













“Development of the credit market of Ukraine under macroeconomic instability”

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DEVELOPMENT OF THE CREDIT MARKET OF UKRAINE UNDER MACROECONOMIC INSTABILITY

Abstract

The development of Ukraine's credit market occurs under periodic economic crises. Available destructive processes inhibit the development of credit relations, negatively affecting the lending of economic entities and restraining the development of the national economy. This study aims to highlight the basic transformations in the development of the credit market of Ukraine, which are formed in macroeconomic instability. The economic development trends in Ukraine were assessed using classical statistical methods. The correlation regression analysis was used to analyze the influence of macroeconomic parameters (exchange rate, average salary, and cost of loans) on the volume of bank lending. The results show that the national economy of Ukraine during 2005–2021 developed in the conditions of periodic macroeconomic instability, and the pre-crisis (an indicator of 2013) parameters of bank lending volumes have not restored within the credit market. The paper stresses the significant impact of the COVID-19 pandemic: in 2020, the volume of bank lending decreased by 10.38 billion USD. Moreover, the econometric analysis of the influence of specific macroeconomic parameters (exchange rate, average salary, and cost of loans) on the development of bank lending in Ukraine demonstrated that the stability of the national currency exerts the greatest influence on the lending processes of economic entities in Ukraine. Its provision in the long term allows the creation of favorable conditions for the credit market functioning after the shock periods.

Keywords

credit market, national economy, macroeconomic development, macroeconomic instability, credit institutions, credit relations, bank lending

JEL Classification

E32, E42, G21

INTRODUCTION

The credit market plays a vital role in the financial system. Financial resources are redistributed in this market, creating the conditions for developing the national economy. In fact, it is impossible to ensure such development without intensifying credit relations. That is why it is important to research the peculiarities of the credit market functioning in different conditions of the state's socio-economic development.

From a theoretical point of view, the credit market's role in the national economy is straightforward and has not changed over the years. Within this market, financial resources are moved from the entities that have such resources to those that need them. At the same time, all economic entities satisfy their needs and receive the expected results and benefits. The credit market develops stably in a stable economic system, fully fulfilling its assigned functions.

However, in an unstable economy characterized by permanent periods of economic fluctuations, the credit market develops differently. In such conditions, the essence of the credit relations does not change, but the conditions for their formation change radically. In the unsta-

ble economic space, the trust level between borrowers and lenders begins to change, and such changes are unpredictable. A change in trust within such a market is the main reason for the emergence of destructive, atypical situations, which can eventually acquire systemic and negative content and restrain the development of the national economy. This increases the importance of researching the peculiarities of the credit market development in the conditions of the macroeconomic instability, deepening the theoretical and applied provisions of the emergence of crisis phenomena in its functioning.

Ukraine periodically faces complex endogenous and exogenous challenges that negatively affect the development of its economy. The credit market, also in connection with permanent financial and economic crises, develops unpredictably with corresponding disproportions in the behavior of both lenders and borrowers. In current conditions, this market has not taken the role in the economic development of Ukraine that it plays in the developed countries. Accordingly, this actualizes the study of Ukraine's experience in the context of credit market functioning in periodically occurring macroeconomic instability.

1. LITERATURE REVIEW

Ensuring macroeconomic stability is essential from the point of view of creating the conditions for the effective development of economic entities. For example, Ahiadorme (2022), Ames et al. (2001), Aden (2021), Danylyshyn and Bohdan (2022), Kraus et al. (2022), Verstiak et al. (2017), Litovtseva et al. (2022), Kotina et al. (2023), and Le et al. (2023) studied the peculiarities of ensuring the stability of the national economy in the long term. Gao and Fan (2020) emphasize that stable development of the national economies is becoming the main task of society and governments. Nikiforov et al. (2022), Fisun et al. (2022), Kral and Janoskova (2023), Petruk et al. (2022), Shkolnyk et al. (2021), Bogolib (2015), and Versal et al. (2023) note that a significant change in external and internal factors makes it necessary to take into account the main macroeconomic trends that directly affect the economy of each country and its stable development. Carli and Modesto (2022) consider the issues of ensuring macroeconomic stability: more attention is paid to the role of fiscal policy and public debt. Khan (2019) describes the impact of macroeconomic instability on environmental development. Radionova (2015, 2016) considers the characteristic features of economic policy in the conditions of macroeconomic instability.

