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THE DEVELOPMENT OF THE BANKING SYSTEM IN CONDITIONS OF DESTRUCTIVE
IMPACT OF INTERNAL AND EXTERNAL FACTORS

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The article presents the substantiation of the methodological model of the development of the banking system of Ukraine. The purpose of the research is to analyze the key aspects of the functioning of the banking system of Ukraine as well as to provide the theoretical and methodological substantiation of the model for its development. The analysis of the issues raised in the study was carried out according to the general methodological scheme of the system approach. The empirical analysis was conducted using the data of 2013–2017.

Monetary instruments of the central bank, which allowed an objective evaluation of its activities in the field of monetary regulation, are identified in the course of the research. The main trends in the development of the banking system of Ukraine are revealed. It is established that it was possible to stabilize the situation in the banking system owing to the restoring of the fund base, recognizing the real quality of assets and implementing programs of capitalization by virtually all large banks. It is found out that commercial banks currently own a right amount of capital and liquidity to resume lending to the economy.

The most probable trend of the development of the banking system of Ukraine in the immediate future is illustrated. It is established that a clear and realistic paradigm with the outlined priorities, objectives, tasks, and the stages of its implementation is able to ensure a sustainable development of the banking system. The most important tasks for the development of the banking system in accordance with the European integration processes, national needs and interests are defined; they include effective redistribution of capital; high-quality banking services; sufficient level of competitive ability; compliance of the domestic banking system with the international standards; financial availability (inclusion). The implementation stages of the paradigm for the development of the banking system of Ukraine are established, namely restoration, activation and well-balanced international integration.

Key words: central bank, commercial banks, banking system, paradigm for the development of the banking system of Ukraine.

РОЗВИТОК БАНКІВСЬКОЇ СИСТЕМИ В УМОВАХ ДЕСТРУКТИВНОГО ВПЛИВУ
ВНУТРІШНІХ ТА ЗОВНІШНІХ ФАКТОРІВ

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Стаття містить обґрунтування теоретико-методологічної моделі розвитку банківської системи України. Мета дослідження полягає в аналізі ключових аспектів функціонування банківської

системи України та теоретико-методологічному обґрунтуванні моделі її розвитку. Аналіз порушених у дослідженні питань здійснювався за загальнометодологічною схемою системного підходу. Емпіричний аналіз здійснювався з використанням даних за 2013–2017 рр.

У ході дослідження виокремлено монетарні інструменти центрального банку, які дозволили здійснити об'єктивну оцінку його діяльності у сфері грошово-кредитного регулювання. Виявлено основні тенденції розвитку банківської системи України. Встановлено, що ситуацію в банківській системі вдалося стабілізувати завдяки відновленню бази фінансування, визнанню реальної якості активів та виконанню програм докапіталізації практично усіма великими банками. З'ясовано, що наразі комерційні банки мають достатньо капіталу та ліквідності, щоб відновити кредитування економіки.

Проілюстровано найбільш ймовірну тенденцію розвитку банківської системи України в найближчій перспективі. Визначено, що сталий розвиток банківської системи може забезпечити чітка і реалістична парадигма з окресленими пріоритетами, цілями, завданнями, а також етапами її імплементації. Найважливішими завданнями розвитку банківської системи у відповідності до євроінтеграційних процесів, національних потреб та інтересів визнано наступне: ефективний перерозподіл капіталів; якісне банківське обслуговування; достатній рівень конкурентоспроможності; відповідність вітчизняної банківської системи міжнародним стандартам; фінансова доступність (інклюдія). Встановлено етапи імплементації парадигми розвитку банківської системи України, особливості реалізації яких ляжуть в основу подальших досліджень авторів.

Ключові слова: центральний банк, комерційні банки, банківська система, парадигма розвитку банківської системи України.

Introduction

The banking system is the major part of the economic development of the state. It contributes to the fundraising, accumulation and allocation of monetary resources, provides conducting payments, shapes the dynamics of investment processes, and maintains price and financial stability. A reliable, transparent and efficient banking system is a guarantee of sustainable economic development of the entire state. In this context, the development of a theoretical and methodological model for the development of the banking system of Ukraine is of particular relevance.

Problems of the development of the banking system in the context of the globalization of the financial market are the subject of a discussion of the world scientific community. V. Kovalenko defines the banking system as a coherent mechanism that interacts with other systemic structures of the financial market, and also as its subsystem, forms a more general association – the economic system as a whole. When comparing the banking system with other ones, he identifies in it some features common for all financial systems (a combination of many similar elements, dynamics, closed nature and self-regulation) (Kovalenko, 2015).

