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**AZERBAIJAN STATE ECONOMIC UNIVERSITY**

**INTERNATIONAL MAGISTRATION AND DOCTORATE CENTER**

**MASTER THESIS**

**“The effect of macroeconomics factors on the performance of the  
Lebanon banking system”**

**Said Ahmed Abdulhakim Jummah**

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**THE MINISTRY OF EDUCATION OF THE REPUBLIC OF AZERBAIJAN**  
**AZERBAIJAN STATE UNIVERSITY of ECONOMICS INTERNATIONAL**  
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**Head of the Center**

**Assoc. Prof. Dr. Ahmadov Fariz Saleh**

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**MASTER DISSERTATION**

**On the topic**

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**Master:**

**Ahmed Said**

\_\_\_\_\_ **sign**

**Scientific Supervisor:**

**Phd. Elmir Safarli**

\_\_\_\_\_ **sign**

**Program Manager:**

**PhD, assoc.prof. Seyfullayev İ.Z.**

\_\_\_\_\_ **sign**

**Head of the Department:**

**Dr.of Econ. Prof. Kalbiyev Y.A.**

\_\_\_\_\_ **sign**

**BAKU - 2020**

## **Scientific Oath**

I Said Ahmed declare that I have written my master's dissertation on “The effect of macroeconomics factors on the performance of the Lebanon banking system” in full compliance with scientific ethics and rules of reference and reflecting all the sources I use in the bibliography.

# **“The effect of macroeconomics factors on the performance of the Lebanon banking system”**

## **Abstract**

**The actuality of the subject:** Macroeconomic processes mainly determine the development parameters of the banking sector. Their reliable assessment allows to increase the effectiveness of management decisions and, accordingly, to strengthen the financial stability of credit institutions. A comprehensive analysis of the impact of macroeconomic factors on the results of business processes allows to identify negative situations and trends in the banking system in a timely manner.

**Purpose and tasks of the research:** The purpose of the study is to improve the theoretical and methodological tools for a comprehensive assessment of the impact of macroeconomic factors on the banking system and to develop recommendations for their practical application.

**Used research methods:** The following methods of scientific knowledge were used during the processing and analysis of information: monographic, analytical, graphic, economic mathematical, economic-statistical, modeling, abstract-logical, etc.

**The information base of the research:** Research database The official reports of the Central Bank of Lebanon, the Lebanese State Statistics Service, the Ministry of Economy and Trade of the Lebanese Republic, commercial banks, scientific and practical conferences, periodicals, sources of official websites, electronic encyclopedias, monographs of local and foreign scientists and research groups.

**Restrictions of research:** The limitation of the study is that the national literature on the subject is a minority.

**The novelty and practical results of investigation:** The results of the research presented in the study are of practical importance: a set of methods to bring the parameters of the banking system to a comparable form; methodological approaches to the joint assessment of the impact of macroeconomic processes on the activities of credit institutions; an algorithm for forecasting the parameters of commercial banks, taking into account macroeconomic trends; Recommendations to increase the efficiency of the management of the Lebanese banking system in the context of macroeconomic instability.

**Scientific-practical significance of results:** The results may be of practical interest to the Bank of Lebanon, commercial banks and financial sector organizations, which are used as a basis for assessing the impact of macroeconomic factors on current performance and developing development strategies.

**Keywords:** Lebanon, macroeconomics, banking sector, finance, currency, credit

## Abstract in Azerbaijani

**Tədqiqatın aktuallığı:** Makroiqtisadi proseslər əsasən bank sektorunun inkişaf parametrlərini müəyyənləşdirir. Onların etibarlı qiymətləndirilməsi idarəetmə qərarlarının effektivliyini artırmağa və müvafiq olaraq kredit təşkilatlarının maliyyə sabitliyini gücləndirməyə imkan verir. Makroiqtisadi amillərin biznes proseslərinin nəticələrinə təsirinin hərtərəfli təhlili bank sistemindəki neqativ halları və meylləri vaxtında aşkar etməyə imkan verir.

**Tədqiqatın məqsəd və vəzifələri:** Tədqiqatın məqsədi makroiqtisadi amillərin bank sistemində təsirinin hərtərəfli qiymətləndirilməsi üçün nəzəri və metodoloji vasitələrin təkmilləşdirilməsi və onların praktik tətbiqi üçün tövsiyələrin hazırlanmasıdır.

**Bu məqsədə nail olmaq aşağıdakı vəzifələri zəruri etdi::**

- makroiqtisadi proseslərin və iqtisadi dövrlərin mahiyyətini öyrənməyə əsaslanaraq, bank sisteminə təsir edən makro amilləri təsnif etmək;
- Makroiqtisadi proseslərin kommersiya banklarının fəaliyyətinə təsirinin qiymətləndirilməsində müasir yanaşmaları səciyyələndirmək, onların üstünlüklərini və mənfi cəhətlərini müəyyənləşdirmək;
- Qloballaşma və xarici siyasi vəziyyətin qeyri-sabitliyi kontekstində Livan bank sektorunun inkişaf tendensiyalarını müəyyənləşdirmək, onların mənfi nəticələrinin minimuma endirilməsinə yönəlmiş mümkün pul siyasəti tədbirlərini təklif etmək.

**Tədqiqatın metodları:** İnformasiyanın işlənməsi və təhlili zamanı elmi biliklərin aşağıdakı metodlarından istifadə edilmişdir: monoqrafik, analitik, qrafik, iqtisadi-riyazi, iqtisadi-statistik, modelləşdirmə, mücərrəd-məntiqi və s.

**Tədqiqatın informasiya bazası:** Tədqiqatın informasiya bazası Livan Mərkəzi Bankının, Livan Dövlət Statistika Xidmətinin, Livan Respublikası İqtisadiyyat və Ticarət Nazirliyinin, kommersiya banklarının rəsmi hesabatlarının, elmi və praktik konfransların, dövrü iqtisadi mətbuatın materialları, rəsmi saytların mənbələri, elektron ensiklopediyalar, yerli və xarici alimlərin və tədqiqat qruplarının monoqrafik tədqiqatları olmuşdur.

**Tədqiqatın məhdudiyyətləri:** Tədqiqatın məhdudiyyəti mövzuya aid milli ədəbiyyatın azlığı təşkil etməsidir.

**Tədqiqatın nəticələri:** Tədqiqatda təqdim olunan tədqiqat nəticələri praktik əhəmiyyət daşıyır: bank sisteminin parametrlərini müqayisə olunan formaya gətirmək üçün metodlar toplusu; makroiqtisadi proseslərin kredit təşkilatlarının fəaliyyətinə təsirinin birgə qiymətləndirilməsinə metodoloji yanaşmalar; makroiqtisadi meylləri nəzərə alaraq kommersiya banklarının parametrlərini proqnozlaşdırmaq üçün bir alqoritm; makroiqtisadi qeyri-sabitlik şəraitində Livan bank sisteminin idarə edilməsinin səmərəliliyini artırmaq üçün tövsiyələr.

**Nəticələrin elmi-praktik əhəmiyyəti:** Nəticələr makroiqtisadi amillərin cari fəaliyyətə təsirini qiymətləndirmək və inkişaf strategiyasını hazırlamaq üçün əsas kimi istifadə olunan Livan Bankı, kommersiya bankları və maliyyə sektoru təşkilatları üçün praktik maraq kəsb edə bilər.

**Açar sözlər:** Livan, makroiqtisadi, bank sektoru, maliyyə, valyuta, kredit

## **LIST OF ACRONYMS**

<b>CB</b>	Central Bank
<b>GDP</b>	Gross Domestic Product
<b>GNP</b>	Gross National Product
<b>IPI</b>	Industrial Production Index
<b>LBP</b>	The Lebanese Pound
<b>USA</b>	United States America

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## INTRODUCTION

**The actuality of the subject:** Macroeconomic processes largely determine the development parameters of the banking sector. Their reliable assessment allows to increase the effectiveness of management decisions and, accordingly, strengthen the financial stability of credit organizations. A comprehensive analysis of the impact of macroeconomic factors on the results of business processes makes it possible to timely identify negative phenomena and trends in the banking system.

However, in modern scientific research, materials related to assessing the impact of macroeconomic parameters on banking results are not often the subject of economic analysis. Existing methods do not take into account the whole range of external factors and do not allow a comprehensive assessment of the consequences of the dynamics of macro processes for credit organizations.

In this regard, the development of methodological approaches to assessing the impact of economic phenomena and monetary policy instruments of the Bank of Lebanese on banking results is of particular relevance in modern conditions. Of great importance is the development by the Central Bank of the Lebanese of areas of monetary regulation that help minimize the negative processes associated with macroeconomic instability. Their practical implementation is designed to increase the level of liquidity, profitability and financial stability of the system of credit organizations, as well as improve competitive positions in the international market.

The solution of these problems is in demand for Lebanese science and practice, and the justification of theoretical and methodological principles and practical recommendations for their implementation in modern conditions becomes an important task of scientific research, which predetermined the relevance of the topic of the dissertation.

**Problem setting and level of learning:** While appreciating the results obtained by scientists, it is important to note that in theoretical studies insufficient



attention has been paid to the cyclical nature of the banking system, the globalization of the banking business, and the modernization of the external political situation in the banking sector; there is no single approach to the classification of macroeconomic factors affecting the banking system. Additional study and improvement of the methods for adjusting the parameters of banking activities to bring them into a comparable form is required. Separate conceptual and methodological provisions are debatable, which makes it expedient to study them in more detail. It is necessary to improve the theoretical and methodological base in order to develop practical recommendations for improving the efficiency of management of credit organizations in a crisis.

The insufficient elaboration of theoretically and practically significant questions determined the relevance and timeliness of the dissertation research on the development of methodological approaches to assess the impact of macroeconomic processes on the dynamics of the banking system, determined the choice of its topic, goal setting and formulation of tasks.

**The purpose and objectives of the study:** The aim of the dissertation research is to improve the theoretical and methodological tools for a comprehensive assessment of the impact of macroeconomic factors on the banking system and to develop recommendations for their practical application. Achieving this aim required the following tasks:

- based on a study of the essence of macroeconomic processes and economic cycles, to classify macro-factors affecting the banking system;
- to characterize modern approaches to assessing the impact of macroeconomic processes on the activities of commercial banks, to identify their advantages and disadvantages;
- to analyze the development trends of the banking system using methodological techniques for adjusting the dynamics of indicators and bringing them into a comparable form;

- conduct a comprehensive assessment of the impact of crisis processes on the banking system by calculating the integral criterion, indicators of instability and absolute stability parameters (volatility);
- to develop methodological approaches to a comprehensive assessment of the basic parameters of credit organizations, taking into account the combined influence of inflation, fluctuations in the national currency, the rate of economic growth (recession), and the dynamics of the stock market;
- present a forecast of the main indicators of the banking system, taking into account trends in the global economic and foreign policy environment, the money exchange rate and the value of shares of credit organizations;
- identify trends in the development of the banking sector of Lebanese in the context of globalization and instability of the external political situation, suggest possible monetary policy measures aimed at minimizing their negative consequences.

**The object and subject of the research:** The object of the study is the banking system of Lebanese. The subject of the study is the theoretical and methodological provisions for assessing the impact of macroeconomic factors on the banking system.

**Research methods:** Methodological basis of the research was the scientific works and applied works of leading domestic and foreign scientists in the field of assessing the impact of macroeconomic factors on the economic system; legislation of the Lebanese in the banking sector; regulations, instructions, instructions and other regulatory documents of the Bank of Lebanese.

During the processing and analysis of information, the following methods of scientific knowledge were used: monographic, analytical, graphic, economicmathematical, economic-statistical, modeling, abstract-logical, etc.

**The information base of the study:** The information and empirical basis of the dissertation was the materials of the Central Bank of the Lebanese, the State Statistics Service of the Lebanese, the Ministry of Economy and Trade of the

Lebanese Republic, official reporting of commercial banks, scientific and practical conferences, periodical economic press, resources of official websites, electronic encyclopedias, monographic studies of domestic and foreign scientists and research teams, as well as personal observations of the author.

**The limitation of the study:** The limitation of the study is that the national literature on the subject is a minority.

**Scientific novelty of the research:** The scientific novelty of the dissertation research is the formation and justification of a set of theoretical and methodological recommendations for assessing the impact of macroeconomic factors and monetary policy instruments of the Bank of Lebanon on the banking system, the practical implementation of which will improve the quality and effectiveness of management decisions in the field of monetary regulation.

**Practical significance of the results and areas of application:** The research results presented in the research is immediate practical importance: a set of methods for bringing the parameters of the banking system into a comparable form; methodological approaches to a joint assessment of the impact of macroeconomic processes on the performance of credit organizations; an algorithm for forecasting the parameters of commercial banks taking into account macroeconomic trends; recommendations for improving the efficiency of management of the Lebanese banking system in the context of macroeconomic instability.

The results reflected in the thesis may be of practical interest to the Bank of Lebanon, commercial banks and financial sector organizations, used as a basis for assessing the impact of macroeconomic factors on current activities and forming a development strategy.

# **CHAPTER I. FINANCIAL ANALYSIS AND GENERAL PRINCIPLES IN BANKING SYSTEM**

## **1.1. Financial institution**

Organizationally, one of the truly key elements of the financial system of any country with a developed market economy is financial markets and financial institutions. A financial institution is understood as an institution engaged in operations on the transfer of money, lending, investing and borrowing funds using various financial instruments. The main purpose of a financial institution is to organize intermediation, that is, to effectively transfer funds (in direct or indirect form) from savers to borrowers. The former are, figuratively speaking, the owners of the "bag of money", i.e. they are ready to transfer them for a reward to a person experiencing financial hunger; the latter have a profitable investment project in their portfolio, but do not have sufficient sources of financing for its implementation.