Macroeconomic instability is a state of the economy characterized by high turbulence in economic processes. It results in a set of disproportions in the relationships between economic entities, which destroys the balance between demand and supply for goods, services, and capital. It also has a destructive effect on the conversion mechanism of savings into investments. To understand the macroeconomic

instability content, this phenomenon can be considered by specifying the essence of macroeconomic stability. For example, the International Monetary Fund defines macroeconomic stability as the state of the economy in which the key economic relationships are in balance, such as between the domestic demand and output, the balance of payments, fiscal revenues and expenditures, and savings and investment (Ames et al., 2001). These processes are not inherent for a state of macroeconomic instability. However, macroeconomic instability does not occur at one moment when all the above signs already exist. The signs of instability are formed and develop gradually, but the macroeconomic instability is faster but not instantaneous.

Summers (2003), Umbrasiene (2014), Piluso and Heron (2022), Prokopchuk et al. (2022), Kuzior et al. (2022), and Khan et al. (2022) consider the stability of the national economies from the standpoint of objective regularities of their cyclical economic development. Ciccarone and Saltari (2015), Hryhorkiv et al. (2019), and Yavorska et al. (2022) analyze the issue of the countries' adaptation to the objective processes of the cyclical economic development, the ability to use new opportunities for faster adaptation to modern economic conditions. Hillinger et al. (1973) describe the patterns of the cyclical development of the national economies from a historical point of view, using the results of a retrospective analysis of their functioning. Ffrench-Davis (2017) analyzes the consequences of cyclical shocks, and Dvoskin and Landau (2023) describe the theoretical provisions of economic cycles, analyzing the impact of the macroeconomic indicators on the general development of economies.

Das and Ordal (2022) and Desalegn et al. (2023) viewed the interaction features between macroeconomic and financial stability. Khan (2022) and Yin et al. (2022) focus on the role of the banking system in shaping economic stability. Elsayed et al. (2023), Melnyk et al. (2021), and Koval et al. (2022) analyzed the role of monetary policy in ensuring financial stability in the country. Lyeonov et al. (2022) conducted a study of the impact of the shadow economy on ensuring macro-financial stability in the country. Mishra and Dubey (2022) analyzed the monetary policy instruments' role in ensuring financial stability. Shkolnyk et al. (2021) investigated the peculiarities of ensuring the stability of the financial system in the difficult conditions of the country's economic development. Piatnytskyi (2014) considers possible options for assessing financial stability based on international indicators.

Carrera et al. (2023) and Winter et al. (2022) analyzed financial cycles, the reasons for their existence and development patterns, and their impact on the national economy. Bortz et al. (2022) investigated the formation and development of the global financial cycle and how it affects the economies of developing countries that depend on foreign investment. Mabkhot and Al-Wesabi (2022), Subbar and Guirinsky (2020), Prokopenko et al. (2022), Bisschoff and Els (2023), and Gharaibeh and Farooq (2022) analyzed the development of the banking and other credit institutions in uncertain conditions. Zveryakov et al. (2019), Kovalenko et al. (2019), and Tehulu (2021) examined the role of these institutions in shaping the cyclical nature of economic development.

Thus, the literature review proves that ensuring the conditions for the countries' effective and, most importantly, stable economic development in the long term is only possible with adequate financial resources. Especially in developing countries and in which the investment market is in its infancy, credit market is the direct source of resources in the system of financial relations. According to Ntarmah et al. (2021) and Vovk et al. (2021), today, market development and the peculiarities of its influence on economic development are actively investigated.

Thus, the credit market is a set of economic relations that arise between subjects of the economic activity in implementing a set of operations for lending funds to a legal entity or an individual for a specified peri-

od and at an interest rate. This process is carried out in the interests of third parties at their own expense, and in cases provided for by the law, at the expense of financial assets borrowed from other persons to obtain profit.

Following Lazarevic et al. (2022), the role of credit cycles in countries' economies is vital. In particular, lending plays a key role in business cycles. However, at the same time, languages are also gradually being formed for the growth of financial crises. That is why the macroprudential policy should play an essential role in the development of the credit market. Du (2017) investigated the impact of crises in the US credit market on the stable development of the economies of other developed countries and proved such an impact based on the econometric modeling. Song and Ryu (2016) examined the bank balance sheet based on the influence of credit cycles, analyzing the impact of credit operations of the banking institutions on their stability, efficiency of their capital, and impact on the stability of financial markets.

Olgianti and Danovi (2015) considered the peculiarities of credit risk management in the conditions of bank cyclical lending. In particular, they study the cyclical fluctuations of bank lending to non-financial corporations in Italy during the financial crisis of 2008–2012 from the point of view of changes in the rate of loan defaults.

