

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

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" \_\_\_\_ " \_\_\_\_ 2024 p.

**COMPREHENSIVE ASSESSMENT OF THE COMPETITIVENESS OF  
FINANCIAL SERVICES MARKETS**

Speciality 072 Finance, Banking and Insurance

EP "International Financial Management"

Qualification (master's) work

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Evaluation: \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
(points/ECTS scale/national scale)

Chairman of the EC: \_\_\_\_  
(Signature)

## SUMMARY

Lobur D. Comprehensive Assessment of the competitiveness of Financial Services Markets. Speciality 072 Finance, Banking and Insurance. Educational Program "International Financial Management." Vasyl Stus Donetsk National University, Vinnytsia, 2024.

The master's thesis is dedicated to the comprehensive assessment of the competitiveness of financial services markets, taking into account contemporary trends and challenges within the financial sector. The study examines the dynamics of supply and demand in the market, identifying key factors influencing the competitiveness and sustainability of financial services.

The primary objective of the exploration is to determine strategic development directions for the market, conduct a competitive analysis, and identify opportunities for improving the efficiency of market participants' activities. The thesis also explores the impact of technological innovations such as digital technologies and blockchain on the financial services market.

The exploration approach is based on meticulous risk analysis, comparative analysis of competitors, and modeling various scenarios for market development. The findings not only help address current challenges but also identify prospects for innovative development in the financial market. The thesis makes a significant contribution to understanding global and regional aspects of the financial sector, providing foundations for strategic management and development of financial services in the contemporary economic environment.

Keywords: benchmarking, financial market, banking system, currency market, credit-investment portfolio, profitability.

68 pages, 18 tables, 10 figures, 1 appendice, 40 references.



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## INTRODUCTION

**Relevance of the topic.** The study of a comprehensive assessment of the competitiveness of financial services markets is very relevant for several reasons.

First, the financial sector is one of the most important segments of any country's economy. It ensures the functioning and development of other sectors of the economy, such as industry, agriculture and trade. Therefore, it is important to have a clear assessment of the competitiveness of the financial sector to ensure its sustainability and expansion.

Second, financial services markets are becoming increasingly aggressive and globalized. Competition between banks, insurance companies, investment funds and other financial market participants is becoming fiercer. Therefore, it is important to have a comprehensive assessment of competitiveness, which takes into account various aspects such as financial performance, number of customers, quality of services, etc.

Thirdly, a comprehensive assessment of the competitiveness of financial services markets helps to identify the strengths and weaknesses of different market participants. This makes it possible to develop effective strategies to protect and improve competitiveness. In addition, such an assessment can be used to compare different markets and identify potential areas of development.

Thus, the relevance of the study of a comprehensive assessment of the competitiveness of financial services markets is determined by its importance for the country's economy, the presence of strong competition and the need to develop strategies to improve competitiveness.

A significant contribution to the development of the theory and practice of introducing modern technologies for assessing the competitiveness of financial services markets was made by O.V. Burban, O.D. Vasylyk, A. Deshko, R.S. Kvasnytska, L.S. Seliverstova and others. However, some aspects of this problem have not been fully clarified, including the issue of assessing the competitiveness



of individual financial institutions in the financial services markets requires a more detailed study.

**The aim of the research** is to deepen the theoretical and practical foundations of a comprehensive assessment of the competitiveness of financial services markets.

To achieve this goal, it is necessary to solve the following **tasks**:

- to determine the theoretical aspects of the formation of competitiveness in the financial services markets;
- describe the methodology for a comprehensive assessment of the competitiveness of financial services markets;
- to conduct a systematic analysis of the indicators of the current state of the financial services market segments;
- analyze the competitiveness of individual segments of the financial services market;
- assess the impact of factors on the competitiveness of individual segments of the financial services market;
- to develop a concept for improving the assessment of competitiveness of financial services markets with the help of the web, benchmarking and mathematical modeling.

**The object of the exploration** is the process of formation of competitiveness in the financial services markets.

**The subject of the exploration** is the methods and means of comprehensive assessment of the competitiveness of financial services markets.

**The theoretical and methodological basis of the research** is the works of domestic and foreign authors in the field of the financial system of Ukraine, legislative and other regulatory documents, publications in periodicals, monographs of the country's leading economists.

**Exploration methods.** The exploration methodology is based on general scientific methods: analysis and synthesis; systemic, logical and comparative

analysis; sample surveys; economic and mathematical modeling; graphical method. Reference, statistical and normative-legal materials on the problem under study were used.

**Scientific novelty of the exploration:** the concept of improving the assessment of competitiveness of financial services markets is proposed, the effectiveness of various methods for assessing competitiveness is investigated and the creation of a model of a comprehensive system for objective assessment and comparison of individual segments of the financial services market is proposed.

**The theoretical significance of the obtained results** lies in the contribution to the existing body of knowledge in the field of assessment of financial services markets. The study provides a comprehensive understanding of the markets and competition faced by international markets, particularly in banking and insurance, especially in volatile environments such as Ukraine during the war. It identifies gaps in theories and models and proposes new approaches to existing methods.

**The practical significance of the results of the research** lies in the fact that it contains practical recommendations for improving the assessment of the competitiveness of financial services markets. The study presents such methods as: analysis of the portfolio of financial services, benchmarking analysis, competitiveness index and mathematical modeling.

**Provisions to be defended:** the proposed definition of the assessment of the competitiveness of individual segments and the financial services market as a whole, the concept of improving the assessment, developed on the example of the largest segment of the financial services market, the banking sector, using certain methods, in particular, the "web" of benchmarking, mathematical modeling, etc.

**Structure of the thesis.** This thesis consists of an introduction, three sections, conclusions, and a list of references. The total volume of the work is 68 pages. The list of references includes 40 titles.



## CHAPTER 1

### THEORETICAL AND METHODOLOGICAL FOUNDATIONS OF COMPREHENSIVE ASSESSMENT OF COMPETITIVENESS OF FINANCIAL SERVICES MARKETS

#### 1.1 Theoretical Aspects of Competitiveness Formation in Financial Services Markets

Marketable financial services instruments, such as funds, securities, loan agreements, and currency values, are objects in the financial sector. They reflect temporarily available funds or financial resources of market participants. When conducting transactions in the financial services market, participants choose the appropriate financial instruments for their implementation.

The goods of the financial services market are funds and securities, which are the objects of purchase and sale in the market.

Securities constitute a key product in the financial services market and are a unique object of trading in this market. These financial instruments are proof documents that prove debt obligations or ownership.

All participants (subjects) of the financial services market can be classified according to several main features (Figure 1.1).

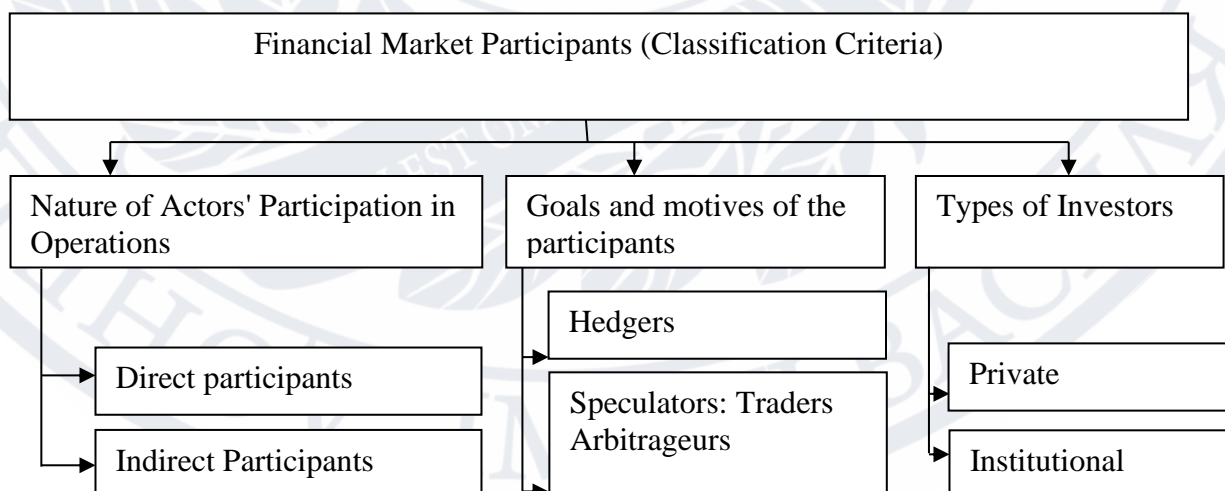


Figure 1.1 – Main subjects of the financial services market

Source: [15, p. 128]

Thus, according to the nature of participation in transactions, the subjects of the financial services market can be divided into two groups: indirect (direct) and indirect (indirect).

Direct participants in financial markets include exchange members who enter into transactions on their own (dealers) or on behalf of and on behalf of clients who are not members of the exchange (brokers or brokers). Indirect market participants include entities that are not members of the exchange and request the services of direct market participants, and among them the largest are called market makers.

In the domestic financial market, the processes of accumulation, distribution and redistribution of free financial resources between different sectors of the economy of different countries are constantly taking place.

The structure of the financial services market can be presented as follows (Fig. 1.2).

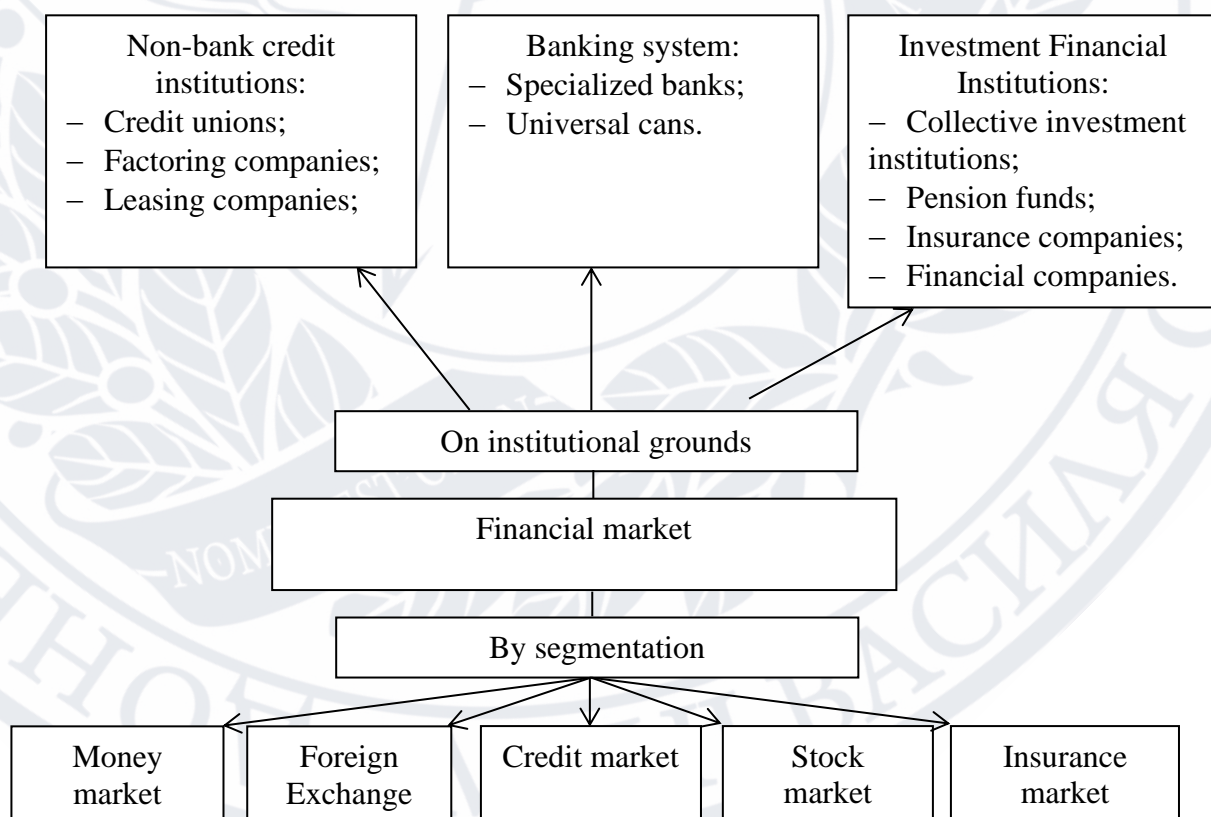


Figure 1.2 – Structure of the financial services market in Ukraine

Source: [13]



From an organizational point of view, the financial services market is a system of independent separate markets (segments), in each of which markets for specific types of financial assets (segments) are distinguished [16]:

- 1) money market;
- 2) foreign exchange market;
- 3) credit market;
- 4) stock market;
- 5) insurance market.

Since individual segments of the financial services market have their own unique structure and mechanisms of functioning, O. Bakaev proposes to group them into different components of the financial services market, such as the securities market (stock market), the foreign exchange market and the credit market. It is important to note that in developed financial markets, the foreign exchange market is generally integrated, and the credit market acts as a separate component of the loan instruments market.

From a functional point of view, the financial services market can be divided into markets for currencies, derivatives, insurance services, stocks, loans, and beyond. Each of these markets can be broken down into narrower categories, for example, the credit market is seen as a combination of the long-term debt securities market and the bank loan market. It is important to note that the market for long-term debt securities is also included in the stock market, which indicates its dual nature, although some researchers only include the stock market in the stock market. [15, c. 128].

From the point of view of the terms of circulation of financial assets, the financial services market can be divided into two parts: the money market (short-term) and the capital market (long-term), structuring it according to the organizational and economic criterion (Fig. 1.3).

Thus, the domestic financial services market in the country is a complex and internally structured system. The definition of its essence and structure does not

have a single approach, and there is no clear definition of the segments that make up the modern financial services market.