Financial institutions include banks, savings institutions (cash desks), insurance and investment companies, brokerage and exchange firms, investment funds, etc. The financial institution is designed to ensure coordination of the various needs of savers and borrowers. The former are primarily interested in a reliable and relatively risk-free

placement of their own funds, which implies (Bock, R. and Demyanets, A. 2012: p.13):

- a) liquidity, i.e., ease of access to your funds if necessary,
- b) obtaining long-term income at an acceptable rate; the second - the possibility of mobilizing funds in the required volume for the implementation of various investment programs and operating expenses.

A financial institution is an organization that acts as an intermediary between lenders (willing to lend) and borrowers (willing to take a loan). The main financial institutions are banks. Financial institutions can also include financial and insurance companies, pension funds, pawnshops, credit unions and partnerships. This is the

socalled non-banking financial institutions that perform the same basic role as an intermediary in the circulation of finance.

Thus, financial institutions can be divided into banking (banks and banking organizations) and non-banking (microfinance organizations, insurance companies, pension backgrounds, etc.).

Financial institutions perform the following functions (Mirzaei A., Liu G. and Moore,

T. 2011: p.24):

- 1) saving of financial resources (saving);
- 2) the actual mediation (intermediation);
- 3) financial transformation (maturity transformation);
- 4) risk transfer;
- 5) the organization of foreign exchange operations (foreign exchange operations);
- 6) promoting liquidity;
- 7) organization of operations to change the legal form of companies (going public and going private transactions).

Saving financial resources. The appearance of this function is predetermined by the widespread need for the accumulation of funds for their subsequent use (targeted investment or consumption). Of course, funds can be accumulated without resorting to the help of financial institutions, but this is less profitable and unsafe.

Mediation, as already noted, is the main function of financial institutions and logically complements the function of savings, since, accumulating the money that is saved and having to pay for it, the financial institution must take care of its use, generating income that will be sufficient not only for payments to savings, but and for your own income. Thus, the funds go from the saver to the borrower, and the actual process of transferring funds is accompanied by the emergence of obligations for their return and remuneration.

Having received money, the financial intermediary in return issues an obligation to return it on certain conditions. In turn, the funds received in a certain

combination are provided by a financial intermediary to a certain borrower also under the obligation to repay them with interest. Depending on the financial instruments used, the return of funds can be carried out indirectly, through capital market mechanisms.

Financial intermediation is beneficial for many reasons. Firstly, far from all savers are specialists in financial transactions, versed in the intricacies of loan transactions. Secondly, even having certain knowledge in such operations, the saver, resorting to the services of professionals, is freed from the need to search for a specific investment option, that is, he saves his own time and resources to engage in his main business. Thirdly, the money of the saver begins to work. Fourth, the saver receives income by forcing the financial intermediary to effectively use the funds received by him. Fifth, with the help of intermediaries, it is possible to diversify, reduce or transfer risk to another person. Sixth, financial intermediaries can accumulate large amounts of cash and, after their concentration, invest in projects that are potentially inaccessible to small investors or savers.

Approximately the same logic is inherent in the operations of banking and investment structures when funds raised for a short term are invested in a long-term project. Two circumstances are taken into account here (Saad, W. and El-Moussawi, C., 2012: p.128):

- a) the accuracy of settlements with short-term investors and therefore the prevention of a situation where, in a panic situation, they will at one time want to return their funds back (even with possible losses);
- b) in this case, the law of large numbers is triggered when, in the presence of many depositors, fluctuations are leveled in relation to the amounts of withdrawn funds.

Risk transfer. The vast majority of financial transactions are risky in nature, therefore, when they are carried out, there is always a desire to either avoid risk or reduce its level. This is achieved in various ways, in particular by obtaining guarantees and collateral, transferring part of the risk to a financial intermediary.

Organization of currency transactions. In the modern economy, the vast majority of companies are connected to one degree or another with foreign exchange transactions. In a developed market economy, these operations are predetermined by the desire of the company to enter the international markets of goods and factors of production. In the developing economy, there are other reasons for currency transactions - the desire to create joint ventures, find a foreign investor, open a foreign representative office, acquire new equipment from abroad, etc. The execution of such operations in most cases passes through financial institutions.

Promotion of liquidity. Any company needs cash (in this case we are talking about cash on hand and on settlement accounts), however, what should be their volume is a debatable question. Since current activities (including in respect of cash inflows and outflows) by definition cannot be rigidly predetermined, there always arises the problem of creating an insurance stock of funds that could be used when, for example, the maturity date of payables has arrived, but the money from the debtor, which the company was counting on, they did not receive the account. The simplest option of insurance against such a collision - the formation of a reserve of funds - is not the most profitable, because money lying without movement does not only generate income, but, on the contrary, leads to losses (for example, due to inflation). Therefore, it is most reasonable to invest money in highly liquid financial products offered by financial institutions, for example, in stocks, short-term liabilities.

Organization of operations to change the legal form of companies. The most typical operation of this kind is the transformation of a company into a public company. The logic of business development is such that as the company grows and its activities expand, its founders either become unable to provide adequate financing for the company, or for some reason do not want to do this. In this case, the company changes its legal form, transforming itself into a public company and thereby gaining additional financing opportunities. Since such a procedure is complex and time-

consuming, they resort to the help of a specialized financial institution to implement it (Shaher, T.A.,

Kasawneh, O. and Salem, R., 2011: p.106).

In the system of financial institutions, the most likely role is played by banks. They are active participants in financial markets, while their role is extremely multidimensional and is not limited to providing loans. Firstly, they are issuers of securities - stocks, bonds, bills, certificates of deposit, which are usually considered less risky compared to securities of enterprises. Secondly, banks are involved in portfolio investments. Thirdly, they offer services to other participants in the stock market (trust operations, that is, portfolio investment management on behalf and at the expense of the client, settlement and payment transactions and depository services). Fourth, they provide loans.

A bank is a financial organization that accumulates temporarily free funds of depositors (attracting money of people and organizations in deposits) and lends to citizens and legal entities (enterprises).

Some economists additionally identify specific types of banks: investment banks (specializing in long-term lending to industry, construction and other sectors of the economy); mortgage (provide loans secured by real estate. and, in some cases, movable property); savings banks (their main function is to attract free cash from customers, as a rule, in long-term deposits), etc. However, this classification is losing importance, because almost all banks today provide their customers with the opportunity to use the full range of banking services at once.

Two main functions of banks can be distinguished (Bridges, J., Gregory, D., Nielsen, M., Pezzini, S., Radia, A. and Spaltro M., 2014):

- attracting clients' money in deposits. Deposits are on demand (interest is usually very small, but money can be withdrawn at any time without loss) and term (or deposits; attracted for a certain period at a higher percentage, early demand entails a loss of interest). If the client needs a current account, with which you can make money transfers, payments, it is better to open an account on demand. If the



client wants to receive income from investing money for a certain period, then most often a deposit is opened;

- granting loans - the provision of money for temporary use on the terms of urgency (for a certain period), payment (the borrower is obliged to pay interest on the use), repayment (the client is obliged to repay the loan on the due date). We can distinguish the types of loans: commercial (credit without collateral, most often in cash and, as a rule, at a high percentage); mortgage (loan secured, as a rule, real estate and at a lower interest rate); a loan (a loan without interest - it is granted in rare cases, for example, to an employee of an enterprise for purchasing an apartment by installments at no additional cost). The simplest loan is commercial. Often in banks it is called consumer. It is simple to issue it - it is enough to confirm solvency (certificates of salary, etc.) and receive cash. Making a mortgage is more difficult. In this case, the borrower is obliged to register an apartment on bail to the bank - in order to guarantee a loan repayment. Such a loan is less risky for the bank - therefore, the percentage on it is less.

Despite the variety of forms that make up the financial system, very few of them invest in commercial firms. Commercial banks are the main source of funds for these firms. Banks, individuals, companies and government organizations accept deposits and time deposits on demand, and in turn lend and make investments. These loans include seasonal and other short-term, medium-term and real estate collateral loans. Apart from banks, deposit institutions include loan-savings associations, mutual credit funds and credit unions (mainly individuals).

The insurance companies' business consists of collecting periodic payments from insurers and fulfilling their obligations to them. Insurance premiums form the Company's reserves, which, together with a portion of its own equity, invest in financial assets. Insurance companies carry out insurance activity in two areas:

1. Property and contingency;

2. Life. (Castro V, 2013: p.681)

Fire, burglary, car accidents, etc. is insured. Such companies pay full income tax at the full rate. That is why they invest most of their money in municipal bonds,

with the income tax paid on these securities. Small amounts are invested in corporate stocks and bonds.

The second type of insurance is life insurance. The large group of people are not likely to die, which means that insurance companies have the opportunity to acquire long-term securities. In addition, a portion of the income of such organizations is exempt from taxation (as a provision). Therefore, they prefer high-income taxable investments.

Scholarship and b. funds are created to provide income for people who have completed their employment. Both employees and employers spend money in the background. Funds received during the collection period are not taxed, but when the money is returned, the tax is paid. Because the pension assets are long-term, the fund offers them the opportunity to invest in long-term securities.

Financial companies are special corporations that provide loans for consumer needs. On the one hand, these firms mobilize funds by issuing shares, take loans from commercial banks, and provide loans on the other hand. These types of companies are the main source of funding for small businesses. Certain financial institutions perform the required broker functions. When brokers meet those in need of funds with those who have the funds, they combine supply and demand for capital rather than credit.

Investment banks deal with the sale of corporate stocks and bonds. When the firm wants to raise funds, the investment bank takes all the issue securities and sells them to investors. Because banks are constantly combining supply and demand for capital, they place their securities more effectively than issuers. Payment for services is the difference between the amount paid to the issuing company and the amount received from the buyers.

Mortgage banks are also directly involved in the purchase and placement of mortgages from individuals and firms, or construction companies and real estate agents.

Although mortgage banks operate as brokers and do not involve equity, they usually serve as collateral for investors, that is, they follow the terms of the pledge and receive payments. They receive commission fees for this activity.

The uninterrupted operation of the financial system is provided by numerous exchanges and securities markets. Current financial assets are bought and sold in the secondary market. Second market deals do not increase the number of securities in the market, but the activity of this market increases the liquidity of financial assets, thus expanding the primary market. In this regard, the New York Stock Exchange, the American Stock Exchange, and the New York Stock Exchange find orders for sale and purchase. In the course of this process, the market value of financial instruments depends on supply and demand.

## **1.2. Financial markets**

In the economy, financial markets are often understood as a mechanism that facilitates the trade of securities, especially stocks and bonds, commodities, for example, securities or agricultural products, as well as interchangeable assets. In recent years, financial markets have grown rapidly in quantitative and qualitative terms, and have been constantly innovating to improve liquidity as a whole.

In today's world it is not easy to define the financial market as a concept. Because, in many cases, this issue creates confusion and confusion. Financial markets can be viewed as an organizational structure that facilitates the sale of financial products (for example, the stock exchange). In addition, financial markets are understood as a way of selling financial products or a way for buyers and buyers to interact. It is a stock exchange, direct contact, etc. can be in the form. Financial markets exist in the form of domestic and foreign markets and include: (Trenca I., Petria N., Mutu S. , Corovei E., 2012: p.86)

- capital base - covers stock and bond markets;
- commodity exchanges - a legal entity that forms a wholesale market through the organization and regulation of exchange trade;

- money market;
- credit market;
- currency market;
- insurance market;
- derivatives market. This includes the futures and forward deals market.

The main task of the financial market in the financial sector as a whole is:

- attraction of capital (in the capital market);
- risk transfer (in the derivatives market);
- Provision of international trade (in the foreign exchange market).

Financial markets are used to meet those who are interested in acquiring capital (borrower) and those with equity (lenders). The obligation of repayment of capital is regulated by the receipt by the borrower to the lender. Such receipts include securities that can be freely bought and sold on the market. The notion of a "financial base" can cause a lot of fun.

Financial markets as a whole can express: (Lavrushin, O.I., 2014)

- Organizations and offices that promote the sale of financial products. Thus, the stock exchange offers stocks, bonds, options and so on. provides sales;
- Coordination of buyers and sellers for the sale of financial products. For example, there is a difference between the stock seller and the buyer in a variety of ways, directly between the buyer and the seller on the stock exchange, and so on.

Financial markets can be classified as national and international markets. The capital market, which is a major part of the financial market, includes:

- provides financing of the Company's projects through the stock market - ordinary shares, and allows trading with them;
- bond market - provides financing of projects by issuing bonds and allows trading with them;
- commodity market - provides trade with commodities;

- money Market - Provides short-term debt financing and investment;
- derivatives market - provides financial risk management tools;
- futures market - provides standardized forward bonds for commodity trading in the future;
- insurance market - provides redistribution of various risks;
- Fforeign exchange market - provides trade with foreign currency. The capital market is a securities market where companies and the state can attract long-term resources.

In order to understand the financial markets, it is necessary to examine what its goals are. The fact is that without the financial markets, borrowers could have difficulty finding independent lenders. Bank intermediaries assist them in this process. Banks take deposits to deposit money. They will then have the opportunity to lend cash to the Deposit Funds to those in need. As a rule, banks provide money in the form of a loan or a mortgage loan.

Compared to a simple bank deposit, a market where lenders and their agents can meet with their lenders and their agents, as well as a market that can sell existing debt and credit obligations, requires a more sophisticated bond. A good example is the financial market and the stock market. The company can raise funds by selling shares to investors, and stocks can be sold and bought. In the 1980s and 90s of the last century, the fast-growing sector of the financial market was trading derivatives or, briefly, derivatives.