Richard A. Werner identifies three theories of banking: 1) The theory of financial intermediation of banking; (2) The fractional reserve theory of banking;

(3) The credit creation theory of banking. He emphasizes that only the credit creation theory of banking is marked by a close interrelation with the development of the bank crediting and the increase of economic activity, which leads to the growth of GDP (Werner, 2016).

Several types of banking systems are distinguished in the history of the development of banking systems of different countries; these are a centralized monobank system; a two-tier banking system (Central bank and system of commercial banks); a unique decentralized banking system – US Federal Reserve System; a three-tier banking system (Kovalenko, 2015). A two-tier banking system has been formed in Ukraine, based on the principles of regulation and control by the first tier (central bank) towards the second tier (commercial banks of different forms of ownership, specialization and sphere of activity). Such a system is typical of most developed countries with a market economy (Great Britain, Austria, Germany, France, Japan).

S. Arzhevitin specifies the following key aspects of the banking crisis in Ukraine as of 2016: the destruction of trust as a key institution of economic and financial development of the society, system vulnerability and uncertainty of property rights, structural imbalances in the economy, lack of monetary and economic sovereignty, critical reduction in the impact of the banking system of

Ukraine for the development of the real sector, the inadequacy of monetary, foreign exchange and banking regulation given the current crisis. The author emphasizes the necessity to develop a totally new strategy for the development of the banking system of Ukraine (Arzhevitin, 2016).

V. Mishchenko and S. Naumenkova describe drivers of the process and methods of bank consolidation and capitalization, including through the use of M&A and P&A transactions. The authors focus on the improvement of bank rehabilitation and financial restructuring procedures, identify the main areas of a decline in the share of distressed assets of banks through the use of “bridge-bank” and “bad-bank” mechanisms (Mishchenko & Naumenkova, 2016).

S. Kirova analyzes the consequences of introducing a banking union into the EU. This union is based on two components: the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM). The author substantiates that the creation of a banking union in the European area contributed to increasing the stability and level of capitalization of the banking system, improving risk regulation. Positive changes have taken place against the backdrop of lower profitability, as there remains a high proportion of problem loans (Kirova, 2017).

N. Petria, B. Capraru, and I. Ihnatov argue that the level of development of the EU27 banking system, and in particular, the profitability of banks are affected by two large groups of factors: bank-specific (internal) factors (bank size, level of credit exposure, etc.) and industry specific and macroeconomic (external) factors (the effect of local market structure, level of competition, GDP per capita, inflation rate) (Petria et al., 2015).

Analysis of the latest research and publications shows that the scientific community is currently investigating problems of identifying and managing systemic risks in the banking sector. It is primarily explained by the global challenges in the financial sector, which the economies of the majority of developed countries face with. Ukraine, as a participant of the world economic community, is also exposed to the impact of external destabilizing factors that deepen the crisis situation both in the economic and banking systems.

The European integration vector of development was chosen by the Ukrainian government as a priority for the national economy. The comprehensive program for the development of the financial sector of Ukraine until 2020 involves ensuring sustainable

economic development by means of effective redistribution of financial resources in the economy based on the creation of a fully competitive environment in accordance with the EU standards. It is obvious that the banking system is a key element in this process and the paradigm for its development requires a separate research.

Materials and methods

In order to solve individual problems various methods were used, among them statistical and economic method (for analyzing the current state and trends of functioning of the banking system of Ukraine); the method of comparative analysis (for the study of economic categories, methods of evaluation, ways and areas of development of the banking sector); method of analogy (for determining the prospects of functioning of banking institutions); tabular and graphical methods (for processing and generalization of data, displaying them in figures and tables); correlation-regression analysis (for constructing a model of the influence of the banking system on the development of the state's economy); the Monte Carlo simulation model (for forecasting key parameters of the development of the banking system of Ukraine), etc.

Results and discussions

In recent years, the central and commercial banks of Ukraine have worked under the emergency conditions. Against the background of social and political, financial and economic crises reinforced by military actions in the East, the central bank (National Bank of Ukraine – NBU) has begun the reformation of the monetary regulations and the banking system of Ukraine. The main efforts of the NBU were aimed at curbing the inflation, increasing the intrinsic value of hryvnia and clearing the banking system of troubled commercial banks. A number of instruments were used by the central bank to stabilize the situation in the banking sector of the country, including the regulation of the official bank rate, intervention in the foreign exchange market, change in the size of mandatory reserve, etc.

