

DOI: 10.55643/fcaptp.5.52.2023.4152

Liudmyla Zhurakhovska

Candidate of Economy Sciences,
Associate Professor of the Department
of Banking, State University of Trade
and Economics, Kyiv, Ukraine;
e-mail: l.zhurakhovska@gmail.com
ORCID: [0000-0003-3745-0155](https://orcid.org/0000-0003-3745-0155)

INVESTMENT STRATEGY OF THE BANKING SECTOR IN THE CONTEXT OF FINANCIAL MARKET INSTABILITY

ABSTRACT

The banking sector plays a leading role in the financial market efficiency. Nevertheless, current global trends can have a significant negative impact on financial markets, thereby directly affecting the banking sector. This necessitates regular revision and improvement of banking strategies, in particular, investment strategies. The aim of this study is to identify priority areas of the investment strategy of the banking sector in the context of financial market instability. The research involved the methods of economic and statistical analysis, namely horizontal and vertical analysis, forecasting based on retrospective data, the comparison method, and the radar method. The analysis of trends in the investment activity of Ukrainian banks gave grounds to determine that the banking sector is characterized by low investment activity, and banks invest mostly in government securities. A comparison of the investment portfolio of Ukrainian and German revealed the high dependence of the volume of the portfolio of Ukrainian banks on geopolitical events, while German banks demonstrate greater stability. The general directions of the banks' investment strategy in the context of financial market instability (diversification, monitoring, ensuring liquidity) are proposed. More specific directions of that strategy are also defined: investment in stability and resilience, investment in the recovery and development of post-conflict regions, strengthening of financial inclusion. The practical value of the work is the possibility of using its results by state managers and bank management to increase the effectiveness of the investment strategy in the long run. Further research will focus on developing an investment business model of banks taking into account the sustainable development principles using the example of one of the leading banking institutions of Ukraine.

Keywords: investment strategy, banking sector, instability, financial markets, geopolitical factors, loans, securities, stock market, bank assets, financial inclusion

JEL Classification: G21, G32, G11, G15, E44

INTRODUCTION

The current state of the world financial markets is characterized by a high level of instability caused by a number of external factors led by the aggravation of geopolitical conflicts in the world [1-3], globalization [4, 5], digital transformation [6]. The banking sector, as the main component of the financial system, is one of the first to respond to the manifestations of macroeconomic fluctuations, which necessitates a constant revision of the banking strategy.

The investment strategy is part of the overall banking strategy, and the stability, liquidity and profitability of banking institutions largely depends on its effectiveness. Banks of developed countries receive the largest share of profits from investment in priority sectors of the economy and promising projects. But the structure of the investment portfolio of Ukrainian banks is dominated by investment in bonds of domestic government loans [7]. In work [8] note that the share of free funds allocated to the purchase of securities ranges from 20 to 40, in leading European banks, while this figure reaches only 5-10% in Ukrainian banks.

Received: 28/08/2023

Accepted: 18/10/2023

Published: 31/10/2023

© Copyright
2023 by the author(s)



This is an Open Access article
distributed under the terms of the
[Creative Commons CC-BY 4.0](https://creativecommons.org/licenses/by/4.0/)

The Ukrainian banking system was characterized by low investment activity even before the large-scale invasion on February 24, 2022. There are a number of underlying reasons, which, in the author's opinion, mostly relate to state administration. In particular, they include imperfect legislative framework, underdeveloped stock market, problems related to tax legislation, as well as the functioning of banking institutions under the constant influence of different crisis phenomena [9-11]. Therefore, banks mainly invest in the least risky securities —domestic government bonds.

Ukrainian banks should take into account foreign experience when developing their own investment strategies with the adaptation of such experience to Ukrainian realities. Literary sources from different countries study the effectiveness of bank investments made in such areas as fintech [12], intellectual capital [13], renewable energy [14]. This is explained by a greater emphasis on such concepts as sustainable development [15], digital transformation [16], etc. because of the objective need for their implementation in almost all spheres of life proven by numerous studies [17-19]. These and other directions shall be the priorities for the Ukrainian banking sector in the long run.

LITERATURE REVIEW

A large number of studies on the problems of investment activity of banks, in particular in the context of instability and macroeconomic fluctuations, testifies to the relevance of the issue under research. Authors (2019) [8] note the scope of investment activity of banks in Ukraine, which involves making investment in the development of one's own business, development of other businesses, formation of the bank's investment portfolio, participation in investment projects. Researchers determine the factors that cause the insufficient development of investment activities of banks. In particular, it is stated that transactions with securities play an important role in the investment activities of banks.

In work [7] authors identify the determinants of investment activity of commercial banks. Researchers determine the main factors affecting the volume and structure of investment of Ukrainian banks, and also establish the reasons for low investment activity.

Author [20] studies the problems of banking investment activity on the Ukrainian stock market. The researcher analyses trends in banks' investment in securities and notes the simplification of bank investment strategies for such investments. She noted in her study that a significant share of the securities portfolio of banks is made up of government securities, while a reduction in the volume of investments in corporate securities is observed. These trends inhibit the development of relations on the secondary securities market.

Researchers [21] study the role of the state's tax policy in stimulating the investment activity of banks. The researchers note the impact of threats and economic challenges on the activities of banking institutions in Ukraine, indicating that in such conditions it is necessary to direct efforts to create a favourable environment for the activation of investment processes. The application of incentive and deterrent tax policies can play an important role in this process.

In work [22] authors explore the risk management of investment banking in the context of the development of the information economy. According to the researchers, the main risks include devaluation of funds invested in securities because of rising inflation, delays or non-payment (partial or full) of investment income.

Authors [23] study the investment strategy of Ukrainian banks in the context of European integration. The researchers determine the compliance of the actual indicators of banks with the investment standards established by the National Bank of Ukraine, reaching the conclusion of low investment activity. The researchers list the reasons that inhibit the development of investment activity of banks, analyse this activity before and after the full-scale invasion of Ukraine, reveal some areas of the investment strategy of commercial banks and note its connection with European integration.

Danylyshyn [24] examines the efficiency of the financial system of Ukraine based on the results of 2022, noting that the state of the banking sector has remained relatively stable. The researcher established that the liquidity of the banking system exceeds the standard by six times thanks to emission financing of the budget deficit and receiving international aid, while the volume of the main and authorized capital exceeds it twice. Moreover, the profitability of the banking sector remained significant, and the margin of financial stability increased. The potential for credit expansion has increased, which has a positive effect on the investment activity of banks. The problems that befell banks because of the war were also noted in the study.

Researchers [25] examine the impact of environmental, social and governance (ESG) on bank stability. The researchers discovered the relationship between these types of management and the stability of banks in the context of fluctuations in the financial system using the example of European banks. It was established that the higher the overall assessment of ESG, as well as its individual components, the greater the stabilizing effect in crisis conditions.

The article [26] is focused on the impact of environmental aspects on banking. The researchers determine the relationship between climate risks and financial stability, noting the lack of proper methodologies to analyse such risks. So, central banks and financial supervisory bodies are only at the beginning of the way of developing appropriate climate stress tests and securing their activities from the consequences of the realization of climate risks.

In work [27] authors reveal aspects of incorporating digitalization into banking strategy. The researchers established that, although digitalization provides a number of unconditional advantages, in particular for the provision of banking services in remote regions in the absence of physical branches, competitive advantages, reduction of operating costs, there are doubts about its implementation. This includes the perception of digitalization by bank employees.

