

CURRENCY MARKET AND MECHANISMS OF ITS REGULATION IN THE SYSTEM OF ECONOMIC SECURITY OF THE STATE

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Abstract. The *aim* of the work is to improve the system of indicators to assess the economic security of the state in the foreign exchange market and ways to develop mechanisms of its regulation. *Methodology.* The study is based on a statistical evaluation of currency security indicators in the period 2008–2021, which allowed to establish that: first, the ratio of loans in foreign currency to total gross loans is a clear indicator of currency crises, when the value of the indicator increases to 60%, while in the pre-crisis period it is almost two times lower; secondly, the dollarization of the money supply changed in the range of 25%–33%, that is, the range of variation is insignificant, but in the post-crisis period, its level drops below 30%; thirdly, the level of dollarization of GDP, which is almost two times lower than the level of dollarization of the money supply, is characterized by greater variability and tends to increase in the crisis period and tends to decline in the post-crisis recovery period. *The results* of the work include a systematization of approaches to the interpretation of currency security and the factors that determine it. According to the narrow approach, currency security is reduced to the state of exchange rate, ensuring the stability of the national currency. Foreign exchange security in a broad sense also implies the ability to automatically set the balance of payments, sufficiency of official foreign exchange reserves, ensuring a stable inflow of foreign exchange into the domestic market with a high export potential and investment attractiveness of the country. Statistical evaluation of currency security indicators in the period 2008–2021 allowed to establish the peculiarities of their interrelation with the signs of currency crises. Proposals aimed at strengthening economic security in the foreign exchange market were substantiated. *The practical implication* is to improve the methodological recommendations for a comprehensive assessment of the level of currency security of the state based on supplementing the current system of six indicators with two additional indicators – the difference between interest rates on deposits in U.S. dollars and in hryvnias, the level of dollarization of the gross domestic product. The advantage of the first is less informational asymmetry compared to the difference between the forward and official hryvnia exchange rates, the advantage of the second is the demonstration of how much of the gross domestic product is served by the money supply in foreign currency. It is advisable to strengthen economic security in the foreign exchange market through the coordinated implementation of monetary, currency, fiscal, structural and investment policies, soft dedollarization, the use of financial derivatives and international lending. *Value/originality.* The proposed mechanisms of currency market regulation in the system of national economic security are based on the separation of narrow and broad approaches to the interpretation of currency security of the state, as well as on the clarification of conditions for the use of currency liberalization tools in the system of formation of a full-fledged competitive currency market and deregulation of currency control.

Key words: currency market, mechanisms, regulation, system, economic security, state.

JEL Classification: F31, F32, H56, E58, G18, G28, L51

1. Introduction

Currency market is an institutional formation, where currency values, derivative financial instruments and contracts are traded and prices for them are formed. An indication of the functioning of the foreign exchange market is its uncertainty, as the opposite nature of the motives of its subjects has a multidirectional impact on

the dynamics of the exchange rate. Its high volatility causes financial instability in the activities of economic entities and the emergence of financial crises that threaten the functioning of the global and national currency systems. Long periods of currency instability lead to significant losses for national economies, economic entities, households and have a negative

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impact on their economic security. This makes it relevant to study the problem of currency market regulation in the system of maintaining national security of Ukraine at a sufficient level. On the other hand, currency security is only one of the subsystems of financial security, which, in turn, is a subsystem of economic security. Therefore, in the process of forming proposals for the development of the mechanisms of the latter it is necessary to take into account the dialectical relationship of the foreign exchange market with other related markets.

The issues of currency market regulation and liberalization are considered through the prism of economic security in the studies of many scientists. In this case, currency liberalization is distinguished as the formation of a full-fledged effective and competitive foreign exchange market, and the liberalization of currency regulation is seen as the deregulation of currency control, the introduction of soft norms of currency legislation, deregulation of currency operations, reduced intervention of the central bank and the authorities in the operation of the foreign exchange market, and the gradual removal of currency restrictions on the current and financial transactions of the balance of payments (Lahutin & Zhurba, 2018).