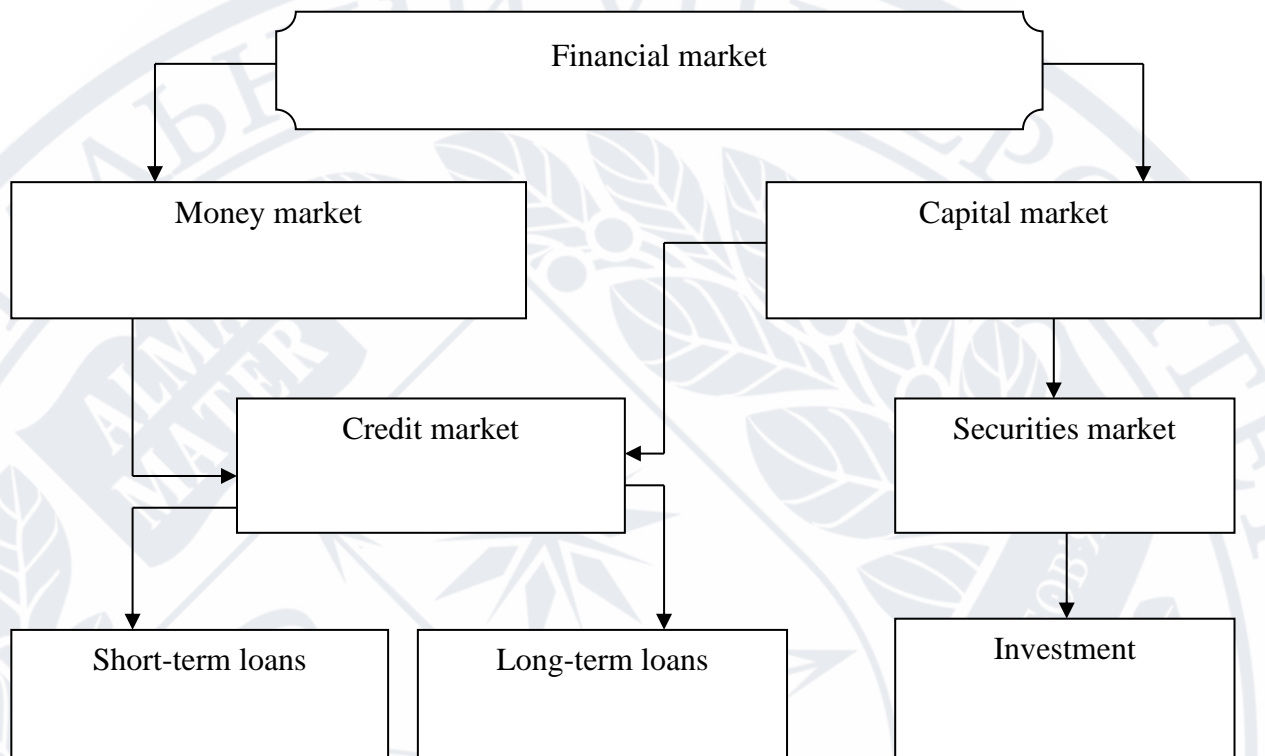


Figure 1.3 – Organizational and economic structure of the modern financial services market

Source: [1, p. 215]

The system of legal regulation of financial activity includes the norms defined by the following legal documents [16, p. 89]:

- the Constitution of Ukraine;
- international agreements signed and ratified by Ukraine;
- Civil Code of Ukraine;
- laws and resolutions of the Verkhovna Rada of Ukraine;
- decrees and orders of the President of Ukraine;
- decrees, resolutions and orders of the Government of Ukraine;
- normative acts (instructions, methods, provisions, orders) adopted by ministries, departments, central executive bodies and registered with the Ministry of Justice of Ukraine;



- normative acts of the body that, in accordance with the legislation of Ukraine, supervises insurance activities;
- normative acts of local executive authorities in cases where certain issues of regulation of insurance activities have been delegated to these bodies by the decision of the President or the Government of Ukraine.

Consequently, in the financial market, there are both institutions that provide financial services and customers who use these services. The first category includes both financial institutions and individuals engaged in entrepreneurial activities. According to the current legislation, more specifically the Law of Ukraine "On Financial Services and State Regulation of Financial Services Markets", a financial institution is a legal entity that provides one or more financial services, as well as other services or transactions related to these services, provided that they are included in the relevant register in accordance with the law.

The category of financial institutions includes banks, insurance companies, credit unions, leasing companies, pawnshops, trust companies, financial companies, and other legal entities that provide financial services and other transactions related to these services.

Domestic support for the Ukrainian financial services market remains at an insufficiently high level. Ukraine's institutional investors, such as pension funds and insurance companies, lag behind Western investors in terms of investment in Ukrainian market. Western investors are highly reactive to any news, which is different from domestic ones.

In addition to the low liquidity and lack of strong domestic support in the financial services market of Ukraine, there is another serious problem: low turnover of shares on the stock exchange. This indicates that the stock market of Ukraine is very underdeveloped, unable to ensure the implementation of long-term investment strategies. This, in turn, slows down the development of the market and the national economy.

There are several problems that negatively affect the development of the domestic financial market, including a low level of protection of the rights of owners and buyers of securities, imperfection of legislation, a low level of regulatory and information support for market participants, the lack of equal conditions for participants, underdevelopment of organizational and financial mechanisms, the lack of open secondary markets for securities and many others. These problems pose significant obstacles to the effective development and functioning of the Ukrainian financial market.

The financial market plays a key role in the functioning of the country's financial system, determining its stability and the possibility of intensive development [22].

In Ukraine, it is important to implement a holistic and long-term strategy for the development of the financial sector. It is also necessary to ensure coordination of activities between different authorities aimed at the development of the country's financial sector. This will help increase the stability of the financial system and contribute to its effective functioning in the long term.

Building a real and effective financial services market requires it to be based on certain principles:

- free access to market information and market instruments for all financial market participants;
- market transparency and real protection of investors;
- liquidity of financial instruments of the market;
- competitiveness and efficiency;
- compliance with international standards.

The financial services market has a rather complex internal structure, and its functioning achieves the greatest efficiency when all its components are involved. At the same time, fulfilling the tasks that are assigned to long-term development and stability in general, where one of the main ones is to improve the regulation of the financial market [22].



The restoration of public confidence in the banking system, expressed in the growth of their deposits, is possible only in the context of a slowdown in the economic decline and an increase in the well-being of Ukrainians. Thus, at this stage, it is extremely important to support the state in the development of the financial sector.

This support should be aimed at redistributing resources to stimulate economic growth and supporting banks through refinancing mechanisms with clear control over the use of allocated funds. In specific cases, the state's participation in the capital of banks may be important.

One of the effective tools that can be used is the creation of a state development bank. Through this bank, public funds can be directed to support strategic investment and innovation projects. It is also important to be able to provide business entities with access to long-term credit resources, which, in turn, will contribute to the development of export potential.

Such an initiative can be a key factor in restoring economic growth and creating a stable financial environment in the country. [9].

Thus, although recently we have had the opportunity to observe positive trends in the development of the financial market of Ukraine, the level of its development leaves much to be desired. In comparison with the financial markets of developed countries, the domestic financial market is at the initial stages of development, in a state of low liquidity and insufficient attractiveness to attract investors – potential users of its services.

Therefore, in order to eliminate the existing shortcomings in the financial services market, it is necessary to start with a systematic analysis of the legislative and regulatory framework that regulates the activities of the financial market. It is important to clarify all cause-and-effect relationships and eliminate negative phenomena that arise during its functioning.

Further, the directions of reforming the financial market in Ukraine and improving its infrastructure in accordance with the European model should include [23]:

- Phased implementation of a centralized depository system to facilitate and unify operations;
- standardization and expansion of the roles of persons providing services at this stage, in order to increase the efficiency and stability of financial transactions;
- measures to increase the transparency of operations in the stock market and improve the functioning of trading platforms;
- implementation of measures to increase the level of corporate governance and ensure the protection of investors' rights in the market;
- active measures to increase the volume of transactions with public debt obligations in the domestic market, in particular the secondary market;
- stimulation of banking activity in conducting operations on the stock market.

These measures are aimed at improving the functioning and popularity of the stock exchange in Ukraine. Successful development of the stock market will help attract investment and bring the country's economy closer to world standards, which, in turn, will have a positive impact on the country's economic development.

Etymologically, the origin of the word "competition" is related to the Latin expression "concurrentia", which translates as "collision" or "competition". The first definitions of the term, based on behavioral analysis, appeared in the economic literature. Adam Smith, in particular, interpreted competition as fair and non-colluding competition between market participants for the most favorable conditions for the sale and purchase of goods. He considered price changes to be the main method of competition. At the same time, he noticed that the market economy follows strict rules of behavior in the market. As a result of the rivalry between sellers and buyers, a common price for homogeneous goods and a specific



type of supply and demand curves are established. Competition is the "invisible hand" that coordinates the activities of market participants [7, p. 279].

If the concept is specified from the point of view of a market economy, then market competition is the struggle of economic entities for profit. The main way to make a profit in a market economy is the sale of goods and the surplus value embedded in it. At the same time, the activities of business entities are carried out in conditions of limited resources necessary for the production of goods, and demand for these products from consumers.

The essence of competition and its driving forces are discussed in detail in the works of the famous modern economist Michael Porter. The result of Porter's research was the concept of the five forces of competition, which makes it possible to determine the determinants that most affect economic entities in the conditions of market competition. According to this concept, the state of competition in a particular market can be characterized as a consequence of the interaction of five competitive forces (Fig. 1.4).



Figure 1.4 – The Five Forces of Competition

Source: developed by the author by [16]

These forces determine the conditions for the functioning of a particular market and its constituent parts. The significance of each of the five forces is determined by the peculiarities of the structure of the industry, its production, technological, economic and other characteristics.

Michael Porter notes that competition is a dynamic process that is constantly evolving and changing the landscape. New products, marketing methods, production processes, and market segments are constantly emerging in this landscape. Changes in the market occur through the interaction of forces that create the conditions for innovation and transformation. Porter himself identifies at least eleven main driving forces that change the conditions and nature of competition [31, p. 123].

Differences in economists' approaches to the essence of competition are also reflected in the consideration of the category of competitiveness. The main task of every researcher who studies the problems of competitiveness of an organization is to determine the criteria, as well as to find the sources and factors of competitiveness. In the economic literature, one can find very heterogeneous definitions of competitiveness.

So, competition in the financial services market is a situation where there are two or more companies in the market that offer similar financial services.

Competition in the financial services market occurs in many areas, such as banking, insurance, investment, etc. Competition can manifest itself in the form of lower prices for services, improvement of the quality of service, introduction of new products and innovations. Competition has a positive impact on consumers, as it forces companies to constantly improve and offer better conditions and services. At the same time, competition is a challenge for businesses that must find new ways to attract customers and maintain their competitiveness.

The competitiveness of financial institutions in the financial services market is their ability to compete effectively with other market participants and ensure customer satisfaction.

Financial institutions can be competitive in various aspects, such as:

– Products and services – the competitiveness of a financial institution is determined by the variety and quality of its offerings. It must have a wide range of



products and services that meet the needs of different customers, as well as be innovative, offering unique and high-quality solutions;

- Pricing policy – competitiveness is also determined by the price conditions offered by a financial institution. It must ensure competitive prices for its products and services while ensuring a sufficient level of revenue;

- Customer Service – A financial institution must provide a high level of customer service in order to attract and retain customers. This means responding to customer inquiries in a timely and high-quality manner, providing personal advice and helping to solve their problems;

- Reputation and credibility – A financial institution must have a solid reputation and a high level of trust among customers and the public. This can be achieved by adhering to high standards of ethics, transparency and accountability;

- technological infrastructure – a financial institution must have a modern technological infrastructure in place to ensure the speed and quality of financial transaction processing, data security, and access to online services.

To ensure the competitiveness of a financial institution, it is necessary to conduct continuous market analysis, identify customer needs and expectations, and improve its products, services, and processes. Only in this way will it be able to successfully maintain and expand its position in the market.

## **1.2 Methodologies for Comprehensive Assessment of the Competitiveness of Financial Services Markets**

In modern analytical studies, various criteria are used to assess the competitiveness and stability of national and regional financial services markets, which include indicators of financial depth, market liquidity, financial integration, etc. Complex methodologies developed by specialists from the World Bank, the International Monetary Fund, the World Economic Forum, and the International Institute for Management Development are also used, providing a more complete assessment of the level of competitiveness and efficiency of the financial market.

In today's world, a multi-segment financial market that offers a wide range of financial services at competitive prices is considered competitive. It uses many different financial instruments, shows high results in the work of financial institutions and ensures the protection of the rights of its participants.

To assess the competitiveness of financial services markets, integral methods are used, which allow calculating the integral competitiveness index and building appropriate ratings. To calculate the integral indices of competitiveness of national financial services markets, three methods are used, which are used by specialists of the World Economic Forum and the International Institute for Management Development. According to two of these methods, the level of development of the financial market is considered a component of the overall competitiveness of the national economy.

A comparative analysis of integral indicators used to assess the competitiveness of financial services markets is given in Table. 1.1.

Table 1.1 – Comparative Analysis of Integral Indicators Used to Assess the Competitiveness of Financial Services Markets

Indicators	Index Development financial market	Level of financial Development	Level of development financial market
Developer	World Economic Forum	World Economic Forum	International Institute for Management Development
Published in	The Global Competitiveness Report	The Financial Development Report	World Competitiveness Yearbook (World Competitiveness Yearbook)
Index type	Component of the Global Competitiveness Index	Self-Index	Component of the "Business Performance" Factor of the Competitiveness Index national economy
Volume of studied markets in 2022	148	62	60



Continuation of Table. 1.1

Factors taken into account in the calculations	Performance indicators of financial services markets.	Institutional environment.	Efficiency of the banking system. Stock market efficiency.
Ukraine's place in the ranking	117	59	60

Source: developed by the author based on [25, 26, 27, 30]

The World Economic Forum uses two main indicators to measure the competitiveness of financial markets – the Financial Market Development Index, which is part of the Global Competitiveness Index, and the Financial Development Index.

According to the first methodology, the development of the financial market is considered as an external factor, which, together with other 11 factors, determines the overall index of global competitiveness. This index is calculated based on an assessment of financial market performance, including the availability and accessibility of financial services, funding opportunities through the stock market, the availability of credit, and the availability of venture capital. Indicators of confidence in the financial system, such as the stability of the banking system, regulation of stock exchanges, and the level of protection of creditors' and borrowers' rights, are also taken into account. The assessment of indicators is based on statistical data on the state of the financial sector and the results of surveys of company executives from around the world.

The advantage of this methodology is that it is possible to get free access to the analytical report "The Global Competitiveness Report" and use a large sample of countries whose financial markets are subject to assessment. This allows us to get a more complete picture of the state of not only national and regional financial systems, but also the global financial market [30].

The second method, used by the World Economic Forum since 2008 to assess the competitiveness of national financial services markets, is to calculate the

level of financial development. Under this method, financial development should include policies and institutions that ensure effective financial intermediation and the functioning of financial markets, as well as access to capital and financial services. The high level of financial development of the country is associated with the availability of various financial services, which makes it possible to distribute risks among market participants.

According to the WEF methodology, the level of financial development is determined by assessing indicators in various categories, namely: institutional environment (legal and institutional framework of financial markets), business climate (resource, logistical and technological support of the financial sector), financial stability (level of stability of the financial system in relation to various types of crises), banking financial services (indicators of the banking system), non-bank financial services (role non-bank financial institutions and their performance indicators), financial markets (markets for stocks, bonds, derivatives and foreign exchange market), financial openness (availability of free access to capital and financial services).