The conducted literature review gave grounds to conclude that when studying the Ukrainian banking system, researchers primarily note the problem of insufficient investment activity. Foreign researchers, who studied European countries with a developed banking system, focus on such global issues as the implementation of sustainable development aspects, implementation of digital transformation, consideration of environmental issues in banking. Considering the current situation in Ukraine, when developing the investment strategy of banks, both urgent needs, such as the need to increase investment activity, and long-term goals, such as sustainable development, the impact of environmental problems, and further improvement of activities through innovation should be taken into account.

AIMS AND OBJECTIVES

The aim of this study is to identify priority areas of the investment strategy of the banking sector in the context of financial market instability. To do this, the article should solve the following objectives:

- analyse the banks' investment activities;
- compare and forecast the trend of changes in the portfolio of securities of Ukrainian and German banks;
- determine the investment strategy directions of the banking sector in the context of financial market instability.

METHODS

Research design

The aim and the research objectives determined the procedure for conducting the research that involves several consecutive and interconnected stages. At the first stage of the research, an analysis of the investment activity of Ukrainian banks was carried out. The following indicators were used in the analysis: the structure of commercial banks' assets, the growth of granted loans and investments in securities, the volume and structure of investments in debt securities, the volume and structure of granted loans. The conducted analysis identified the main trends in the investment activity of banking institutions before and after the full-scale invasion, as well as to determine the possible reasons for those trends.

The second stage includes a comparison of trends in the volume of securities of German and Ukrainian banks. This enabled determining the stability of this indicator to macroeconomic fluctuations and geopolitical events, and comparing the volumes of portfolios and to draw conclusions regarding the expansion of investment activities. Furthermore, trends in the volume of valuable portfolios were forecasted based on retrospective data.

The third stage deals with the identification of the main directions of the banks' investment strategy in the context of financial market instability. The analysis carried out in the previous sections gave grounds to determine three key directions for the banking sector in general, as well as the directions related to Ukrainian banks and primarily related to public administration. Besides, specific directions for improving the investment strategy of banks in the context of financial market instability were determined for the long run.

The fourth stage of the study provided for emphasizing the importance of increasing financial inclusion for the investment activities of banks. The current level of financial inclusion for the banking sector of Ukraine was analysed and compared with the target.

Sample

The sample for the study consists of the banking sectors of Ukraine and Germany (excluding central banks). Ukraine was chosen for the study as the country's financial market has been negatively affected by various external factors for a long time. However, the large-scale invasion of the Russian Federation on the territory of Ukraine, which caused the most difficult challenge for the national banking system, played the decisive role in the choice of the country for the study. The issue of

developing investment strategies of banks in wartime is poorly studied in the academic literature, therefore this problem is relevant, and it is possible to trace the impact of war on the banking system on the example of Ukraine in the current conditions. The following indicators were analysed for this purpose: the structure of commercial banks' assets, the growth of granted loans and investment in securities, the volume and structure of investment in debt securities, the volume and structure of granted loans (annual data for 2007 to 2023). These indicators provide information on the total amount of banks' assets, the trend of which may indicate expansion/reduction of investment opportunities, as well as the structure of assets, the ratio of elements of which may indicate changes in banks' investment strategies.

German banks are included in the analysis because the German banking system is one of the most stable and developed banking systems in the world. That is why the experience of German banks in the field of investment is especially valuable for Ukraine, particularly in the context of European integration, because Germany is a close neighbour of Ukraine, and there are close partnership relations between these two countries. Comparison of the trend of changes in the volume of securities portfolios of Ukrainian banks with such a trend for German gave grounds to observe the stability of the banking sectors of both countries to macroeconomic fluctuations, to compare the portfolio volumes, and to determine whether these trends indicate the expansion of investment activities of banks. Monthly indicators of the volume of securities portfolios 2007 to 2023 were taken for analysis. A forecast was made until July 2027 at the forecasting stage.

Methods

The research is based on a comparative analysis of annual and monthly financial reporting data of the banking sector of Ukraine and Germany posted on the official websites of the National Bank of Ukraine [28], the Ministry of Finance of Ukraine [29] and the Deutsche Bundesbank [30] for 2007 to 2023.

Horizontal and vertical analyses were applied to analyse investment activities of banks. The horizontal analysis determined the trends of changes in the studied indicators, namely, changes in the volume of assets, granted loans and investments in securities. The vertical analysis used to analyse the structure of indicators determined the ratio of the elements of bank assets, the structure of investment in securities, and the structure of granted loans. The comparison method was used to compare trends in changes in the volume of securities portfolios of Ukrainian and German banks. Moreover, a forecasting method based on retrospective data using the AAA version of the exponential smoothing algorithm was applied during the analysis of securities portfolios. Their further trend (three years ahead - until July 2027) was predicted on the basis of existing data with the determination of upper and lower confidence limits showing possible deviations from the main line of the forecast. The radar method was used to analyse the financial inclusion level in the banking sector of Ukraine, which made it possible to identify the current level of financial inclusion and compare it with the calculated value of the target level. The radar method involves the construction of a polygon in the polar coordinate system and evaluates several indicators at the same time, compares them with target values, and also calculates the integral indicator according to the polygon area formula (Formula 1).

$$S = \frac{1}{2} \times ((\sum_{i=1}^n X_i \times Y_{i+1}) - (\sum_{i=1}^n X_{i+1} \times Y_i)) \quad (1)$$

where S – the area of the polygon, n – the sequence of coordinates of its neighbouring vertices, X , Y – the coordinates of the vertices in the Cartesian coordinate system, and $i = 1$.

The studied indicators have the form of lines on the radar chart, which start in the centre and mark the level (value) of each indicator. The larger the area of the formed "radar" (polygon), the higher the integral index. The following indicators were taken into account in the study: the number of open basic accounts/ the number of adult population, the cash (M0) to GDP ratio, the ratio of non-cash card transactions (including P2P) to the total number of transactions, the ratio of non-cash card transactions (including P2P) to the total transactions, information disclosure index, including a number of information disclosure requirements, the level of public trust in the financial system, and the Financial Literacy Index.

Instruments

The data contained in the study were grouped in MS Excel, which was also used for the construction of tables, graphic materials, and forecasting. The resulting visualizations were used for further study using methods of economic and statistical analysis.

RESULTS

Analysis of investment activity of banks

The dynamics and structure of assets of Ukrainian banks were considered in order to analyse the investment activity of banks. Figure 1 shows these indicators for 2007 to 2023.



Figure 1. Asset structure of commercial banks, %. (Source: built by the author according to National Bank of Ukraine [28])

The data presented in Figure 1 give grounds for making some observations regarding the investment activity of Ukrainian banks. During the studied period, the total amount of bank assets increased significantly, which preliminarily indicates the expansion of investment opportunities of the banking sector. A significant share of assets is presented in the form of loans, but in recent years there has been a tendency towards reduction of their share in favour of increasing share of debt securities and other assets. It should be noted that as of 2023 other assets are mostly represented by deposits, which are actually equal to the amount of loans for this period (as of May 2023, UAH 994,742.57 million are deposits, UAH 995,789.65 million are loans). This trend may indicate a change in banking strategy and a preference for deposits as a source of funding. An increased amount of deposits can mean that more funds are available for lending and investment, contributing to increased stability and liquidity, which in turn can give banks more flexibility in making investment decisions. An increased amount of deposits can provide banks with opportunities to expand investment activities, lending to customers, and increase the portfolio of securities. At the same time, an increased volume of deposits is accompanied by increased investment in securities, while the volume of loans is slightly reduced (Figure 2).

