

THE IMPACT OF THE NATIONAL ECONOMY'S MONETARY SECTOR ON THE MONETIZATION LEVEL

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Abstract

The paper examines factors of influence on the economy's monetization level and determines its impact on the money market. It is obtained further development of the methodical approach to estimating the level of monetization, which in contrast to the existing one, proceeds from directions of estimating the monetary position, structural characteristics of money supply, analysis of the economy's monetization level. In the framework of this study, based on the accumulated scientific experience, it is formed many factors of determination the economy's monetization level and analysis of the money market's current state.

Key words: *currency; demand; liquidity of money; monetary aggregates; national economy.*

JEL Classification: *E41; E51; E59*

I. INTRODUCTION

Modern economic conditions are characterized by the intensification of transformation processes and therefore an important role in achieving economic growth in Ukraine is given to monetary policy. The essential characteristics of monetary policy are revealed through monetary indicators that characterize the state of monetary circulation.

It is worth to note that the system of monetary relations has particular importance, because the state of financial and banking systems significantly affects the socio-economic development of the country. The state's monetary system is aimed at providing a market economy with mechanisms and instruments used by public authorities to effectively manage the national economy (Matrosova, 2018: p.500).

At the present stage of Ukrainian economy's development, the process of the money market functioning is becoming increasingly important. The money market is one of the central links in the functioning of the national market economy (Rekunenko, Bozhko & Zymoglyad, 2018: p.727). The interaction of money and credit markets with other spheres of the financial system becomes especially relevant. This also confirms the relevance of this problem research.

II. ANALYSIS OF RECENT RESEARCHES AND PUBLICATIONS

Analysis of scientific approaches to the definition of "economy's monetization" shows their diversity. In particular, monetization is characterized by: the sufficiency of money to service the trade (Ivanov & Sokolov, 2015: 167), the process of national economy's saturation with money (Gryaznova, 2002: p.354), the state of security for circulation, payment and accumulation (Morozov, 2012: pp.57-60) the macroeconomic indicator that characterizes the level of providing the economy with money (Arbuzov, Kolobov, Mishchenko & Naumenkova, 2011: pp.286-287), the integrated indicator which characterizes public confidence in the national currency (Matrosova, 2018: p.500) etc.

According to Mishchenko (2015: p.41), the process of economy's monetization can be described as a set of interrelated targeted, consistent, forecasted and predictable actions of a central bank, financial institutions and a state in the regulation of money circulation to obtain results designed to ensure the stability of a money market, money circulation, financial stability and sustainable economic growth. As Grekov (2011: p.61) noted, the level of economy's monetization, ultimately, is determined by the degree of financial and credit systems development and the economy's evolution as a whole, but monetization determines the free movement of capital in the economy.

The authors of the scientific publication (Mishchenko, Naumenkova & Len, 2017: p.53) emphasize that the volume and structure of money supply can be considered as an indicator of the economic and financial situation in the country, which characterizes economic activity and economic growth. The same opinion is supported by Khokhych (2020: p.32), who links the level of monetization with inflationary processes, which occur depending on the volume of money supply. The thorough study by Drobiazko, Dunaev & Lyubich, (2019) allowed

determining the fact that if the central bank’s money supply in the market does not meet the level of demand for money in the economy, the country will experience problems with real sector’s crediting, inflation, exchange rates and foreign direct investment.

The formation of the appropriate set of factors was based on the modern experience of interstate comparative ranking and the work of leading scientists to determine the impact of monetization on the money market’s development. Also, an important factor is the available data on the state of the money market, provided by World Bank, National Bank of Ukraine.

III. RESEARCH RESULTS

In light of the above, all the proposed factors were grouped into three areas of assessment:

1. *Monetary position.* Effective monetary policy and the study of its impact on overcoming the structural imbalances of the economy in the state is important for any society. This problem becomes especially relevant in terms of finding ways to stabilize economic development in countries where the economy is at the stage of post-crisis syndrome, the lack of steady growth in the real sector, violations of financial and socio-economic relations. Modern monetary theory is based on the neoclassical approach to the formation of money demand and supply, according to which the function of demand for money by its objective nature is unstable, which is reflected on fluctuations in the velocity of money and, accordingly, the level of monetization depending on business activity cycle stages (Mishchenko et al., 2017).