The WEF methodology has such advantages as access to the analytical publication "The Financial Development Report" and many analyzed parameters, which allows for a deeper and more accurate assessment of the level of financial development of national economies. On the other hand, the number of financial services markets to be analyzed is half that compared to the previous methodology (only 62 countries instead of 148 countries), which leads to limited data in the report [29].

The methodology for assessing the competitiveness of financial markets, proposed by the International Institute for Management Development, has a similar drawback, which consists in taking into account not an independent index of financial markets development, but the result of several factors, including the efficiency of the banking system, the stock market and financial management. The assessment is carried out in the national markets of 60 countries.



The results of the rankings compiled according to these methods are generally similar. For example, Hong Kong's financial services market is top in both rankings, while Ukraine's market is in low positions in both overall rankings.

In the above-mentioned methodologies, the main commonality is the derivation of the aggregate index of financial market development and the ranking of countries on the basis of the assessments of individual indicators. In addition to index methods, other comprehensive methodologies are also widely used, which provide an overall assessment of the state of the financial sector of a country or region, but without defining a generalized indicator. These methodologies offer systematized lists of indicators, the assessment of which helps to determine the level of development of the financial services market.

The study of modern scientific literature and analytical publications makes it possible to identify the following comprehensive methods for assessing the competitiveness and efficiency of national financial markets, which have the nature of systematization of evaluation criteria:

1. The methodology for assessing the state of financial markets, developed by the World Bank, proposes to assess financial services markets (in particular, the stock market and the banking services market) and financial institutions taking into account financial depth (size), accessibility, efficiency and stability. The results of the analysis of financial sectors according to these criteria are presented in the form of the database "The World Bank's Global Financial Development Database" [28].

2. The Financial Sector Assessment Program, developed jointly by the International Monetary Fund and the International Bank for Reconstruction and Development, is based on the analysis of financial stability (IMF) and financial development (IBRD) indicators. This methodology is used by countries to produce individual reports.

The described detailed methodology for assessing the state of national financial services markets can be found in the IMF handbook entitled "Financial Sector Assessment: A Handbook" [25].

Other available methods for assessing the competitiveness and level of development of financial services markets have a more specialized approach, as they focus on the study of individual components of the financial sector or individual segments of the financial services market. For example, the IMF uses a methodology for assessing financial strength indicators, known as Financial Soundness Indicators, to analyze the current financial condition and financial stability of the financial institutions sector in a country.

Thus, integral methodologies for determining the level of competitiveness of financial services markets, using different evaluation criteria and a different number of national markets, demonstrate similar results in ranking countries by the level of financial development.

The integral methodologies of the World Economic Forum and the International Institute for Management Development have an advantage in comparing the state of national financial services markets for comparative research and assessment of the general level of development of regional financial markets. The methodologies used by the IMF and the IBRD are systematized lists of assessment indicators that provide an idea of the state of the financial sector in the country. However, cross-country and cross-regional comparisons of financial markets based on these methodologies are complex.



## CHAPTER 2.

### ASSESSMENT OF THE COMPETITIVENESS OF FINANCIAL SERVICES MARKETS IN MODERN CONDITIONS

#### 2.1 System analysis of indicators of the current state of financial services market segments

The financial services market is a key component of the country's economy, its effective development is of great importance for ensuring the economic stability of the nation. The key players in this market in Ukraine are commercial banks, insurance companies and stock exchanges. They play an important role in the accumulation of financial resources and have a direct impact on the development of production, the investment climate and the standard of living of the population [22].

The modern foreign exchange market of Ukraine operates in an extremely unfavorable external environment and aggravation of socio-political tensions in society. These conditions have a negative impact on the national economy and hinder innovative development. In recent years, the hryvnia exchange rate has degraded significantly. Thus, as of 2020, the official exchange rate of the hryvnia to the US dollar was at the level of UAH 27.19 per 1 US dollar, and to the euro – UAH 28.42 per 1 euro (Figure 2.1).

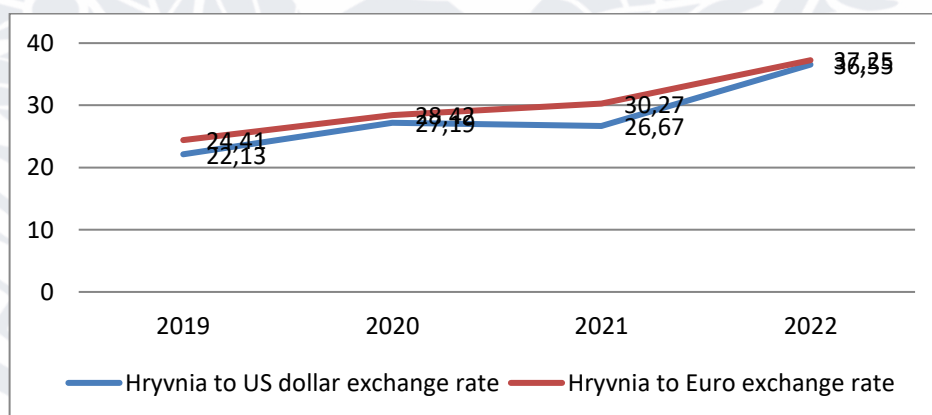


Figure 2.1 – Dynamics of the average annual exchange rate of the hryvnia against the dollar and the euro

Source: [11]

At the beginning of 2022, the hryvnia exchange rate against the US dollar was UAH 28.7 per 1 US dollar. As of the end of 2022, the official exchange rate of the hryvnia against the US dollar was at the level of UAH 36.55 per 1 US dollar [18].

When analyzing the main reasons for the depreciation of the national currency in comparison with foreign currency, it should be noted that Ukraine, which is a country with a commodity economy, mainly depends on external prices for the main export destinations, such as metals, ores and grain. Even the hard-hitting agricultural sector of the economy does not insure against the impact of hostilities, which have led to a significant reduction in export foreign exchange earnings. This, in turn, led to a shortage of foreign currency in the foreign exchange market of Ukraine.

An important indicator of monetary policy is the level of monetization of the country's economy. Depending on the supply of money, the transmission mechanisms may change their strength. Ukraine's economy was not uniformly monetized throughout the study period (Table 2.1).

Table 2.1 – Dynamics of the level of monetization of the Ukrainian economy

Indicator	2016	2017	2018	2019	2020	2021	2022
M2, mln. UAH	771100	906300	955300	993810	1102390	1 273 771	1283652
GDP, mln UAH	1408889	1454931	1566728	1979458	2383182	2983882	3558706
Monetization coefficient of the economy	54,73	62,29	60,97	50,21	46,26	42,68	35,75

Source: [11]



During 2016–2018. The level of monetization remained almost constant. However, throughout this period, the monetary base has been growing, outpacing the growth rate of nominal GDP. The next peak in the growth of the level of monetization, associated with the financing of the deficit, was observed in 2017. 2019 is characterized by a decrease in monetization to the level of 50.2%. In 2020–2022, the economy's monetization ratio continued to decline to 35.8% at the end of 2022.

The level of monetization is important because of one of the main reasons – the degree of access of banking institutions to financial resources, which determines the further principles of interest rate formation. The NBU is forced to use different tools to regulate interest rates under different conditions of access to resources. The normal value of this indicator is in the range of 70-80%. Thus, the level of monetization of the national economy is insufficient, and its increase to this level is one of the main strategic tasks of the National Bank of Ukraine.

In the stock market, relations are formed regarding the purchase and sale of securities. In turn, securities have a certain value and establish certain relations between issuers and investors regarding the ownership of securities. In general, the securities market moves capital from the investor to production.

In 2021, there is an increase in GDP compared to the volume of trading in the securities market, which amounted to 16.3% of GDP. In 2021, the share of the exchange market in the total trading volume in the securities market increased and amounted to 43.9%.

During the same period, there was a decrease in the exchange segment of the stock market of Ukraine. Compared to 2020, the volume of exchange contracts with securities on trade organizers in 2021 decreased by 12.58% to UAH 205.79 billion, which is equivalent to 6.9% of Ukraine's GDP (Fig. 2.2).

Among the various financial instruments on the exchange market, the highest trading volumes almost always fall on government bonds of Ukraine, as well as on stocks and corporate bonds.

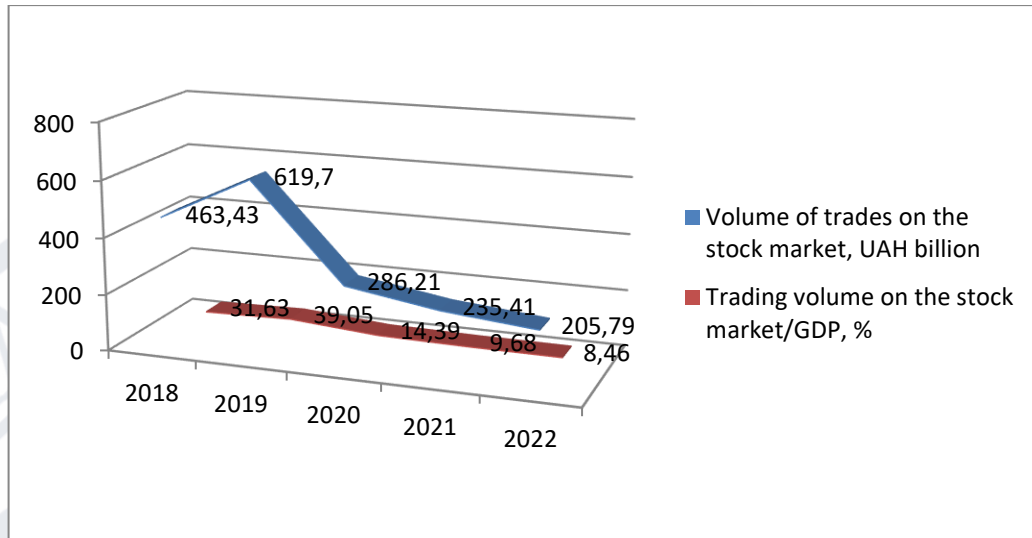


Figure 2.2 – Comparative data on trading volumes in the securities market and GDP in 2018-2022, UAH billion.

Source: [11]

The total volume of equity securities registered by the National Securities and Stock Market Commission (NSSMC) during 2022 amounted to UAH 60.32 billion. This amount was less by UAH 292.84 billion compared to the corresponding period of 2021 (UAH 353 billion). (Figure 2.3).

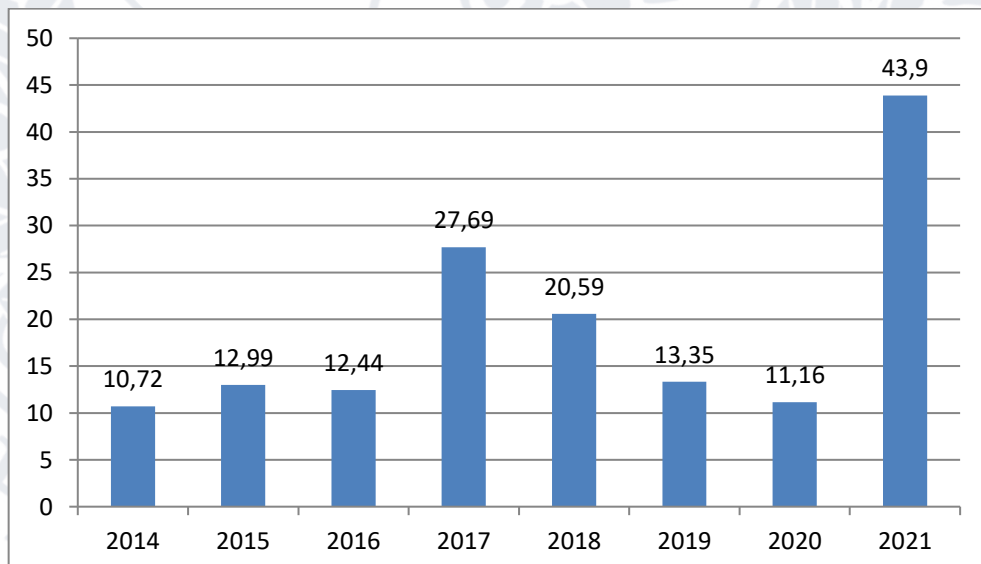


Figure 2.3 – Share of the exchange market in the total volume of trading in the securities market in 2014–2021, %

Source: [11]



Consequently, there is a loss of attractiveness of Ukrainian corporate securities. This can be explained by a number of factors, such as the military conflict, the deterioration of the socio-economic situation in Ukraine, and a significant increase in interest rates on debt instruments of Ukrainian issuers. On the other hand, this situation also indicates insufficient control over their liability, which remains an urgent problem in the domestic securities market.

The most pressing problem of the development of the exchange segment in Ukraine is the presence of a significant number of exchanges, the share of which in trading volumes is negligible. Thus, in 2021, out of 4 stock exchanges available in Ukraine, only two ("PFTS", "Perspektiva") accounted for more than 93% of the value of exchange contracts, the remaining 6 – only 7%. The presence of so many trading platforms that are barely functioning complicates control over securities transactions and contributes to the spread of manipulation of their value.

Since the beginning of 2022, the total assets of Ukrainian banks have increased by 9.3% (UAH 105.24 billion) and exceeded UAH 1.2 trillion. UAH, reaching 1 232.4 bln. UAH. as of 01.10.2022 Compared to the amount of assets as of 01.10.2021, the volume of assets of the banking system increased by 10.3% (UAH 114.92 billion). The growth in assets during the first nine months of 2022 was primarily due to an increase in the volume of the portfolio of securities for sale, other financial assets and funds in other banks [10].

In January-September 2022, the size of the loan portfolio, excluding provisions, increased by 5.6% (by UAH 45.41 billion) (Fig. 2.4). At the same time, the share of long-term loans in the banks' loan portfolio decreased by 1.7 percentage points (from 48.4% to 46.7%) during the first nine months of 2022, while as of January 1, 2018 it was 64.1%.

Table. A.1 of Annex A shows the change in the assets of the banking system for the period 01.01.2022 – 01.10.2022 in the context of groups of banks.

Details and dynamics of changes in individual aggregated balance sheet indicators are given below, in Table. 2.2.