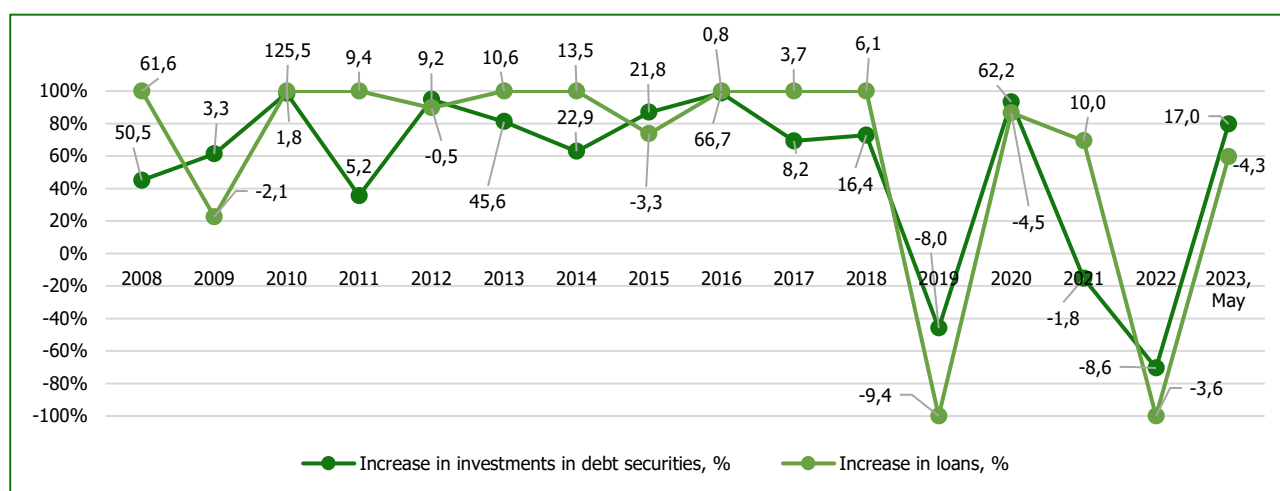


Figure 2. Growth of granted loans and investment in securities, %. (Source: built by the author based on National Bank of Ukraine [28])

This may be caused by an increase in credit risks, in particular, the risk of non-repayment of loans. Banks can also reduce the volume of lending while increasing investment in securities in order to diversify the portfolio of assets and calculating

income from investment activities. Figures 3 and 6 show the detailed structure of investment in securities and loans granted for the studied period.

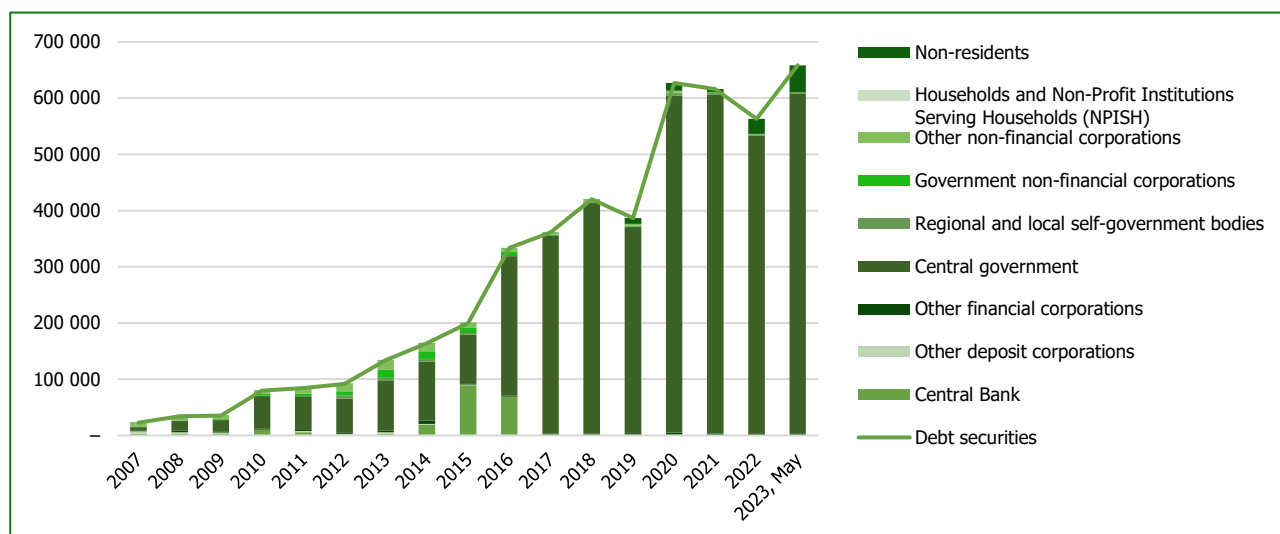


Figure 3. Volume and structure of investment in debt securities, UAH million. (Source: built by the author based on National Bank of Ukraine [28])

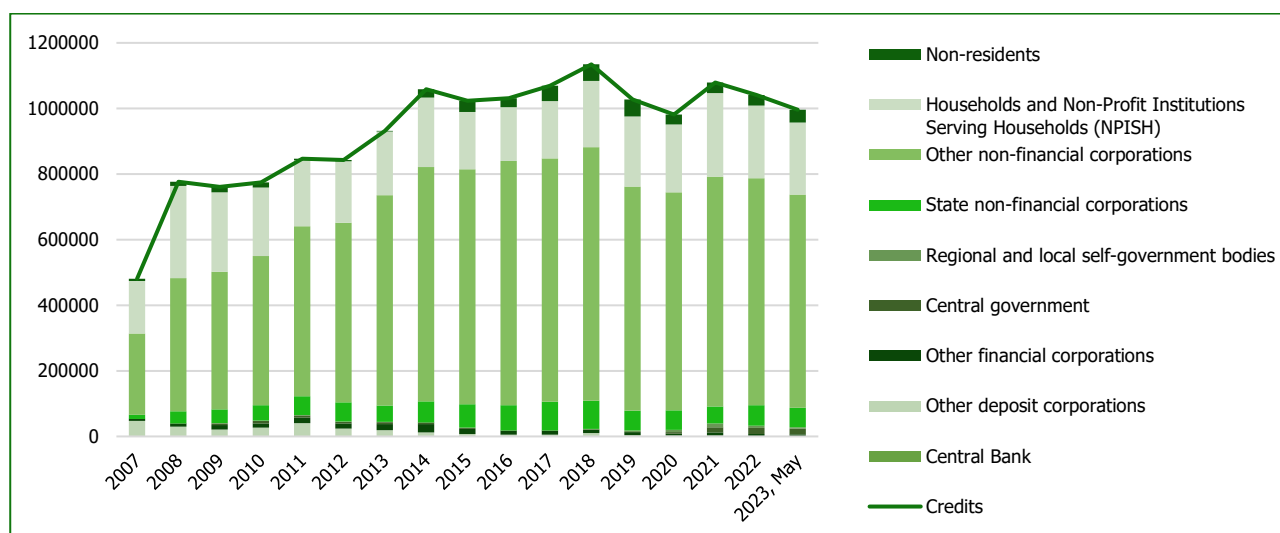


Figure 4. Volume and structure of granted loans, UAH million. (Source: built by the author based on National Bank of Ukraine [28])

So, other non-financial corporations and, with a significant margin, households and households and non-profit institutions serving households (NPISH) dominate the structure of granted loans. The largest share in the structure of investment in debt securities is made up of securities of central government. This indicates banks' desire to ensure a higher level of liquidity and security compared to investing in other securities. The reason for this trend may be insufficient development of the Ukrainian stock market. Moreover, all operations on the Ukrainian stock market were suspended after the full-scale invasion, and only military government bonds were allowed to trade. Subsequently, the restrictions were lifted, but there was no significant intensification of activity in carrying out transactions.