During 2013–2017, the National Bank of Ukraine changed the official bank rate several times (figure 1). Changing the official bank rate is an important signal for commercial banks to establish interest rates on deposits and loans. It affects the value of loans granted to commercial banks by NBU. The higher it is, the more expensive refinancing loans are, and therefore the loans that banking institutions

offer to their clients are more expensive as well. Accordingly, the number of borrowers decreases. The decrease in lending to individuals negatively affects the demand for those goods and services that are

mostly purchased on credit. Consequently, manufacturers refrain from increasing production, and sellers from price raising due to low demand.

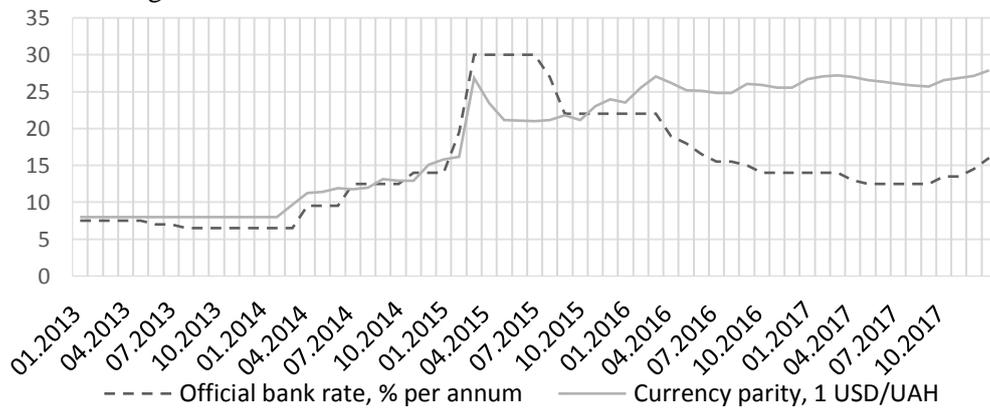


Figure 1. Dynamics of the currency parity and the level of the official bank rate of the NBU
Source: data from the NBU.

An instrument that has a significant impact on the resource provision of commercial banks and the stability of the economy as a whole are interventions in the foreign exchange market. The NBU carries out inter-bank foreign exchange regulation through the accumulation of international reserves, flattening out the operation of the foreign exchange market and the change of the key interest rate. In 2014, the National Bank began the process of transition to a new monetary strategy – the mode of inflation targeting. Its first step was the abandonment of the fixed exchange rate and the use of the average weighted market rate.

The first reaction to such measures was the depreciation of the national currency unit (hryvnia) and the loss of a part of the accumulation of international reserves of the state (figure 1). Restrictions on the foreign exchange market and tough monetary policy were able to somehow curb the fall of the hryvnia. Cooperation with the International Monetary Fund provided an increase in international reserves and a cover of a significant part of the deficit of the state budget of Ukraine. However, it influenced the growth of debt obligations.

Not least important instrument of the monetary policy of the central bank is the required reservation of a part of funds attracted by commercial banks in the form of deposits. In recent years, the amount of mandatory reserve was 6.5 % for funds on current accounts and 3 % for fixed-term deposits of legal entities and individuals.

The effectiveness of the implementation of monetary policy in the country depends not only on

the tools used by the central bank, but also on its internal potential. Thus, during 2013–2017, the National Bank of Ukraine carried out an annual increase in the value of assets. This situation, above all, was due to the growth of the portfolio of government securities. The NBU became the nominee holder of 99.5 % of all Ukrainian securities. In addition, in 2016 the National Bank of Ukraine received 716 million in special drawing rights (SDR) within the framework of the Extended Fund Program (EFF). At the same time, the size of the loan portfolio of the central bank reduced by almost 2 times, which is determined by a decrease in loan debts and a share of impaired loans.

During 2013–2017, the central bank managed to increase its equity by 2.3 times. The NBU increased its total reserves and reserves for revaluation of assets and liabilities, which account for 99 % of the equity and 10 % of the total capital. The liabilities of the National Bank increased in terms of the available balance on the accounts of state and other institutions, deposit certificates, liabilities to the International Monetary Fund. At the same time, there was a reduction of the available balance on accounts of commercial banks.