Table 2.2 – Total assets of the banking system of Ukraine, bln. UAH

Balance sheet	In general, in the banking system							
	01.01. 2021	01.04. 2021	01.07. 2021	01.10. 2021	01.01. 2022	01.04. 2022	01.07. 2022	01.10. 2022
Cash and cash equivalents	141608	135671	139511	143870	172 266	150875	154770	162922
Trading Securities	11688	14 945	20 990	17 911	17 463	17 507	15 406	11 265
Funds in other banks	52134	53 739	50 987	37 306	26 682	26 892	30823	32 314
Loans and indebtedness of customers	666101	670017	676956	686 336	694 381	707754	719099	742989
Securities in the portfolio of banks for sale	63990	69 167	74 038	76 422	72 898	97 397	109468	109116
Property, plant and equipment and intangible assets	39402	38 488	39 351	39 688	39 798	39 196	39 546	40 065
Other financial assets	40841	63953	63 190	74 512	64 931	63 108	78 723	84 150
Other assets	38509	36 493	39 372	39 402	38 760	42 406	46 376	43 998
<b>Total Assets</b>	<b>1054272</b>	<b>1082473</b>	<b>1104395</b>	<b>1117446</b>	<b>11271791</b>	<b>1146136</b>	<b>1194211</b>	<b>1226818</b>

Source: developed by the author based on [10]

In 2022, certain components of the loan and investment portfolio continued to grow. Despite a slight decrease in the third quarter of 2022, according to the results of the first nine months of this year, the volume of securities in banks' portfolios for sale increased by 49.68% (UAH 36.22 billion). The volume of loans and debts to customers increased by 7.00%, or by 48.61 billion. UAH. At the same time, the balances of other financial assets increased by 29.60% (UAH 19.22 billion) during January-September 2022. During January-September 2022, the volume of cash and cash equivalents, as well as trading securities, decreased by 5.42% (-UAH 9.34 billion) and by 35.49% (-UAH 6.20 billion), respectively. According to the results of the first nine months of 2022, the volume of funds in other banks increased by 21.11% (UAH 5.63 billion).

Thus, it should be noted that during January-September 2022, asset growth occurred among all groups of banks, except for Group II. During January-September 2013 the total assets of the first group of banks increased by 10.6% (UAH 75.61 billion), in the third group – by 9.0% (UAH 9.15 billion), in the fourth



group – by 21.1% (UAH 24.23 billion), in the second group – decreased by 2.1% (-4.17 billion UAH).

The volume of debt on loans issued increased the most among Group IV banks – by 20.9%. Among the banks of Group I and III – by 9.0% and 13.1%, respectively, and among the banks of Group II – decreased by 6.6%. The size of securities in the portfolios of banks for sale increased in all groups: among Group I banks – by 58.5%, among Group II banks – by 26.9%, among Group III banks – by 7.3%, among Group IV banks – by 35.5%.

The total volume of new loans in January 2022 amounted to UAH 101.2 billion. UAH. In the context of a seasonal slowdown in the dynamics of the money market, the volume of new loan agreements decreased by 29.9% over the month. However, according to 12-month cumulative data, they increased by 0.6%. The vast majority of contracts (85.6%) were concluded with non-financial corporations. At the same time, the volume of new loans to households increased by 12-month cumulative data 2.4% – Table. A.2 of Annex A.

The total amount of new loans in February 2022 amounted to UAH 111.3 billion. The average volume for the previous 12 months was 114.9 billion. UAH. According to the 12-month cumulative data (annualized), the volume of lending amounted to UAH 1,385.7 billion. UAH. The volume of lending to households during the month amounted to UAH 8.8 billion. The average volume for the previous 12 months was 8.9 billion. UAH. Lending volumes on an annualized basis amounted to \$109.1 billion. UAH. The volume of lending to non-financial corporations in January 2022 amounted to UAH 99.7 billion. The average volume for the previous 12 months was 103.1 billion. UAH. Lending volumes on an annualized basis amounted to UAH 1,240.5 billion. UAH.

So, during 2020-2022. The balances of loans granted to residents continued to grow. Credit support by banks of the real sector of the economy was carried out mainly in the national currency. The sector of non-financial corporations remained the main borrower. Among the loans granted to non-financial corporations, the

balances of loans for a period of up to 5 years increased the most. Lending to households in the national currency intensified significantly. At the same time, the sector's foreign currency debt continued to decline. During the study period, new loan agreements were concluded mainly with non-financial corporations.

It is expedient to analyze the activities of insurance companies in Ukraine in the direction of quantitative measurement of the results of the functioning of insurance companies in the domestic market and to outline the dynamics of key indicators of their performance (Table 2.3).

Table 2.3 – Dynamics of development of insurance activities in 2018-2022

INDICATOR	Years				
	2018	2019	2020	2021	2022
Total number of authorized capitals, units	361	310	294	281	233
incl. IC "non-Life", unit.	312	271	261	251	210
incl. IC "Life", unit.	49	39	33	30	23
Gross insurance premiums, UAH mln	29 736,0	35 170,3	43 431,8	49 367,5	53 001,2
Gross insurance payments, mln UAH	8 100,5	8 839,5	10 536,8	12 876,4	14 338,3
Total assets of insurers (according to Form 1 (Accounting Regulations 2)), UAH million	60 729,1	56 075,6	57 381,0	63 493,3	63 866,8

Source: compiled by the author according to [17].

As of 31.12.2022, the number of insurance companies (hereinafter referred to as ICs) in the domestic insurance market was 233, of which 23 were life insurance insurance companies (IC "Life") and 210 insurance companies that carried out other types of insurance (IC "non-Life").

Thus, in 2022, compared to the same period in 2021, the number of insurance companies decreased by 48 units (as of 31.12.2018 – 281 companies, including IC "Life" – 30 companies, IC "non-Life" – 261 companies). Such a situation in the domestic market of insurance services indicates a steady tendency to reduce the number of insurance companies, and one of the main prerequisites for such dynamics is the imperfect business model of insurance companies to meet the



requirements of the current market environment and the volatility of the economic sector of Ukraine.

In 2022, the total assets of insurance companies increased by UAH 373.5 million compared to the same period in 2021. At the same time, the total number of insurance companies as of 31.12.2022 decreased by 48 units. Even taking into account the decrease in the number of insurance companies, the volume of gross insurance premiums and gross insurance payments has increased. Compared to 2021, gross insurance premiums increased by UAH 3,633.7 million in 2022, and gross insurance payments – by UAH 1461.9 million.

In Ukraine, only universal types of insurance are being developed – CASCO, property insurance, life insurance, which are rather compulsory types of insurance, but health insurance is not developed at all or minimally (Fig. 2.4).

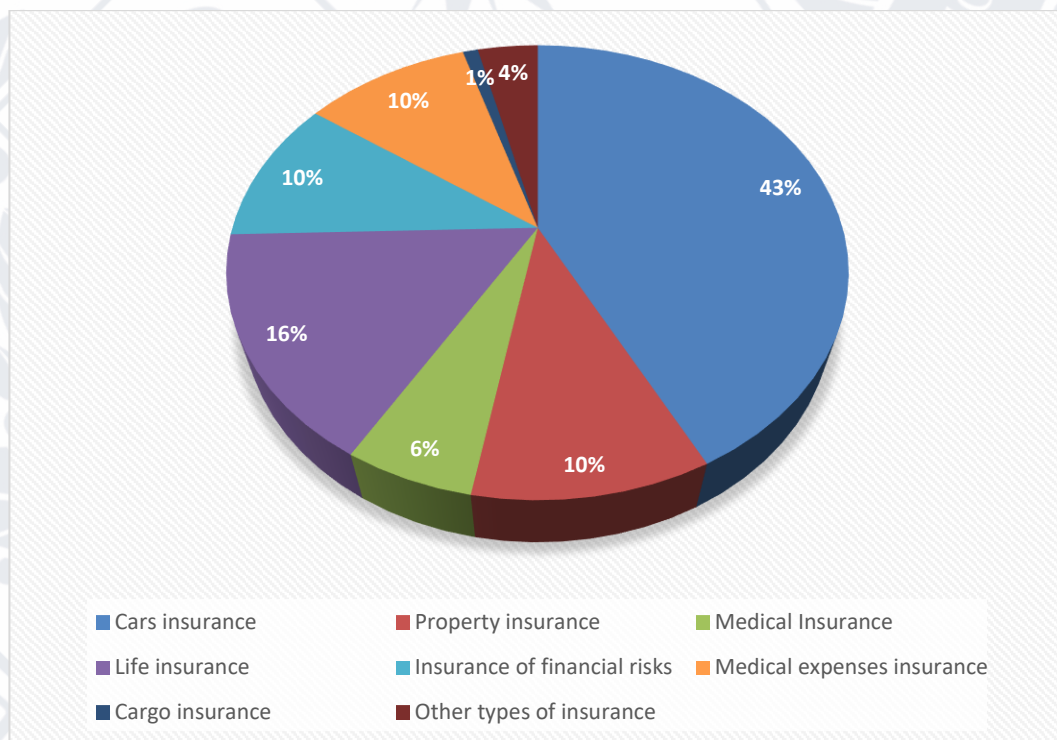


Figure 2.4. Structure of types of insurance in Ukraine as of 31.12.2022, %

Source: compiled by the author based on [17]

As it is known, the level of performance of insurance market entities is adjusted under the influence of the volume of insurance premiums received by insurance companies and insurance payments, which are the main factor in the

formation of the financial result of an economic entity. Let's consider a more detailed analysis of insurance premiums during 2018-2022. Based on Table. 2.4 and Table. 2.5:

Table 2.4 – Insurance premiums by type of insurance for 2018-2022

INSURANCE PREMIUMS, MLN UAH									
Gross	Clean	Gross	Clean	Gross	Clean	Gross	Clean	Gross	Clean
2018		2019		2020		2021		2022	
Motor insurance (CASCO, MTPL):									
7 871,6	7 322,4	9 277,5	8 653,0	10 613,0	9 858,1	12 975,1	11 720,7	15 110,2	13 801,2
Cargo and baggage insurance:									
3 555,4	1 255,4	4 374,6	1 264,2	4 686,7	1 001,4	2 899,0	1 479,3	2 835,0	1 432,3
Property Insurance:									
3 486,2	2 188,1	4 142,4	2 633,3	5 098,9	2 578,5	6 440,2	3 222,0	6 604,8	3 518,4
Financial Risk Insurance:									
3 598,6	2 172,9	3 596,7	1 985,4	5 594,4	1 829,5	5 135,5	1 663,8	4 397,6	2 151,2
Life Insurance:									
2 186,6	2 186,6	2 756,1	2 754,1	2 913,7	2 913,7	3 906,1	3 906,1	4 624,0	4 624,0
Insurance against fire risks and risks of natural disasters:									
1 977,6	1 292,1	2 551,9	1 782,1	3 598,1	1 576,1	4 497,1	1 915,6	4 746,3	2 173,6
Health Insurance (Continuous Health Insurance):									
1 929,2	1 862,1	2 355,5	2 280,2	2 881,3	2 673,9	3 486,7	3 243,1	4 470,3	4 268,8
Third Party Liability Insurance:									
2 059,6	1 391,5	2 093,9	1 430,6	2 925,0	1 613,2	2 567,2	1 659,7	2 238,7	1 424,3
Accident Insurance:									
535,5	442,7	837,1	727,2	1 308,5	1 002,9	1 754,2	1 329,0	1 872,2	1 475,3
Medical Expenses Insurance:									
490,7	469,2	727,0	671,3	891,0	833,2	1 345,9	1 098,8	1 885,5	1 685,9
Credit Insurance:									
348,7	200,2	531,0	505,7	365,0	334,7	1 113,6	577,2	1 102,3	366,3
Aviation Insurance:									
449,0	426,9	501,1	482,7	764,3	662,8	1 041,7	778,5	703,7	551,1
Other types of insurance:									
1 173,8	1 073,4	1 340,1	1 218,3	1 705,8	1 531,5	2 205,2	1 830,5	2 410,6	2 113,6
JUST:									
29 736,0	22 354,9	35 170,3	36 463,8	43 431,8	28 494,4	49 367,5	34 424,3	53 001,2	39 586,0

Source: compiled by the author based on [17]

The growth rates of net and gross insurance premiums in 2022 compared to 2021 are shown in Table. 2.5:



Table 2.5 – Growth rate of insurance premiums in 2022 compared to 2021

TYPE OF INSURANCE	Absolute growth, mln UAH		Growth rate of insurance premiums, %	
	Gross premiums	Net premiums	Gross Premium	Clean Premium
	2022/2021		2022/2021	
Car Insurance	2135,1	2080,5	16,5	17,8
Cargo and baggage insurance	-64,0	-47,0	-2,2	-3,2
Property Insurance	164,6	296,4	2,6	9,2
Financial Risk Insurance	-737,9	487,4	-14,4	29,3
Life Insurance	717,9	717,9	18,4	18,4
Insurance against fire risks and risks of natural disasters	249,2	258,0	5,5	13,5
Health Insurance	983,6	1 025,7	28,2	31,6
Third Party Liability Insurance	-328,5	-235,4	-12,8	-14,2
Accident Insurance	118,0	146,3	6,7	11,0
Medical Expenses Insurance	539,6	587,1	40,1	53,4
Credit Insurance	-11,3	-210,9	-1,0	-36,5
Aviation Insurance	-338,0	-227,4	-32,4	-29,2
Other types of insurance	205,4	283,1	9,3	15,5
Just	3 633,7	5 161,7	7,4	15,0

Source: compiled by the author based on [17]

Thus, there is a steady increase in net insurance premiums in 2022 compared to 2021 (+15.0%) for the following types of insurance: motor insurance (+17.8%), life insurance (+18.4%), property insurance (+9.2%), medical insurance (+31.6%), insurance against fire risks and risks of natural disasters (+13.5%), accident insurance (+200.2%), insurance of medical expenses (+11.0%), financial risk insurance (+29.3%) and in some other areas. At the same time, net insurance

premiums for cargo and baggage insurance (-3.2%), third-party liability insurance (-14.2%), credit insurance (-36.5%), and aviation insurance (-29.2%) decreased.

Dynamics of gross and net insurance premiums during 2018-2022 shown in Fig. 2.5.