Comparison of the securities portfolio of Ukrainian and German banks

At this stage, it is proposed to investigate the dynamics of the indicators of the securities portfolio of Ukraine and Germany as an important direction of bank investment. Figure 5 shows the rate of growth of securities portfolios of Ukrainian and German banks.

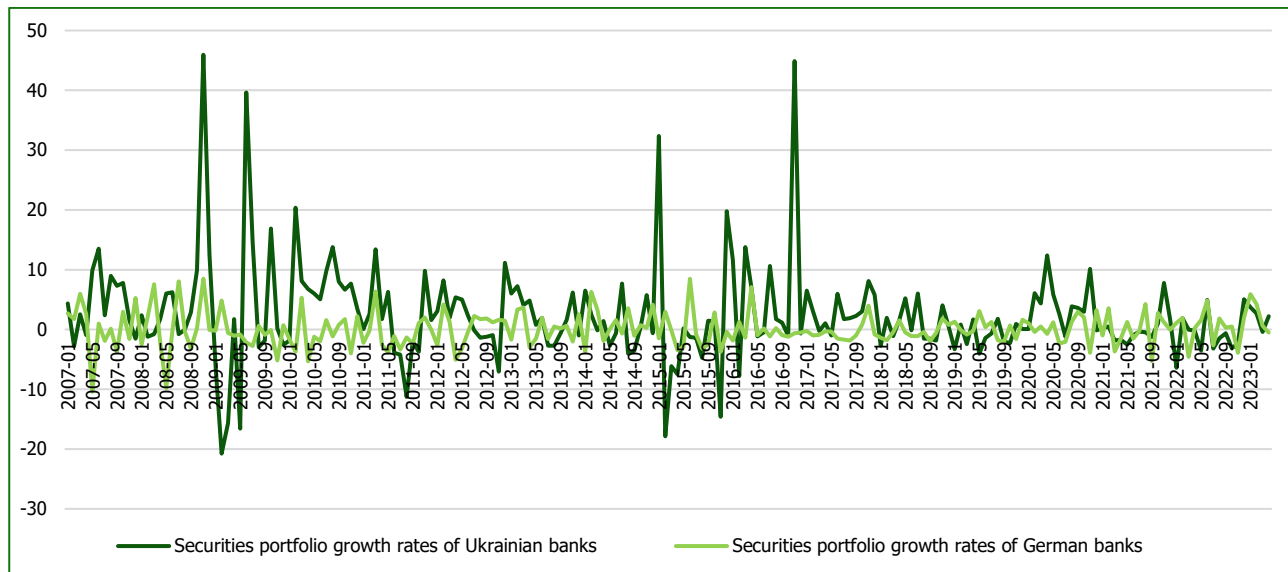


Figure 5. Securities portfolio growth rates of Ukrainian and German banks (excluding central banks). (Source: built by the author based on National Bank of Ukraine [28] and Deutsche Bundesbank [30])

As Figure 5 shows, the securities portfolio growth rate of Ukrainian banks was more than once higher than the similar indicator of German banks. It is characterized by sharp changes, and significant ups and downs are most likely associated with the worsening of the economic and political situation in the country. Particularly high values of the negative growth rate were characteristic after 2008 (the global financial crisis), after 2014 (the beginning of the armed aggression of the Russian Federation (RF) against Ukraine). It is important to note that the dynamics of growth in the securities portfolio of Ukrainian banks has somewhat stabilized over the past five years, and even the full-scale invasion of the Russian Federation did not significantly affect this. The growth rate of the securities portfolio of German banks is more stable and ranges from about 10% to -10% (the lowest values are also associated with the period of the global financial crisis). Figures 6 and 7 present the dynamics of the securities portfolio of Ukrainian and German banks in absolute terms.

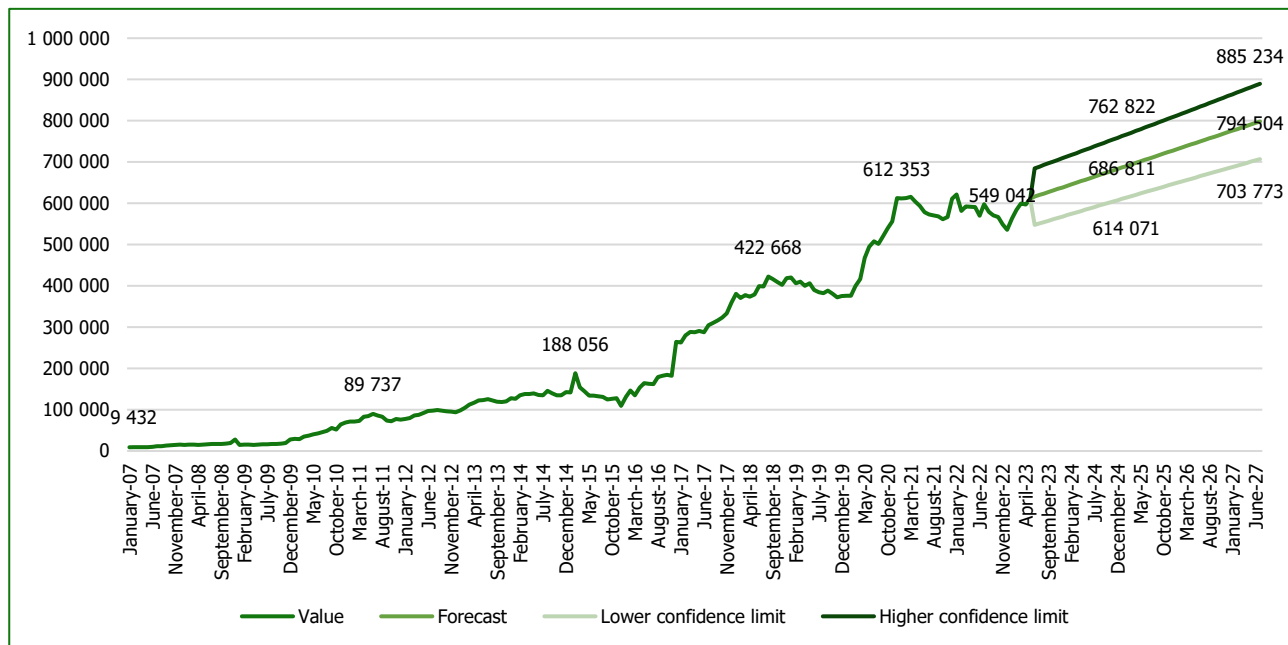


Figure 6. Securities portfolio of Ukrainian banks, UAH million. (Source: built by the author based on National Bank of Ukraine [28])