During the investigated period, the NBU had profit. Its main sources were interest income and gain on foreign exchange, which are the results of the revaluation of monetary assets and liabilities due to the changes in the official exchange rate. At the same time, during 2013–2017, the amount of interest expenses of the central bank increased by 11.7 times and amounted to UAH 11.6 billion in 2017. This

situation is associated with an increase in payment of deposit certificates and repayment of obligations to the International Monetary Fund.

As for the activities of commercial banks, during 2013–2017 they were carried out in the context of reforming the banking system and improving the level of risk management. The National Bank of Ukraine was actively implementing measures to support banking stability. In 2015–2016, a large-scale stress testing of the banking system took place. The test results showed that 21 of the 60 audited banks do not need any recapitalization, 9 of them completed their three-year recapitalization plans ahead of

schedule, 4 banks need to be withdrawn from the market, and the others may work according to the schedule. In 2016, the amount of recapitalization of banking institutions was UAH 108 billion.

In 2017, the number of operating banks decreased by 54.4 % (table 1). One of the reasons for this decrease was their weak financial position. Among the reasons of non-financial nature, the following should be noted: violations of requirements for financial monitoring, non-transparent ownership structure, conflicts of interests of bank owners, inability of shareholders to increase authorized capital and, consequently, self-liquidation.

Table 1. Dynamics of clearing the banking system of Ukraine of troubled banks, entities

Indicator	2013	2014	2015	2016	2017
Number of banks in register	182	182	182	182	177
Number of operating banks	180	158	120	99	82
Number of banks at the stage of liquidation	2	24	62	83	95
Number of banks with foreign capital	49	51	41	38	38
including with 100 % foreign capital	19	19	17	17	18

Source: Author's calculation in the NBU.

Structural changes in the banking system were aimed at increasing the financial stability of commercial banks. In 2015, the National Bank of Ukraine announced the plans to gradually introduce new requirements for bank equity. The adoption of this decision was determined by the need to implement a progressive European experience and to converge on the standards of equity management Basel III and the EU Capital Requirements Directive (CRD IV), which proved to be effective. Thus, as of January 1, 2019 the standard of equity adequacy for banks will be introduced at the level of 7 %. The achievement of this level of adequacy is provided for

by the Memorandum of Cooperation between Ukraine and the IMF.

As a consequence, during the period 2013–2017, the authorized capital of commercial banks grew by 2.65 times (table 2). 2014 was characterized by the withdrawal of troubled banks from the market and the reduction in the total authorized capital of banking institutions. The trend to increase the authorized capital of banking institutions has been restored since 2015. As a result, the authorized capital of 1 bank amounted to about USD 6 billion. However, its size remains low due to the significant devaluation of the national currency, low quality of the loan portfolio and the growth of currency risks.

Table 2. Dynamics of the equity of commercial banks in Ukraine

Indicator	2013	2014	2015	2016	2017
Equity, UAH mln	192 599	148 063	94 914	116 434	157 364
Growth rate of equity, %	23.9	-23.1	-35.9	22.7	35.2
Share capital, UAH mln	183978	179 208	212 921	311 745	488 218
Growth rate of share capital, %	54.2	-2.6	18.8	46.4	56.6
Correlation between share capital and equity, %	95.5	121.0	224.3	267.7	310.2
Average amount of share capital per 1 bank, UAH mln	1022.1	1134.2	1774.3	3148.9	5953.9

Source: Author's calculation in the NBU.

Owing to the systemic unprofitability of banking institutions, the correlation between their authorized and equity was non-proportional. During 2013–2017, the adequacy of regulatory capital declined from

18.26 % to 16.1 %. It is established that the higher the value of the indicator of adequacy of regulatory capital is the greater is the share of risks for the bank owners. And conversely, the lower the value of the

indicator is, the greater is the share of risk taken by the bank lenders and depositors. It should be noted that in countries with transition economies this indicator exceeds 40 %, and in developed countries 80 %.

The insufficient level of capitalization of Ukrainian banks is one of the reasons for their low

competitive ability in the world market. Although this indicator fluctuates within the regulatory value (10 %), commercial banks should intensify their activities in order to increase the amount of their equity. It is also necessary to note the trend to reduce the share of equity in the gross domestic product of Ukraine (figure 2).