The financial market is an institutional structure for the creation and exchange of financial assets. The financial markets are focused on the mobilization of capital, the provision of credit, the exchange of money transactions, and the efficient allocation of financial resources in the production of goods. Different financial instruments and services act as the object of sale in the financial markets. The primary financial market is related to the launch of new financial instruments. The secondary market is the purchase and sale of financial instruments. It is well-known that, in the context of market relations, continuous attraction of financial resources

into the country's economy is important. The economic reforms implemented in Azerbaijan and its deep integration into the global economic system have contributed to the dynamic development of the economy. The existence of financial markets that ensure the involvement of internal and external resources in economic development has become necessary. Thus, financial markets play an important role in providing them with financial resources both at the macroeconomic and state levels, regardless of the form of ownership. Therefore, the development of a market economy is impossible without financial markets. Financial markets are a particular form and method of organizing cash flows and are a combination of buying and selling relationships in the financial sector.

The emergence of financial markets is objective and has been further developed in connection with the activities of the state and enterprises of various organizational and legal forms. On the other hand, the level of government interference in the market economy and the interaction between the state and the enterprises have also influenced the financial market. Financial market is the marketplace where financial resources such as commodities are represented. In other words, the financial market is a market that distributes cash between economic entities. The purpose of the financial markets is to ensure the efficient mobilization of funds and their sale to those in need of financial resources.

The global financial market is part of the global market for loan capital, the aggregate supply and demand for capital of lenders and borrowers from different countries. One of the segments of the global financial market is the stock market or the securities market.

The global financial market began to develop with the beginning of the export (migration) of capital by the end of the XIX century.

The functions of the global financial market include the following features:

1. The accumulation of free cash and their redistribution between individual industries, countries and regions on a global scale.
2. Acceleration and growth of production efficiency (Gropp, R., Mosk, T., Ongena, S. and Wix, C., 2016).

The global financial market is divided into primary and secondary. They are closely related, since the primary market saturates the secondary with securities. The primary market serves to redistribute capital between lenders and borrowers (investors and recipients). In the secondary market, only counterparties change, namely:

- there is a change in owners of debt obligations;
- the size of the resources of the original borrowers does not change.

The secondary market creates a mechanism for the resale of debt obligations, which leads to an increase in the liquidity of the market as a whole, and, consequently, the credibility of investor creditors also increases. It ensures, therefore, the smooth functioning of the entire market for loan capital.

Within the global financial market there are: (Jiménez, G., Ongena, S., Peydro, J.-L. and

Saurina, J., 2017: 2129)

- national financial market;
- international financial market.

The basis of this division is a sign of accountability to national monetary regulation systems.

The global financial market does not exist in the form of a single market, it is only a combination of interconnected national markets. Under the international financial market understand loan operations in currencies outside their countries of origin and, therefore, not subject to direct state regulation by these countries.

Since 1964, by virtue of the Code of Money and Credit, the Bank of Lebanon has published a list of banks operating in the country.

Lebanon does not attract the significant level of foreign aid needed to help it recover from both a long civil war (1975-89) and the Israeli occupation of the south of the country (1978–2000). In addition, the delicate social balance and the almost complete absence of central government institutions during the civil war led to the complete bankruptcy of the state, which seeks to raise the income it needs to finance reconstruction efforts. Thus, significant debt has accumulated, which by 2001

reached \$ 28 billion, or almost 150% of GDP. Unfortunately, economic performance was sluggish in 2000-2001 (zero growth in 2000, and estimated between 1.0-1.4% in 2001, largely due to a slight increase in tourism, banking, industry, and construction ) Unemployment is estimated at 14% for the year 2000 and 29% among the age group of 15-24 years, with preliminary forecasts of further growth in 2001. However, fortunately, many foreign Lebanese have returned to the country due to the negative financial situation that they are facing abroad due to the global economic crisis. In addition, more and more job opportunities are attracting more Lebanese youth who see a chance to return and work in Lebanon, as well as support for Lebanese with higher education living in the country.

Lebanon has commercial traditions of free market and non-interference in the market. The Lebanese economy is service oriented; The main sectors of economic growth are banking and tourism. In Lebanon, there are no restrictions on foreign exchange transactions or capital flows and banking secrecy is strictly enforced. Lebanon recently passed a law against money laundering. Lebanon has virtually no restrictions on foreign investment. The United States also lacks specific trade sanctions against Lebanon.

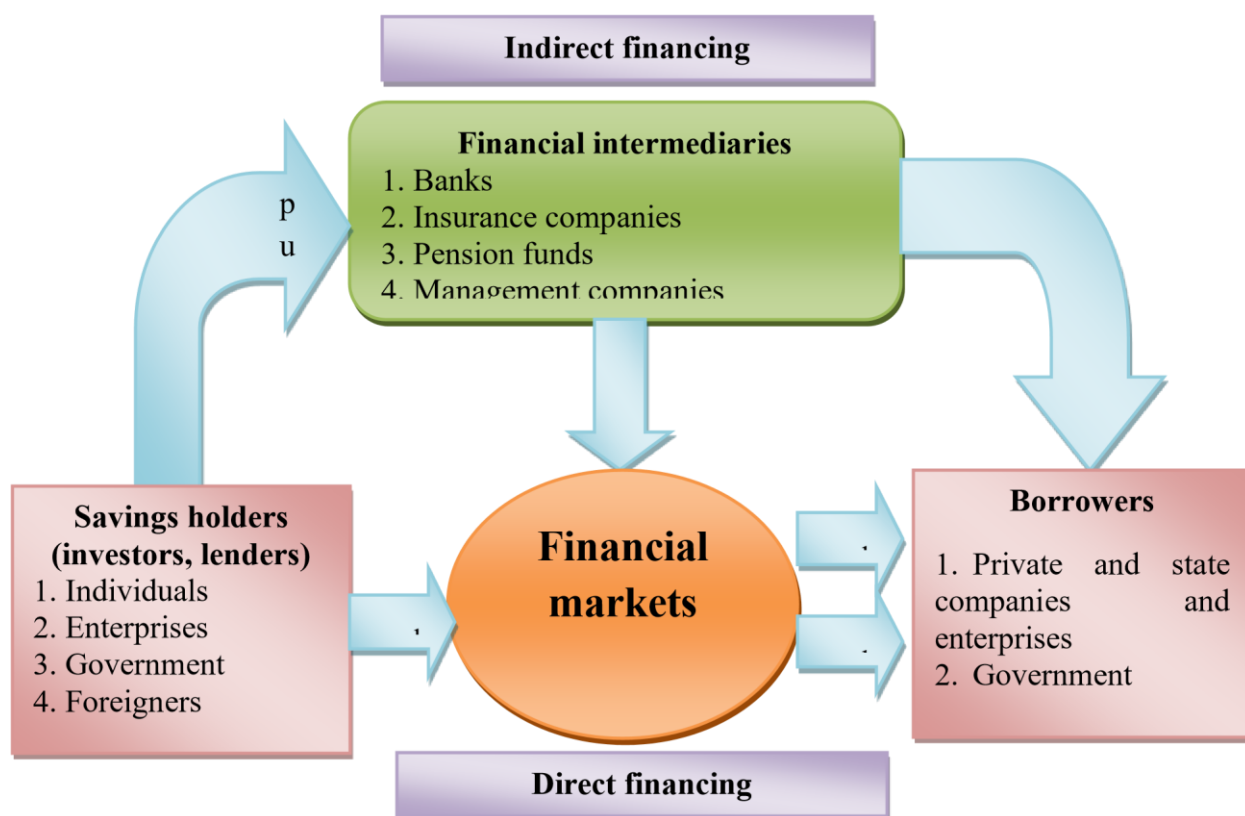
Financial markets are government institutions that provide the movement of capital between participants in the economic and economic activities of a market economy.

Such participants include the State, state and commercial companies, institutional and private investors. The purpose of some participants is to obtain borrowed money to fulfill their tasks in the real sector of the economy, to insure the future results of their economic activities, as well as to ensure financial connection with the global economy, the goal of others is to increase / increase money.

Financial markets are designed to fulfill the goals set by different participants.



**Figure 1: The scheme of work of financial markets**



**Source:** Kok, C., Gross, M. and Zochowski, D., 2016

In the financial markets, free money is directed to financial assets either directly from the lender to the borrower in exchange for securities, term liabilities and currency, or through intermediaries (indirect financing) - the money of lenders is accumulated in banks, insurance companies and various funds, and then transferred to borrowers.

According to the goals of the participants and the tasks performed by the financial

markets, the latter can be divided into (Kok, C., Gross, M. and Zochowski, D., 2016):

- Currency market;
- Money Market;
- Debt market;
- Derivatives market; • Commodity market;
- Stock market.

The essence and main role of the financial market is to unite all sellers so that they are easily accessible to potential buyers. Thus, if the economy relies mainly on the relationship between buyers and sellers in the allocation of resources, then this economy can be called a market economy.

Financial markets favor (Maurin, L. and Toivanen, M., 2012):

- accumulation and increase of capital;
- transfer and risk management (hedging);
- international trade (in the foreign exchange market).

The financial market also serves to bring together those who seek capital and those who have it.

Often, the borrower (the one who takes the capital) writes out to the creditor (the one who gives the capital) a receipt or bill, promising to pay the capital. These bills are called securities that can be freely sold and bought. For the lender to lend capital to the borrower, he naturally expects some kind of compensation, which is usually paid in the form of interest or dividends.

Where does each of us come across these markets? The simplest example is when you come to a bank or exchange office to exchange currency, we automatically become participants in financial markets. We refuel the car at a gas station and we are participants in the financial markets, since the price of gasoline and diesel fuel depends on the cost of oil, the price of which is formed in the financial markets. We buy a beloved girl or wife a gold ring - and in this situation we are participants in financial markets, since the price of gold is also formed in the financial markets. We went to the supermarket for food - and here we ran into financial markets, since the cost of products depends on the national currency, and its rate is formed precisely in the financial markets.

Financial markets surround us from all sides and, in the situations that I have listed above, we are passive participants and cannot influence the situation.

### **1.3. Banks and general principles in banking system**

In the economic literature, the question of the content of the concept of “banking system” is interpreted differently. Without going into the existing controversy, when considering the banking system, we will proceed from the general provisions characterizing any system. With this approach, the banking system is a single whole, parts of which are interconnected and interacting with each other, and the system itself simultaneously depends on the properties of these parts.

The banking system of any country was formed as a result of the development of the national economy, now it has become the center of the economic mechanism and interacts with all sectors of the economy, with the population, public authorities, having a certain impact on them. The effective functioning of the banking system is a catalyst for the overall development of the national economy.

Banking systems in different countries were formed far differently.

Historical, political, ethnic, religious and even climatic factors influence this process. Despite this, there are certain general principles for building a banking system at the national level.

Firstly, there is a legislative separation of the functions of the central bank and all other banks. In practice, this gives rise to a two-tier banking system.

The central bank, being at the top level, performs such important functions as: (Mésonnier, J.-S. and Stevanovic, D., 2017: p.551)

- issue of cash means of payment;
- the function of “bank of banks”;
- government banker;
- monetary regulation of the economy.

In some countries, central banks also have the function of regulating and supervising banks.

Second-tier banks provide intermediation in credit and investment, payments and other banking services. Their activities reduce the degree of risk and uncertainty in the economy both within the country and beyond. Concentrating in

their hands the bulk of the loan capital, banks bear the bulk of the credit servicing of economic turnover.

Secondly, the central bank does not compete with commercial and other banks of the country located at the lower level of the credit system. His activities are aimed at implementing the economic policy of the government, achieving national goals.

Thirdly, in all countries there is a special system of regulation and control over the activities of banks. In some countries, including Lebanese, the central bank performs regulatory and supervisory functions in relation to banks, in others they are assigned to special state bodies (for example, in France, to the Banking Commission).

But there are states where the activities of commercial and other banks are controlled and regulated by the Ministry of Finance. Regardless, in all countries, banking is one of the most controlled businesses. Control is aimed at maintaining the liquidity of banks and protecting the interests of depositors and investors.

A distinctive feature of commercial banks in comparison with specialized credit non-bank organizations focused on providing a limited list of services is the availability of the ability to provide comprehensive customer service. This is due to the fact that, in accordance with the requirements of the law, non-banking organizations are subject to a restriction with respect to operations.

Commercial banks are called upon to carry out the following functions: Mobilize free cash and transform it into income-generating capital; To lend to the state, business entities and citizens; Issue credit money; Make settlements and payments; Issue an issue; Advise in the field of their professional activity.

The operation of a commercial bank means a certain system of actions aimed at achieving a specific goal (transferring funds, obtaining a loan, etc.). The functions performed by a commercial bank determine the composition of the operations it renders. A specific feature of banking operations is that they are primarily associated with cash and capital. A modern commercial bank can offer its customers a wide range of operations, including about three hundred items. Diversification of the

approach to carrying out activities allows commercial banks to maintain their existing customers and expand their composition even in the face of adverse economic conditions.

Banking risk is the possibility of financial loss to a financial institution. The reasons for this may be an unexpected change in the market value of various financial instruments. In addition, losses may arise due to changes in the foreign exchange market.

The following classification of banking risks exists (Noss, J. and Toffano, P., 2016: p.19):

1. by time. Risks are current, promising and retrospective;
2. by level. The degree of possibility of occurrence of losses can be either low or moderate, or complete;
3. according to the main factors of occurrence. Such circumstances are caused by economic or political reasons. The first option includes various adverse changes in the economic field of the financial institution itself. Also, this can occur in the country's economy. Political risks are caused by changes in the political environment.