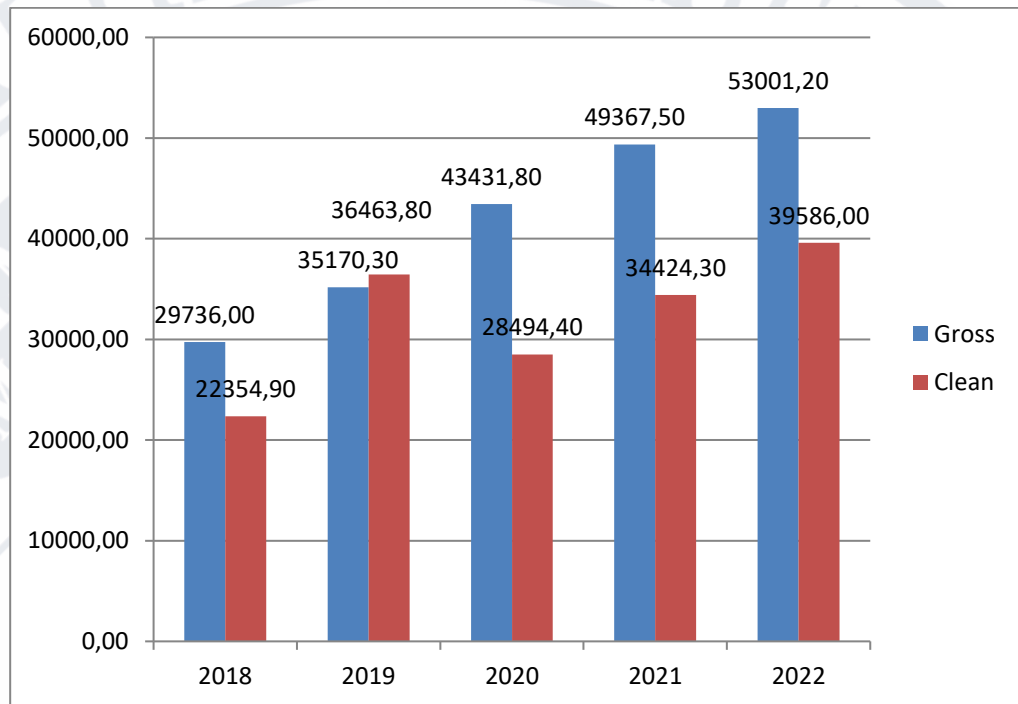


Figure 2.5. Total gross and net insurance premiums for 2018-2022

Source: compiled by the author according to [17].

Thus, there is an increase in net insurance payments in 2022 compared to 2021 (+12.9% or UAH 1607.9 million) for the following types of insurance: motor insurance (+15.7% or UAH 880.4 million), medical insurance (+24.2% or UAH 507.9 million), financial risk insurance (+12.7% or UAH 176.8 million), medical expenses insurance (+12.3% or UAH 38.2 million), as well as other types of insurance (+84.1% or UAH 374.1 million). At the same time, net insurance payments for life insurance (-18.3% or UAH 129.0 million), property insurance (-18.8% or UAH 265.6 million), and credit insurance (-36.4% or UAH 28.4 million) decreased.

It should be noted that as of 31.12.2022, the level of gross insurance payments (the ratio of gross insurance payments to gross insurance premiums) was



27.1% (as of 31.12.2021 – 26.1%). The level of net insurance payments (the ratio of net insurance payments to net insurance premiums) as of 31.12.2022 was 35.5% (as of 31.12.2021 – 36.1%) [23].

Dynamics of gross and net insurance payments during 2018-2022 shown in Fig. 2.6.

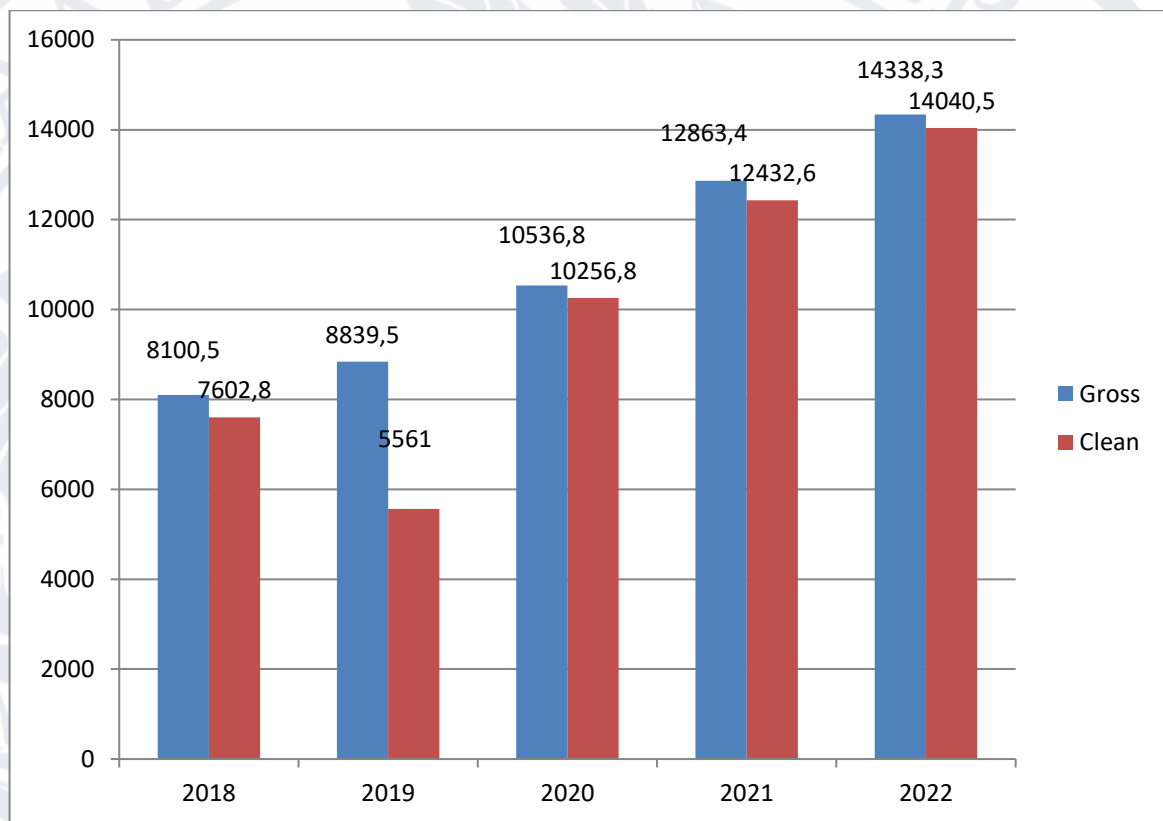


Figure 2.6. Total gross and net insurance payments for 2018-2022

Source: compiled by the author according to [17].

According to information from the National Commission for State Regulation of Financial Services (National Commission for the Regulation of Financial Services Markets), the insurance market is defined as the second in terms of capitalization among other non-bank financial markets.

Thus, we see that, despite the fact that the number of insurance companies is decreasing every year, the number of contracts, gross insurance premiums and gross insurance payments have a steady growing dynamics. This can be determined by several factors. The first factor is the decrease in the number of

insurance companies caused not so much by a decrease in demand for insurance services as by the fact that the market is being "cleansed" of unreliable and financially insolvent insurers. Secondly, the events taking place now have forced the population to change their views on life, asset and liability insurance. And the third important factor is fruitful cooperation with foreign partners and the entry of insurance companies with foreign capital into the national market.

Thus, having analyzed the indicators of insurance density and insurance penetration in Ukraine, we came to the conclusion that the domestic market of insurance services remains underdeveloped compared to foreign markets.

Taking into account the analysis, insurance activities in Ukraine have deteriorated significantly, which is undoubtedly due to the political and economic situation in the country during 2018-2022. Therefore, among the main problems that hinder the development of the Ukrainian insurance market are the following:

- poorly formed regulatory framework;
- low level of foreign investment in Ukraine, which does not allow to create insurance reserves in the long term;
- low insurance payments to citizens;
- low incomes of the country's population;
- unstable political and economic situation in the country;
- lack of stable relations between Ukraine and other countries in the field of insurance;
- insufficient competitiveness of Ukrainian insurance companies.

Among the directions of stimulating the development of the domestic insurance market, including after the end of martial law in our country, it is worth outlining a number of measures. At the macroeconomic level, this includes the formation of state policy in the field of insurance by improving state regulation of the insurance market and the activation of incoming reinsurance as a tool for attracting funds to the country's economy. At the microeconomic level, this involves the introduction by insurance companies of innovative insurance services



that are competitive not only in the domestic market, but also in the global insurance arena [23].

## **2.2 Analysis of the competitiveness of individual segments of the financial services market**

When analyzing the dynamics of globalization processes, one may get the impression that only economically strong countries benefit from these processes. They expand their markets, export opportunities and receive additional returns on investment. However, economically weak countries can also benefit from globalization if they have the right fiscal policies in place. One way to reap the benefits of globalization is to raise funds in international financial markets. However, globalization also increases international competition, including for limited financial resources.

Currently, financial globalization is taking place mainly at the expense of foreign capital, foreign currency loans, foreign direct and portfolio investments. Under such conditions, it is necessary to pursue an adequate policy aimed at increasing the competitiveness of the economy and active participation in the processes of international financial coordination. It is also necessary to introduce generally accepted requirements, rules and regulations and unify economic measures to prevent financial crises. To take advantage of international financial integration, it is necessary to create conditions that will ensure competitive advantages over other countries.

However, Ukraine has a very low level of global competitiveness, as determined by the World Economic Forum. In 2022-2023, Ukraine ranked 79th out of 140 countries in this indicator. The development of the financial market also affects the global competitiveness of the country.

For comparative analysis, let us compare the indicators of competitiveness of the domestic financial services market with countries that have similar economic potential (Table 2.6).

Table 2.6 – State of the Financial Services Market in the Global Competitiveness Index of Ukraine: Comparative Analysis (2022-2023)

Indicators	Ukraine	Poland	Kazakhstan	Turkish- For example, in the case of	Romania	Lithuania	Switzerland	Germany- For example, in the case of
Overall Ranking/GCI Rank	79/4,0	41/4,5	42/4,5	51/4,4	53/4,3	36/4,5	1/5,8	4/5,5
Development of Financial Markets: Place in the Rating/Index Value	121/3,2	43/4,3	91/3,6	64/3,9	55/4,0	57/4,0	10/5,1	18/4,7
Availability of financial services	101/3,9	43/4,9	63/4,5	34/5,2	92/4,1	44/4,9	1/6,5	18/5,6
Accessibility of financial services	123/3,5	43/4,8	53/4,3	36/4,9	64/4,2	38/4,9	1/6,1	14/5,5
Financing through the local capital market	118/2,6	68/3,6	91/3,1	60/3,7	100/3,0	71/3,5	10/5,2	17/4,8
Ease of access to loans	87/2,6	89/2,6	44/3,2	65/2,9	60/2,9	91/2,6	28/3,6	35/3,3
Availability of venture capital	102/2,4	96/2,5	59/2,9	93/2,5	103/2,4	48/3,0	18/3,7	25/3,5
Reliability of banks	140/2,6	48/5,4	110/4,2	51/5,3	82/4,6	84/4,6	20/5,9	46/5,4
Regulation of Stock Exchanges	135/2,5	48/4,6	87/3,9	65/4,2	99/3,7	76/4,1	12/5,6	26/5,2
The most problematic factors for business development, in %:								
–corruption;	16,6	2,3	13,9	1,5	8,7	8,8	0,5	1,5
– access to finance;	12,2	7,8	13,9	12,2	14,0	7,4	10,6	8,9
–inflation;	11,5	0,5	13,3	5,1	1,3	1,2	1,2	0,8
– political instability;	10,6	5,1	2,2	6,2	3,3	3,6	7,5	1,6
– tax factors	16,0	34,1	17,1	22,4	23,2	25,0	17,9	31,9
GDP (USD billion United States)	90,5	475	173,2	733,6	177,3	41,3	664,3	3357
Number Population, mln	42,6	38,0	17,7	77,7	19,9	2,9	8,2	81,9

Source: developed by the author based on [30]

Ukraine shows the worst performance in the global index compared to other countries. The situation with the macroeconomic environment and the



development of financial services markets is particularly bad. Compared to Poland, Romania, Lithuania and Turkey, the financial services market in Ukraine is much worse. The same problems are found when compared with Kazakhstan. All indicators of the development of the financial services market indicate a low level in Ukraine.

The most negative situation is observed with the reliability of the banking system, the regulation of the stock market, the availability of financial services and the attraction of resources through the local capital market. This situation arises not only due to political instability, but also due to other factors. The main problems for business in Ukraine are corruption, the complexity of the tax system, and limited access to finance. The most vulnerable indicator is the level of corruption, which is the highest among comparable countries. In Russia and Kazakhstan, this figure is also high. Interestingly, in all countries, except Ukraine, tax factors have a greater impact on business. This can be attributed to the presence of other negative factors, such as corruption, political instability, inflation, and limited access to finance.

The carried out analysis allows us to assert that there is a relationship between the expansion of national markets for financial services and global competitiveness. The higher the level of competitiveness, the more attractive the country is for investment and the more capital flows into the local financial services market. On the other hand, the expansion of the local financial services market affects the level of competitiveness of the country.

It is necessary to identify priorities in risk management and improvement of the supervisory system to improve the situation in the banking system and the stock market. Increased business confidence can be achieved through the implementation of effective anti-corruption measures, simplification of the tax system and improved access to finance. Transparency, anti-corruption measures and stability in the economic and political spheres play a key role in improving the

investment climate and creating conditions for the effective functioning of financial services.

### **2.3 Assessment of the impact of factors on the competitiveness of individual segments of the financial services market**

In order to assess the impact of factors on the competitiveness of individual segments of the financial services market, it is necessary to take a closer look at the state and prospects of development of the financial services market of Ukraine and its individual segments. Over the past five years, the total capacity of the domestic financial services market has been approximately 50-60% of GDP. On the other hand, this figure is 416% in the United States, 298% in Japan, 195% in Germany, 141% in Greece, and 110% in Poland. For this reason, both in relative and absolute terms, the depth of the financial services market in Ukraine is much less than in developed economies and most transition economies.

Indicators of financial resources that enterprises mobilize in the capital market are formed by combining the total volume of capitalization of the stock market and the market of corporate bonds. According to the National Securities and Stock Market Commission, as of mid-2023, this figure in Ukraine amounted to approximately UAH 26 billion, which corresponds to only 6% of GDP in 2022. Given the instability of the political and economic situation in recent years, this indicator, in our opinion, does not reflect the current situation. More objective is the assessment made at the beginning of the crisis, which was caused by martial law in Ukraine.

According to the World Bank, during 2018-2020 in Ukraine, the average ratio of stock market capitalization to GDP was about 25%, and in the period from 2021 to 2023 – 17.9%. Compared to these figures, this figure was 34.4% in Poland, 14.7% in Romania, 32.9% in Hungary, 28.3% in Kazakhstan, and 114% on average across OECD countries.



Thus, before the onset of the crisis, Ukraine had a level of stock market capitalization that was characteristic of countries with a low level of income and economic development, such as Bulgaria, Vietnam and Romania. Objectively, Ukraine has a larger territory, population and enterprises, and therefore should have a larger capital market. As targets for the Ukrainian stock market, we can take the indicators of Kazakhstan, Turkey and Poland. However, at present, the stock market indicators in Ukraine are much worse than in these countries.