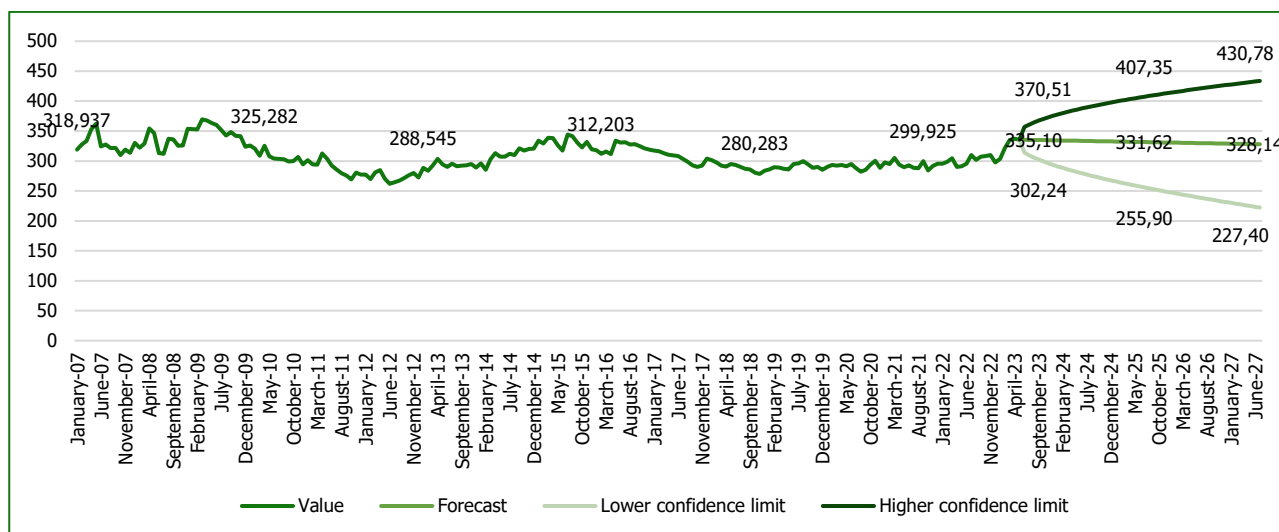


Figure 7. Securities portfolio of German banks, EUR billion. (Source: built by the author based on Deutsche Bundesbank [30])

Comparison of Figures 6 and 7 gives grounds to draw the following conclusions. First, the dynamics of the securities portfolio of Ukrainian banks has a noticeable upward trend, while the index of German banks is not characterized by significant changes. Second, the securities portfolio of Ukrainian banks shows dependence on geopolitical factors: the most noticeable reductions occurred after the beginning of Russian aggression (2014), with the beginning of the spread of COVID-19 (2020) and after a full-scale invasion (2022). In turn, the securities portfolio of German banks is more stable, and it did not undergo significant changes even during one of the last macroeconomic events that caused significant fluctuations in the financial markets of the world - the COVID-19 pandemic. Third, the forecast based on retrospective data for Ukrainian banks is more informative and indicates a further increase in the growth rate within confidence limits. The forecast for the German data has a wider range of possible values, it does not rule out both a downward trend and an upward trend. Fourth, there is a significant difference in the volume of portfolios: as of April 2023, this indicator is UAH 610,630.37 million for Ukraine, while it is EUR 335,557 million for Germany, which is almost 23 times more than the Ukrainian indicator (according to UAH to EUR exchange rate as of July 2023).

Directions of the investment strategy of the banking sector in the context of financial market instability

There are many well-known areas of the investment strategy of banking institutions: portfolio diversification, market monitoring, risk analysis, liquidity provision, etc. In the author's opinion, the value of the research will be higher in case of consideration of some specific areas of the investment strategy in the context of financial market instability.

The experience of Deutsche Bank in Germany is worth considering for this purpose. In the bank's activities, considerable attention is paid to promoting the transition of economies to sustainable and low-carbon growth. Deutsche Bank directs financial flows to sustainable and environmentally safe solutions. The cumulative permanent volume of financing and investment since January 2020 has reached more than EUR 200 billion, and it is planned to reach the mark of EUR 500 billion by the end of 2025 [31]. The Bank finances initiatives aimed at the development of renewable energy, green buildings, energy efficiency and other projects aimed at reducing carbon emissions. Moreover, the bank develops investment products that provide customers with the opportunity to invest in companies guided by the sustainable development principles.

In view of the foregoing, the investment strategy of banks in the context of instability of financial markets can take into account investment in stability and resilience. This direction involves making investment in such projects, initiatives and companies that demonstrate stability in the context of financial turbulence and are guided by the principles of sustainable development and growth. When making investment, it is important to understand both potential risks and opportunities. The main areas of this strategy are:

1. Distribution of assets taking into account stability and resilience, which can be implemented by increasing the share of assets in high-quality bonds, shares of companies with high and stable financial indicators, etc., protecting the portfolio from significant market fluctuations.
2. Geographical distribution of investments. Banks can invest in different regions and sectors, reducing dependence on certain regions or areas taking into account the indicators of sustainable development, stability, and growth potential.

3. Long-term approach. The long-term orientation of investment in sustainable development does not imply obtaining a quick effect, but ensures stable income and sustainability in the long run.

As for the Ukrainian case, the following prerequisites, which primarily depend on government actions are necessary in order to increase the investment activity of banks and further improve investment strategies: improvement of regulation and legislation in the field of banking activity, effective decisions in the field of monetary and tax policy, development of the stock market, promoting innovations, increasing the investment attractiveness of the financial sector, cooperation with international partners. The Strategy of Ukrainian Financial Sector Development until 2025 [32] notes the following strategic directions:

- financial stability;
- macroeconomic development;
- financial inclusion;
- development of financial markets;
- innovative development.

Each of the mentioned directions has its own strategic goals noted in the Strategy. But in addition to general recommendations, it is possible to recommend that Ukrainian banks (as well as banks of other countries that have experienced military conflicts) take into account a strategy for investing in the reconstruction and development of post-conflict regions in their investment activities. The following elements of the strategy are worth noting in order to ensure the effectiveness of this strategic direction:

1. Assessment of the potential of post-conflict regions, which consists in the assessment of social, economic, and infrastructural opportunities. The next step is to assess the needs for recovery and development of various areas and sectors of the region's economy.
2. Partnership agreements provide for the conclusion of agreements with local authorities, international organizations and other interested parties for additional fundraising and expert evaluation of initiatives.
3. Support for the development of enterprises in post-conflict regions taking into account their potential, threats, and opportunities. Among other things, this direction can take into account sustainable development aspects, giving priority to companies and projects that contribute to the achievement of the goals of social development and sustainable economic growth.

The conducted analysis gave grounds to build a block diagram containing the strategic directions of banks' investment activity (Figure 8).



Figure 8. Strategic directions of banks' investment activities in the context of financial market instability.

Combining the specified areas of investment strategies (investment in stability and resilience, as well as investment in the reconstruction and development of post-conflict regions) with the main areas of banks' investment strategies (risk analysis, diversification of the asset portfolio, increasing liquidity, etc.) and strategic guidelines of a specific country can ensure the stability of banks in the long run and increasing efficiency from investment activities.

Increasing financial inclusion as an important strategic direction of banks' investment strategy

Based on the identified areas of the investment strategy of banks, it is proposed to pay special attention to the strengthening of financial inclusion. This direction has a significant impact on the investment activity of banks, which can be explained as follows:

1. Financial inclusion provides expanded access to financial services for those categories of the population and businesses that previously did not have the opportunity to use accounts, deposits, loans, insurance services, etc. Attracting new customers means an increased investment potential, obtaining new sources of resources, and increasing potential capital for investment activities for banks.
2. Financial inclusion provides new opportunities for small and medium-sized businesses, providing them with access to financial resources. In turn, small and medium-sized businesses, which are often considered as an important engine of economic development, as well as being as flexible as possible and well receptive to innovations, contribute to the growth of the economy and innovations. So, banks receive a promising direction for investment, financing in support of small and medium-sized businesses.
3. Financial inclusion promotes investment in the developing sectors of the economy, as well as sectors that need recovery and have the appropriate potential for growth and innovation. Investment in such sectors can be beneficial not only for banks, but also contribute to sustainable development, post-conflict reconstruction, creation of new jobs, and infrastructure development.

Therefore, expanded access to financial services can contribute to the intensification of investment activities. Therefore, it is important to assess the current state of financial inclusion by using the radar method on the example of the banking sector of Ukraine. Data for calculations are given below (Table 1).

Table 1. Data for calculating the radar area.