A rather critical opinion is expressed about the non-compliance of Ukraine's monetary policy with generally accepted international norms over the past 20 years due to the irresponsibility of the authorities, impunity of crimes of high-ranking officials, wastefulness and inefficient use of state budget funds (Ilychok, 2017). For these reasons, inflation-deflationary processes and Ukraine's low global competitiveness index have become a permanent phenomenon in our country as a whole.

The state of fiscal, tax, currency and banking determinants of financial security of Ukraine is considered in a causal relationship and their crisis state is noted (Vasylytsiv, Lykholat & Hudzovata, 2017). The weakness of fiscal security is determined by the high level of secondary redistribution of GDP, the budget deficit, and its coverage by external borrowing. Threats to banking security are associated with a high share of foreign capital and weak support for the development of the real economy. Threats to currency security are associated with hryvnia devaluation, a critical level of official currency reserves, and significant dollarization. The replacement of Ukraine's national currency by foreign currencies, primarily the U.S. dollar and the euro, threatens not only the economic but also the national security of our country. The paper agrees that the government and the NBU should conduct a balanced fiscal and monetary policy to create a new phenomenon – the dedollarization of the national economy (Fedulova, 2015). To achieve this goal, it is necessary to develop appropriate programs and action plans to coordinate the demand for

foreign currency and its supply, to increase confidence in the hryvnia, to create a regulatory framework for cooperation with international financial organizations, which will consolidate strategies to achieve currency security in the system of national security of Ukraine (Lesnik, 2017). While appreciating the scientific work of these authors, we should recognize the lack of attention to the causal links between currency crises and the economic security of the state, the statistical assessment of the level of dangers.

2. Currency security of the state as a subsystem of the national economic system

The economic security of the state is a derivative of many processes taking place in the world monetary and economic system and the national economy. In the conditions of Ukraine, given the level of dollarization, currency security has a significant pressure on the level of economic security, as a significant saturation of foreign currency circulation channels binds the hryvnia and the national economy as a whole to the fluctuations of other currencies, simplifies the import of currency crises, etc.

The development of recommendations to strengthen the country's economic security in the field of currency and economic relations requires clarification of the definition of currency security. As an integral category, it combines external and internal aspects of competitiveness of the national economy, its ability to withstand external currency shocks and threats, currency imbalances, imbalances in the currency market, etc. On the other hand, the guarantee of currency security determines the investment attractiveness of the country for foreign investors, the risks of their investments in the national economy, the degree of currency market liberalization and the tightening of currency restrictions. Therefore, the level of currency security, capable of mitigating currency crises, should become a strategic goal of monetary policy, and its tactical mechanisms should be aimed at balancing consumer prices and stabilizing the national currency (Toropchenko & Trokhymets, 2021).

Currency security is a hierarchical category, which within the national economy is associated with various actors: the state, individual industries and regions, enterprises, households. Despite significant differences in the purposes of currency operations of these entities, the common features of their currency security are the protection of financial interests in the face of external and internal destabilizing factors affecting the currency market, their ability to maintain the usual mode of operation during currency shocks.

Generalization and critical evaluation of definitions of currency security of the state allows to distinguish two approaches: narrow and broad. The Methodological Recommendations on the calculation of