Table 2.7 presents the structure of the Ukrainian stock market for various financial instruments in the period from 2015 to 2022. From this information, we can conclude that there is a very unsatisfactory trend in the formation of resources in the domestic capital market.

Table 2.7 – Structure of the stock market of Ukraine, in % for 2015-2022

Financial Instrument	Action	Corporate bonds	Government bonds	Local Loan Bonds	Investment & Options Certificates	Derivatives	Other
2015	37,6	19,6	22,7	0,1	19,8	-,1	0
2016	33,3	5,1	46,4	0,1	12,3	2,8	0
2017	29,1	9,1	42,1	0,2	9,4	10,1	0
2018	8,2	10,0	67,8	2,4	2,2	9,4	0
2019	9,2	10,0	74,7	0,2	1,3	4,6	0
2020	4,2	5,4	87,9	0,1	0,6	1,5	0,3
2021	2,0	4,7	87,1	0,1	0,9	2,2	3,0
2022	0,8	2,9	84,8	0,0	0,6	0,5	10,4

Source: developed by the author based on [22]

Most of the financial resources from the market are invested in government bonds. Over the past two years, a particularly significant amount of funds has been directed to certificates of deposit of the National Bank of Ukraine (data are presented in the section "Other financial instruments"). Thus, in the structure of financial instruments in circulation on the domestic stock market, government bonds and NBU certificates of deposit accounted for more than 90% in 2021 and more than 95% in 2022. The negative dynamics of attracting funds to government securities has been observed over the past 8 years. Over the past five years, the

situation has become critical, as more than half of the resources in the country's stock market are directed to government bonds.

From 2018 to 2022, there has been a significant decrease in investments in corporate securities, such as stocks and corporate bonds.

The share of funds invested in shares of enterprises decreased by more than 10 times, and in bonds – by more than three times. This was not only due to a decrease in effective demand from investors and an increase in credit and investment risks, but also due to the displacement of corporate securities by government bonds in the market. Government bonds have become more attractive to investors, both in terms of risk and profitability. For example, the yield on certificates of deposit of the National Bank of Ukraine was 15.5% in mid-2022, and about 16.5% on government bonds. The largest institutional investors, such as banking institutions, prefer to invest in government bonds, including because of the possibility of using them as collateral for refinancing by the National Bank of Ukraine.

Thus, the key indicators of the competitiveness of the financial services market in Ukraine, such as the reliability of the banking system, the state of regulation of the stock market, the availability of financial services and the possibility of attracting resources through the local capital market, lag far behind other countries in the analyzed segment. The main reasons for this underdevelopment of the capital-market-based financing model lie both in the investors themselves and in the enterprises.

Given the low level of income, the need for financing small and medium-sized businesses, the traditional propensity to use non-public information for financial decision-making is reduced by the global competitiveness index of our country. The structure of Ukraine's stock market suffers from inferiority due to the significant number of government bonds, which leads to a decrease in the volume of investments in corporate securities due to the crowding-out effect. To make this market more attractive to investors, it is necessary to significantly reduce the yield



on government securities, which will increase interest in riskier but profitable corporate securities.



## CHAPTER 3

### AREAS OF IMPROVEMENT COMPREHENSIVE ASSESSMENT OF THE COMPETITIVENESS OF FINANCIAL SERVICES MARKETS

#### 3.1 The Concept of Improving the Assessment of the Competitiveness of Financial Services Markets

The concept of improving the assessment of competitiveness of financial services markets should include the development and application of new methods and approaches to determine the level of competitiveness of financial services in the market.

First of all, it is important to consider the needs and requirements of customers when assessing the competitiveness of the financial services market. Customers are key participants in the financial market, so their needs and requirements must be taken into account when assessing competitiveness.

The second aspect is the comparison of financial services, which provides an opportunity to compare different financial products and services provided in the market. This allows you to determine the quality, value, and benefits of each service and make an informed choice.

The third aspect is the assessment of the efficiency of the financial services market, which includes an analysis of the level of competition in the market, the degree of availability and quality of services, as well as the level of innovation and development of the industry. An efficient financial services market ensures competition and encourages service providers to improve and innovate.

Another aspect of the concept of improving the assessment of the competitiveness of financial services markets is the use of the latest technologies and analytical tools. For example, the development of machine learning and artificial intelligence models to predict the competitiveness of markets, analyze trends, and identify new opportunities.



Figure 3.1 shows the concept of improving the assessment of the competitiveness of financial services markets.

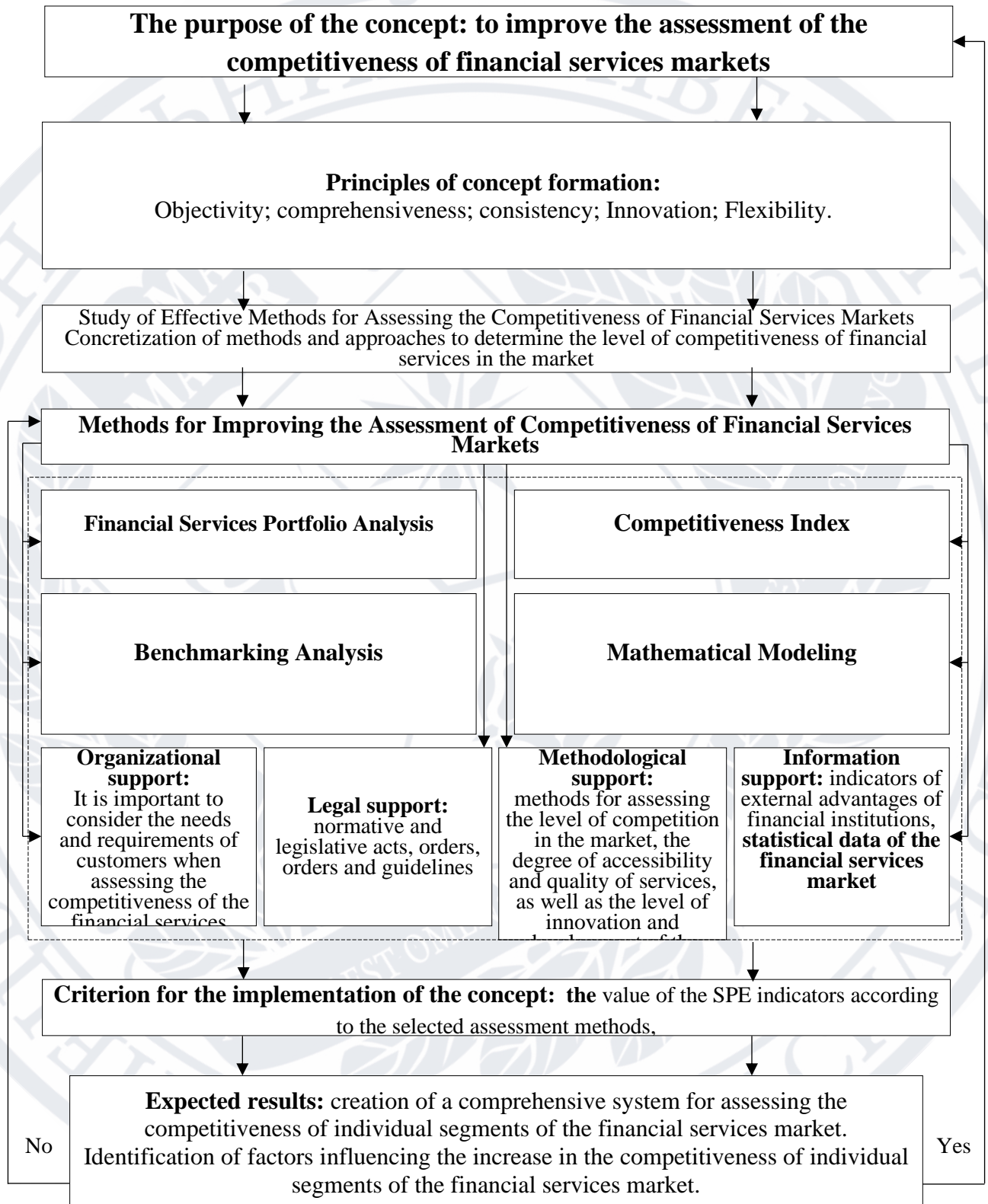


Figure 3.1 – Concept for Improving the Assessment of Competitiveness of Financial Services Markets

Source: Developed by the author

Improving the assessment of the competitiveness of financial services markets is an important element in the development of the financial industry. Ensuring competition and quality of services in the market contributes to the growth of the economy and increases the level of customer satisfaction.

Thus, to assess the competitiveness of financial services markets, it is possible to use the following methods:

1. Analysis of the financial services portfolio. The method consists of researching the different financial services that are provided in the market. This assessment allows you to determine the level of competition in the financial services industry, as well as track trends in the market;
2. Competitiveness Index. The method is used to compare different financial services markets using specific metrics. The Competitiveness Index allows you to determine how efficiently a market is performing and helps you decide which markets have an advantage over others;
3. Benchmarking analysis. The method involves comparing financial markets with the best players in the industry. This makes it possible to identify the strengths and weaknesses of financial services markets and draw conclusions about their competitiveness on this basis;
4. Analysis of technology implementation. The method assesses how effectively financial markets use modern technologies. This includes researching the level of integration of technologies into financial services delivery processes and assessing their impact on market competitiveness;
5. Monitoring the level of customer satisfaction. The method evaluates the level of customer satisfaction with financial services and the level of their loyalty. This allows you to determine how successful the services and strategies of a particular financial services market are.



### **3.2 Improving the assessment of competitiveness of individual segments of the financial services market with the help of the "web" of benchmarking**

The "web" of benchmarking is a methodology for assessing the competitiveness of individual segments of the financial services market, which is based on the comparison of information from different sources using web technologies. This approach allows us to trace the relationships and relationships between different financial institutions and products in these market segments.

One of the main advantages of benchmarking is the ability to get a comprehensive picture of the financial services market, including the state of the market, competition, pricing policy, marketing strategies and other factors affecting competitiveness.

This approach involves analyzing large amounts of data from various sources, such as financial institutions' websites, reports, news, social media, and more. Information from these sources is processed and structured using special algorithms that allow you to build a web of connections between different financial institutions and products.

After comparing the data on the basis of the "web", a comprehensive assessment of the competitiveness of individual segments of the financial services market can be created. Such an assessment may include factors such as the number of active market participants, market share, sales volumes, pricing, customer satisfaction, etc.

Thanks to the "web" of benchmarking, it is possible to obtain a more objective and accurate assessment of the competitiveness of various segments of the financial services market. In addition, this approach allows you to identify weaknesses in your own product or service, draw conclusions about the profitability and effectiveness of competitors, and identify potential opportunities to improve your own competitiveness.

Let's apply the method of "web" benchmarking on the example of the largest segment of the financial services market – the banking sector.

According to UBA, for 2023, the TOP-10 banks in Ukraine included the following (Table 3.1):

Table 3.1 – TOP-10 banks of Ukraine

Position	Name	Points	Points %
1	Privatbank	16,70774553	100,0
2	Oschadbank	8,704891854	52,1
3	Ukrsibbank	7,448948012	44,6
4	MTB	6,454633444	38,6
5	Sense Bank	5,131166427	30,7
6	Credit Agricole	4,95620449	29,7
7	FUIB	4,289235782	25,7
8	Raiffeisenbank	4,260191544	25,5
9	Ukrasbank	3,802738392	22,8
10	Universal Bank	3,696901641	22,1

Source: Developed by the author

To assess the competitiveness of the leading banks of Ukraine, we will take 9 indicative indicators of competitiveness. Competitive advantages and their corresponding "weights" are shown in Table. 3.2.

Table 3.2 – Share of advantages of the leading banks of Ukraine

Extrinsic Benefits	The "Weight" of Benefits
1. Financial stability	0,15
2. The level of prices for services, the system of bonuses	0,20
3. Quality of services	0,20
4. Marketing Communications	0,15
5. Quality of service	0,10
6. Online Presence	0,05
7. Service Quality Control	0,05
8. Additional services	0,05
9. Investment attractiveness	0,05
Just	1

Source: Developed by the author



Thus, the integral indicator of competitiveness of domestic banks is given in Table. 3.3.

Table 3.3 – Summary Table of Competitiveness Indicators of the Leading Domestic Banks of Ukraine

Extrinsic Benefits	The "Weight" of Benefits	Indicator value (1 is the most significant)			
		Privatbank	Oschadbank	Ukrsibbank	MTB
1. Financial stability	0,15	1	0,96	0,94	0,99
2. The level of prices for services, the system of bonuses	0,20	0,77	0,99	0,99	0,83
3. Quality of services	0,20	1	0,83	0,89	0,97
4. Marketing Communications	0,15	1	0,93	0,92	0,97
5. Quality of service	0,10	0,96	0,99	0,99	0,98
6. Online Presence	0,05	0,88	0,86	0,89	0,91
7. Service Quality Control	0,05	1	0,91	0,92	0,88
8. Additional services	0,05	1	1	1	1
9. Investment attractiveness	0,05	1	0,41	0,91	0,99
Integral Indicator of Competitiveness	1	1,808	1,231	1,244	0,94

Source: Developed by the author

Let's calculate the integral indicator of PrivatBank's competitiveness:

$$K_{\text{Integral}} = 1 * 0,15 + 0,77*0,20 + 1*0,2 + 1*0,15 + 0,96*0,1 + 0,88*0,05 + 1*0,05 + 1*0,05 + 1*0,05 = 1,808.$$

Let's calculate the integral indicator of Oschadbank's competitiveness:

$$K_{\text{Integral}} = 0,96 * 0,15 + 0,99*0,20 + 0,83*0,2 + 0,93*0,5 + 0,99*0,1 + 0,86*0,05 + 0,91*0,05 + 1*0,05 + 0,05*0,41 = 1,231.$$

Let's calculate the integral indicator of Ukrsibbank's competitiveness:

$$K_{\text{Integral}} = 1 * 0,15 + 0,77*0,20 + 1*0,2 + 1*0,5 + 0,96*0,1 + 0,88*0,05 + 1*0,05 + 1*0,05 = 1,244.$$

Let's calculate the integral indicator of MTB competitiveness:

$$K_{\text{інтегр}} = 0,99 * 0,15 + 0,83 * 0,20 + 0,97 * 0,20 + 0,97 * 0,15 + 0,98 * 0,10 + 0,91 * 0,05 + 0,88 * 0,05 + 1 * 0,05 + 0,99 * 0,05 = 0,941.$$

It is necessary to build a graph of the level of competitiveness of domestic banks (Fig. 3.2).