According to Gorbatyuk & Dyba (2011: p.24), the economy’s monetization is related to the real economic and social processes, which are taking place in a country. Monetization should be linked to the volume of goods and services created in the economic system, the velocity of money supply, the magnitude of supply and demand for goods and money, the state of commodity and financial markets. Usually with the growth of inflation, the level of monetization decreases, and with decreasing inflation and achieving financial stability, this level stabilizes and increases.

Regulation of the dynamics and structure of money supply should be based on the principle of minimizing the negative factors impact on the external and internal environment, which requires researchers to provide theoretical and practical support for appropriate management decisions. During the analysis of money supply dynamics, priority importance must be paid to the money demand assess, the stability of which determines the monetary policy effectiveness (see Figure 1).

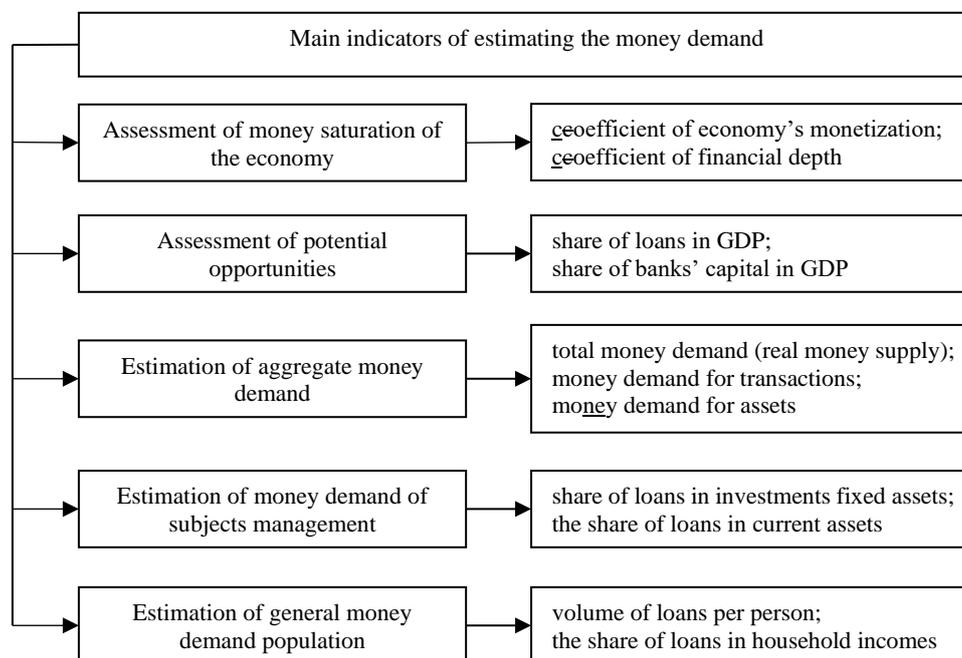


Figure 1 –System of indicators for estimating the money demand

Source: developed by the authors

Based on the above, it should be concluded that the economy’s monetization level is directly influenced by the sustainability of financial and credit systems, in particular the banking sector, which can be assessed with the market positions achieved by banks.

2. *Characteristics of the money supply structure.* One of the quantitative indicators, which characterizes the

state of money circulation is the size of money supply, the volume and structure of which have a significant impact on the money market development. Money supply means the whole set of funds in all their forms, which are in use by the subjects of money circulation at a certain point in time. The amount of money supply is determined by the state – the issuer of money, its legislature. Fluctuations in the money supply are largely determined by the state monetary policy, including issuance processes. The increase in emissions must be justified due to the needs of trade turnover and the state budget flows.

In structural terms, the money supply can be divided according to several criteria, namely: by the degree of individual elements’ “readiness” for turnover, i.e., the degree of liquidity; by form of cash (cash, deposit); by placement in the subjects of money circulation; by location, etc. The most difficult is to structuring the money supply according to the first criterion, because there is no clear understanding of the liquidity degree for each element, as well as there is no clear distinction between money and highly liquid financial assets that are no longer money. According to this criterion, science and practice distinguish several elements of the money supply, a combination of which can determine different in composition and volume indicators of money supply.