Giesecke and Weber (2004) studied the fluctuations of the aggregate credit losses on loans issued to the business entities that have a low level of financial stability, which activity depends significantly on the stability of the financial system in developed countries. Arham et al. (2020) analyzed the impact of the macroeconomic cyclical indicators on the formation and management of bank non-performing loans. In particular, the state policy and central banks are important in mitigating the negative impact of the cyclical economic development on the functioning of banking institutions and their effective credit activity.

Kubin et al. (2019) considered a credit cycle model with market sentiments; that is, how changes in the sentiments of borrowers and creditors shape the instability of the credit market. At the same time, an indispensable role in changing the behavior of these entities is played by the amount of the equity capital, the reduction of which to a critical size forms new

models of behavior of both borrowers and lenders on the credit market. López-Salido et al. (2017) paid significant attention to the role of credit market in economic growth. The analysis of such a market in the USA from 1929–2015 made it possible to conclude that the sentiments of investors can be an important driver of economic fluctuations.

The scientific findings on the impact of credit market on economic development proves that this market plays a crucial role in such development, creating conditions for the activation of business attitudes of economic entities. At the same time, rapidly destructive phenomena are formed within this market due to the unfavorable macroeconomic situation, which only deepens the financial crisis. However, there is a lack of evidence on destructive factors in the credit market's permanent macroeconomic instability, which constantly arises within the national economy after a certain period. Therefore, the purpose of this study is to highlight the basic transformational changes in the development of the credit market of Ukraine, which are formed in the conditions of macroeconomic instability.

2. METHODOLOGY

A retrospective analysis of the current economic development of Ukraine was carried out based on statistical methods (index analysis, generalization, and comparative analysis). The paper used the econometric modeling methods to describe:

- 1) influence of the volume of bank lending (*Bl*) on the change in the country's GDP (*GDP*);
- 2) influence of the individual macroeconomic parameters (exchange rate of the national currency (*ExR*), the volume of average wages (*AvS*), interest rate on bank loans (*Cl*)) on changes in the volume of bank lending to the national economy (*Bl*).

The outlined indicators were chosen because of their important role in ensuring the stability of the national economy, and its development and the significant impact of such indicators on the development of credit relations. The cubic one-factor econometric models were constructed. The following dependencies are used:

- 1) real dependence model of one parameter on another

$$y = \alpha_0 + \alpha_1 x^3 + \alpha_2 x^2 + \alpha_3 x + \varepsilon, \quad (1)$$

- 2) calculation model of the dependence of one parameter on another

$$y = \hat{\alpha}_0 + \hat{\alpha}_1 x^3 + \hat{\alpha}_2 x^2 + \hat{\alpha}_3 x, \quad (2)$$

where y – value of the dependent variable (*GDP*; *Bl*); x – value of the independent variable (*Bl*; *ExR*; *AvS*; *Cl*). a_0, a_1, a_2, a_3 , – model parameters; ε – error.

It can be assumed that:

$$\varepsilon = y - \hat{y}. \quad (3)$$

Then:

$$\varepsilon = y - (a_0 + \hat{a}_1 \cdot x^3 + \hat{a}_2 \cdot x^2 + \hat{a}_3 \cdot x). \quad (4)$$

To find the calculation model of the dependence of one parameter on another, it is necessary that ε be minimal, therefore

$$(y - (a_0 + \hat{a}_1 \cdot x^3 + \hat{a}_2 \cdot x^2 + \hat{a}_3 \cdot x)) \rightarrow \min, \quad (5)$$

$$\sum_{i=1}^n (y - (a_0 + \hat{a}_1 \cdot x^3 + \hat{a}_2 \cdot x^2 + \hat{a}_3 \cdot x))^2 \rightarrow \min. \quad (6)$$

Using the outlined formula, the least squares method, and a set of mathematical transformations, one can find the parameters of this equation (a_0, a_1, a_2, a_3) and specify the dependence of one parameter on another in the form of the algebraic equation.

3. RESULTS

3.1. Trends of the macroeconomic development of Ukraine in 2006–2021

The analysis of the statistical data show the permanent macroeconomic instability in the economic development of the economy of Ukraine in the short term. Figure 1 presents information on the leading economic indicators of Ukraine's development in 2006–2021: the country's GDP, av-

Source: NBU (2023).