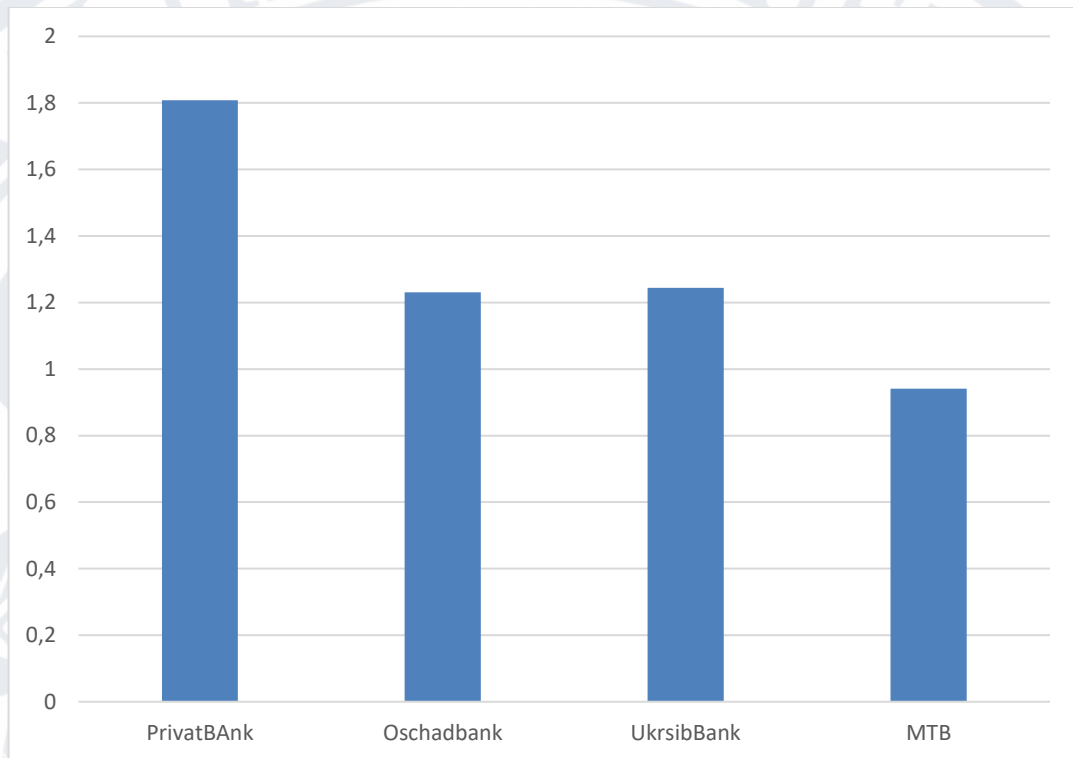


Figure 3.2 – Dynamics of the level of competitiveness of the leading banks of Ukraine

Source: compiled by the author

The data of Fig. Figure 3.2 indicates that the integral indicators of competitiveness by banks are similar and vary insignificantly. PrivatBank has the highest level of competitiveness with an indicator of 1,808. MTB has the lowest level of competitiveness compared to the leading banks, but its indicator is quite high – 0.941.

Further analysis of the competitiveness of the banking segment of the financial services market will be carried out according to the indicators of the two leading banks. That is, when assessing the competitiveness of PrivatBank and its



main competitor, Oschadbank, it is necessary to determine the strength of the influence of external factors on their activities.

Table. 3.4 an expert assessment of the competitive positions of PrivatBank and Oschadbank was carried out.

Table 3.4 – Expert assessment of the competitiveness characteristics of PrivatBank and Oschadbank

№	Factors to be evaluated	Peer review, score	
		PrivatBank	Oschadbank
1	Reputation of the bank	4	4
2	Quality of services	4	4
3	Financial stability	5	3
4	Value of the offer	4	5
5	Civic Position	4	5
6	Advertisement	3	5

Source: compiled by the author

According to the table, it is necessary to build a "web" of benchmarking (Fig. 3.3), which will consist of a system of concentric circles, which in turn will be divided into identical sectors by rays. The number of rays corresponds to the number of characteristics presented in Table. 3.4.

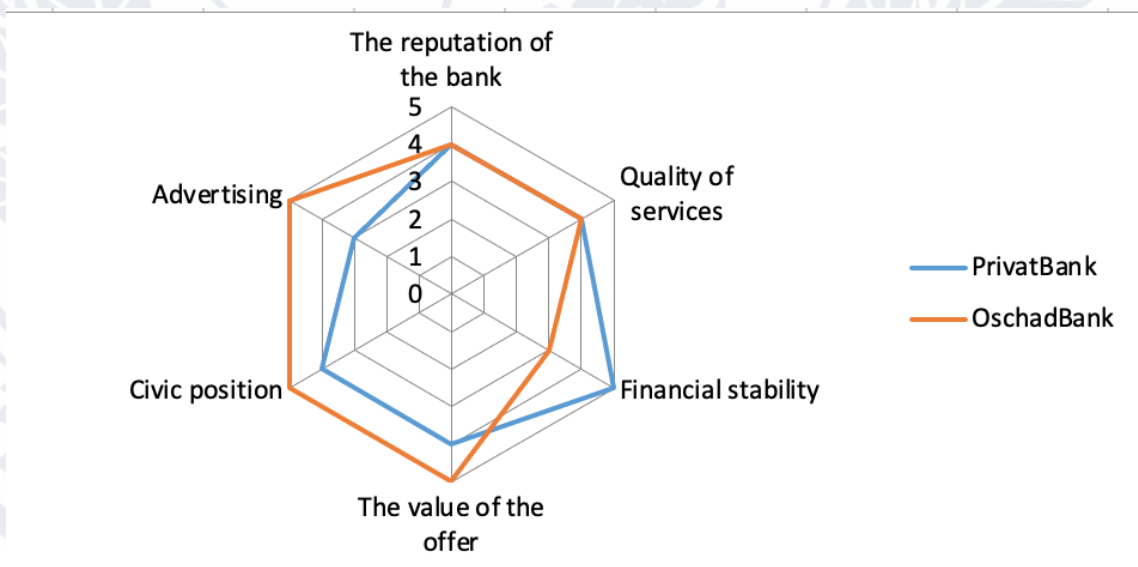


Figure 3.3 – Benchmarking "web" of banks competitiveness

Source: compiled by the author

We calculate the total number of points for each bank (Table 3.5) and compare them.

Table 3.5 – Summary Expert Assessment of the Competitiveness Characteristics of the Leading Banks of Ukraine

Factors to be evaluated	Peer review, score	
	PrivatBank	Oschadbank
Total Points	24	26

Source: compiled by the author

Oschadbank's competitive position is generally ahead of PrivatBank's competitive forces by 2 points.

At the next stage, it is expedient to analyze the main characteristics that act as a guarantor of ensuring the superiority of the object of research.

The key characteristics that guarantee an advantage in the market of banking services in Ukraine are advertising, civic position, and the value of banks' offers. The following characteristics are of equal importance: the quality of services and the reputation of the bank.

Guided by the data given above, we calculate the areas of figures resulting from combining the values of the criteria, which will become a lever for a broader and more in-depth analysis of the competitiveness of banks' services (3.1).

$$S = \pi * R^2, \quad (3.1)$$

Where  $\pi$  is a mathematical constant that expresses the ratio of the circumference of a circle to the length of its diameter,  $3.14:\pi$

R is the radius; The maximum value of the rating scale.

Area of the figure of PrivatBank:

$$R = \frac{\sum \text{балів}}{n},$$

$$R = 24/6 = 4,33$$

$$S = 3.14 * 4,33^2 = 50.244,33^2$$

Area of the figure of Sberbank:

$$R = 26/6 = 4$$



$$S = 3.14 * = 58,91.4^2$$

After the operations carried out, it is advisable to determine the ratio of the areas of the banks' figures in absolute and percentage coefficients and calculate the lag of one bank from another.

$$50.24/58.91 = 0.85, \text{ i.e. } 85\%$$

PrivatBank lags behind Oschadbank by 15% (100% – 85%).

We calculate the area of the entire circle, assuming that all indicators are with the value of the entire market.

$$S = 3.14 * = 78,5.5^2$$

Let's find the ratio of the areas of the PrivatBank figures to the area of the entire circle in absolute and percentage terms:

$$50.24 / 78.5 = 0.64, \text{ or } 64\%.$$

Accordingly, 36% of the advantages (100% – 64%) are not enough for Oschadbank to develop as much as possible.

$$58.91/78.5 = 0.75, \text{ or } 75\%.$$

It is difficult for PrivatBank to single out 25% (100% – 75%) of a particular favorite, these data are not enough for maximum development and competitive advantage.

It can be noted that both banks lack competitive advantages for a complete advantage in the market.

Therefore, the benchmarking analysis of PrivatBank's competitiveness in comparison with its main competitor, Oschadbank, in the financial services market showed:

- The predominance of Sberbank in terms of the main characteristics: advertising, civic position, value of offers.
- PrivatBank's 15% lagging behind according to the criteria under consideration, based on the calculation of the areas of the benchmarking "web";
- the availability of reserves to achieve maximum competitiveness and improve PrivatBank's services is 36%, and for a competitor – 25%.

Thus, the initial results can become the foundation for the development and flexible change of the strategy for improving the competitiveness of the banking sector of Ukraine.

Thus, the leading banks of Ukraine have a fairly high integral indicator of competitiveness in the financial services market.

### **3.3 Improving the assessment of competitiveness of individual segments of the financial services market with the help of mathematical modeling**

Improving the assessment of the competitiveness of individual segments of the financial services market can be carried out with the help of mathematical modeling. This will allow you to more accurately determine the factors affecting the competitiveness of the segment and make a more objective assessment.

First of all, you should collect a sufficient amount of data about the financial services market segment, such as companies' market shares, sales volumes, prices, product and service characteristics, and competitor data.

Further, you can build a mathematical model that takes into account various factors that affect the competitiveness of the segment. For example, it can be a model based on cost-quality analysis, where the cost of a product or service is compared to its quality.

When building a model, you can apply various methods of analysis, such as regression analysis, cluster analysis, factor analysis, etc. The use of these methods will help to identify the main factors influencing the competitiveness of the segment.

After building the model, you can make calculations and get a quantitative assessment of the competitiveness of the segment. This assessment can be used to compare different market segments or to identify potential areas for improvement in a particular segment.

The use of mathematical modeling will provide an objective and scientifically grounded assessment of the competitiveness of individual segments



of the financial services market, which will allow companies to develop strategic decisions based on specific data and forecasts.

To determine the impact of bank lending on the level of competitiveness of the financial services market, we will conduct a factor analysis based on the data of the National Bank of Ukraine and the State Statistics Service, grouped in Table 3.6 over the past seven years, linking the impact of the average interest rate on loans in the national currency, the NBU discount rate, the weighted average exchange rate of the hryvnia against the dollar in the interbank foreign exchange market of Ukraine, the inflation index, indicators of return on assets and return on equity of the banking system of Ukraine to the dependent variable – gross domestic product (GDP) [9; 10].

Table 3.6 – Input data of the factor model of the impact of bank lending on the state of the real sector of the economy

Date	GDP, bln. UAH	Average interest rate on loans in national. Currency	Average discount rate of the NBU	Weighted average exchange rate of the hryvnia against the dollar on the interbank foreign exchange market of Ukraine	Inflation Index	Return on assets	Profitability Capital
2016	1979	0,15	0,09	2378,37	1,091	-0,0145	-0,01019
2017	2383	0,15	0,08	2669,24	1,046	-0,0076	-0,0527
2018	3558	0,18	0,08	2789,05	0,998	0,0303	0,0045
2019	3974	0,16	0,07	2768,82	1,005	0,0012	0,0081
2020	4194	0,19	0,11	2774,36	1,249	-0,0407	-0,3046
2021	5459	0,21	0,22	2827,46	1,433	-0,05	-0,5191
2022	5191	0,18	0,17	2727,82	1,124	-0,13	-1,17

Source: compiled by the authors according to the State Statistics Service and the National Bank of Ukraine

Calculations of paired correlation coefficients made it possible to determine the degree of connection between the factors studied.

As a result of the calculations of partial correlation coefficients, the least significant factors were discarded, and the following factors were chosen as influential factor variables (Table 3.7):

- average interest rate on loans in national currency (x1);

- the average discount rate of the NBU (x2);
- weighted average exchange rate on the interbank foreign exchange market of Ukraine (at the time of setting the official hryvnia exchange rate), UAH. (x3);
- inflation index, annual value (x4);
- return on assets of the banking system of Ukraine (x5);
- return on capital of the banking system of Ukraine (x6).

Repeated calculations of paired correlation coefficients made it possible to determine the degree and direction of the relationship between the volume of GDP and the selected factors.

Table 3.7 – Matrix of paired correlation coefficients

	Into	X1	X2	X3	X4	X5	X6
Into	1						
X1	0,6626	1					
X2	0,79517	0,78068	1				
X3	0,94308	0,74032	0,91475	1			
X4	0,46755	0,78877	0,84172	0,69556	1		
X5	-0,8591	-0,4106	-0,7291	-0,9071	-0,4738	1	
X6	-0,9221	-0,4916	-0,7508	-0,9301	-0,4213	0,97136	1

Source: Author's own calculations

The data analysis was carried out using MS Excel, as a result of calculating the quality of approximation, which is determined by the coefficient of determination (R<sup>2</sup>) and in our case is close to 1. This means that the impact of the studied indicators X1, X2, X3, X4, X5, X6 on GDP is quite high.

The value of the multiple correlation coefficient R indicates the adequacy of the constructed model.

After calculating the values of the independent variables, the regression equation will look like this:

$$Y = 3158.88 - 10818.13X1 - 3817.76X2 + 2.05X3 - 1394.77X4 + 8772.15X5 + 789.28X6 \quad (3.2)$$

The statistical significance of the independent variables of the model is determined by the t-test.

The theoretical value of the t-test is 2.179, so the variables X3, X5 and X6



have a significant impact, and X1, X2 and X4 are not statistically significant coefficients, that is, their influence during the observation period is unsystematic.

Let us consider the coefficients of partial elasticity, which clearly demonstrate the dependence of changes in the effective indicator of GDP on changes in one of the factor indicators, provided that other factors remain unchanged.

The partial coefficients of elasticity of the constructed model are calculated, which characterize the influence of the change in the specific gravity of  $X_i$  on  $Y$  under the assumption of the absence of influence of other factors.

The coefficient of partial elasticity shows how much %  $Y$  will change if  $X_i$  changes by 1%, and is determined by the formula:

$$Kel_{(i)} = a_i * X \quad (3.3)\bar{J}$$

where,  $Kel_{(i)}$  is the partial coefficient of elasticity;

$AI$  – model parameters to be evaluated;

$X$  are the average values of the independent variables of the model. $\bar{J}$

The calculation of partial elasticity coefficients was carried out in MS EXCEL (Table 3.8).