The number of monetary aggregates used in the statistical practice of individual countries is not the same, due to significant differences in the elemental composition of the money supply, in the spectrum of assets that are considered in national practice as money, in the use of money supply for regulatory purposes. Thus, in the United States and Russia four units are used to determine the money supply, in the UK – five, in Germany and Switzerland – three (Shishkina & Krasnyanskaya, 2016: pp.32-42).

In the Ukrainian practice money supply regulation, the composition and structure of monetary aggregates are determined by National Bank of Ukraine, the characteristics of the last ones are given in Figure 2.

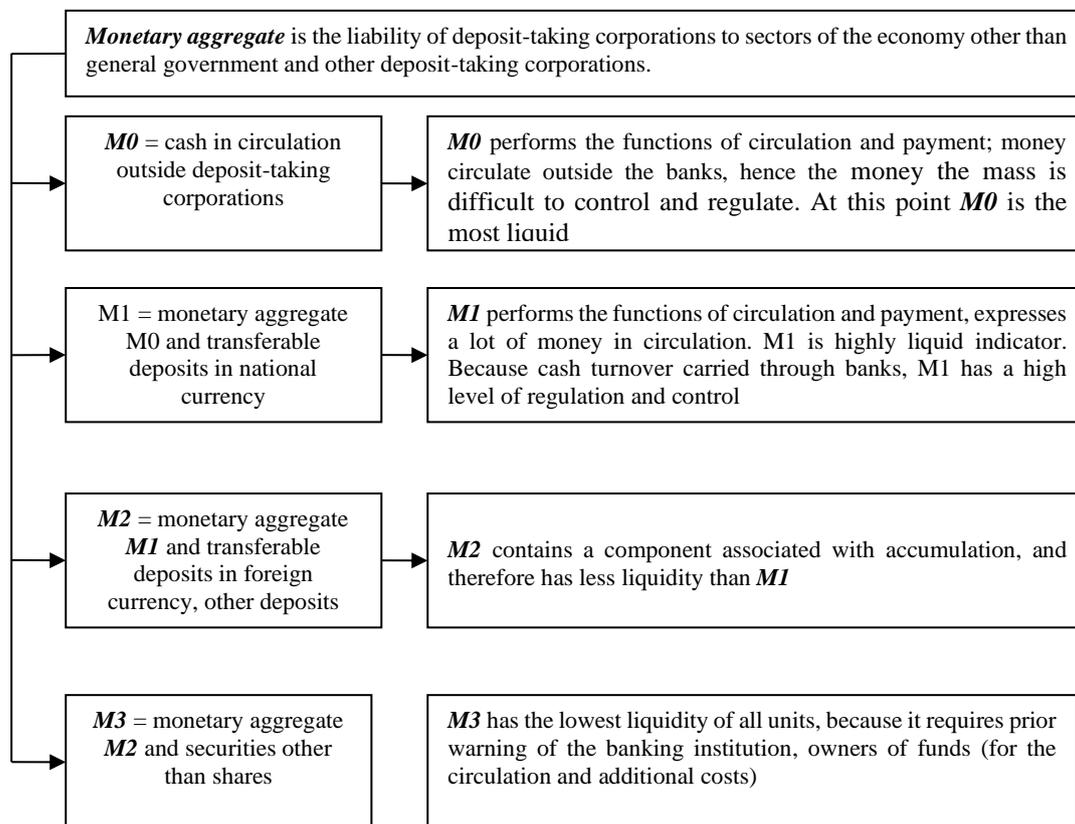


Figure 2 – System of indicators for estimating the money demand

Source: developed by the authors

The structure and dynamics of the money supply in Ukraine are presented in Table 1. The results of the dynamics analysis for all monetary aggregates show their increase, although it is uneven, there is no certain natural trend in growth. The steady increase in aggregates occurred in 2007, 2013 and 2016, in other periods the change in aggregates was asymmetric, for example, in 2008 against the background of a significant increase in cash, the growth of current accounts was much slower, and in 2011 tendency of savings took place due to faster growth rates of M2 and M3 aggregates, in the crisis year of 2014 it can be notice growth of cash and “fast, liquid” money opposite to long-term deposits, 2020 is characterized by faster growth rates of transferable deposits than other indicators, which may indicate a transition to the plane of non-cash payments.