The main banking risks include the following factors:

1. liquidity risk. The value of assets and liabilities of banking institutions should correspond to the current market indicator. If this does not happen, then the financial institution may experience serious difficulties in paying off its obligations;
2. The risk of changes in credit rates. Unforeseen changes in this segment can seriously affect the structure of assets and liabilities of a banking institution;
3. Credit risk. This area requires a constant balance between the quality of loans issued and the liquidity factor;
4. Capital adequacy. It is necessary that the bank be able to freely absorb losses and have sufficient financial capabilities in times of negative situations.

In their activities, financial institutions have to take into account various nuances. In particular, the nature of the risks is of considerable importance.

Distinguish between external and internal causes of their occurrence. The first category includes those risks that are not directly related to the activities of the bank. These are losses resulting from some serious events. These may include wars, nationalization, the introduction of various prohibitions, the aggravation of the current situation in a particular country. As for internal risks, they represent losses arising from improperly carried out (main or auxiliary) activities of a banking organization.

The determination of costs (in quantitative terms) that are related to risks during banking activities is called the assessment of such risks. The purpose of this procedure is to identify the conformity of the results of a particular lending institution with current market conditions. Most often, the analytical method is used for this - as applied to both the loan portfolio and its main indicators. This allows you to display the overall picture of the activities of a particular bank, as well as its main areas of operation. In addition, this assessment process helps determine the degree of credit risk.

An important role in the activities of each credit institution is played by the proper management of financial risks. In this matter, the choice of the most suitable strategy is of great importance. The main goal of such banking risk management is to minimize or limit the possibility of financial losses. For this, a number of special events are regularly held. Much attention is paid to management issues - in relation to assets and liabilities, control of established standards and limits, as well as reporting. In addition, the monitoring, analytical and audit areas are of considerable importance - in relation to the activities of any credit organization.

The widest group of banking risks includes financial factors. Such probability of loss is usually associated with unexpected changes that have occurred with the main components of any credit institution. Most often this happens with the volumes of banking components, or is associated with the loss of their profitability. In addition, unforeseen changes in the structure of assets and liabilities of a credit institution can play an important role. The group of financial risks includes such

types of them as investment, credit, currency, market, inflation and other variants of changes.

Risks in banking are the likelihood of a loss of liquidity, cash loss due to external, internal factors. Risk is part of banking, but all banks make efforts to reduce the possibility of financial loss. The desire of banks to find marginal revenue is limited by the likelihood of monetary losses (Kok, C., Gross, M. and Zochowski, D., 2016).

The risk potential is constantly above 0, the bank's task is to calculate the exact value. The level of risks increases with problems that suddenly arise, the setting of tasks not previously solved by the bank, and the inability to take urgent measures to resolve the situation. The consequence of an incorrect assessment is the inability to take the necessary actions, the consequence is super-high losses.

Calculation of banking risks is complex and private. The calculation is based on the search for a connection between the acceptable risk and the amount of possible losses. Comprehensive risk is the total probability of loss of bank finances for all types of activities. Private - losses incurred on a specific operation, measured empirically by selected methods.

There are three methods for calculating the possibility of losses: analytical, statistical, and expert. With the statistical method, statistical series in a large time interval are considered. The expert method is the collection of opinions of banking professionals, the preparation of rating ratings. The analytical method is the analysis of risk zones using the above calculation methods.

The essence of banking risks is the probability of non-repayment of funds issued on credit. The Basel Committee classification distinguishes credit, market, operational, state, strategic, liquid, reputational risks that can cause disturbances in the balance of assets and liabilities.

Banking risks are divided into individual, micro and macro levels, depending on the path of occurrence. Risks are manifested by the need for additional costs, resulting in losses up to liquidation. The probability of losses exists in every financial

transaction, banking activity reduces the likelihood of events affecting the default on creditors and debtors.

The basic principles of banking are: liquidity, security and profit. Liquidity in banking is the ability of a bank to pay the minimum possible losses to potential savings depositors and at the same time meet the market's credit needs. Banking security is twofold in the form of sufficient capital and asset quality. Sufficient bank capital ensures the depositors' confidence in the bank, and the quality of the bank's credit portfolio, the bank's security.

The organizational structure of the bank is closely related to its size, the range of services provided and the prestige of the personnel. Loans and customer service are the basic functions of small-cap banks. As the volume increases, the range of specialization and loans (such as commercial, consumer and construction loans) also grows and customer services grow. Banks increase the range of services they offer to maximize interest and commission income. We can divide the product mix of banks into three main groups: loans; Deposit-oriented services; investment (money market instruments). Customer groups - customer markets consist of consumers (retail banking, other banks (correspondent banking)), formal customers and institutions (wholesale banking).

Banks are the major credit institutions that offer a wide range of credit, savings and payments services and provide a wide range of financial services to any business in the economy.

Savings function. Each bank, along with its own capital (charter, reserve fund, retained earnings), is engaged in attraction of deposits, which constitute the major part of the bank's liabilities to carry out active operations (lending, purchase of securities, etc.). In the broadest sense, the savings include not only the funds that customers put in the bank at a higher interest rate for a certain period, but also the resources that individuals and legal entities have on their current accounts. Different entities accrue savings in the future for the costs of the period, thus increasing the bank's savings potential. Banks are expanding their savings base through the use of



plastic cards to facilitate settlements, departments and offices in the densely populated areas.

**Credit function.** Banks pay a certain amount or cover the costs they collect. The banks provide loans for manufacturing and trading to maximize these costs and make profits. Banks with savings and credit function play an intermediary role in the economy and transfer money from economical economy to deficit economy under guarantee (Bondarenko V.A., 2015).

**Transfer and settlement function.** Each enterprise has a bank account. Through it, he makes payments and receives payments from other entities. The non-cash form of settlements is considered to be an important function of banks as banks are safe, operative and affordable, and these transactions are not possible outside the bank.

**Cash management.** The Bank is responsible for collecting and disbursing enterprise payments. It already puts his cash on short-term securities. If the customer needs cash, the reverse transaction is performed. While cash from legal entities has been managed lately, there are similar operations with individuals.

**Trust function.** Banks manages certain financial institutions (personnel trust services) and property of businesses (commercial and non-commercial trust services) and financial resources.

**Bank investor or underwriter.** Underwriting is the purchase of a security by the issuer and the sale of another to make a profit. This operation is more risky than traditional banking services. Accordingly, in 1933, the US Congress banned banks from engaging in investment and commercial transactions at the same time. Subsequently, firms preferred to issue and place their securities rather than bank lending. Banks have made it clear they need to engage in investment operations to repay their former customers. This service tended to increase as a result of the merger of large enterprises and the acceleration of privatization processes.

**Broker function.** Banks provide their clients with the opportunity to buy stocks, bonds and other securities without resorting to dealers. Banks carry out brokerage operations on real estate and sell residential and commercial buildings and

subsequently finance them. Banks conclude agreements with brokerage firms and create brokerage offices in their organizations. Thus, brokers are approaching the bank's clients, and the banks are approaching the brokers' business. People who have changed their place of residence have not yet found their “bank,” and look for a home and commercial building. In turn, he directs his client to the bank. Brokers, which are not directly related to interest rates, become partners of banks. Banks are also getting brokerage firms specializing in these transactions. This direction is also important in the development of banks.

Investment planning function. Banks are planning investment projects for their customers. Banks should constantly keep track of processes in the economic community and provide professional planning services to their clients with strong financial and legal experts.

Issue of credit money. Banks increase deposit money by implementing deposit and credit issues. Loans to the customer increase the bank's liability by writing to his / her demand account. The account holder can increase the amount of cash in circulation by cash. However, as the economy requires a certain amount of money, this function of banks is either restricted or stimulated by central banks.

Consulting services. Traditionally, customers address banks and discuss with them the optimal use of credit, savings and investments. Banks offer tax and business marketing research, both in domestic and foreign markets, and advise on the promotion of goods and services in the market. Banks analyze a large amount of information as a mediator between settlements, depositors, and those seeking a loan. This ability differentiates banks from other relevant entities in carrying out the given function.

(Lendvai, J., R. Raciborski and L. Vogel, 2013: p82)

Storage of valuables. One of the main types of banks since ancient times is the storage of valuables. Jewelry, documents, etc. personal belongings are protected from non-combustible safe. Bank protection increases the likelihood of customers to relax.

Currency exchange. This type of service has also played an important role in the evolution of banking. The risk of the global financial market today has led to largescale operations by large banks. This is due to the problem of funds liquidity and the importance of rich experience. These operations, which are widely used, are referred to as dealing.

Leasing Services. Banks offer customers leasing instead of loans to buy equipment. That is, the bank leases it as its own funds. The equipment will remain at the disposal of either the bank or the customer after the leasing payments have been fully paid.

Offering venture capital. Banks are increasingly investing in risky areas. Venture capital is primarily a high-tech list of projects that are driven by business plans that are likely to fail far from traditional, but with high returns.

Pension security. Banks are in the area of interest of pension funds and are engaged in providing senior citizens. It is based on an agreement with individuals or businesses. The proceeds are accumulated and invested. Payment starts when citizens reach retirement age or they lose their ability to work. These resources play an important role in the investment activity of banks as long-term funds.

Each bank must adhere to the following basic principles and guidelines to ensure the adequacy of its internal control mechanisms: (Lavrushin, O.I., 2014)

1. Perfect organizational structure;
2. Necessary policies and accounting rules;
3. Actions for the protection of assets;
4. Effective internal audit program.

Internal auditing is the most effective internal control tool at the disposal of the Supervisory Board, the Financial Audit Commission and the Management Board. An internal audit program can be considered perfect when it is able to minimize the damage that can be caused by established controls, operating procedures - ineffectiveness, inconsistencies, or fraudulent or deliberate manipulation.

## **CHAPTER II. HISTORY OF THE LEBANESE ECONOMY AND BANKING SECTOR**

### **2.1. Period (1) 1950 till 1970**

Lebanon, which has become the most important financial and commercial center of the Middle East since the 19th century, has great market potential that cannot be compared with its population and territory. The service sector is the most important area in the country's economy. In a country where the free market economy is dominant, the economic sphere is based on private enterprise. Private sector, which meets 80% of the total demand in the country; It works in all areas: from agriculture, industry, construction, trade, tourism, banking, hotel management, media, consulting and engineering. Beirut port has become the most important trading port in the Middle East and Eastern Mediterranean after World War II. The construction and sale of real estate is an important source of income in the country's economy. Especially the benefits provided to citizens of the Arab countries when purchasing real estate. This provides an important flow of money to Lebanon, especially to the Gulf countries. The availability of skilled labor enables international trade. There are no legal restrictions on private business and investments; there are rules encouraging foreign investment. The cement industry, which is the country's most valuable natural resource and has now become extinct, has been replaced by the cement industry.

Lebanon, where a market economy is applied, prefers to be liberal in trade. In a country where the government does not restrict foreign investment, investors face difficulties due to bureaucracy, corruption, complexity of client procedures, high taxes and poor regulation of property rights. The main sectors of the Lebanese serviceoriented economy are banking and tourism.

Countries to which Lebanon exports: Saudi Arabia, the United Arab Emirates, Syria, Iraq, South Africa and Switzerland. The main export products are; jewelry,

nonferrous metal, chemicals, fruits and vegetables, tobacco, building materials and paper.

Countries that the country imports; China, Italy, France, Germany, USA, Russia, Greece and Turkey. The main imported goods are; Oils from petroleum oils and bituminous minerals are automobiles, pharmaceuticals, gold, livestock, petroleum gases and other gaseous hydrocarbons and diamonds.

Being the biggest problem in the socio-economic sphere, injustice in the distribution of income is leading, as in the whole world. Although per capita income exceeds \$ 10,000, more than a million people in the country are estimated to live below the poverty line, and 250 thousand people live below the hunger line.

Modern Lebanon is a young independent state, developing according to the market type. The leadership of the economy and political life of the country is carried out by the trade and financial elite. Capitalist relations are dominant in the country, but along with the capitalist structure in the economic life of the country, pre-capitalist forms are preserved.

Lebanon is of great interest for its political and state system. In this regard, it is a unique country. In Lebanon, the structure of the state apparatus is based on a confessional basis, which is characterized by the distribution of the most important public posts between various religious communities.

In the modern world there are many countries in which one or another religion is state (this applies to a large extent to Muslim countries), and because of this, representatives of other faiths have virtually no access to state power. However, this practice cannot be compared with the confessional system operating in Lebanon. Unlike other Arab countries, a significant part of the Lebanese population professes not Islam, but Christianity. According to the last official census conducted in 1932, Christians make up 52%, Muslims - 48% of the population. Both Christians and Muslims of Lebanon are adherents of many movements of these two world religions. In total, there are about 20 different religious communities in Lebanon (French Commissariat, 1932: p.3).

The Lebanese economic system was based on the regime of the “free economy” under which the unlimited freedom in Lebanon received foreign capital.

In 1948, the country was declared a free foreign exchange market. Beirut has become one of the world centers for trading in gold, foreign exchange, and transactions with chain securities. The city has many banks (of which more than 40 are branches of foreign banks), 103 insurance companies, many trading, intermediary and other companies with Lebanese and foreign capital.

Lebanon, being one of the first countries to free itself from colonialism (1943) and achieve the abolition of the French mandate, began to play an active role in the political and economic life of the Middle East. Under these conditions, Lebanon was tasked with accelerated economic development with the goal of accelerated integration into world economic space. The path chosen by the Lebanese authorities was based on the principles of significant government intervention in the rushing economy with the aim of promoting local and foreign private entrepreneurship, providing foreign capital with equal opportunities with local capital, maintaining a liberal currency and customs regime, and predominantly orienting production to the external market for the entire region.