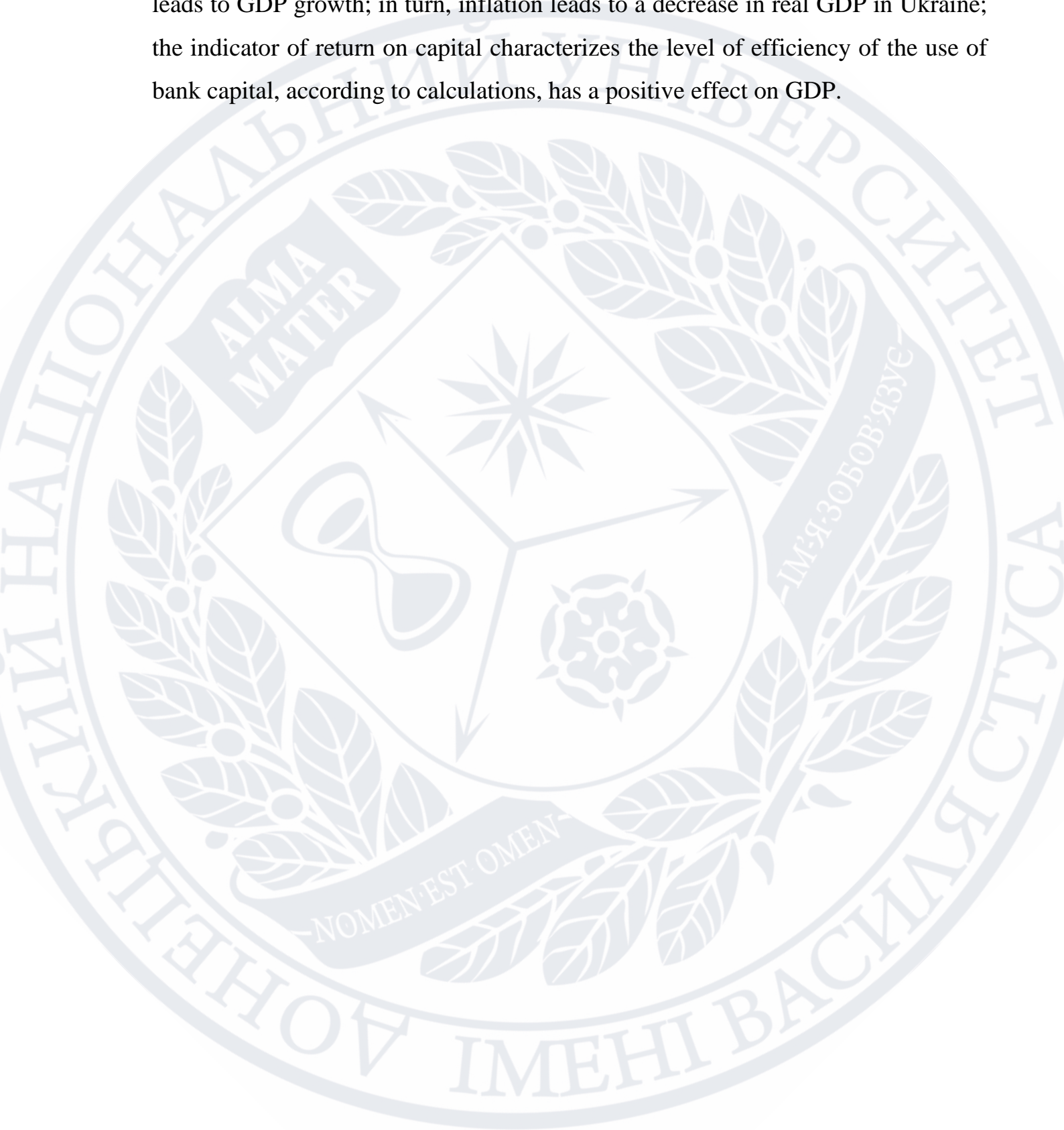
Table 3.8 – Results of the calculation of partial elasticity coefficients

Coefficient of elasticity	Meaning
$K_{el}(1)$	-1,29
$K_{el}(2)$	-0,23
$K_{el}(3)$	1,82
$K_{el}(4)$	-1,09
$K_{el}(5)$	-0,18
$K_{el}(6)$	-0,15

Source: Author's own calculations

The calculated elasticity coefficients for the constructed model indicate the most significant impact on the exchange rate, while other factors are not influential. The results of factor modeling of the formation of competitiveness of the financial services market are as follows: an increase in the interest rate on loans in the national currency, as well as an increase in the discount rate, negatively

affect GDP, leading to its decrease; however, the appreciation of foreign exchange leads to GDP growth; in turn, inflation leads to a decrease in real GDP in Ukraine; the indicator of return on capital characterizes the level of efficiency of the use of bank capital, according to calculations, has a positive effect on GDP.





## CONCLUSIONS

So, competition in the financial services market is a situation where there are two or more companies in the market that offer similar financial services.

Competition in the financial services market occurs in many areas, such as banking, insurance, investment, etc. Competition can manifest itself in the form of lower prices for services, improvement of the quality of service, introduction of new products and innovations. Competition has a positive impact on consumers, as it forces companies to constantly improve and offer better conditions and services. At the same time, competition is a challenge for businesses that must find new ways to attract customers and maintain their competitiveness.

The competitiveness of financial institutions in the financial services market is their ability to compete effectively with other market participants and ensure customer satisfaction.

To ensure the competitiveness of a financial institution, it is necessary to conduct continuous market analysis, identify customer needs and expectations, and improve its products, services, and processes. Only in this way will it be able to successfully maintain and expand its position in the market.

Integral methodologies for determining the level of competitiveness of financial services markets, using different evaluation criteria and a different number of national markets, demonstrate similar results in ranking countries by the level of financial development.

The integral methodologies of the World Economic Forum and the International Institute for Management Development have an advantage in comparing the state of national financial services markets for comparative research and assessment of the general level of development of regional financial markets. The methodologies used by the IMF and the IBRD are systematized lists of assessment indicators that provide an idea of the state of the financial sector in the

country. However, cross-country and cross-regional comparisons of financial markets based on these methodologies are complex.

Ukraine lags behind in key indicators of the competitiveness of the financial services market compared to other countries. Factors such as the lack of reliability of the banking system, ineffective stock market regulation, limited availability of financial services, and limited potential for attracting resources through the local capital market are the result of problems for investors and businesses.

Reduced incomes, the need for financing for small and medium-sized enterprises, and the traditional avoidance of using public information for financial decisions contribute to the decline in our country's Global Competitiveness Index.

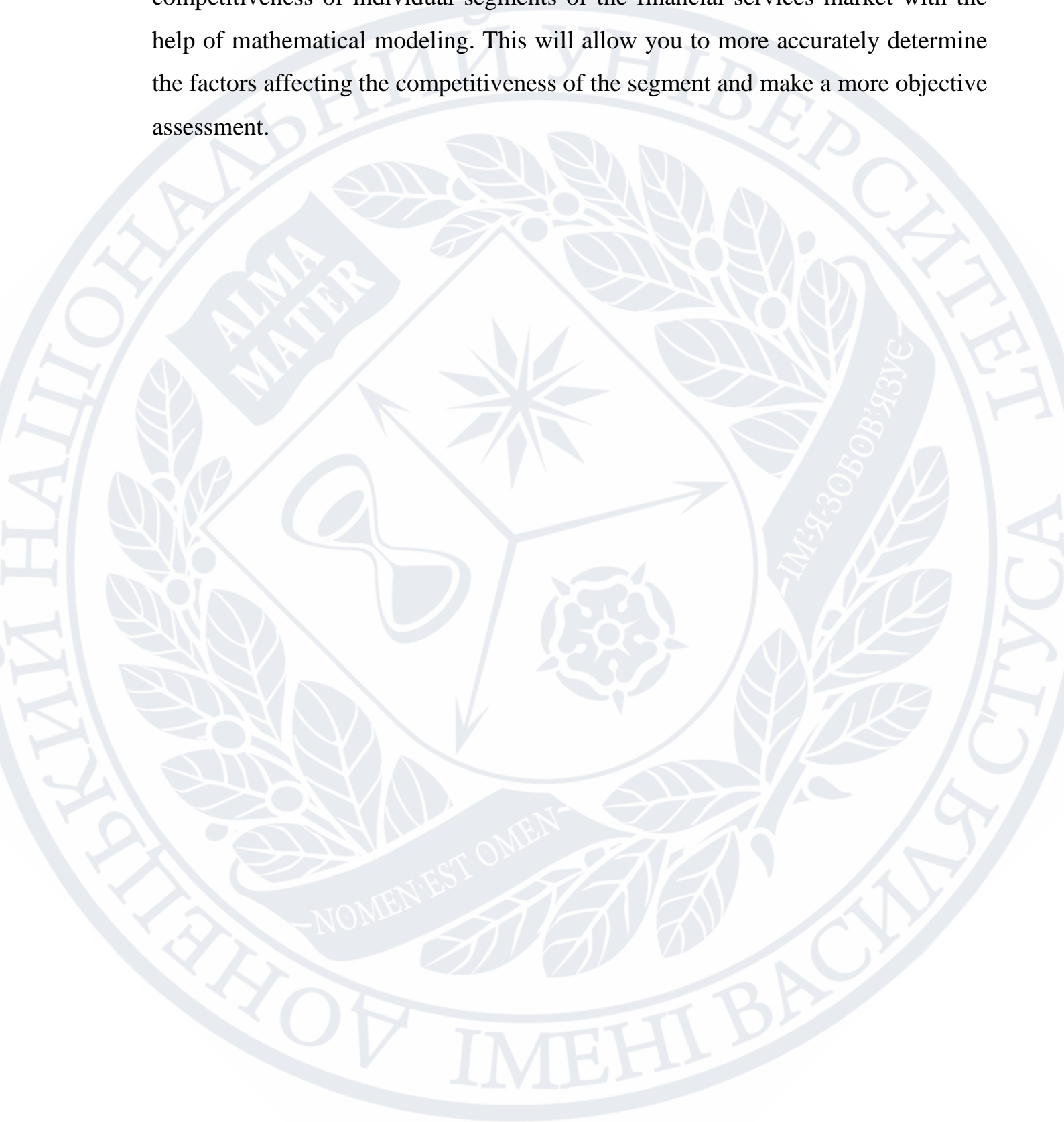
The structure of Ukraine's stock market suffers from inferiority due to the significant number of government bonds, which leads to a decrease in the volume of investments in corporate securities due to the crowding-out effect. To make this market more attractive to investors, it is necessary to significantly reduce the yield on government securities, which will increase interest in riskier but profitable corporate securities.

Thus, the concept of improving the assessment of the competitiveness of financial services markets is an urgent need, therefore, for better perception and development in general, it should include the development and application of new methods and approaches to determine the level of competitiveness of financial services in the market.

One of the most effective options for identifying needs and accumulating solutions and strategies is analysis, which is carried out through the "web" of benchmarking. Thanks to it, it is possible to obtain a more objective and accurate assessment of the competitiveness of various segments of the financial services market. In addition, this approach allows you to identify weaknesses in your own product or service, and most importantly, draw conclusions about the profitability and effectiveness of competitors and identify potential opportunities to improve your own competitiveness.



The paper presents a methodology for improving the assessment of competitiveness of individual segments of the financial services market with the help of mathematical modeling. This will allow you to more accurately determine the factors affecting the competitiveness of the segment and make a more objective assessment.



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## APPENDICES

## Appendix A

Table A.1 – Dynamics of banks' assets by groups, mln. UAH

Balance sheet	Group 1		Group 2		Group 3		Group 4	
	01.01. 2022	01.10. 2022	01.01. 2022	01.10. 2022	01.01. 2022	01.10. 2022	01.01. 2022	01.10. 2022
Cash and cash equivalents	114475	100018	23 060	24 487	15 882	16 555	18 849	21 001
Trading Securities	9 959	5 704	3 573	1 381	2 494	3 157	1436	1 481
Funds in other banks	8 960	17216	4 653	3 202	7 119	5 148	5 950	6 854
Loans and customer acquisition	444254	484 098	123 619	115455	56 241	63 627	70 267	84 953
Securities in banks' portfolios for sale	54 719	86 738	7 404	9 398	6 356	6 823	4 419	5 986
Property, plant and equipment and intangible assets	24 054	24 700	7 054	6 518	3 491	3 330	5 199	5 489
Other financial assets	37 410	47 943	15 874	18 969	6 519	8 835	5 129	8 694
Other assets	22 403	25 430	9 440	11 100	3 403	3 176	3 514	4 536
<b>Total Assets</b>	<b>716233</b>	<b>791848</b>	<b>194 679</b>	<b>190 510</b>	<b>101505</b>	<b>110651</b>	<b>114 762</b>	138995

Source: developed by the author based on [10]

Table A.2 – New loans (volumes of loans disbursed during the period)

Indicators	Per month, bln. UAH.			For 12 months cumulatively				Average volume for the previous 12 months, bln. UAH.	Balance s at the end of the month, bln. UAH.
	December 2021	January 2022	February 2022	Billion. UAH.		Change,%			
				January 2022	February 2022	January 2022	February 2022	February 2022	February 2022
<b>The amount of new loans granted during the period</b>									
Just	144,4	101,2	111,3	1379,3	1385,7	0,6	0,5	114,9	823,9
Households	13,0	9,1	8,8	106,6	109,1	2,4	2,3	8,9	188,2
Non-Financial Corporations	126,5	86,4	99,7	1237,5	1240,5	0,1	0,2	103,1	612,6
<b>Volume of new deposits to households</b>									
Just	13,0	9,1	8,8	106,6	109,1	2,4	2,3	8,9	188,2
Consumer loans	11,2	7,9	7,3	89,3	91,5	2,7	2,4	7,4	127,0
Real Estate Loans	0,513	0,056	0,111	3,910	3,827	-3,4	-2,1	0,326	57,1
<b>The volume of new deposits to non-financial corporations</b>									
Just	126,5	86,4	99,7	1237,5	1240,5	0,1	0,2	103,1	612,6
Agriculture	4,8	4,2	4,7	53,2	54,4	3,6	2,3	4,4	35,0
Industry	32,7	23,8	29,9	390,2	384,5	-1,5	-1,5	32,5	167,6
Construction	2,8	2,0	2,1	36,0	36,2	-2,1	0,7	3,0	46,9
Trade	67,9	44,9	48,8	589,9	596,9	0,7	1,2	49,2	220,5

Source: developed by the author based on [10]