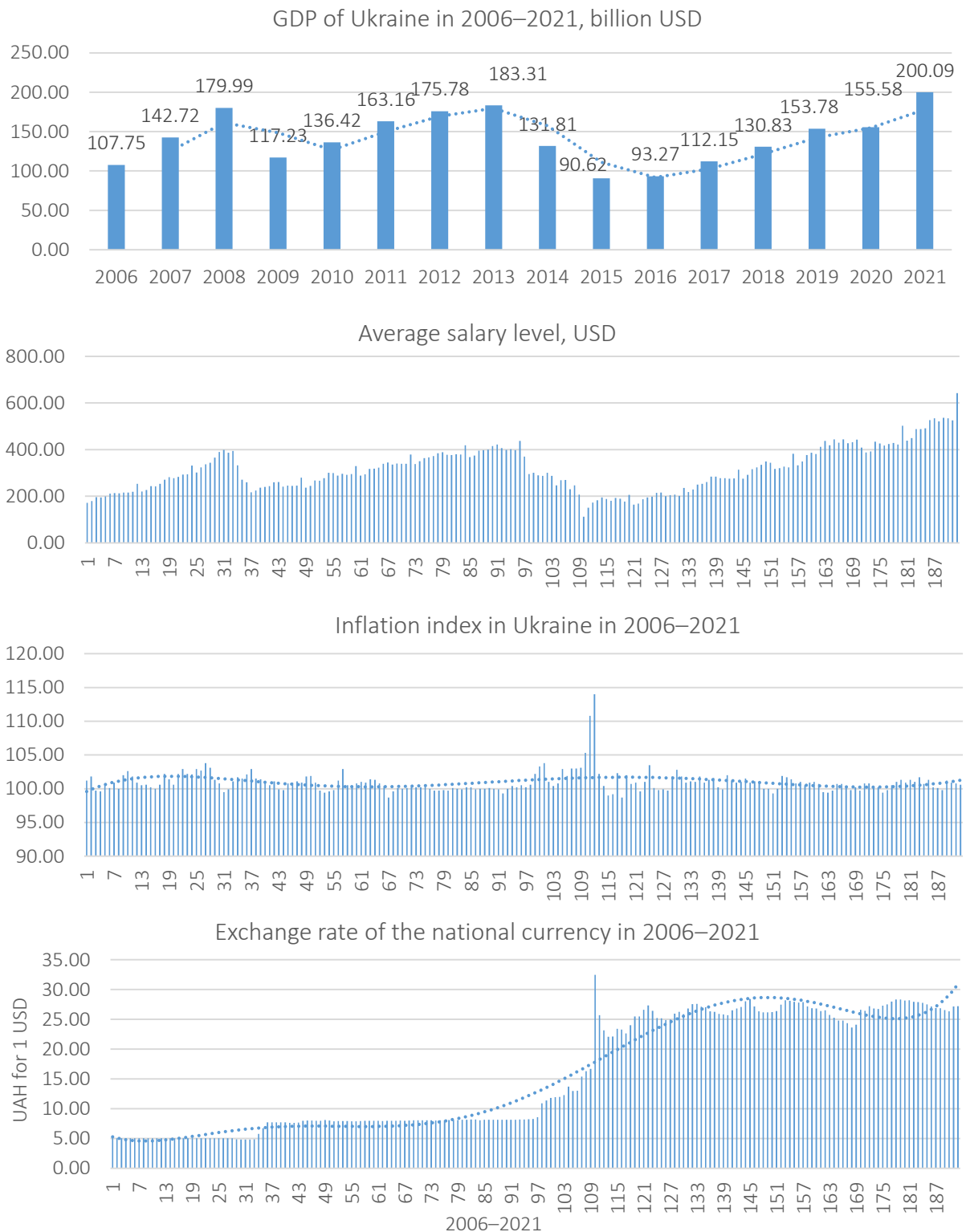


Figure 1. Macroeconomic indicators of Ukraine’s development in 2006–2021

average wages, the inflation index, and the exchange rate of the national currency. The peculiarity of Ukraine is that the instability of the economic development is determined not by the regularities of

the development of economic systems, which objectively function according to their nature, but by complex social factors that affect the development of economic relations.

Unlike other countries, in Ukraine, due to constant periods of macroeconomic instability, there is no qualitative transition of the economy to a constantly new level, which is inherent in a new development level of the national economy. For example, at the end of 2021, the GDP of Ukraine amounted to 200.09 billion USD, which is the largest indicator for the entire period of 2006–2021. However, even in 2020, the value of this indicator was at the level of 155.58 billion USD, which almost corresponds to the level of 2011 – UAH 163.16 billion. And only in 2021, according to this indicator, it was possible to reach the GDP value of 2013, almost ten years later.