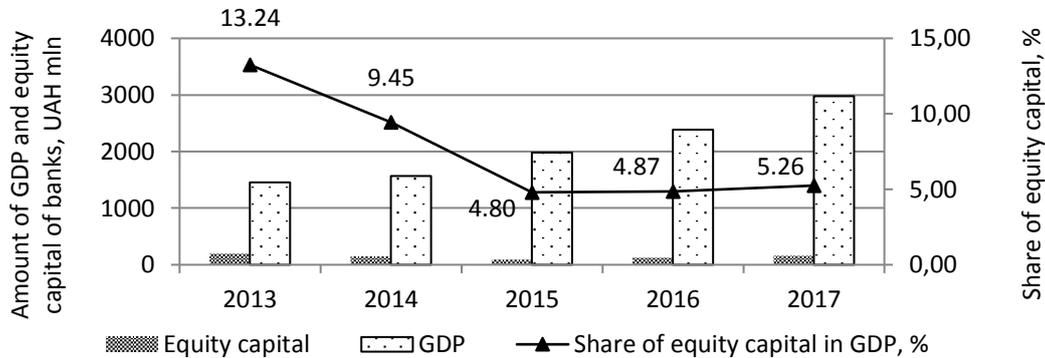


Figure 2. Dynamics of the share of equity of Ukrainian banks in the gross domestic product, UAH mln
Source: data from the NBU and Ministry of Finance of Ukraine.

The financial results of the operation of commercial banks also had ambiguous trends. In 2013, banking institutions had a profit of UAH 1.436 million. During 2014–2016 they worked with significant losses, which were reduced to UAH 25699 million by the end of 2017. During the investigated period, commission expenses and commission income of banking institutions increased significantly, while interest expenses and interest income were reduced (figure 3). This trend is explained by a considerable outflow of deposits both from individuals and legal entities, and a

simultaneous reduction in lending operations. The share of funds received on securities increased in interest income, in particular, owing to state and deposit certificates of the National Bank, while interest income from lending decreased. This indicates a change in the nature of the functioning of the Ukrainian banking system, namely the transition from the fulfillment of the traditional functions of the banking sector related to ensuring the redistribution of funds between depositors and creditors to the concentration of its activities on servicing the financial flows of the state budget.

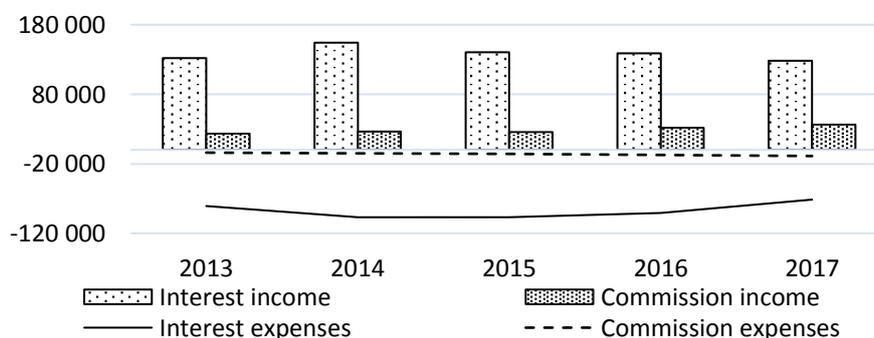


Figure 3. Interest and commission incomes and expenses of the commercial banks of Ukraine, UAH mln

Source: data of the NBU.

Consequently, owing to reforms in the banking system of Ukraine, it was possible to overcome the great bulk of problems that prevented its healthy development. The situation in the banking sector has stabilized due to the restoration of the funding base,

the recognition of the real quality of assets and the implementation of capitalization programs by virtually all large banks. Currently, banks have sufficient level of equity and liquidity to resume lending to the economy. However, in the short term

prospective, the failure of individual large banks to implement capitalization programs remains the main risk to the financial stability of the banking system. The resolution of the problems of capital shortages by sizeable banking institutions is necessary in order to ensure the stability of the financial sector in the long term prospective.

The functioning of the banking sector depends on the factors that are formed on the micro-, meso- and macro-levels of the state economic system. Micro-level factors are usually manageable and depend on certain national, regional or internal management features of each individual banking institution. Among them, the decisive influence on the state of the banking system of Ukraine is exerted by: the volume of active operations in the market of banking services in general and each commercial bank in particular. It depends on the size of equity and the needs of the economy in credit resources. The more capital is formed, the greater is the capacity of the credit market. At the same time, the more credit resources customers need, the greater is the amount of capital that banks are required to form; the specific character of the bank customer base. The specialization of banks in servicing individual customer groups requires the intensification of assets and risk management. The lack of diversification in the allocation of resources requires additional control and security measures; the type and level of risk of active operations. Similar high-risk operations require more equity and, conversely, a diversified loan portfolio or a prevalence of low-risk operations makes it possible to increase own resources of the bank moderately.