One of the indicators that characterizes the development of the national economy in terms of the intensity of money use in circulation for goods and services is the currency velocity (see Figure 3).

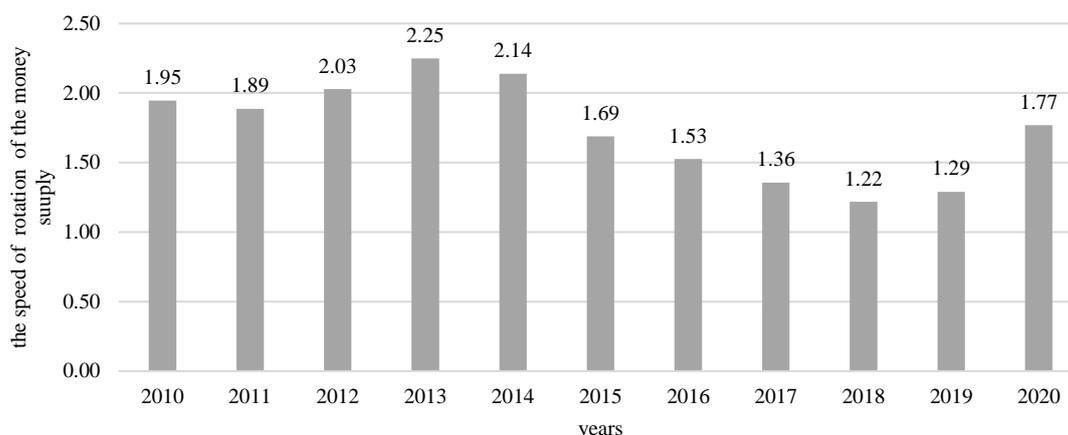


Figure 3 – Dynamics of money velocity in Ukraine for the period 2010-2020

Source: calculated by the authors based on National bank of Ukraine data

The money velocity indicator is considered sufficient if each currency unit rotates approximately 2 times a year. Changing the velocity of money particular affects the money supply in circulation and thus affects the effective demand and costs of circulation, complicates or facilitates the regulation of money circulation, gives a generalized reflection of changes in the intensity of economic processes.

Over the past decade, the indicator has been within the norm, except for the period 2016-2019. Some political and social instability in the country is contributing to the decline in the national currency’s confidence, more and more economic entities prefer foreign currency. Dollarization of the economy, its marginal value of 30%, has a greater negative impact on the national interests, reduces the effectiveness of monetary policy, promotes illegal capital outflows, leads to loss of investment potential, impoverishes society and the state, artificially devalues and distorts the monetary structure circulation.

Tabel 1. Dynamics of monetary aggregates in Ukraine for the period 2007-2020 (as of year start)

Year	Indicators, bn UAH				Growth / decrease rates compared to the previous year, %			
	M3	M2	M1	M0	M3	M2	M1	M0
01.01.2008	396,16	391,27	181,67	111,12	147,92	150,83	147,37	148,19
01.01.2009	515,73	512,53	225,13	154,76	133,55	130,99	123,92	139,27
01.01.2010	487,30	484,77	233,75	157,03	94,49	94,58	103,83	101,47
01.01.2011	597,87	596,84	289,89	182,99	122,69	123,12	124,02	116,53
01.01.2012	685,52	681,80	311,05	192,67	114,66	114,23	107,30	105,29
01.01.2013	773,20	771,13	323,23	203,25	112,79	113,10	103,92	105,49
01.01.2014	908,99	906,24	383,82	237,78	117,56	117,52	118,75	116,99
01.01.2015	956,73	955,35	435,47	282,95	105,25	105,42	113,46	119,00
01.01.2016	994,06	993,81	472,22	282,67	103,90	104,03	108,44	99,90
01.01.2017	1102,70	1102,39	529,93	314,39	110,93	110,93	112,22	111,22
01.01.2018	1208,86	1208,56	601,63	332,55	109,63	109,63	113,53	105,77
01.01.2019	1277,64	1273,77	671,29	363,63	105,69	105,39	111,58	109,34
01.01.2020	1438,31	1435,22	770,04	384,37	112,58	112,67	114,71	105,70
01.01.2021	1767,22	1764,52	971,29	493,08	122,87	122,94	126,14	128,28

Source: calculated by the authors based on National bank of Ukraine data.