Indicators	Actual result, %	Target value, %	% available to the desired
Number of open basic accounts/ number of adult populations	63	80	78.75
The cash (M0) to GDP ratio	12.01	Not more than 7.5	62.45
The ratio of non-cash card transactions (including P2P) to the total number of transactions	82.4	Not lower than 85	96.94
The ratio of non-cash card transactions (including P2P) to the total number of transactions	50.3	65	77.38
Disclosure Index, including a number of disclosure requirements	2	5	40.00
The level of public trust in the financial system	≈10	60	16.67
Financial Literacy Index	11.6	12.5	92.80

Figure 9 shows the radar of financial inclusion built on the basis of data from the Ukrainian banking sector.

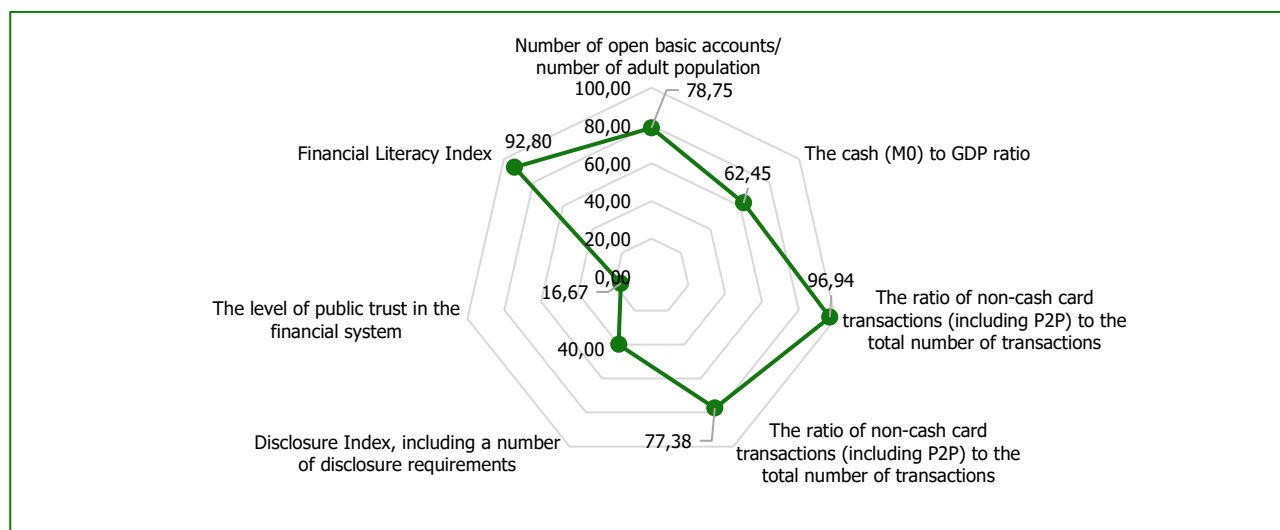


Figure 9. Radar of financial inclusion of the Ukrainian banking sector.

The area of the "ideal" radar is 27364.1 conventional units calculated by using the polygon area formula. The area of the radar in Figure 9 is 12153.58 conventional units or 0.44% of the "ideal" radar. This indicates that the level of achievement of the target indicators of financial inclusion of the banking sector of Ukraine at the time of the study is lower than the average. Considering the importance of this direction for intensification of investment activity, it is worth making efforts to increase both individual indicators and the level of financial inclusion as a whole. Indicators such as cash (M0) to GDP ratio, the information disclosure index, including a number of information disclosure requirements, and the level of public trust in the financial system require special attention.

DISCUSSION

Along with noting the general directions of banks' investment strategy – portfolio diversification, market monitoring, etc. — the author of this study focuses on the possibility of applying some specific areas of such a strategy in the context of financial market instability. Identified directions: investment in stability and resilience, investment in the reconstruction and development of post-conflict regions, increasing the level of financial inclusion.

Authors [23] note that the banks' strategy should include the following areas: expansion of resources, ensuring the reliability of resource storage, diversification of investment to minimize risks, ensuring the appropriate level of liquidity and solvency, penetrating new markets for bank services. The investment policy should be based on the analysis of the structure of assets and liabilities, the calculation of the optimal ratio between liabilities and equity, the minimization of risks, and the search for new sources of investment resources. So, the researchers determined the "classical" directions of investment strategy of banks, which are universal for any banking institutions. Unlike the author's study, the researchers do not take into account such modern trends as sustainable development, nor do they consider opportunities for economies in need of post-war recovery.

Researchers [8] believe that the key factors inhibiting the development of the investment activity of Ukrainian banks are the lack of a proper banking investment mechanism, imperfect management of investment activities, the refusal to introduce new investment products, significant investment risks and the imperfection of corporate management, insufficient experience in the development of effective investment strategies. The researchers come to the conclusion that when the credit resources increase, banks are forced to look for alternative ways to intensify investment activities, in particular, investing in securities. The researchers identified mostly the factors inhibiting the development of investment activities at the level of individual banks. In the author's opinion, it is necessary to improve the investment climate at the state level, and it is also important to take into account the objective need for long-term orientation of investment, one of the promising directions of which are investment in sustainable development, as well as regions with high potential in certain areas. The author's opinion regarding the need for changes at the state level is confirmed in the work of [7], who determine that low investment activity is one of the problems of banking activity in Ukraine. The researchers established that the effectiveness of the investment activity of Ukrainian banks depends not only on their investment strategy, but also on the actions of the state, in particular in the field of monetary and fiscal policy, improvement of the regulatory and legal framework.

Medynska and Rushchyshyn [21] discuss the impact of tax incentives on the intensification of investment activities of Ukrainian banks. The researchers come to the conclusion that the effectiveness of tax incentives may depend on the introduction of the following measures: reduction of income tax rates on loans granted by the banks for stimulating innovation and investment projects; abolition of income tax for banks on investment loans intended to finance the development of priority sectors of the economy in accordance with government programmes; introduction of a tax holiday from income tax, which is aimed at bank capitalization and stimulates investment activity. The work of the researchers, like the author's article, proves the importance of state influence on the investment activity of banks. However, in the author's opinion, this work could have been improved by including measures such as tax breaks for banks investing in sustainability and other tax incentives for institutions implementing sustainable development principles, investing in disaster-affected regions, etc.

In work [24] author reveals the strengths and problems of the banking sector of Ukraine. The researcher notes an increase in the share of non-performing loans (from 30 to 36%) at the beginning of 2022, a reduction in business lending opportunities (in particular, due to an increase in the NBU discount rate to 25% and a corresponding increase in business lending rates to 20%). Among other problems, the scientist notes the problems of financial intermediation of banks: while banks prefer investing in NBU certificates of deposit and government bonds, it is necessary to strengthen the activities of the government and the NBU to reorient banking institutions to perform intermediary functions. According to the researcher, the strategy of the banking system for 2023 should include lowering the NBU discount rate, reforming the system of profitability of banks for liquidity (including the introduction of restrictions on bank investments in NBU certificates of deposit, revision of the standards for the creation of mandatory reserves of banks), introduction of special lending mechanisms (especially small and micro lending) to revive the intermediary functions of banks. An emphasis on the implementation of projects aimed at post-war recovery is common in the work of the researcher and the author's study. Furthermore, the researcher proposes the introduction of special tools of the National Bank for preferential targeted refinancing of bank loans. Projects of small and medium-sized businesses, energy security of the country, which improves the investment climate and can contribute to sustainable development, can be promising directions for targeting such loans.