Meso-level factors, which characterize the peculiarities of the organization of interconnections of a certain set of banking institutions, include: the amount of the discount rate. It directly depends on the policy of the NBU in the field of monetary regulation and affects the volume and price of credit resources; the volume of the reserves. It determines the volume of reserves of commercial banks on risk active operations, which increases the reliability and stability of the banking system; currency parity. It is regulated by the NBU and has a decisive influence on the resource provision of individual banks and the stability of the economy as a whole; the NBU regulations. They allow for ensuring the reliability and stability of the banking system.

Macro-level factors, which are formed at the national or international levels, have an impact both

on the banking system as a whole and on every commercial bank in particular. It is expedient to include here: inflation rate. It affects not only the money supply, but it is also closely related to the price for money resources, amount of capital, the strengthening of the functional responsibilities of all banks related to ensuring the stability of the national currency unit; GDP level. It shows the level of development of the domestic economy and, in turn, reflects the needs of economic entities for development resources; foreign debt. It characterizes the state debt obligations to non-residents in relation to repayment of borrowed funds (principal debt) and interest on them, which as a result affects foreign exchange operations and positions of commercial banks; level of development of the banking system of Ukraine. It is calculated as the ratio of total assets to GDP and indicates the effectiveness of banking regulation, the activity of economic entities and the level of development of the state economy; level of development of the securities market in Ukraine. It displays the investment attractiveness of the economy and the ability of capital for long-term savings.

The modern paradigm of the development of the banking system of Ukraine should be aimed at successful overcoming of existing problems and achievement of economic growth. To a certain extent, this will depend on the accuracy of the forecast of the results of work and the level of development of the banking system in Ukraine. Taking into account the trends established in the course of research concerning the functioning of the banking sector and the achievement of these goals, the Monte Carlo simulation model was applied.

This method is based on the use of simulation models that allow for the creation of a certain number of scenarios that are consistent with the specified restrictions for a particular scenario. The simulation of the movement trajectory of the indicators of development of the banking system takes place according to the chosen stochastic process. The model is based on the assumption that changes taking place in the banking sector are described by the geometric Brownian motion, that is within the already recorded trends.

In order to simulate possible scenarios for the development of the banking system, an initial data set (table 7) was formed; it serves as the basis for forecasting the outlined parameters for the foreseeable future.

Table 7. Initial data for forecasting

Indicator	Pessimistic assumption	Optimistic assumption
Amount of equity (E), USD mln	4345.879	16198.4
Financial result of the operation of banking institutions (FR), USD mln	0	9.356
Banking system assets (A), USD mln	49170.22	175727.9
Volume of nominal GDP (GDP), USD mln	90615	183310

Source: own representation.

The following indicators were used as estimates: the volume of equity of commercial banks (E), the volume of the banking system assets (A) and the volume of nominal gross domestic product (GDP). Their minimum and maximum values are the factual data for the corresponding indicators that were recorded during 2008–2017. In addition, the value of the possible financial result of the banking institutions

(FR) was calculated according to the polynomial function of 5th order: $y = -0.0049x_5 + 0.1832x_4 - 2.4013x_3 + 13.553x_2 - 31.735x + 21.577$. This equation was obtained as a result of the trend selection according to the indicators of 2008–2017 with the most accurate graphic representation and the highest level of confidence of approximation (figure 5).

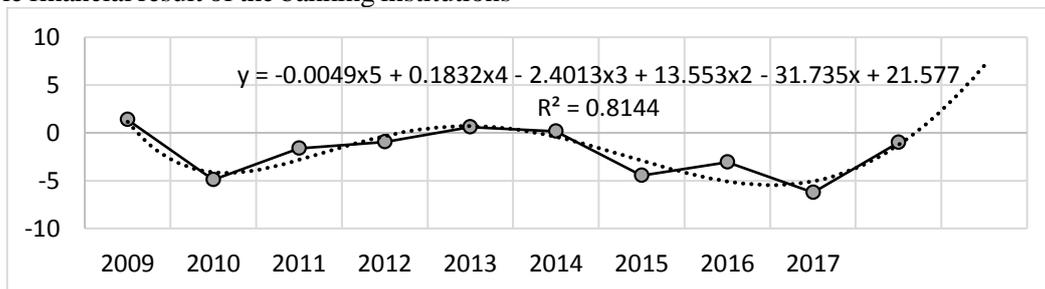


Figure 5. Exponential trend of 5th order of the amount of net profit of the banking system of Ukraine, USD mln

Source: own representation.