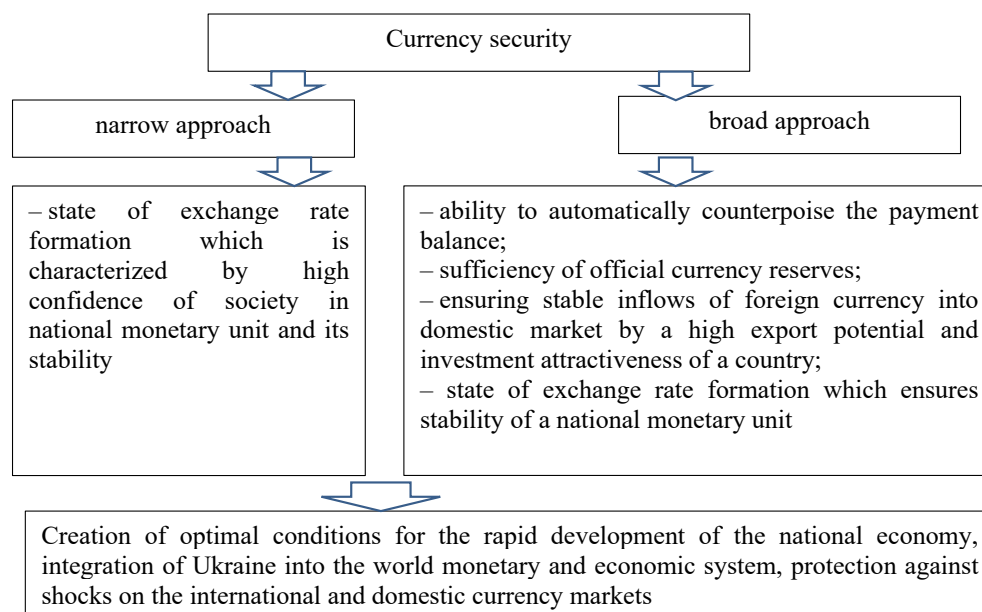


Figure 1. Formalization of narrow and broad approaches to the interpretation of currency security of the state

Source: author's own development

the level of economic security of Ukraine contains a narrow interpretation, which is reduced to the state of exchange rate formation and requirements for it (Ministry of Economic Development and Trade of Ukraine, 2013). However, in terms of cause-and-effect relationships, the state of foreign exchange policy, which ensures the stability of the national currency, is derived from a positive balance of payments, the presence of a sufficient level of official foreign exchange reserves, etc. Therefore, the author considers a broad approach to the definition of monetary security to be more convincing (Figure 1).

In a narrow sense, currency security is ensured only by monetary policy, while in a broad sense it is a derivative of other areas of economic policy: structural, investment, debt, etc. However, the dynamics and level of the national currency exchange rate as a result of the exchange rate policy certainly acts as a stimulant / destimulant of export-import activity and attraction of foreign investments into the country. That is why it can be argued that exchange rate policy affects all components of the broad sense of "monetary security" directly, not indirectly.

3. Methodological approaches to assessing the currency security of Ukraine

In the Methodological Recommendations for Calculating the Level of Economic Security of Ukraine for a comprehensive assessment of the level of currency security an integral index is used on the basis of six indicators using weighting coefficients determined by expert method (Figure 2).

For an unambiguous interpretation of the indicators, methodological recommendations for their calculation and the source of information are given. However, there are certain difficulties, particularly in terms of calculating the difference between the forward and official hryvnia exchange rates, as information about the forward rate is not published by the NBU, and forecasts of consulting financial companies differ significantly. Therefore, the paper supports proposals for the use of an alternative indicator – the difference between the interest rates on USD and UAH deposits (Marena & Inozemtseva, 2018), since in the pre-crisis and crisis period it increases and at the same time reflects an increase in threats to currency security. The paper also proposes to use an additional indicator to the level of dollarization of the money supply – the level of dollarization of GDP, because the volume of money supply in national and foreign currency is an instantaneous indicator, while the proposed coefficient combines it with the interval indicator and reflects the ratio between monetary aggregates in foreign currency and the GDP created during this period.

The ratio of loans in foreign currency to total gross loans, presented in Figure 3 demonstrates three distinct peaks corresponding to crisis situations: the first (60.32%) – in the 4th quarter of 2008.

Up to the 4th quarter of 2013, in the process of post-crisis recovery, there was a steady decrease in the indicator up to 34.72 %, as the crisis unfolded in 2014, the share of loans in foreign currency in total gross loans increased and formed the second crisis peak of 57.37 % in the 1st quarter of 2015, and the third crisis