From the very beginning of Lebanon`s independent development, there has been no significant increase in government intervention in the country's economy. The role of the state was expressed, in particular, in the development and implementation of state plans. Thus, the Ministry of Planning, created in November 1954, was entrusted with coordinating the development of individual sectors of the economy, identifying potential resources and opportunities, developing economic projects and monitoring their implementation. In 1956, the Litani project was launched in Lebanon, which included the construction of dams and hydroelectric power stations on the Litani River, at the end of which (1968) several hydroelectric power stations with a total capacity of about 300 thousand kW were commissioned, and the area of irrigated land increased by 25,5 thousand hectares (Statistical digest, 1970: p.11).

After the withdrawal of Anglo-French troops from Lebanon in 1946, economic projects aimed at its revival began to be carried out in the country. Large funds were allocated from the state budget for public works. The Government of Lebanon nationalized through repurchase part of the Domask-Beirut railway, previously owned by French capital, some power plants and utilities, and also tightened control over the issuing Bank of Syria and Lebanon, which was dominated by French capital, as well as other foreign banks operating in Lebanon. The Lebanese government succeeded in obtaining from foreign oil companies an increase in concession payments for the operation of oil pipelines and oil refineries guides enterprises in the country.

At the same time, the government began to encourage the investment of private national capital in the economy, providing it with various kinds of benefits. So, according to the law of 1954, newly created industrial enterprises were exempted from income tax for 6 years. According to the Beirut Association of Merchants, taxes and duties, from which Lebanese entrepreneurs were exempted in 1956, accounted for 52% of the final price of goods (Statistical digest, 1970: p.8).

On the whole, the measures taken by the government of the Lebanese republic led to a certain strengthening of the position of the national bourgeoisie, laid the foundation for the creation of a public sector in industry and in the field of transport.

The industry in Lebanon has traditionally been concentrated in private hands, enterprises were small and comprised mainly individual private property with or without hired labor. Some enterprises were limited liability partnerships, and their number increased and reached 44 in 1974. The structure of industrial production was represented by food industry, textile and spinning mills, which accounted for 44% of industrial production, furniture and woodworking enterprises, which accounted for 29% of industrial production. At the same time, engineering accounted for only 6% of the total production, and the rest was in the pharmaceutical industry and the production of building materials.

In the 1950s, artisanal and craft enterprises predominated in Lebanon's industrial production. Heavy industry was extremely poorly developed. Lebanon's industrial enterprises were mainly associated with the primary processing of agricultural products and enterprises of a different profile were based, as a rule, on the processing of imported raw materials (plastics, rubber, metal processing and others).

Modern industrial enterprises were mainly owned by foreign capital or were of a mixed nature when Lebanese entrepreneurs acted as shareholders. National capital prevailed only in the textile, food and other sectors of light industry, which as a result of foreign competition were in a very difficult situation.

At the beginning of the 60s, there were about 3.5 thousand industrial enterprises in Lebanon, whose capital was estimated at 908 million Lebanese pounds (412.727 million dollars; 1 dollar = 2.2 pounds). About 50% of them had a registered capital of less than 10 thousand pounds per enterprise, that is, in fact, did not differ much from craft workshops;

40% of enterprises had capital on average from 10 to 100 thousand pounds each; about 9% - from 100 thousand to 1 million pounds. Only 30 enterprises had a capital of more than 1 million pounds each. The number of workers employed in one enterprise averaged approximately 14 people. In total, about 50 enterprises in Lebanon had personnel of 100 or more people.

Since the mid-60s, light industry in the form of consumer goods production began to develop in Lebanon. The source of financing was the funds allocated by some oil refining Arab countries and Lebanese emigrants, who created a number of industrial enterprises upon their return to their homeland.

Nevertheless, for many years the industry of Lebanon has been characterized by a relatively high level of development compared to other developing countries in the Middle East region.

Before the civil war, namely in the 50-60s, Lebanon was a predominantly agrarian state. More than 50% of the country's residents associated their well-being



with work in agriculture, which was concentrated mainly in the Bekaa Valley, in the Marjayun region, in the northern coastal zone in the Tripoli region and in the southern coastal zone in the Saida and Tira region (Fauaz M., 1968: p.6). The main crops grown are: wheat, barley, corn, beans, as well as grapes, tangerines and oranges.

The total area of the best lands most suitable for agricultural work, especially if irrigation was used on them, was estimated in Lebanon in 1974 as 180 thousand hectares. For their irrigation, 900 million cubic meters of water were available. This amount of water was sufficient for excess irrigation of approximately 90 thousand ha or conventional irrigation of 120 thousand ha. The total area of agricultural land was estimated in 1974 at 325 thousand hectares, including irrigated, non-irrigated and noncultivated land (Lebanese Businessmen Union, 1993: p.91).

Before the outbreak of hostilities, the Lebanese government attached great importance to the creation and development of the infrastructure of the Lebanese economy, in particular, the expansion of the transport network, electricity and water supply networks, the construction of airports, seaports, etc., without, however, paying enough attention to such vital industries like agriculture. However, some institutions provided some assistance to the agricultural sector, supporting, in particular, the so-called "Green Project". From time to time, the Agricultural Credit Bank provided loans and loans to agricultural producers at low interest rates. Agriculture provided only 40% of the population's food needs. Lebanon was supposed to import the rest of the food from abroad, while spending scarce currency. Foreign trade was characterized by a large and chronic trade deficit, as evidenced by the data in the table below.

It follows from the table that, for example, in 1963, Lebanon's imports were several times higher than exports, which explains the rapid increase in the negative balance. A similar situation was observed in 1974, when various goods were imported into the country in the amount of 4,200 million pounds, and exported only in the amount of 1,740 million Lebanese pounds, that is, the negative balance

amounted to 2,460 million Lebanese pounds. Moreover, the deficit consisted mainly of the unbalanced trade of Lebanon with the United States and with the Common Market countries, which refused to purchase Lebanese products purely for political reasons, at a time when the Lebanese government took a course of support for the rest of the Arab states, in particular Syria, in fight against Israel. In those years, influential financial circles in Europe and America exerted pressure on Lebanese counterparties to abandon trade deals with a number of Arab countries.

**Table 1: The structure of Lebanon's foreign trade in the pre-war years (in million Lebanon pounds)**

Year	Import	Export	Total turnover	Balance (-)
1951	356.0	105.8	461.8	250.2
1954	485.0	105.5	590.5	379.5
1957	626.6	152.3	778.9	474.3
1960	865.4	243.5	1108.9	621.9
1963	1314.0	196.0	1510.0	1118.0
1966	1914.0	370.0	2284.0	1544.0
1969	2006.0	555.0	2561.0	1451.0
1972	2688.0	1080.0	3768.0	1608.0
1973	3618.0	1293.0	4911.0	2325.0
1974	4200.0	1740.0	5940.0	2460.0

**Source:** Chamber of Commerce. The dynamics of foreign trade. Beirut. 1975. p. 22-24.

The bulk of Lebanese exports were agricultural products, the share of which amounted to 60%; Industrial products accounted for only 15% of total exports. Imports consisted of 30% food products and 40% finished industrial products. Such a structure of foreign trade, which was dominated by the export of unprocessed agricultural products and the import of finished industrial products and food, was a consequence of the weak

development of the country's industry. (World Bank for Reconstruction and Development, 1973: p.37)

In 1966, exports from Lebanon to the Common Market countries amounted to 127.8 million Lebanon pounds while Lebanon's purchases in these countries amounted to 1294.7 million Lebanon pounds. Exports from Lebanon to the United States

amounted to 15.9 million Lebanon pounds, while US imports amounted to 1,176 million Lebanon pounds (table 2.).

The trade deficit was covered by the services provided by Lebanon: transit trade, re-export of goods, tourism customs revenue. An important source of deficit mitigation was remittances from Lebanese emigrants, gold trading, etc. As a result, with a negative trade balance, the balance of payments was positive.

**Table 2: Lebanon's Geographical Distribution of Foreign Trade (in Lebanon millions pounds)**

Year	1954		1960		1966		1974	
	import	export	import	export	import	export	import	export
Arabian countries	148.4	56.8	167.0	141.0	326.5	209.5	421.0	904.8
Common Market Countries	277.9	40.8	566.8	84.5	1294.7	127.8	2969.0	642.1
USA	37.8	2.4	92.7	7.5	1176.0	15.9	382.0	47.0
Other countries	20.9	5.5	38.9	10.5	116.8	16.8	428.0	146.1
Total (million Lebanese pounds)	485.0	105.5	865.4	243.5	1914.0	370.0	4200.0	1740

**Source:** Chamber of Commerce. Foreign trade report. Beirut. 1975. p. 17.

The traditional import markets for Lebanon were Western European countries, mainly France, Germany, Italy and the United Kingdom. Moreover, he was characterized by active dynamics with some accelerated growth in exports. If in 1954, Lebanon's imports amounted to 277.9 million pounds, and exports - 40.8 million, then in 1974, imports increased 11 times and amounted to 2969 million pounds, and the level of export more than 16 times was 642.1 million pounds. The second place in the export of goods to Lebanon was occupied by the countries of the Arab East. In 1954, the share of imports here exceeded the share of exports by 2.5 times, and in 1960 the difference between imports and exports sharply decreased, as imports amounted to 167 million pounds, and exports - 141 million pounds. This is due to the fact that at that time Lebanon was the main supplier of fruits, vegetables and mineral water to the Gulf countries, where there was an acute shortage of these

goods. The barter agreement also played a role (one liter of water in exchange for one liter of oil), which ensured a two-fold reduction in imports relative to exports in 1974 (421 and 904.8 million pounds, respectively).

The United States was the main supplier of military equipment for Lebanon, and the volume of imports from this country (mainly military equipment) was many times higher than the volume of exports. In 1954, for example, imports amounted to 37.8 million liv. pounds, which is 16 times higher than the export level of 2.4 million pounds. At the same time, the dynamics of their ratio was the reverse of that which developed with the countries of the Arab East. In 1966, the difference in imports and exports increased, and imports (1,176 million pounds) were 73.5 times higher than exports (15.9 million dollars).

In matters of foreign trade, Lebanon's policy has always been aimed at ensuring the import of food and raw materials, as well as at finding markets for national agricultural products and industry. Lebanon had trade relations with more than 80 countries of the world. The specifics of Lebanese foreign trade, where imports were four to five times higher than exports, predetermined an unequal balance of trade with each of the states. For example, England in 1960 ranked first in Lebanese imports and only sixth or seventh place in its exports.

Customs legislation could not protect Lebanon's young national industry from fierce foreign competition. As a result of the “open door” policy, overseas goods, the import of which was almost free of duties, literally flooded the Lebanese market.

An important place in the Lebanese economy was occupied by income from foreign tourism, which largely covered the trade deficit, ensuring its surplus. This sector of the economy supplied the Central Bank of Lebanon and commercial banks with the hard currency they needed and provided jobs for a significant number of Lebanese people.

In 1972, there were 346 various tourism facilities and services in Lebanon. The hotels available in the country were able to simultaneously accommodate 27,523 people. The number of people staying in Lebanese hotels in 1974 was 725,392.

Lebanon received a large number of tourists annually, who were sent mainly to the mountainous areas of Lebanon, as well as to the coastal zone for spending summer vacations and relaxing at sea there.

Many young people came to Lebanon to study and patients for treatment due to the high level of Lebanese education and medical services. In 1974, tourism provided 19.4%

of the gross domestic product (Ministry of Tourism, 1975: p.20).

Thus, having gained political independence, the Lebanese economy, with a relatively active regulatory role of the state, developed along the path leading to the strengthening of the country's economic independence, overcoming significant difficulties. Some of them were associated with vestiges of the colonial past and the strengthening of capital positions of Western countries. Others stemmed from economic backwardness and the maintenance of archaic economic relations, as well as the technical and technological level of production.

## **2.2. Period (2) 1990 till 2000**

Lebanon belongs to a small group of countries in the world in which more than half of the annual national income is generated in the service and trade sectors. Beirut has historically developed as an international financial center, where funds from oil export from all over the Middle East have flocked. Long-term trade and cultural ties with both European and Arab states allowed Lebanon to turn trade into one of the most important sectors of the economy. From 1950 to 1975, Lebanon's national income increased on average by more than 8% per year. After 1975, this figure dropped to about 4%.

The nineties of the twentieth century were a period of economic recovery in the Lebanese Republic after the long civil war of 1975 - 1990 and other military conflicts, which resulted in severely destroyed the country's economic infrastructure, which significantly undermined the country's position as an important economic, commercial and banking center in the Middle East. The peace settlement allowed

the Lebanese government to begin rebuilding the economy and financial sector. In 1993, gross domestic product (GDP) was estimated at \$ 7.6 billion, and in 1995 reached \$ 11.7 billion. The average annual growth of GDP per capita from 1986 to 1995 was 8.4%.

**Table 3: Key indicators of Lebanon economy**

Indicator	Value	Period
GDP	\$ 56.65 billion	2018
Annual GDP growth rate	1%	2018
GDP per capita	6260 USD	2018
Annual inflation rate	6.97%	dec. 2019
Interest rate	10%	dec. 2019
Unemployment rate	6.3%	2019
Trade balance	-973 USD million   -0.973 billion USD	nov. 2019
Current balance	\$ 1,144 million   \$ 1.144 billion	nov. 2019
State debt	121435 LBP Billion   \$ 80.277 billion	nov. 2019

**Source:** <https://take-profit.org/statistics/countries/lebanon/>, 2019

However, in light of the well-known events of 2006, namely the war of the state of Israel with the Hezbollah radical political group, the Lebanese economy is still in a deplorable state. Data on the damage caused to the country by military operations over the past 30 years are approximate, estimated, since the material losses of Lebanon are not limited only to what was destroyed, burned and plundered, but also include much that cannot be accounted for or estimated. Despite the tacit agreement between Lebanese on the need to revive a united Lebanon, private sector investment activity is below the required level, which was originally expected to reach after the Lebanese events. Lebanese investors in the country are characterized by waiting and wariness.