According to Figure 1, the nominal GDP of Ukraine is constantly increasing. However, to compare indicators for different years, all relevant absolute macroeconomic indicators are defined in USD using the official UAH/USD exchange rate. At the same time, in some years, the official exchange rate of the UAH was artificially fixed by the state authorities and was not determined based on the market mechanisms. However, such processes do not play a vital role in the real trends of changes in the GDP of Ukraine in 2006–2021.

Other macroeconomic indicators also demonstrate the instability of the country's economic development. For example, the trend of changes in the volume of average wages clearly demonstrates the periods of real decline in the economic security level of citizens. At the end of 2006, this indicator in Ukraine was 171.27 USD, in July 2008 – 398.7 USD, in January 2009 – 216.23 USD, in December 2013 – 437.08 USD, and in December 2014 – 245.98 USD, and in February 2015 – a total of 111.96 USD, in December 2021 – 641.4 USD. These data attest to the real value of the income the citizens of Ukraine received. In nominal terms, the wages did not decrease.

The economic analysis of the development of Ukraine in 2006–2021 confirms the periods of macroeconomic instability in the country, which is often caused by internal factors. There are also periods when the recovery of the national economy to the pre-crisis level is immediately accompanied by new dissipative changes, and a sharp decline occurs. At the same time, considering the consequences of the war with the Russian

Federation, which has been ongoing since the beginning of 2022, the economy of Ukraine will suffer significant losses in the future. Such losses will be the largest and worst during the entire period of the country's independence. Thus, the volume of GDP is again moving toward the crisis values, and the growth since 2015–2016 will again be accompanied by a sharp decline. The restoration of pre-crisis indicators, that is, the parameters of 2021, may take at least five to seven years, taking into account the depth of such a crisis and its difficult consequences for the national economy.

3.2. Trends in the credit market of Ukraine under macroeconomic instability

The credit market plays one of the most critical roles in developing the national economy. Without the normal functioning of the credit system, it is impossible to ensure good economic development (Košťálová et al., 2022; Kim, 2022). At the same time, the outlined market also develops in a particular economic space and can form both positive conditions and crises for the further functioning of the national economy.

A sharp decrease in the volume of bank lending to the national economy reduces the demand of the economic entities for other goods and services, and the opportunities for business development decrease, which only deepens the crisis. Adapting to the new conditions of economic reality, financial institutions are looking for opportunities to generate income. In Ukraine, there was an experience when, after challenging economic crises, commercial banks began to receive such income exclusively at the expense of the commission-brokerage operations.

Over time, the situation within the national economy gradually stabilizes, contributing to the intensification of economic entities. However, more complex crises occur in the credit market, and restoring the operation of such a market to the pre-crisis rates takes time to achieve. Exclusively statistical indicators cannot measure the stabilization of the credit market and its normal functioning. These indicators, while ascertaining the volume of loans issued, especially in the banking system, do not reflect the normalization of the

credit relations between financial institutions and economic entities and, most importantly, the restoration of the fulfillment by such institutions, as they have the function of stimulating the economic development. For example, in Ukraine in 2019, banking institutions generated the largest own profit for the entire period of independence, but this did not lead to significant rates of economic growth (return on capital was 37.37% at the end of 2019). Banking institutions received such profits mainly due to mass lending to households at high-interest rates. At the same time, the recovery of active lending to business entities was not observed.

In the state of recovery of the country's economy, the following processes took place in the credit market of Ukraine. In order to ensure the growth of their own incomes, financial institutions increased the supply of credit funds, primarily for households. At the same time, the demand for such resources on the part of these subjects remained relatively insignificant. The high cost of loans (150-200%) restrained the desire of clients to take such loans. Simultaneously, banks raised the requirements for the creditworthiness of households. The loans were issued to those with an official income, good credit histories, and no debt on existing loans. Unusually, banks offered significant amounts of funds to households immediately by issuing a card on which this amount was already credited. Commercial banks did not offer such banking products even in the pre-crisis periods. This situation is unique for banking institutions. However, the economic situation in Ukraine contributed to such a disparity in the credit market development.

