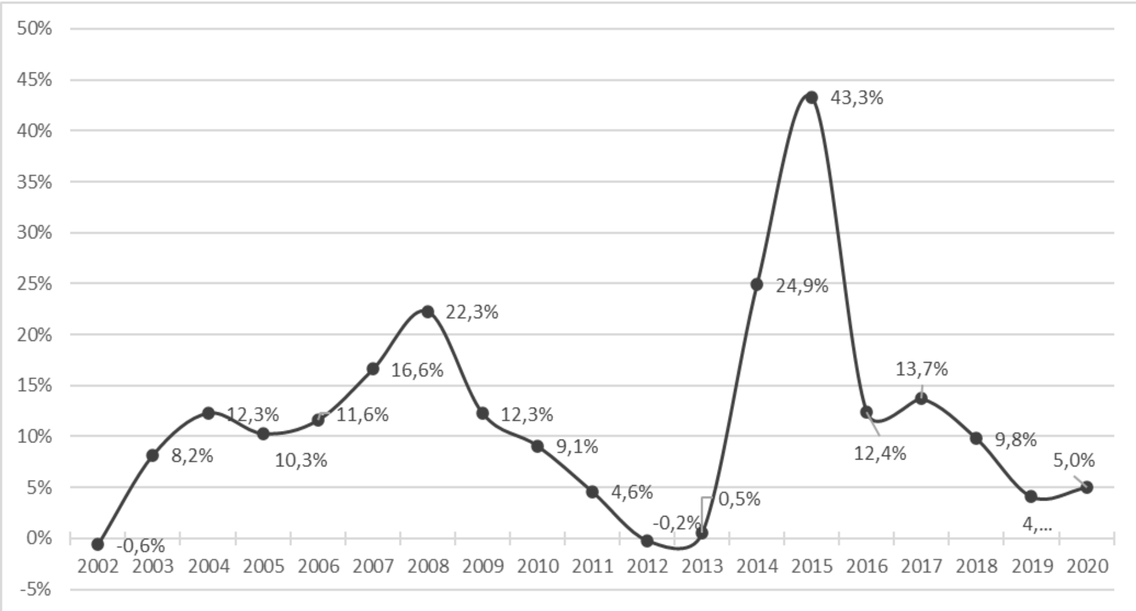
At the beginning of 2008, the NBU declared its intention to maintain a stable exchange rate of the national currency; if necessary, it was supposed to use its gold and foreign exchange reserves. This decision can hardly be called economical, but as mentioned above, the possibility of free conversion of the national currency at a stable exchange rate has always been perceived by the population as a sign of the country's economy's stability. The decisions of the NBU taken during this period are more of a political than an economic nature, but it should be borne in mind that the experience of previous crises in the country showed the need to stabilize not only economic indicators but also social expectations.

Figure 6. Dynamics of changes in gold and foreign exchange reserves of Ukraine in 2002-2020, million US dollars



(source: compiled by the authors based on [12])

Figure 7. Inflation chart of the national currency of Ukraine for the period 2002-2020



Using administrative instruments of influence, the NBU introduces the so-called "currency corridor" - the limits of possible deviation of the national currency rate, within which commercial banks can buy and sell foreign currency from the population.

By the end of 2008, the growing crisis tendencies and the rapidly dwindling reserves of the country led to the fact that the NBU was forced to "let the course float freely", and panic began in the foreign exchange market. Throughout 2009, the national currency maintained a stable exchange rate, and the NBU completely stopped trying to point currency injections to strengthen the hryvnia exchange rate; on the contrary, in some cases, the NBU bought out surplus foreign currency to stimulate devaluation processes.

The government, together with the NBU, adopted several bills aimed at stabilizing the situation; in particular, a ban was introduced on foreign currency lending to individuals, which, according to experts, served as an additional factor of pressure on the foreign exchange market. Commercial banks have developed and introduced various loyal programs for refinancing foreign currency loans of the population. The end of the 2008-2009 crisis was marked by the stabilization of the national economy and the normalization of the situation in the sphere of money circulation.

Both for the real sector of the economy and for the banking sector, this crisis showed the perniciousness of dependence on foreign exchange, oddly enough, but the crisis had an impact on the even greater strengthening of the national currency, perhaps that is why the crisis of 2014 had practically no effect on the foreign exchange market, although and hit the country's monetary system.

4. Findings.

The monetary system of Ukraine created as a result of conducting in 1996 monetary reform is an institution designed to ensure the country's market economy's functioning. Formed in the years of crisis it has been transformed and modified along the entire path of its development. The main regulator of the monetary system, represented by the National Bank of Ukraine, purposefully implements the state's monetary policy measures. The experience of several overcome crises has shown that often its decisions may not be economical, but rather political in nature; this feature of the monetary system of Ukraine can be associated with the legacy of the past when the leadership of the country's central bank was carried out directly by the government.

Evolutionary processes accompanied by the monetary system, both in the world and in Ukraine, are a reflection of the dictates of the times. Technologies that have been effectively used to manage monetary relations for decades may turn out to be untenable in the new century. The need to carefully study and observe the monetary sphere's evolutionary processes is a matter of common sense.

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