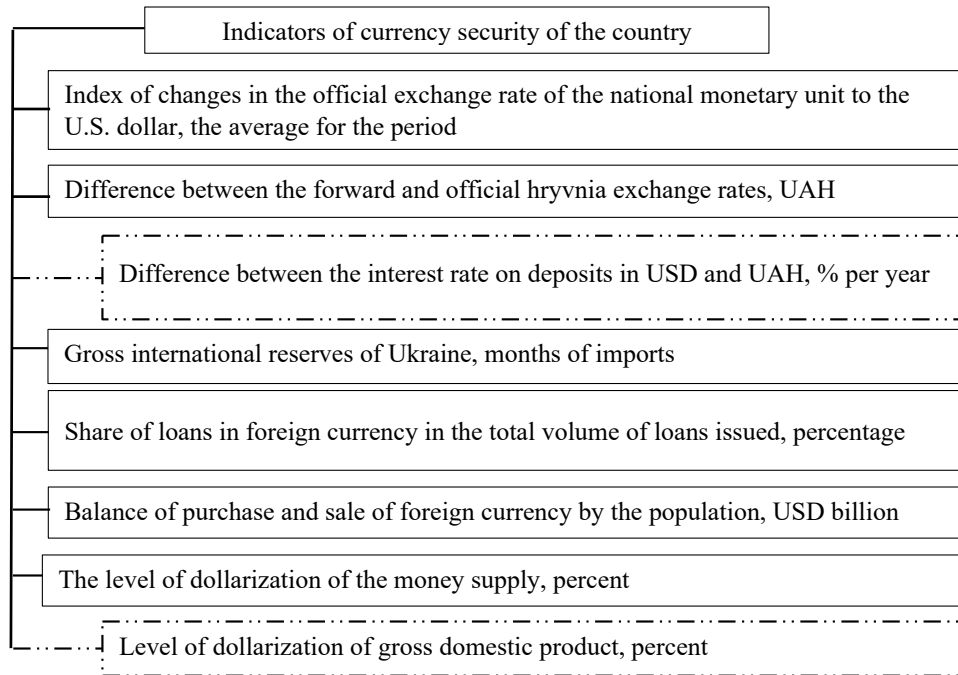


Figure 2. Indicators of currency security of a country

Source: constructed based on the data (Ministry of Economic Development and Trade of Ukraine, 2013)

peak appeared in a year – in the 1st quarter of 2016 (59.29%). The recovery of the foreign exchange market and the national economy after the currency crisis of 2014–2015 is accompanied by a steady downward trend in the analyzed indicator to 32% in the 3rd quarter of 2021.

The phenomenon of dollarization is inherent in many countries of the world and is associated with the U.S. dollar acting as national money. More than half of cash US dollars are in circulation outside the

US. Ukraine, as well as Russia, China and Belarus, is a significant recipient of dollars (Hrona, 2020). Figure 4 shows the dynamics of dollarization indicators, or the presence of foreign currency in the currency security system of Ukraine.

The level of dollarization of the money supply during 2008–2018 exceeded 30%, except for 2010, 2013, 2018–2021. This means that almost every third UAH equivalent of the money supply is invested in foreign currency. This increases the external depen-

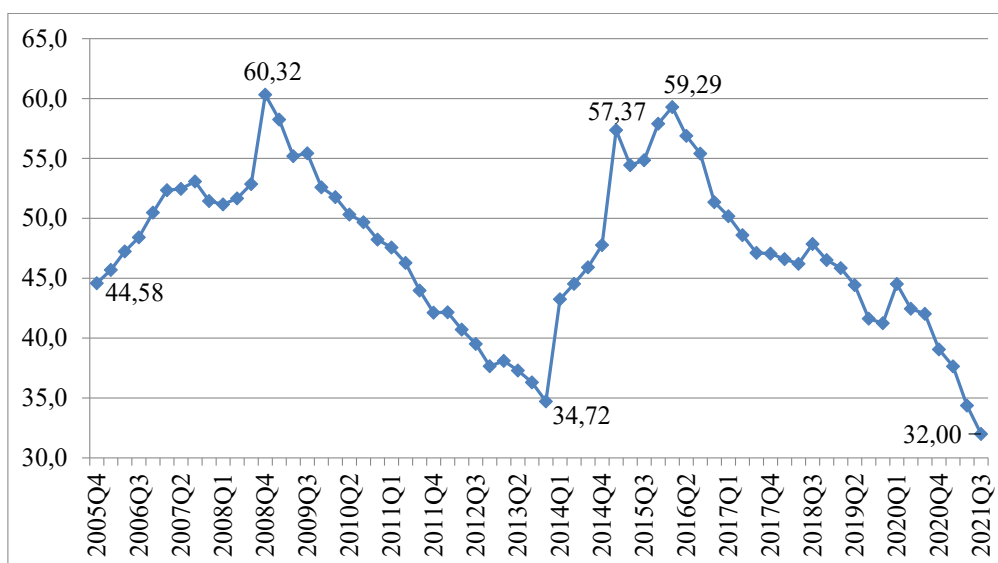


Figure 3. Ratio of loans in foreign currency to total gross loans

Source: constructed based on the data (National Bank of Ukraine, 2021)