Author [20] recommends taking into account the innovative component, improving state regulation, and strengthening bank capitalization requirements when elaborating a strategy for the development of the banking system to increase investment potential. Creation of the authorized capital of banks in accordance with the NBU requirements is also an important aspect. It is possible to merge small banks to increase their competitive advantages, to increase the deposit base by strengthening public trust in banking institutions, and part of the profits of banks should be directed to investment development. Moreover, it is worth improving risk management systems in order to reduce the amount of funds diverted to problem loans. The researcher's work reveals the direction of increasing the investment potential of the banking system not considered in the article: the possibility of merging banks to increase efficiency.

Researchers [22] list the components of investment risk assessment aimed at their minimization, dividing such components into qualitative and quantitative. Qualitative ones include: establishment of risk factors, analysis of circumstances under which risk arises, identification of possible areas of risk. Quantitative components are analytical and statistical methods, method of analogues and expert evaluations, and others. The researchers also suggest using Big Data technologies to analyse and manage such risks in order to minimize investment risks for banks. The author's article did not assess investment risks, which makes their assessment a promising direction for further research.

The focus of foreign authors is significantly different from Ukrainian research. Studying European banks, which are mostly characterized by high investment activity, the researchers pay attention to such factors as ecology, sustainable development, renewable energy, innovation, social aspects, etc. Authors [26] emphasize that climate change should be taken into account in financial analysis, financial risk assessment, and banking strategy development. In paper [27] was note the problems faced by banks on the way to implementing digitalization in their strategy. The researchers note that digitalization provides new opportunities for development, but the digital transformation of the banking sector must be a gradual transition through training.

In work [25] was found that banks with higher ESG scores are less risky during financial crises. The researchers also supported the view that moral capital increases the sustainability of businesses. The results of the study showed that the highest positive effect is expected from the introduction of environmental innovations, fair treatment of employees, responsibility for the product, and equal treatment of shareholders. So, banks' participation in ESG practices affects the benefits of sustainable development practices. However, ESG ratings have different effects on the stability of a bank depending on its specifics. In the context of the crisis, only the largest European banks benefit from financial stability. Obtaining benefits of sustainable development practices requires a long time and significant effort to implement them. Therefore, the introduction of ESG is an important area of activity for Ukrainian banks, but one should not expect a quick

result. This conclusion is common to the author's research and other studies, because it took into account the need to introduce sustainable development practices in the context of banking investments and noted that such an investment direction is oriented towards long-term goals.

CONCLUSIONS

The analysis of trends in the investment activity of Ukrainian banks determined that the banking sector is characterized by insufficient investment activity, and banking institutions make investments mainly in government securities. Furthermore, a tendency to prioritizing deposits as a source of financing, as well as some reduction of loans, which can be explained by increasing credit risks, was noted.

Comparison of trends in the volume of securities portfolios of Ukrainian and German banks revealed that the volume of the investment portfolio of German banks is almost 23 times larger than the Ukrainian indicator (as of April 2023), and is more resistant to significant macroeconomic fluctuations and financial turbulence. Forecasting the trends of both portfolios based on retrospective data was more indicative for Ukraine and showed a further uptrend, while the range of possible values for German banks is wider and can indicate both a decline and an increase in the trend.

As a result of the conducted research, some specific directions of the banks' investment strategy were proposed along with its general directions (portfolio diversification, market monitoring, risk analysis, etc.). These include investment in sustainability and resilience and investment in the reconstruction and development of post-conflict regions. The first of the identified directions can be applied to any region of the world, the second - to regions that have experienced military conflicts or other extraordinary events. Investment in sustainability and resilience involve the following aspects: allocation of assets taking into account sustainability and resilience, geographical distribution of investments, long-term approach. Investment in the reconstruction and development of post-conflict regions involve assessing the potential of post-conflict regions, concluding partnership agreements, and supporting the development of businesses in post-conflict regions with a view to their potential. Besides, an important direction of revitalizing the investment activity of banks was to increase the level of financial inclusion, which reaches about 44% of the target for the Ukrainian banking sector at the time of the study.

Furthermore, it was noted for the Ukrainian case that in order to develop and improve the efficiency of investment activity in Ukraine, it is necessary, first of all, to improve the investment climate on the part of the state, which provides for improving regulation and legislation in the field of banking activity, effective solutions in the field of monetary and tax policy, the development of the stock market, promoting innovation, increasing the investment attractiveness of the financial sector, cooperation with international partners.

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

All authors have contributed equally

REFERENCES

1. Elsayed, A. H., & Helmi, M. H. (2021). Volatility transmission and spillover dynamics across financial markets: The role of geopolitical risk. *Annals of Operations Research*, 305, 1-22.
<https://doi.org/10.1007/s10479-021-04081-5>
2. Hossain, A. T., & Masum, A. A. (2022). Russian invasion of Ukraine, geopolitical risk, and global financial markets. *SSRN*.
<http://dx.doi.org/10.2139/ssrn.4056137>
3. Singh, V., & Roca, E. D. (2022). China's geopolitical risk and international financial markets: Evidence from Canada. *Applied Economics*, 54(34), 3953-3971.
<https://doi.org/10.1080/00036846.2021.2019185>
4. Rathore, H. S., & Prajapati, R. (2019). The impact of financial globalization on Indian financial market: A case study of Regional Rural Bank. *SSRN 3389130*.
<http://dx.doi.org/10.2139/ssrn.3389130>
5. Nasreen, S., Mahalik, M. K., Shahbaz, M., & Abbas, Q. (2020). How do financial globalization, institutions and economic growth impact financial sector development in European countries? *Research in International Business and Finance*, 54, 101247.
<https://doi.org/10.1016/j.ribaf.2020.101247>