3. *Analysis of the economy’s monetization level.* To substantiate the factors that affect the level of monetization of the economy, first of all it is advisable to consider global trends (see Figure 4).

The presented data indicate that the monetization level by country has fairly significant amplitude of fluctuations. The world average level of monetization in 2019 was 126.07%, in particular in low-income countries – 27.02%; in middle-income countries – 129.76%; in high-income countries – 123.26%. Therefore, it can be stated that the level of monetization acts as a means of ensuring and meeting effective money demand, including money capital, the entire economy as a whole; saturation of liquid assets capable of performing such functions as a means of payment and circulation.

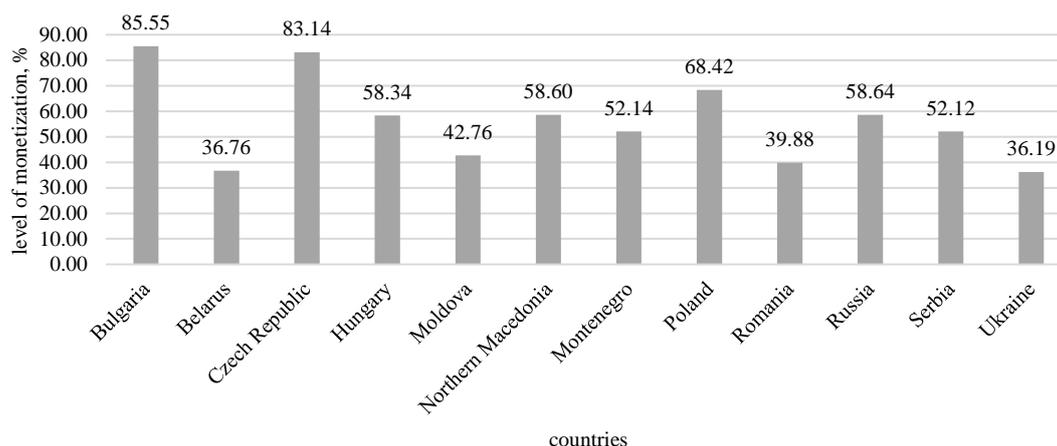


Figure 4 - The monetization level of selected countries in 2019

Source: calculated by the authors based on World Bank data.

The presented statement is confirmed by the factors influencing the dynamics of the monetization level, the characteristics of which are presented in Table 2.

Table 2. The monetization level of Ukrainian economy and the main indicators of the impact on its level for the period 2015 -2020

Index	Years					
	2015	2016	2017	2018	2019	2020
Money supply, bn UAH	969,1	1102,7	1208,9	1277,6	1438,3	1767,2
Deposit element of money supply, bn UAH	695,6	793,5	898,8	933,0	1071,7	1297,5
Monetary base, bn UAH	321,2	381,6	399,1	435,8	477,5	586,3
Cash, bn UAH	273,2	314,4	332,5	363,6	384,4	493,1
Banks' deposits, bn UAH	1040,6	998,7	1016,7	1118,4	1033,4	980,5
GDP, bn UAH	1979,5	2383,2	2982,9	3558,7	3974,6	3869,7
Monetization level, %	48,96	46,27	40,53	35,90	36,19	45,67

Source: calculated by the authors based on National bank of Ukraine data.

As shown by the data presented in Table 2, all indicators that affect the monetization level tend to increase, this level itself is variable. For further study the interrelation between the development of the money market and the monetization level, as a basis for determining such factors the authors take the credit channel of the transmission mechanism of NBU monetary policy (see Table 3).

Table 3. Dynamics of the factors of the credit channel influence on the transmission mechanism of monetary policy on the monetization level in 2015 – 2020

Indicators	Years					
	2015	2016	2017	2018	2019	2020
M3, bn UAH	969,1	1102,7	1208,9	1277,6	1438,3	1767,2
GDP, bn UAH	1979,5	2383,2	2982,9	3558,7	3974,6	3869,7
Banks' deposits, bn UAH	1040,6	998,7	1016,7	1118,4	1033,4	980,5
Deposit element of money supply, bn UAH	695,6	793,5	898,8	933,0	1071,7	1297,5
Monetization level, %	48,96	46,27	40,53	35,90	36,19	45,67
Increase in the monetization level compared to the previous year, pp.	-12,11	-2,69	-5,74	-4,63	0,29	9,48
incl. factors impact:						
M3-to-loans ratio	0,931	1,104	1,189	1,142	1,392	1,802
Loans-to-deposits ratio	1,496	1,259	1,131	1,199	0,964	0,756
Deposits-to-GDP ratio	0,351	0,333	0,301	0,262	0,270	0,355

Source: calculated by the authors based on National bank of Ukraine data.