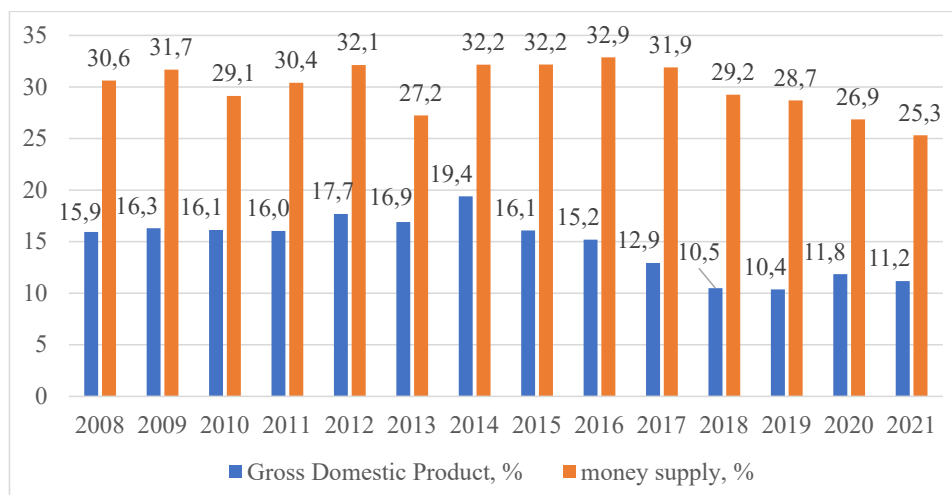


Figure 4. Dynamics of dollarization indicators in the currency security system of Ukraine, %

Source: constructed based on the data (National Bank of Ukraine, 2021)

dence of the national economy, contributes to its shadowing, reduces the standard of living of the population, complicates the conditions for small and medium-sized businesses. The existing significant level of dollarization increases the risks of Ukraine's default on foreign debts, which can be assessed using the proposed GDP dollarization indicator. During 2008–2014, its value increased from 15.9% to 19.4%. This means that during the 2014–2015 crisis, the value of foreign currency in circulation amounted to almost a fifth of GDP. The steady decrease of the dollarization of GDP to 10.5% in 2018 can be recognized as a positive effect of the reform of the foreign exchange policy, which has been underway since 2016. An additional argument in favor of this conclusion is the fact that during 2016–2021 there was a pronounced downward trend in the dollarization of the money supply from 32.9% to 25.3%.

4. Ways to strengthen the currency security of the state: international experience and Ukraine

The process of replacing foreign currency with national currency from circulation can be called dedollarization. International experience shows that it can be soft and coercive in nature (Oliinyk, 2016). In the first case, the instruments of soft dedollarization are: anti-inflationary policy, development of financial markets, issuing bonds to sterilize the excess money supply and turn it into an investment resource, increasing reserve requirements for banks on loans denominated in foreign currency, the concentration of foreign currency in lending to exporters, increasing the overall level of interest rates on deposits in national currency and indexing them in line with inflation.

Forced dedollarization was carried out by developing countries through forced conversion of all dollar assets into the national currency, freezing deposits in foreign currency, etc. However, such mechanisms are unacceptable for the conditions of liberal currency markets, to which Ukraine is moving. The most acceptable instruments of currency security for our country are the following: coordinated measures of monetary, fiscal, debt and structural policy, correct information policy of the NBU, aimed at increasing confidence in the national currency (Stetsiuk, Slyvka & Bashynskyi, 2018), cooperation with the IMF to maintain a sufficient level of official currency reserves, reducing the level of dollarization of monetary mass due to increasing the attractiveness of assets nominated in hryvnia, using currency derivatives for hedging currency risks; stimulation of export-oriented sectors of the industries of national economy, balance monitoring and counterpoising the payment balance. The issue and circulation of digital currency may significantly affect the nature of the monetary policy of the National Bank of Ukraine, the conditions of the monetary transmission mechanism and the conduct of fiscal policy (Mishchenko & Naumenkova, 2021). The most important tasks of strategic anti-crisis management of currency security of the state on the way of its integration into the global economy are to ensure effective integration of regional and global financial relations, increasing the effectiveness of public administration in terms of neutralizing external and internal threats to financial security, conducting a policy of reasonable protectionism within the framework of generally accepted and effective procedures, as well as maintaining the stability of the national currency and its moderate volatility, etc. (Getmanenko, 2020).