Developing in macroeconomic instability, Ukraine's credit market is constantly in a system of constructive and destructive influence on national economic development. In the vast majority of cases, the destructive impact occurs due to the deterioration of macroeconomic indicators, which is caused by several economic, political, and social reasons. Any economic growth, including due to the credit market functioning, in the next period is lost due to crises and a significant decrease in the rate of this market. Such a situation has been observed in Ukraine for many years, which will be confirmed by a further empirical study of the

peculiarities of the development of the national economy and the specified market.

Next, the study analyzes the trends in the credit market development of Ukraine in the conditions of macroeconomic instability. Figure 2 specifies the volume of bank lending in 2006–2021.

The volume of loans to business entities and households deserves special attention. Figure 2 proves that the recovery of lending to the population is occurring at a faster pace than the granting of loans to business structures. The volume of loans issued to the population in 2015–2021 constantly increased (except for 2020). The trend of such growth shows that the volume of such loans is increasing, which indicates the development of this type of lending.

The volume of bank loans issued to the business entities periodically increased in 2015–2021, proving the stable increase of such loans. At the same time, in 2021, the total volume of such loans amounted to 29.4 billion USD. However, this is the figure for 2017 – 30.8 billion USD. Thus, this indicates a rather significant recession in the lending to the business sector in Ukraine, which complicates its economic development under challenging periods of macroeconomic instability and does not allow for forming the basis for economic recovery in the short term.

The analysis of modern trends in the credit market development in Ukraine, under constant macroeconomic instability, singled out the following features of its functioning:

- 1) constant decrease in the real volume of lending to the national economy after 2013 and not restored pre-crisis values of this indicator;
- 2) decline in lending to the business sector, a long period of its recovery, and a further decrease in the volume of such loans, which is due to the difficult conditions of lending to business entities and significant disproportions (high-interest rates with a rather high demand for appropriate loans, insufficient creditworthiness of borrowers, high risks of lending to enterprises even in the relatively stable conditions of national economy);