All these circumstances led to the fact that a significant part of the investment was directed to the construction sector and invested in real estate, where the degree of risk for investors was lower than in the manufacturing sector, the service sector and other sectors of the economy, with the exception of trade. The main reason that limited the amount of investment was the insecurity of local and foreign business circles in the stability of the situation in Lebanon. However, it is worth noting that,

despite the foregoing, Lebanon is no longer a similar risk zone as it was in the early nineties of the twentieth century. Lebanon is gradually ceasing to be a risk zone for foreign investors and partners. In the years since the end of the civil war, more than 900 foreign companies have been registered in Lebanon, including 147 American, 88 French, 86 British companies, 73 Swiss and 42 Panamanian firms. There are also 4 Russian companies registered in Lebanon.

After the end of hostilities in Lebanon, he received large-scale gratuitous assistance, the amount of which is difficult to determine precisely, since it included inkind assistance along with cash, and part of it was directly transferred to certain enterprises in Lebanon. At the same time, there is evidence that gratuitous assistance provided to Lebanon amounted to approximately \$ 706 million. Lebanon received this assistance mainly from Saudi Arabia, France, Germany, Italy, from international organizations and the United States. Remittances in the form of gratuitous assistance from other countries are a rather significant part of the sources of the state budget of the Lebanese Republic.

After the end of the civil war, Lebanon enjoyed considerable stability, the reconstruction of Beirut was almost completed, and an increasing number of tourists began to relax in the resorts of the country (Johnson A., 2006).

Evidence of economic growth was also an increase in banking assets to more than 75 billion US dollars. Market capitalization was also high all this time and was estimated at \$ 10.9 billion at the end of the second quarter of 2006. The second Lebanon war of 2006 caused serious damage to the Lebanese economy, especially in the tourism sector. During 2008, Lebanon modernized its real estate and tourism infrastructure, resulting in a relatively strong post-war economy. The main contribution to the restoration of Lebanon was made by Saudi Arabia (with declared investments of \$ 1.5 billion) (Joseph S. M., 2007), the European Union (about \$ 1 billion) and some other Gulf countries with deposits of up to \$ 800 million.

Given the frequent military turmoil she faced, the Lebanese banking system took a conservative approach, with strict standards set by the Central Bank to protect

the economy from political instability. These rules generally left Lebanese banks unscathed during the 2007-2010 financial crisis. Lebanese banks still, even under current conditions, demonstrate high liquidity and peace of mind for their security (BBC News, 2008). At the end of 2008, Moody moved Lebanon according to its rating from stable to a positive level, recognizing its financial security (Moody's, 2008). In addition, with an increase of 51% in trading on the Beirut stock market, the MSCI rating company index established that Lebanon is the best stock market in the world in 2008. Lebanon is one of seven countries in the world in which the volume of the stock market increased in 2008 (Cooper K., 2008). The Lebanese economy is still showing stability, its growth was 8.5% in 2008, 7% in 2009 and 8.8% in 2010.

In 2008, the country's gross domestic product grew by 4.4% (of this growth, agriculture accounted for 5.1%, industry - 19.1%, and the service sector - 75.8%). GDP per capita is about 5.5 thousand US dollars. The working population in Lebanon is about 1.5 million people, while about a million foreign workers are employed in the country. The unemployment rate is 9.2%, all data for 2008. Inflation was held at 12%. About 28% of the population lives in Lebanon below the poverty line.

The basis of the economy of modern Lebanon is active banking and financial activities, trade, and tourism. Horticulture and vegetable growing are developed. Livestock, fishing. The Lebanese industrial sector is based on large refineries and cement plants. A small amount of iron ore and brown coal are mined in the country. Export: paper and paper products, citrus fruits, apples, cotton fabrics, textile, pharmaceutical and jewelry. Import: electrical equipment, vehicles, metals, minerals and food. Main foreign trade partners: Saudi Arabia and other Arab countries, countries of Western Europe, USA.

Industry provides 20% of the Lebanese Republic's gross domestic product. The country has developed the food industry, jewelry, light industry, construction, woodworking and furniture manufacturing, metalworking. Since 2004, a number of important tasks of the Lebanese Ministry of Industry have been to increase the share



of industrial exports to \$ 1.4 billion, create 50,000 new jobs and expand the share of industrial production in the country's GDP. (Lebanese Businessmen Union, 1993) We see that, unlike agriculture, the country's industry is developing, however, at a very low pace. However, its growth was caused not so much by the construction of new or modernization of old enterprises as by the restoration of the former, which in practice leads to the conservation of technologically obsolete production in Lebanon. The extremely uneven distribution of productive forces inherited from the past also remains: in the main economic center - Beirut - more than half of the total industrial potential and over 2/3 of the share capital are still concentrated. In other cities, small and smallest industrial enterprises of a handicraft and craft type prevail. A number of the most important sectors - metallurgy, industrial equipment manufacturing - are generally absent.

**Table 4: Budgetary indicators**

Indicator	Value	Period
Government Debt to GDP	151%	2018
The state budget	-631831 LBP million   -0.418 billion USD	oct. 2019
Government spending	13793 LBP million   0.009 billion USD	2018
State debt	121434 LBP billion   80.276 billion USD	nov. 2019
Government revenue	1253225 LBP million   0.828 billion USD	oct. 2019
Budget expenses	1885056 LBP million   1.246 billion USD	oct. 2019
State budget from GDP	-11 %	2018
Military expenses	2606 USD million   2.606 billion USD	2018

**Source:** <https://take-profit.org/statistics/countries/lebanon/>, 2019

It is noteworthy that Lebanon's manufacturing industry, by its contribution to the production of GDP, is noticeably, almost double, ahead of the corresponding indicators taken throughout the Arab region. In itself, this fact looks very impressive and indicates a rather high level of development of the material and technical base of the country. The difficulties faced by Lebanese industry after the end of hostilities in the country are largely similar to the problems of Lebanese agriculture. To a large extent, they were determined by the economic policy pursued by the state, and first

of all, by its inattention to industry and the oil complex. In addition, this manufacturing sector did not receive the necessary loans from the public sector, which led to an almost complete shift of the function of lending to industry to commercial banks. In addition, the almost complete absence of mineral resources in the country makes Lebanon completely dependent on the supply of oil and other raw materials from Arab countries, which also does not contribute to the significant development of industry.

Due to the fact that the national industrial production did not enjoy the necessary protection from the state, it suffered serious damage due to fierce competition from foreign industrial goods. This state of affairs was due, first of all, to the orientation of the state towards the so-called “customs dollar”. This refers to the fact that the customs duties imposed on imported goods were set at a certain percentage (for example, 6%) not of the actual value of each given type of goods in real dollars (in accordance with the real dollar exchange rate on the Beirut exchange), but the value calculated in accordance with the "customs dollar" rate, which was established by the tax administration in early 1991 in the amount of 6 Lebanese pounds per dollar, while the real value of the dollar in the Beirut currency market was hundreds of times Shae. Thus, imported industrial goods entered the Lebanese market after paying extremely low customs duties, which created favorable opportunities for their successful competition with Lebanese industrial products.

**Table 5: Inflation indicators**

<b>Indicator</b>	<b>Value</b>	<b>Period</b>
CPI Consumer Price Index	116 ind. P.	dec. 2019
Food inflation	9.77%	dec. 2019
Gas prices	0.81 USD / liter	dec. 2020
Annual inflation rate	6.96%	dec. 2019
Monthly inflation rate	2.71%	dec. 2019
CPI for utilities	109 ind. P.	dec. 2019
CPI for transport	106 ind. P.	dec. 2019

**Source:** <https://take-profit.org/statistics/countries/lebanon/>, 2019

At the same time, the tax administration did not exempt from customs duties on raw materials, machine tools, and production equipment imported into Lebanon intended for use in Lebanese industry. On the contrary, they were subject to the same duties as imported consumer goods that enter the country's domestic market. Recent facts also explain the significant prevalence of a country's imports over its exports.

**Table 6: Indicators of tax**

<b>Indicator</b>	<b>Value</b>	<b>Period</b>
Corporate tax rate	17,4 %	2020
Income tax rate	24,3 %	2019
Sales tax	11 %	2020
Social insurance rate	25.6 %	2019
Social insurance rate for companies	22.6 %	2019
Employee social insurance rate	3 %	2019

**Source:** <https://take-profit.org/statistics/countries/lebanon/>, 2019

The state economic policy pursued by the Lebanese government after the end of hostilities in the country in the field of agriculture and industry has noticeably weakened the competitiveness of Lebanese products in traditional Lebanese markets.

Agriculture accounts for 10% of the Lebanese Republic's gross domestic product. The country grows citrus fruits, grapes, tomatoes, apples, olives, potatoes, tobacco, sugar beets, wheat, and also cattle and small cattle and fish. In livestock, a project to raise cattle and small cattle in the Bek Valley is currently underway as part of the United Nations Baalbek-Hermel Development Program. Also in various projects of the Ministry of Agriculture of Lebanon, such international organizations as FAO, the World Bank and others take part. The total budget of this ministry is clearly insufficient for carrying out scientific and laboratory research, implementing agricultural orientation and training programs, producing seeds, seedlings and seedlings of better quality and generally for raising the agricultural sector.

It can be argued that Lebanese agriculture is in crisis, despite the fact that it remains one of the main sectors of employment of the local population. The agrarian policy of the government is inconsistent and contradictory. The vast majority of commodity production is produced by capitalist-type farms, but they are primarily

oriented towards export. The level of production in the traditional sector is extremely low, which is why the deficit of cereals and other crop products is constantly increasing, and the country is forced to spend increasingly hard currency on food imports.

Trade and services account for 70% of Lebanon's gross domestic product. In Lebanon, the tourism business (including ecotourism) and infrastructure (hotels, restaurants) are actively developing. It is generally accepted that the high proportion of the sphere of trade and services in the final social product of developing countries is one of the characteristic indicators of their backwardness. This applies to the Lebanese economy only partially. In any case, the more than twofold excess of the nonproductive sphere in Lebanon is explained not so much by economic backwardness as by the spontaneous specialization of the Lebanese economy in the system of the international capitalist division of labor. In other words, the imbalances in the interbranch structure of the Lebanese economy are caused (and this is its important specificity) by the fact that the sphere of trade and services is of a general regional character, while material production as a whole is predominantly domestic.

**Table 7: Indicators of trade**

Indicator	Value	Period
Current balance to GDP	<b>-27 %</b>	2018
Trade balance	-972 USD million   -0.972 billion USD	nov. 2019
Cash flows	4410 USD million   4.41 billion USD	2nd quar./19
Current balance	1143 USD million   1.143 billion USD	nov. 2019
Export	309 USD million   0.309 billion USD	nov. 2019
International investment position	33573 USD million   33.573 billion USD	nov. 2019
Import	1281 USD million   1.281 billion USD	nov.2019
The number of foreign tourists	208,011 people   0.208 million people	nov. 2019

**Source:** <https://take-profit.org/statistics/countries/lebanon/>, 2019

With the impressive role of external factors, the mechanism of reproduction of the social product in Lebanon has acquired features that differ not only from most Arab countries, but also from many developing countries. The free exchange of the Lebanese pound for key world currencies allows Lebanese to import a large volume of a wide variety of goods and services, mainly from developed capitalist states,

without serious restrictions. There is no habitual tough interdependence between export and import trade operations in the country, since purchases of goods abroad are financed by massive receipts from Lebanese workers working abroad and from other sources. In turn, such an organization of the Lebanese economy contributed to the active involvement of Lebanon in the system of world economic relations.

The monetary unit of the Lebanese Republic is the Lebanese Pound, which in international banking operations is referred to as "LBP". The Lebanese Pound is also called the Lebanese Lira. At the moment, the Lebanese pound against the US dollar is one in one and a half thousand (1: 1500). In daily business, the American dollar is the main currency used and is widely accepted in shops, restaurants, hotels and other institutions. In circulation are banknotes in denominations of 50, 100, 250, 500, 1000, 5000, 10000, 50,000, as well as 100,000 lira and coins of 250 and 500 lira. Lebanese pound is equal to 100 piastres. Also in circulation are coins of denominations of 1, 5, 10, 25 and 50 piastres and 1 pound. US dollars and the common European currency Euro are exchanged and accepted for payment almost everywhere. Exchange, import, export of foreign currency in the country is not limited.

A huge threat looms over the Republic of Lebanon in fulfilling its obligations under public debt through the fault of prolonged hostilities in the country. The value of public debt in 2000 was about 130% of GDP, which is one of the highest rates in the world. The formation of such a large debt was also facilitated by a policy aimed at maintaining the value of the national currency against the dollar. Such a course was accompanied by the preservation of high bank interest rates, which, although they allowed to stabilize the Lebanese pound, at the same time negatively affected the country's economic growth.

Banks of the Lebanese Republic have the right to transfer unlimited amounts of any size in any currency. Accounts can be opened in any major monetary units. The amount of interest can be set by agreement with the client. The Lebanese Republic has a guarantee for deposits of up to 5 million Lebanese pounds or their equivalent

in foreign currency. Since 1956, customer accounts of Lebanese banks have been considered strictly confidential. Exceptions may be made in some cases of judicial investigation or bankruptcy. Often, because of this fact, Lebanon is called "Middle Eastern Switzerland" (<https://www.vestifinance.ru/articles/113743> - 2019).