An important role in the formation of economic security of the state is currency security of economic entities, the insurance of their currency risks on the basis of hedging, that is, the use of certain countermeasures in response to deteriorating situation on the currency market. The most common are: balancing assets (receivables) and liabilities (payables) by term and amount; derivative financial instruments (futures, forwards, swaps, options). In Ukraine, the most common financial derivative of the foreign exchange market is the forward instrument, which contributes to strengthening the currency security of business entities through the following mechanisms: forward premium compensates the difference between the interest rates on the dollar deposit and the hryvnia loan, ensuring exchange rate parity; forward contracts allow foreign exchange market participants to keep their currency position closed and bring the exchange rate in settlement closer to the spot rate at the time of payment; the sale or transfer of obligations under forward foreign exchange contracts to other parties, as well as their termination, is carried out only with the mutual consent of the buyer and the seller, which imposes a 100% obligation to fulfill the agreements and disciplines the parties, especially in times of currency crisis. In Ukraine, the FOREX market operates in a legal vacuum, which has a negative impact both on the protection of the rights of its participants, and on the volume of tax revenues to the state budget. The most acceptable way to eliminate this drawback is to introduce the experience of EU countries on the legal regulation of FOREX-companies, as well as to create a legal basis for their self-regulation in the framework of improving the legal regulation of foreign exchange outside the exchange in Ukraine (Podorozhnyi, Sirokha & Komirchyi, 2017). The FOREX market functioning will contribute to the stability, reliability and efficiency of the financial system, increasing the guarantees of protection for the rights of private investors, increasing tax revenues to the budget and strengthening the currency security of the state.

The currency potential of economic entities increases their receipt of international currency loans, parallel and multi-currency lending, which covers the shortage of financing on the domestic currency market and contributes to the financial security of the state as a whole. Insurance instruments, state guarantees, and first-class banks are used to reduce credit risks.

5. Conclusions

1. The approaches to the interpretation of currency security and the factors determining it are systematized. According to the narrow approach, currency security is reduced to the state of exchange rate, which ensures the stability of the national currency. In addition to the above characteristic, currency security in the broad sense also includes the ability to automatically balance payments, sufficiency of official foreign exchange reserves, ensuring a stable inflow of foreign currency in the domestic market with a high export potential and investment attractiveness of the country.

2. As a result of the critical evaluation of methodological recommendations for a comprehensive assessment of the level of currency security, it was proposed to supplement the current system of six indicators with two additional indicators – the difference between the interest rates on deposits in U.S. dollars and in hryvnias, the level of dollarization of gross domestic product. The advantage of the first is less informational asymmetry compared to the difference between the forward and official hryvnia exchange rates, the advantage of the second is the demonstration of how much of the gross domestic product is served by the money supply in foreign currency.

3. A statistical evaluation of currency security indicators for 2008–2018 found that:

- firstly, the ratio of loans in foreign currency to total gross loans is a clear indicator of currency crises, when the value of the indicator increases to 60%, while in the pre-crisis period it is almost two times lower;
- secondly, the index of dollarization of the money supply changed in the range of 25% – 33%, that is, the range of variation is insignificant, but in the post-crisis period, its level falls below 30%;
- thirdly, the level of dollarization of GDP is almost twice lower than the rate of dollarization of the money supply, it is characterized by greater variability and tends to increase in the crisis period and tends to decrease in the post-crisis recovery period.

4. It is advisable to strengthen economic security in the foreign exchange market through the coordinated implementation of monetary, currency, fiscal, structural and investment policies, soft dedollarization, the use of financial derivatives and international lending.

The purpose of further research is to formalize the exchange rate regime as an object of regulatory policy of the state under the conditions of openness of the national economy.

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