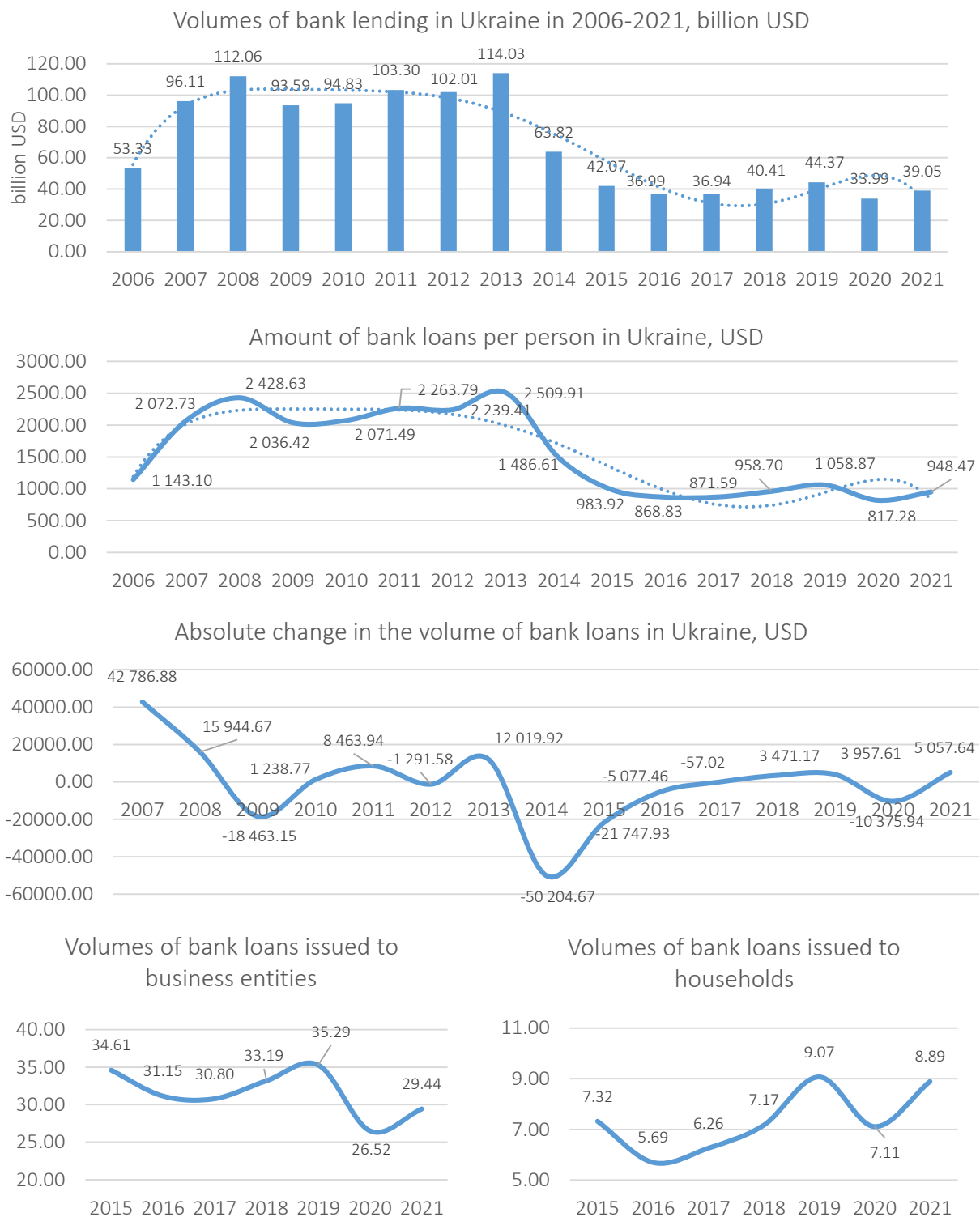


Figure 2. Volumes of bank lending in Ukraine in 2006–2021

3) rapid recovery of lending volumes to individuals in the country with a slight decline in 2020, which is due to the coronavirus crisis (demand remains stable at high-interest

rates on loans; the most common loans are cash loans, installment loans, and credit cards);

- 4) decline in the volume of long-term loans, a shortage of such resources in the banking system, which is caused by the instability of economic development and negatively affects lending to business entities;
- 5) development of the credit market in the conditions of macroeconomic instability, which changes the traditional model of the credit behavior of both banking institutions and their clients.

These factors include the national currency exchange rate, average salary, and interest rate on borrowed funds. As a result, the stability of the national currency exerts the greatest influence on the credit market development. The correlation coefficient in this econometric model was $R^2 = 0.86$, which proves the significant vulnerability of lending to economic entities to changes in the UAH exchange rate. Historical features of the credit market functioning in Ukraine confirm this statement. During the economic crises, the exchange rate of the national currency of Ukraine changed constantly and at a significant pace. This affected the change in the real value of credit loans. At the same time, if considering

Table 1 shows the results of modeling macroeconomic factors' influence on bank lending volume (Cuestas et al., 2023; C. Tori & S. Tori, 2001).

Table 1. Modeling the credit market development in the conditions of the macroeconomic instability

Source: NBU (2023).

Influence of exchange rates on the volume of bank lending in Ukraine	
$BI = 0.034ExR^3 - 1.80ExR^2 + 25.33ExR - 4.59$	
$R^2 = 0.86$	
Influence of the average salary on the volume of bank lending in Ukraine	
$BI = -0.007AvS^2 + 2.63AvS - 236.3$	
$R^2 = 0.24$	
Influence of the cost of loans on changes in the volume of bank lending in Ukraine	
$BI = 0.07CI^3 - 4.77CI^2 + 99.69CI - 566.74$	
$R^2 = 0.48$	

Note: BI – bank lending; ExR – exchange rate; AvS – average salary; CI – cost of loans.

the nominal values of the outlined indicators, the trends of their changes will be better.

In 2008, 2014, and 2022, significant devaluation of the national currency was observed. It affected the real volume of loans issued by banking institutions, changed the demand of economic entities for such services, and, most importantly, transformed the behavior of banking institutions in such a market from the standpoint of credit market development. Moreover, restoring pre-crisis real indicators of bank lending has always been difficult and over a long period.

Next, the study considers the consequences of the devaluation of the national currency for the credit market in 2014–2016. This is the period of the greatest decrease in the real value of the UAH against the USD, namely the price changed from 8.0 UAH at the end of 2013 to 27.19 at the end of 2016. At the same time, in 2012–2013, the government artificially restrained the USD exchange rate, but in the shadow market, it was sold at an average of 10 UAH for 1 USD. Therefore, the following can be attributed to such consequences:

- a complete stop of lending to economic entities;
- a growth in the volume of problem loans of banking institutions and revision of lending conditions (extension, restructuring);
- a sharp deterioration in the creditworthiness of enterprises;
- a sharp increase in the cost of credit resources in the long term for all economic entities;
- a suspension of mortgage lending and issuance of long-term loans;
- a presence in the banking system of a significant number of bad loans, which were formed as a result of lending to persons affiliated with banking institutions;
- a reduction in demand for loan funds among the population;

- an increase in the reserves of financial institutions for problem debt and, accordingly, a decrease in the amount of income.