From the presented data it can be concluded that the greatest influence on the level of monetization is effects by the indicators of Ukrainian banks' deposits dynamics and the volume of loans granted. When studying the

factors that cause changes in the monetization level due to the credit channel of the monetary policy transmission mechanism, it is also necessary to distinguish the share of cash in the total monetary aggregate M3 (see Table 4).

Table 4. Selected indicators' dynamics of the impact on the change in the share of cash in the monetary aggregate M3 in 2015-2020

Indicators	Years					
	2015	2016	2017	2018	2019	2020
<i>M3</i> , bn UAH	969,1	1102,7	1208,9	1277,6	1438,3	1767,2
<i>M3</i> growth rate compared to the previous year %	4,26	13,79	9,63	5,68	12,58	22,86
<i>M0</i> , bn UAH	282,7	314,4	332,6	363,6	384,4	493,1
<i>M0</i> growth rate compared to the previous year %	11,50	11,21	5,79	9,32	5,72	28,87
GDP, bn UAH	1979,5	2383,2	2982,9	3558,7	3974,6	3869,7
Monetization level, %	48,96	46,27	40,53	35,90	36,19	45,67
The share of <i>M0</i> in the <i>M3</i> %	29,17	28,51	27,51	28,46	26,73	27,90
Change in the share of <i>M0</i> in <i>M3</i> compared to the previous year, pp.	-1,39	-0,66	-1,00	0,95	-1,73	1,17
	incl. factors impact:					
<i>M0</i> -to-GDP ratio	0,143	0,132	0,112	0,102	0,097	0,127
<i>M3</i> -to-GDP ratio	0,490	0,463	0,405	0,359	0,362	0,457

Source: calculated by the authors based on National bank of Ukraine data.

Based on the calculated data in table 4, it should be noted that the growth of money supply does not lead to a dynamic change in the monetization level, which in the studied period ranges from 35 to 49%. Thus, the authors proved the influence of the credit channel of the monetary policy transmission mechanism (expansionary and restrictive credit policies), which is associated with changes in the level of monetization.

IV. CONCLUSION

The study of the mechanisms of the money circulation influence on the stimulation and support of economic growth has an important practical focus. Continuity and stability of money circulation determines both the state of the money market and the nature of reproductive processes in the economy. The study leads to the conclusion that the main problems constrain the stimulating effect of money circulation on economic growth should include: imbalance of financial markets and their low liquidity; imperfect structure and unbalanced development of the financial sector; imperfection of functioning mechanisms and low use efficiency monetary policy transmission mechanism channels; gradual decline in credit activity of banks.

Modern problems of Ukrainian economy cannot be solved only by issuing money. Attention should be paid to the vector of monetary segment's development, namely on the way to economic recovery and the transition to high growth rates, it is necessary to realize significant work connected to fill it with financial resources. Nowadays it is particularly important to constant monitor the monetization level and a consistent, balanced monetary strategy of National Bank of Ukraine.

The process of stabilizing the economy's monetization should be accompanied by the adaptation of the economy to increasing money supply, which should, on the one hand, ensure their effective use, while on the other – to contain inflationary pressures.

Therefore, for effective regulation of the economy it is necessary to implement the following tasks: executing monetary policy measures that would increase the money supply in GDP without inflation (reforming the tax system and reducing the share of cash in circulation serving the shadow sector, significantly weakens the effect of multiplication); the resumption of investment mortgage banks, which links the growth of money with innovation processes, supports the interdependence between the money supply and economic activity. The process of monetization of Ukrainian economy should realize due to the growth of bank deposits, reduction of dollarization, credit activity of the economy's real sector in accordance with the balanced growth of production.

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