6. Breidbach, C. F., Keating, B. W., & Lim, C. (2020). Fintech: research directions to explore the digital transformation of financial service systems. *Journal of Service Theory and Practice*, 30(1), 79-102.
<https://doi.org/10.1108/JSTP-08-2018-0185>
7. Brezhnieva-Yermolenko, O. V., Zolotaryova, O. V. & Moskalenko, K. O. (2018). Determinants of investment activity of commercial banks. *Economy and Society*, 19, 948-954.
https://economyandsociety.in.ua/journals/19_ukr/14_2.pdf
8. Kovalenko, M. A., & Boichevska, N. S., (2019). Determinants of investment activity of banking institutions. In: *Formation of the Newest Paradigm of Public and Private Finance Management in Ukraine* (pp. 7-9). KhNTU.
<http://eir.nuos.edu.ua/handle/123456789/6246>
9. Angela Kuznyetsova, Iryna Boiarko, Myroslava Khutorna, and Yuliia Zhezherun (2022). Development of financial inclusion from the standpoint of ensuring financial stability. *Public and Municipal Finance*, 11(1), 20-36.
[http://dx.doi.org/10.21511/pmf.11\(1\).2022.03](http://dx.doi.org/10.21511/pmf.11(1).2022.03)
10. Mihus, I. P., Haman, P. I., Andriyenko, M. V., & Koval, Y. S. (2019). The state of economic security of Ukrainian banking institutions and the effect of economic reforms on formation of anti-crisis measures. *Financial and Credit Activity Problems of Theory and Practice*, 2(29), 32-43.
<https://doi.org/10.18371/fcaptop.v2i29.171997>
11. Prokopenko, O., Mazurenko, V., Kozlianchenko, O., & Muravskiy, O. (2022). Improving customer relations in the banking sector of Ukraine through the development of priority digital banking products and services: Evidence from Poland. *Banks and Bank Systems*, 17(3), 12-26.
[http://dx.doi.org/10.21511/bbs.17\(3\).2022.02](http://dx.doi.org/10.21511/bbs.17(3).2022.02)
12. Kou, G., Olgu Akdeniz, Ö., Dinçer, H., & Yüksel, S. (2021). Fintech investments in European banks: A hybrid IT2 fuzzy multidimensional decision-making approach. *Financial Innovation*, 7(1), 39.
<https://doi.org/10.1186/s40854-021-00256-y>
13. Oppong, G. K., & Pattanayak, J. K. (2019). Does investing in intellectual capital improve productivity? Panel evidence from commercial banks in India. *Borsa Istanbul Review*, 19(3), 219-227.
<https://doi.org/10.1016/j.bir.2019.03.001>
14. He, L., Liu, R., Zhong, Z., Wang, D., & Xia, Y. (2019). Can green financial development promote renewable energy investment efficiency? A consideration of bank credit. *Renewable Energy*, 143, 974-984.
<https://doi.org/10.1016/j.renene.2019.05.059>
15. Kuznyetsova, A., Sydorchenko, T., Zadvorna, O., Nikonenko, U., & Khalina, O. (2021). Assessment of aspects of the COVID-19 crisis in the context of ensuring economic security. *International Journal of Safety and Security Engineering*, 11(6), 615-622.
<https://doi.org/10.18280/ijss.110601>
16. Zarubei, V., Kuibida, A., Kozhna, A., Vdovichenko, L., Varenia, N. (2020). Modeling and technology of public administration of socio-economic security for digitalization. *International Journal of Management*, 11(3), 143-154.
https://iaeme.com/Home/article_id/IJM_11_03_016
17. Tay, L. Y., Tai, H. T., & Tan, G. S. (2022). Digital financial inclusion: A gateway to sustainable development. *Heliyon*, 8(6), E09766.
<https://doi.org/10.1016/j.heliyon.2022.e09766>
18. Ambrosio, T., Hall, S. G., & Obydenkova, A. (2022). Sustainable development agendas of regional international organizations: The European Bank of Reconstruction and Development and the Eurasian Development Bank. *Problems of Post-Communism*, 69(4-5), 304-316.
<https://doi.org/10.1080/10758216.2021.1979412>
19. Xie, X., & Wang, S. (2023). Digital transformation of commercial banks in China: Measurement, progress and impact. *China Economic Quarterly International*, 3(1), 35-45.
<https://doi.org/10.1016/j.ceqi.2023.03.002>
20. Cherkasova, S. V. (2019). Banking investment activity at domestic stock market. *Entrepreneurship and Trade*, 24, 51-58.
<https://doi.org/10.36477/2522-1256-2019-24-07>
21. Medynska, T. V., & Rushchyshyn, N. M. (2021). Tax incentives for banking investment activities in Ukraine. In: *Proceedings of the 4th International Scientific and Practical Conference «Competitiveness Model of Innovative Development of Ukraine's Economy»*. Central Ukrainian National Technical University.
<http://dspace.kntu.kr.ua/jspui/handle/123456789/11301>
22. Kazak, O., & Chestyakova, D. (2021). Risk management of investment activity of Ukrainian banks in the conditions of information economy development. *Efficient Economy*, 3.
<https://doi.org/10.32702/2307-2105-2021.3.91>
23. Anzhela Kuznyetsova, Iryna Boiarko, Victoria Rudevskaya, and Vladyslav Maslov (2022). Development of business architecture of the banking

- sector based on public-private partnership. *Banks and Bank Systems*, 17(2), 150-162.
[http://dx.doi.org/10.21511/bbs.17\(2\).2022.13](http://dx.doi.org/10.21511/bbs.17(2).2022.13)
24. Danylyshyn, B. (2022). How the war affected the financial sector of Ukraine: The main achievements and failures of this year and tasks for the next. *Economic Truth*.
<https://www.epravda.com.ua/columns/2022/12/28/695523/>
25. Chiaramonte, L., Dreassi, A., Girardone, C., & Piserà, S. (2022). Do ESG strategies enhance bank stability during financial turmoil? Evidence from Europe. *The European Journal of Finance*, 28(12), 1173-1211.
<https://doi.org/10.1080/1351847X.2021.1964556>
26. Battiston, S., Dafermos, Y., & Monasterolo, I. (2021). Climate risks and financial stability. *Journal of Financial Stability*, 54, 100867.
<https://doi.org/10.1016/j.jfs.2021.100867>
27. Kitsios, F., Giatsidis, I., & Kamariotou, M. (2021). Digital transformation and strategy in the banking sector: Evaluating the acceptance rate of e-services. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(3), 204.
<https://doi.org/10.3390/joitmc7030204>
28. National Bank of Ukraine. (2023).
<https://bank.gov.ua/>
29. Minfin. (2023). Dow Jones Industrial Average.
<https://index.minfin.com.ua/ua/markets/stock/dji/>
30. Deutsche Bundesbank. (2023). Securities portfolios by category of banks.
https://www.bundesbank.de/dynamic/action/en/statistics/time-series-databases/time-series-databases/745582/745582?startDate=2020&tsTab=0&listId=www_s100_bh54_01&tsId=BBK01.OU0807&id=0&dateSelect=2023
31. Deutsche Bank. (2023). Sustainable finance.
https://www.db.com/what-we-do/responsibility/sustainability/sustainable-finance?language_id=1
32. National Bank of Ukraine. (2021). Development strategy of the financial sector of Ukraine until 2025.
https://bank.gov.ua/admin_uploads/article/Strategy_FS_2025.pdf?v=4

Жураховська Л.

ІНВЕСТИЦІЙНА СТРАТЕГІЯ БАНКІВСЬКОГО СЕКТОРА В УМОВАХ НЕСТАБІЛЬНОСТІ ФІНАНСОВИХ РИНКІВ

Банківський сектор відіграє провідну роль в ефективному функціонуванні фінансового ринку. Проте сучасні глобальні тенденції можуть мати суттєвий негативний вплив на фінансові ринки, що прямим чином відображається на банківських структурах. Це зумовлює необхідність постійного перегляду та вдосконалення банківських стратегій, зокрема інвестиційних. Метою дослідження є формування пріоритетних напрямів інвестиційної стратегії банківського сектора в умовах нестабільності фінансових ринків. У роботі використано методи економіко-статистичного аналізу, а саме – горизонтальний і вертикальний аналіз, прогнозування на основі ретроспективних даних, а також метод порівняння та метод радара. На основі аналізу тенденцій інвестиційної діяльності банків України визначено, що банківському секторові характерна низька інвестиційна активність, а банки здійснюють інвестиції здебільшого в державні цінні папери. Порівняння інвестиційного портфеля українських та німецьких банків надало змогу визначити високу залежність обсягу портфеля українських банків від геополітичних подій, тоді як німецькі банки демонструють більшу стійкість. Запропоновано загальні напрями інвестиційної стратегії банків в умовах нестабільності фінансових ринків (диверсифікація, моніторинг, забезпечення ліквідності) та визначено більш специфічні напрями такої стратегії: інвестиції в сталість та резилієнтність, інвестиції у відновлення та розвиток постконфліктних регіонів, посилення фінансової інклюзії. Практична цінність роботи полягає в можливості використання її результатів державними управліннями та керівництвом банків для підвищення ефективності інвестиційної стратегії в довгостроковій перспективі. Подальші дослідження матимуть на меті розробку інвестиційної бізнес-моделі банків з урахуванням принципів сталого розвитку на прикладі однієї з провідних банківських установ України.

Ключові слова: інвестиційна стратегія, банківська сфера, нестабільність, фінансові ринки, геополітичні фактори, кредити, цінні папери, фондовий ринок, активи банків, фінансова інклюзія

JEL Класифікація: G21, G32, G11, G15, E44