4. DISCUSSION

The credit market is critical to developing the national economy, especially in developing countries. In these countries, the entire financial services market functions with a different result than it does in countries where the development level is high. The credit market (Zhavoronok et al., 2022; Onikiienko et al., 2021) is the primary source of attracting funds by business entities.

However, the obtained results state that any crisis arising in the credit market development creates disproportions in the country's economy, which is then difficult to resolve. Such disproportions were visible in the example of the credit market development. Some arose periodically, following the general economic situation, and were gradually resolved; some, arising after the financial and economic crisis of 2007–2008, exist in the financial system even until now.

After 2007–2008, a severe crisis took place in the credit market, the consequences of which were as follows: a significant loss of banking institutions, curtailment of lending, the exit of certain banking institutions from the market, high volumes of the creditworthiness and withdrawal of objects from borrowers by banking institutions. At the same time, a deep crisis arose in the development of non-bank financial and credit institutions. After this crisis, the development of credit cooperatives, actively evolving in developed countries, has not recovered in Ukraine. Pawnshops and financial companies began to actively develop, which, taking advantage of the high demand for loan resources and the low level of supply from banks, provided loans at 300–400% per annum. After 2007–2008, the mortgage market in the country did not recover to pre-crisis levels, significantly hindering the national economy.

After the crisis of 2014–2015, the volume of lending to business entities decreased quite seriously: the number of short-term and high-cost loans for the population and the requirements for customers'

creditworthiness increased significantly. All this also restrains the development of the credit market and its positive impact on the national economy. At the same time, in 2019, banking institutions generated the largest profit from their own activities in the entire history of Ukraine's independence, which is due to many factors, primarily the gradual adaptation to new features of the credit market and the active implementation of digital technologies (Chmutova et al., 2017; Kholiavko et al., 2020; Zhavoronok et al., 2022).

Thus, the intensification of the economic development of Ukraine is primarily related to the restoration of the effective development of the credit market, the increase in the volume of lending, primarily to business entities, and the acceleration of the mortgage market functioning. For state authorities, these directions should become the leading ones for support. In recent years, attempts have been made to develop such areas, but they were not systematic, and the volumes of loans issued under individual state programs were insufficient. Although Akin et al. (2013) and Andriushchenko et al. (2019) described the development of individual credit services, it is quite clear that ensuring the systematic and harmonious development of the credit market remains relevant in Ukraine.

The issue of ensuring the stability of the national currency remains debatable; the development of the credit market directly depends on the national currency's exchange rate. Among all the macroeconomic indicators selected for analysis of their dependence on the development of such a market, the dependence on the UAH stability is the greatest.

Thus, the issue of how to stimulate the development of the credit market while maintaining the stability of the national currency remains debatable, given that such stability also depends on other economic factors. Today, the National Bank of Ukraine sees its main task as curbing inflation in the country; however, this significantly restrains the development of lending (Ostrovska & Hrapko, 2014; Tkachuk et al., 2022), primarily to the business sector, and therefore negatively affects the industrial sector. Solving the outlined task should become a priority direction for the National Bank of Ukraine.

This study adds to the knowledge of the credit market functioning in the conditions of macroeconomic instability, analyzing the applied provisions of such development in the example of the credit market of Ukraine.

CONCLUSION

The purpose of the study was to identify the fundamental transformational changes in the development of the credit market, which are formed in the conditions of macroeconomic instability. In order to achieve the outlined goal, the presence of permanent periods of unstable development of the national economy is established based on the analysis of macroeconomic indicators (GDP of Ukraine, average wage level, inflation index, exchange rate of the national currency). The leading causes of such development are also specified, among which the main socio-economic destabilizing processes are identified.

Taking into account the analysis of the main indicators of the development of bank lending in Ukraine in 2006–2021, some transformative changes in the credit market functioning, which take place in dissipative economic conditions, are highlighted. They include a decrease in the financial stability of the credit institutions and their ability to provide loans; a sharp decrease in the volume of long-term lending and its slow recovery; a decline in credit volumes, primarily to business entities; an increase in debt for loans; a sharp decrease in the creditworthiness of borrowers; a faster decrease in the supply of credit resources compared to the demand for them; an increase in the cost of borrowed funds and its decrease in the long term; a sharp decrease in the profitability of credit activities in the short term; and a growth in the number of different types of credit institutions.

AUTHOR CONTRIBUTIONS

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