Such mathematical dependencies are used in the forecast model: the ratio of profit (loss) to equity for calculating the profitability ($P = FR/E$); the ratio of the banking system assets to GDP for determining the development level of the banking system

($DLBS = A/GDP$). By generating 500 random situations in the Microsoft Office Excel application software package, we get the values of the selected indicators (table 8) with the corresponding mathematical and statistical characteristics (table 9).

Table 8. Forecast parameters

No	E	FR	P	A	GDP	DL BS
1	11538	1	0.01	138360	179123	77.24
2	13474	6	0.04	64571	101928	63.35
3	15371	1	0.01	173103	162576	106.48
4	7249	2	0.03	115387	144168	80.04
5	4494	9	0.20	54910	124469	44.12
.....
496	11545	1	0.01	168191	178282	94.34
497	13293	2	0.02	56564	131783	42.92
498	13024	8	0.06	61488	157008	39.16
499	13396	6	0.04	153453	91641	167.45
500	10650	4	0.04	106820	118466	90.17

Source: own representation.

The analysis carried out by the Monte Carlo method allowed for obtaining the value of the expected indicators and the distribution density of these random variables.

Table 9. Final values of the forecast

No	Indicator	E	FR	P	A	GDP	DL BS
1	Standard deviation	3371.49	2.90	0.04	37851.19	26640.48	33.20
2	Variation coefficient	0.32	0.66	0.80	0.34	0.19	0.40
3	Pessimistic forecast (minimum criterion)	4392.00	0.00	0.00	49283.00	90722.00	29.10
4	Optimistic forecast (maximum criterion)	16189.00	9.00	0.20	175669.00	183173.00	186.75
5	Most probable forecast (average value)	10539.76	4.38	0.05	110463.07	139634.85	82.25

Source: own representation.

Thus, the pessimistic forecast showed the magnitude of the planned indicators while preserving the trend of the minimum development of the banking system that has existed for the last three years. The optimistic forecast reflected the magnitude of the planned indicators for preserving the current trend of maximum development. The average value illustrated the most probable situation according to the chosen parameters of the development of the banking system of Ukraine. Consequently, the mathematical apparatus allowed for isolating the levers of the stabilization of the banking system and its steady development in accordance with the outlined parameters.

At present, the national banking system is functioning in the context of Ukraine's integration into the European Community. The priority of such a vector is the protection of the banking system from the negative influence of external factors and strengthening the positions of domestic banks in the financial market in order to ensure successful economic transformations and financial security of the state. The basis for such transformations may be a clear and realistic paradigm with the outlined priorities, goals, tasks, and the stages of its implementation.

The paradigm for the development of the banking system of Ukraine is based on the strategic goals set by the National Bank of Ukraine. These are low and stable inflation; sustainable, transparent and efficient banking system; renewal of lending system; effective regulation of the financial sector; financial inclusion; modern, open, independent, efficient central bank. Thus, the priority for the development of the banking system of Ukraine is the creation of a powerful mechanism for the operation of banking

institutions that is capable of ensuring sustainable economic development in the state at the expense of quality servicing and efficient redistribution of financial resources based on the development of a full-fledged competitive market environment in accordance with international standards.

The most important tasks for the development of the banking system in accordance with the European integration processes, national needs and interests are: effective redistribution of capital; quality bank services; sufficient level of competitiveness; complying of the domestic banking system with the international standards; financial accessibility (inclusion).

Effective redistribution of capital is aimed at ensuring the financial sufficiency of economic entities, curbing inflation, applying optimal interest rates, increasing deposits and loans. Achievement of price stability is a difficult challenge for the NBU, since the inflation rate in the country is influenced by the factors uncontrolled by the central bank. They include the activity of economic agents, the openness of the economy, the monopolization of individual markets, the high degree of dollarization of settlements and savings, etc. In contrast to the high discount rate of the NBU, the establishment of optimal interest rates will promote the active development of business entities and the economy as a whole. Deposit growth is the basis for resource provision of lending, which is needed for a qualitative renewal of economic entities.

Quality banking services can increase credibility in the entire banking system. The familiarization with and launch of a variety of innovative and up-to-date products on the market can be a way to attracting new customers or reviewing relationships with the former.

Sufficient level of competitiveness of both the NBU and commercial banks will ensure the stability of the banking system. Creating a modern, competitive European central bank can take place through its internal transformation. Such a bank will more effectively regulate the banking sector, stimulate its development, and will ensure the transparent and secure use of financial services. Raising the competitive ability should be initiated by commercial banks as well and will depend on their performance.