The fact that the value of the Lebanese pound continues to decline steadily when imports are several times higher than exports is highly undesirable, and even the government's assurance of its determination to maintain a stable exchange rate did not dispel pessimism in the country, which generally worsens the situation in the region. That is why, at the moment, maintaining the stability of the national currency is one of the most important tasks of the government.

### 2.3. The challenges faced the Lebanese economy in period (2)

For several years now, Lebanon's economic performance has been steadily deteriorating. A country with the world's third largest public debt in terms of GDP has been economically affected by the decline in tourism from the Gulf Cooperation Council member states (primarily Saudi Arabia and the United Arab Emirates), as well as the financial burden caused by the Syrian conflict and massive influx of refugees.

**Table 8: GDP indicators of Lebanon in 2018**

Indicator	Value	Period
GDP	56.65 USD billion	2018
Annual GDP growth rate	1 %	2018
GDP per capita	6260 USD	2018
GDP at comparable prices	64163 LBP million   0.043 billion USD	2018
GDP per capita PPP	11608 USD	2018

**Source:** <https://take-profit.org/statistics/countries/lebanon/>, 2018

In this regard, the announcement of Qatar on intention to invest up to \$ 500 million in Lebanese government bonds made on January 21, 2019 was a very important event. This money, of course, stabilizes the situation on the bond market, which has staggered sharply after a hint of Lebanese officials about a possible debt

restructuring by the end of January. It is not yet clear whether Qatar intends to purchase bonds in foreign currency or whether the funds will be allocated to debt in local currency.

Doha's diplomatic and economic offensive in Lebanon is taking place while some of Riyadh's recent actions against Beirut have dramatically shaken the Saudi position in Lebanon. In 2016, Saudi Arabia froze \$ 3 billion in aid to Lebanon due to dissatisfaction with Hezbollah's role in local politics. In 2017, Riyadh lost many supporters in Lebanon after the mysterious forceful detention of Prime Minister Saad Hariri in the Saudi capital.

The Lebanese banking sector is one of the most dynamic sectors of the Lebanese economy and looks much better than other sectors of the Lebanese economy. For example, banking sector assets have more than quadrupled in the short term from 7.96 billion US dollars in 1992 to 36.48 billion US dollars in 2010. Lebanese banks contain highly liquid assets with total deposits of more than \$ 30 billion, while liquid assets account for almost 70% of the total assets. In addition, conservative lending, which remains at a rather low level in comparison with the banking sectors of other emerging markets, cannot be ignored. Deposits of the banking sector in foreign currency account for 66.43% of the total deposits in 2010 and the dollar exchange rate for loans at 88.90%. It should be noted that the banking sector of Lebanon was able to withstand for a long time, when the country was bogged down in political instability and mired in a civil war, with virtually no government. Despite this, the banking sector of Lebanon has been able to maintain its strong position and is still one of the most successful and prosperous sectors in the Middle East.

The Lebanese banking sector is characterized by a variety of strengths. This is expressed in the political and financial fields, the main difference of the Lebanese banking sector is a strong deposit policy, as the basis for financing. "Local banks have always had deposits in deposits from a large number of Lebanese diaspora investors in order to increase their balance sheet" (Faruh A., 2011). Thus, high deposit

rates are the main incentive for investors who want to invest their capital in the banking sector. As a result, customer deposits increased from 1992-2004 by 83.79%.

However, in the coming years, consolidation is likely to be manifested in the purchase by large banks of other banks of small or medium size. Mergers among large banks are not welcomed by the central bank of Lebanon, because it is the policy of the central bank to block any large-scale mergers between the ten largest banks in order to maintain healthy competition. Liberalism of the Lebanese banking sector manifests itself in the dissemination and development of a banking culture, the support of the National Bank of Lebanon in the event of a crisis, the secrecy of bank deposits, as well as the variety of banking financial activities: core deposits, certificates of deposit, preferred shares, organization of syndicated loans. In terms of opportunities, they are presented in the potential benefits of privatization, which could trigger an inflow of foreign capital.

The three undisputed leaders currently dominate the Lebanese banking sector, namely Bank Audi, Blom Bank and Byblos Bank. Market analysis shows that Audi Bank is the largest bank in terms of assets, deposits, loans and shareholders' equity and takes the second place in terms of net profit. Blom Bank is the leading bank in terms of profitability and the second largest in Lebanon in terms of assets, deposits, loans and equity. Byblos Bank is the third player in terms of assets, deposits, loans, equity and net profit (John A., 2010: 37). In the Lebanese banking sector, these three representatives continue to maintain their leading position among other competing banks in the group.

Together, these three banks account for 51.3% of the total assets of the banking sector in 2011, where 22.4% belongs to Audi, 17.5% to Blom Bank and 11.5% to Byblos Bank. In addition, together these banks generated 56.5% of the total profit of the banking sector in 2011, thus Blom Bank accounted for 22.7%, Audi Bank 22.4% and Byblos Bank 11.3%. It should also be noted that Audi Bank, Blom Bank and Byblos Bank jointly controlled 43.9% of the consolidated assets sector in 2011.



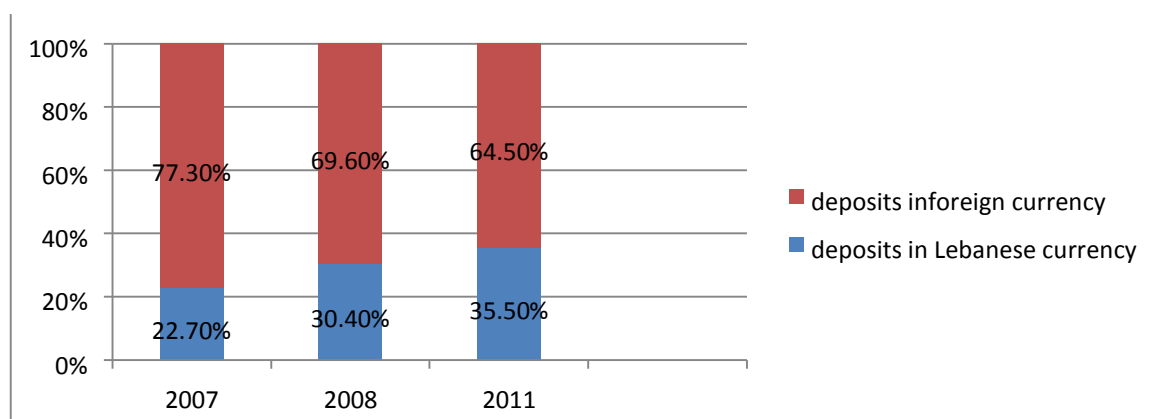
The balance sheet of commercial banks showed strong growth throughout 2011 through significant growth in deposits and steady growth in lending activity. In general, the banking sector showed a significant increase in profits, despite the ongoing global and regional financial crisis. The strong expansion of assets is due to an unprecedented influx of deposits in the sector. Between 2000 and 2011, domestic assets of commercial banks were placed at a deposit rate of 12.3% on average. In 2011, as a result of a continuous influx of liquidity into the country's banking sector, the domestic assets of commercial banks increased by \$ 21 billion to \$ 115.3 billion by the end of the year. In 2008, this indicator amounted to 94.3 billion dollars, thus, in percentage terms, the growth from 2008-2011 amounted to 22.3%. The high level of asset growth is primarily due to customer deposits, which accounted for 83.1% of the assets of the commercial banking sector in 2011, compared with 82.5% at the end of 2008. Lebanese commercial banks mobilized a strong inflow of deposits during 2011, as evidenced by a 23.1% increase in customer deposits, which amounts to 18 billion US dollars. It should be noted that this growth in customer deposits exceeded the previous annual growth and reached a new historic high of \$ 95.8 billion.

With a more thorough study of the banking sector, in connection with the growth of deposits, it should be noted that customer deposits in the Lebanese pound significantly increased by the end of 2011, compared with deposits in foreign currency. Consequently, it can be assumed that the Lebanese banking sector liquidity inflow mainly consists of deposits in Lebanese pounds. The last surge in 2011 was 43.8%

(equivalent to 10.4 billion US dollars), compared with 14.1% for deposits in foreign currency (equivalent to 7.6 billion US dollars) (Ingelby D., 2011). Such a development of events shows that the trend of de-depolarization continued in 2011, due to increased confidence in the national currency and the Lebanese economy as a whole. The structure of deposits in foreign currency at the end of 2011 showed that deposits in Lebanese pounds accounted for 35.5% of the total deposit base, while deposits in

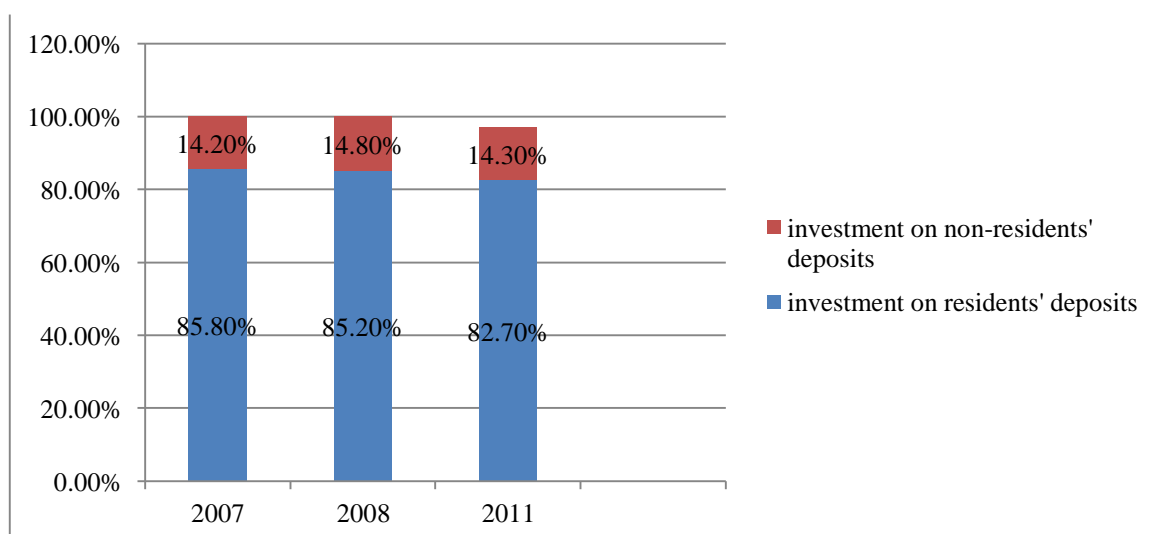
foreign currency amounted to 64.5% of the total deposits. Thus, the dollarization of the deposit rate has been steadily decreasing since 2006 to the lowest level in a decade at the end of 2011(Figure 1.).

**Figure 1: The indicator of foreign currency investments**



**Source:** Ingelby D. Lebanese Banking Industry. New York: Y&D, 2011.

**Figure 2: The indicator of deposits of residents and non-residents**



**Source:** Ingelby D. Lebanese Banking Industry. New York: Y&D, 2011.

Figure 2 shows the share of non-residents' deposits, which grew from 14.8% in 2008 to 17.3% at the end of 2011, from which it can be concluded that investors are confident in the restoration of political stability and see the high profitability of the offered deposits in relation to international tariffs. Despite the movement of nonresidents 'deposits, regarding residents' deposits, it can be concluded based on

the facts that the deposit base of commercial banks is still funded by residents, which is another stability factor, since this category of depositors is less likely to refuse to invest in the domestic sector economies in times of crisis and political unrest.

Summarizing, we can say that the Lebanese banking sector has demonstrated its ability to withstand external risks in conditions of instability. As a result, we can say that the Lebanese banking sector is a key link in the financial system of Lebanon, which, despite the ongoing global financial crisis, has demonstrated its ability to withstand external risks and showed a significant increase in profit. It should be noted that the banking sector has all the qualities necessary to attract local and foreign investors: an attractive interest rate and banking secrecy of client accounts, the liberal policies of the Central Bank of Lebanon, legislation aimed at developing the banking structure, as well as rich banking experience, highly valued by all Middle East players.

## **CHAPTER III. PERFORMANCE ANALYSIS IN BANKING SECTOR**

### **LITERATURE REVIEW**

One of the first works in which the performance of banks was compared was a study (Berger, Humphrey, 1991). Subsequently, a comparative analysis of banking performance becomes a popular research topic for the United States (Berger, Hancock, Humphrey, 1993; Berger, Leusner, Mingo, 1997), European countries (Altunbash et al., 2001), Japan (Altunbash et al., 2000), China (Berger et al., 2009), as well as for a cross-country analysis of banking efficiency (Berger, Hancock, Humphrey, 1993; Berger et al., 2000; Berger, 2007) and others.

However, special attention to the analysis of the efficiency of European banks taking into account macroeconomic factors was given in (Dietsch, Lozano-Vivas, 2000), which compared the performance of French and Spanish banks. Subsequently, a series of studies were conducted on the effectiveness of the European banking system taking into account macroeconomic factors (Chaffai et al., 2001; Lozano-Vivas et al., 2001, 2002; Lozano-Vivas, Pastor 2010), which confirmed the importance of taking macroeconomic variables into account in obtaining correct assessments of the effectiveness of banking. However, in a number of studies of factors affecting bank profitability, other authors studied the influence of macro factors without making it the main element of the work (Athanasoglou et al., 2008; Deitrich, Wanzenried, 2014; Bonin, Louie, 2015). These publications reflected the main factors responsible for the results of banking activities. Among them, such as the structure of the bank's ownership, its size, labor productivity, structure of the bank's assets and liabilities, profile of banking risks, components of corporate governance, etc. were particularly distinguished. At the same time, the majority of the macroeconomic variables used were significant and had a significant impact on the results of banks.