The complying of the domestic banking system with international standards opens up the possibility of integrating the Ukrainian banking system into the European financial space for attracting international capital. Harmonization of Ukrainian standards with international ones is aimed at increasing the stability of the banking system, improving the quality of risk management and preventing criminal actions in the financial sector.

Financial inclusion characterizes the level of availability of basic financial services for the majority of the population. This is about the availability of basic financial services into which the World Bank includes money transfers and payments, savings services, lending, insurance services.

Implementation of the paradigm for development of the banking system of Ukraine should be implemented in three stages. The first stage – recovery – is aimed at urgent stabilization of the work of banking institutions. The second stage – activation – involves the formation of a permanent mechanism for the functioning of the banking system, capable of ensuring sustainable economic development in the state. The third stage – international integration – aims to ensure the integration of Ukrainian banking system into the European financial space and further increase in the stability of the banking system.

Conclusions

The theoretical and methodological model for the development of the banking system of Ukraine is substantiated. The established trends in the development of the banking system of Ukraine showed that in recent years the work of the central and commercial banks of Ukraine was carried out in emergency mode, connected with the liquidation of troubled banks, outflow of funds from deposit accounts, reduction of active operations of banking institutions, decrease of the share of equity of commercial banks in gross domestic product of Ukraine, systemic unprofitability of the banking

sector, etc. In order to stabilize the situation in the banking sector of the country, the NBU used a number of monetary regulation instruments: discount rates, interventions in the currency market, the size of mandatory reserve, etc.

It was established that the situation in the banking sector has somewhat improved due to the restoration of the fund base, the recognition of the real quality of assets and the implementation of capitalization programs by virtually all large banks. Currently, banks have sufficient capital and liquidity to resume lending to the economy. However, in the short run, the main risk for the financial stability of the banking system remains the failure of individual banks to implement capitalization programs. The resolution of the problem of capital shortages by sizeable banking institutions is necessary to ensure the stability of the financial sector in the long run.

It was proved that the micro-level (the volume of active operations in the market of banking services, the specific character of the customer base of the bank, the type and level of risk of active operations, etc.), meso-level (discount rate, size of reserve, exchange rate, norms of the NBU and others) and macro-level factors (inflation rate, GDP, foreign debt, the level of development of the banking system of Ukraine, the level of development of the securities market in Ukraine, etc.) have a decisive influence on the development of the banking system of Ukraine. Using the methods of correlation-regression analysis, it was proved that the key indicators of the development of the banking system of Ukraine that have an impact on the development of the economy are the amount of loans issued and deposits attracted, the volume of imports, the inflation rate and the exchange rate. Given that, it was found that the volume of issued loans and attracted deposits, as well as the amount of imports contribute to the accelerated dynamics of nominal GDP. In addition, the impact of the inflation rate and the exchange rate on GDP is of long-term and prolonged nature.

It was argued that effective functioning of the banking system of Ukraine requires the formation of a clear and realistic paradigm with the outlined priorities, goals, objectives, and implementation stages. The most probable trend in the development of the banking system of Ukraine in the short term is forecasted using Monte Carlo simulation method. The most important tasks for the development of the banking system in accordance with the European integration processes, national needs and interests are

efficient redistribution of capital; quality banking services; sufficient level of competitive ability; congruency of the domestic banking system with international standards; financial accessibility (inclusion). The stages of implementation of the paradigm for the development of the banking system of Ukraine were established; these are recovery, activation and harmonious international integration.

It was generalized that the development of the banking system of Ukraine should be oriented towards the integration with the European community; liberalization of the banking services market; balance of economic interests, through the formation of a competitive market environment; independence and efficiency of the NBU, supervision on the basis of risk assessment; transparency and high standards of disclosure by members of the banking system; responsibility and trust between the participants of the banking sector and the NBU; the integrity of the banking system, the comprehensive protection of the rights of creditors, borrowers and other customers.

Consequently, all segments of the banking system – deposit and lending activities, investment and currency transactions, banking services, etc. – are in need of active improvements. The effectiveness of implementing the paradigm for the development of the banking system will be achieved through comprehensive changes in both the activities of the NBU and commercial banks. At the moment, the banking system is already in the process of reforms, and provided that certain aspects are strengthened, and in some cases, there is even reorientation to more problematic objects, one can hope for successful achievement of priorities.

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