Lebanese banks are no exception to this trend. Cross-country comparisons (Caner,

Kontorovich, 2004; Fries, Taci, 2005; Yildirim, Philippatos, 2007) and an analysis of exclusively Lebanese banks (Styrin, 2005; Pavlyuk, 2006; Belousova, 2011; Mamonov, 2011; Mamonov, Vernikov, 2015) In a cross-country analysis, macroeconomic indicators were considered inflation, exchange rate, GDP per capita, demand density and the level of financial intermediation, most of which were significant and positively influenced the technical efficiency of banks. When analyzing Lebanese banks, a relationship was found between the unemployment index, the total volume of attracted deposits and issued loans, inflation, the M2 monetary aggregate, the level of financial, per capita income, and the level of development of the region.

### 3.1. Methodology

When modeling the profit function, a mediation approach is used, which takes into account deposits exclusively as the bank's resources (Lozano-Vivas, Pastor, 2010) and allows to take into account the structure of the bank's expenses and income and analyze the bank as a separate unit (Belousova, 2011). The translogarithmic function, which is widely used in the analysis of both the American (Berger, Mester, 1997) and European (Weill, 2003) banking sectors, and for the analysis of the Lebanese (Karas et al., 2010; Belousova, 2011; Mamonov, Vernikov, 2015). This function was also investigated in papers analyzing the influence of macroeconomic factors on bank efficiency (see, for example, (Chafie et al., 2001).

The basic function is:

$$\ln\left(\frac{P_{nit}}{w_{3it}} + \theta\right) = a_0 + a_1 \ln(y_{1it}) + a_2 \ln(y_{2it}) + a_3 \ln\left(\frac{w_{1it}}{w_{3it}}\right) + a_4 \ln\left(\frac{w_{2it}}{w_{3it}}\right) +$$

$$+ \frac{1}{2} \sum_{n=1}^2 \sum_{m=1}^2 a_5 \ln(y_{nit}) \ln(y_{mit}) + \frac{1}{2} \sum_{n=1}^2 \sum_{m=1}^2 a_6 \ln\left(\frac{w_{nit}}{w_{3it}}\right) \ln\left(\frac{w_{mit}}{w_{3it}}\right) +$$

$$\frac{1}{2} \sum_{n=1}^2 \sum_{m=1}^2 a_7 \ln(y_{nit}) \ln\left(\frac{w_{mit}}{w_{3it}}\right) + \sum_{j=1}^{12} \eta_j MF + \varepsilon_j$$

(1) where Pn - profitability indicators (ROA - quarterly profit / average value of

assets and ROE - quarterly profit / average value of capital);  $y_1$  - loans issued by the bank, normalized to equity;  $y_2$  - bank investments in securities normalized to equity;  $w_1$  is the price of deposits;  $w_2$  is the price of fixed assets;  $w_3$  is the price of labor; MF is the vector of logarithmic macro factors;  $i$  - bank number;  $t$  - period number,  $\epsilon_j$  - random error.

Table 9 presents the macroeconomic variables used, which are divided into three substantial groups: factors 1-7 characterize the main macroeconomic conditions, macro factors 8 and 9 describe the structure of the banking industry, and the rest are responsible for the availability of banking services.

**Table 9: Macroeconomic indicators**

№	Variable	Abbreviation		Variable	Abbreviation
1	Population density	Density	7	Issue Index by Basic Economic Activities	Release index
2	Nominal wages per capita	Nominal wages per capita	8	Mediation Level	Mediation Level
3	GDP per capita	GDP per capita	9	The number of banks per 1 thousand people	The number of banks per 1 thousand people
4	Inflation	Inflation	10	GDP per branch	GDP per branch
5	Exchange rate dynamics	Exchange rate	11	The volume of deposits per branch	Deposits at the branch
6	Industrial Production Index	IPI	12	Branch coverage	Branch coverage

Source: <https://www.ig.com/en/trading-strategies/what-are-the-key-macroeconomic-indicatorsto-watch--191014>

It is worth noting that in the table. 3.1 two additional variables are used that characterize the demand for banking products and services among sectors of the economy such as industry and mining. This is due to the fact that industry and mining (mining, manufacturing and the production and distribution of energy, gas and water) occupy a significant share in the GDP of most countries, including Lebanese (about 29.3% in 2019 (GKS, 2019)). It is industrial and mining enterprises that are among the main borrowers among legal entities (21.36% of the total lending to

resident legal entities and individual entrepreneurs in rubles (CB, 2019a) and 40.91% in foreign currency and precious metals as of the end 2019 (CB, 2019b)).

The industrial production index is an aggregated production index for such activities as “Mining”, “Manufacturing” and “Production and distribution of electricity, gas and water”. The growth of this index indicates the development of mining and manufacturing industries. This means an increase in demand for loans among enterprises, which is associated with an increase in investment activity. In addition, with the growth of production and business profitability, part of retained earnings is not invested, and free cash can be stored in bank accounts, which positively affects the profitability of banks.

In contrast to the previous indicator, the output index for basic types of economic activity covers the mining and production sectors more broadly, including a number of important areas (construction, trade and transport). In general, the impact of this index on bank profitability coincides with the previous one, i.e. an increase in this index leads to an increase in bank profitability.

In this paper, we also use various control variables that allow us to take into account the specifics of banking activities and the various types of risk inherent in banks. As a rule, three main types of risk are considered:

1) credit risk - the ratio of the volume of reserves for possible losses on loans (RPLL) to the volume of the bank's loan portfolio: the higher this indicator, the more risky the loan portfolio, since the bank expects higher losses. It also reflects the degree of conservativeness of the credit policy of a particular bank: with the same quality of the loan portfolio, a more conservative bank may lay higher reserves (Athanasoglou et al., 2008);

2) liquidity risk - the ratio of the bank's liquid assets to its total assets (Belousova, 2009). Using this indicator, the overall level of bank liquidity is changed at the end of each quarter. Recently, this type of risk has become increasingly significant, which is confirmed by the regime of chronic liquidity shortages, which Lebanese banks switched to in 2011, as well as the events of 2019, when there was

a net outflow of funds from the Lebanese banking system. In addition, liquidity ratios are also taken into account in Basel III;

3) the risk of a decrease in capital adequacy is the ratio of the bank's own capital to its total assets. It characterizes the financial leverage and the ability of the bank to use its own funds in case of any losses. The lower this value, the higher the financial leverage and, accordingly, the cost of borrowing, which is confirmed by international studies and studies for Lebanese.

Thus, the profit function takes the form:

$$\ln(wP_{nit} + \theta) = a_0 + a_1 \ln(y_{1it}) + a_2 \ln(y_{2it}) + a_3 \ln(w_{w3it}) + a_4 \ln(w_{w3it}) +$$

$$+ 0,5 \sum_{n=1}^2 \sum_{m=1}^2 a_5 \ln(y_{nit}) \ln(y_{mit})^{0,5 \sum_{n=1}^2 \sum_{m=1}^2 a_6 \ln\left(\frac{nit}{mit}\right) \ln\left(\frac{mit}{nit}\right) + w_{w3it}}$$

$$0,5 \sum_{n=1}^2 \sum_{m=1}^2 a_7 \ln(y_{nit}) \ln\left(\frac{mit}{nit}\right) + w_{w3it} \quad (\eta_1, \dots, \eta_{12})MF + (\varphi_1, \varphi_2, \varphi_3)Z + \varepsilon_j$$

(2)

where Z is the risk profile vector, consisting of credit risk, liquidity risk and capital risk (prologarized values are taken into account).

It is worth noting that ROA and ROE can be negative if the bank suffers losses. In this regard, the method described in the article is used (Berger, Mester, 1997). First, the smallest value of the indicator for the period is calculated, after which the module of

this value and unit are added to each indicator, i.e.  $\ln\left(\frac{P_{nit}}{w_{3it}} + \theta\right)$ , where  $\theta =$

$\min|P_{nit}/w_{3it}| + 1$ . Thus, the minimum value of the indicator in the period is zero (ln1), while all other indicators become positive. A similar conversion is carried out separately for each period. In this function, several methods are used at once to combat possible heteroskedasticity and to achieve linear homogeneity of the model:



the output parameters are normalized to equity, and the uniformity of prices for factors of production, which is expressed in the normalization of price variables to the price of labor resources, is taken into account (Berger M., 1997).

**Table 10: Descriptive statistics of indicators used**

Variable	Number of Observations	Average value	Standard deviation
ROA	3996	0,0038	0,0086
ROE	3996	0,0294	0,0629
Interest income	3996	20299,31	99266,67
Non-interest income	3996	73895,36	361161,22
Operating income	3996	78766,01	429085,99
Loans	3996	157800	736400
Securities	3996	23690	95990
Labor price	3996	0,00558	0,00315
Deposit Price	3996	0,00657	0,00760
Fixed assets price	3996	18,34	44,54
Credit risk	3996	0,103	0,0814
Liquidity risk	3996	0,276	0,121
Capital risk	3996	0,137	0,0586
The share of overdue debt in the loan portfolio	3996	0,0381	0,0362
Operating expenses	3996	83488,76	26685,1
The cost of the device	3996	1981,4	450091,6
RPLL	3996	12703,9	9658,5
Interest expense	3996	33624,9	54806,9
Total assets	3996	231381,7	1055672,27
Equity	3996	28764,57	133310,22
Density	27	8,394	128450,7
Nominal wages per capita	27	23999,2	5264,64
GDP per capita	27	93898,7	21915,39
Inflation	27	1,4456	0,989
Exchange rate	27	30,771	3,356
IPI	27	101,593	8,585
Release index	27	158,607	8,541
Mediation Level	27	1,491	0,141
The number of banks per 1 thousand people	27	0,7017	0,05697
GDP per branch	27	5263284	23050209
Deposits at the branch	27	4369,31	1191,33

Branch coverage	27	6369,608	1422,48
The crisis (2008–2009)	27	0,2963	0,4653

**Source:** Berger M., 1997

In this work, the indicators for the analyzed banks are taken from the database of the Lebanese National News Agency. The database of macroeconomic variables was compiled by the authors according to the data published on the websites of the Central Bank of Lebanon and the State Statistics Service of Lebanon. Descriptive statistics of the variables are given in table 10.

The sample of banks under study is a balanced panel consisting of 148 credit organizations, the largest in terms of assets in the Lebanese banking sector. The sample includes banks of all forms of ownership. These banks represent the largest part of the domestic banking sector: over the reporting period (quarterly average), the assets of these banks accounted for 85.6% of the banking sector assets and 79.8% of total capital. All this indicates that the sample is representative and allows it to draw conclusions regarding the banking sector of Lebanese as a whole.

For analysis, an Excel data analysis package was used. Panel data was analyzed using a fixed effects model, random effects and an end-to-end regression model, using the robust function, which provided robust estimates of standard errors that take into account the correction for heteroskedasticity. In turn, Wald, Broysch – Pagan and Hausman tests revealed the most suitable model.

### **3.2. Variables and data**

An important point in the analysis in this direction is the definition of the term “macroeconomic factors”. Macro factors, as a rule, mean three groups of variables (Dietsch, Lozano-Vivas, 2000): describing the main macroeconomic conditions that characterize the structure of the banking industry and are responsible for the availability of banking services.

Population density - a factor based on the number of potential customers of the bank. The higher the density, the lower the cost to banks, and vice versa. For

example, when opening two identical additional offices in different regions (one with a high density, the other with a low one), the costs per client in the regions will differ significantly, since the number of potential customers is greater in the region with a high density. For the same reason, it is expected that the profit of an office located in a densely populated region will be higher (Deitch, L. V, 2000).

Salary per capita - an indicator is a measure of the purchasing power of the population. The higher the level of wages, the higher the activity of the population is observed in the banking services market. This, in turn, increases the number of banking operations performed, and, accordingly, the profitability of banks increases.

GDP per capita - the indicator characterizes the economy as a whole and its institutions. This indicator can act as a proxy variable for such invisible factors as the presence of business ethics, the correct behavior of market participants, transparency of the banking system, etc. The higher this factor, the lower costs the bank incurs and the higher profitability it receives from its operations. However, a more mature and developed economy leads to a decrease in profit margins, increasing the cost of raising funds and lowering market loan rates, which reduces the efficiency of banks (Chaffai et al., 2001).

Demand density - the indicator is measured as the volume of deposits per square kilometer of territory. This indicator demonstrates the potential demand for retail or consumer loans as a banking service, and is also responsible for the availability of funding in the form of deposits, therefore, for the cost of raising capital. The direction of its influence on the profitability of the banking business is similar to the case with population density.

Inflation is an indicator that positively affects the bank's profitability, provided that the bank's wages and other operating expenses grow at a slower rate than inflation. Taking into account inflation and setting optimal interest rates, the bank optimizes not only its expenses, but also its income. Most empirical studies have shown a positive

effect of inflation on bank profitability (Athanasoglou et al., 2008; Dietrich, Wanzenried, 2014), but high inflation may negatively affect bank performance.

Real exchange rate - the variable describes the effect of changes in the exchange rate on the activities of the bank. Empirical work shows that strengthening the national currency leads to a decrease in the profitability of banks, as their activity in foreign markets decreases, and the volume of issued foreign currency loans decreases.

The level of financial intermediation - is defined as the ratio of loans issued to attracted deposits. This indicator demonstrates the ability of banks to act as an intermediary, i.e. accumulate deposits and issue loans to increase bank profitability. Due to the fact that the main way to generate income for banks is through lending, the higher this indicator, the higher the bank's profitability, as the bank uses its borrowed resources more efficiently.

The number of banks per inhabitant - the indicator reflects the competitive environment in the banking industry, i.e. the more banks, the wider the customer's choice, which accordingly increases competition between banks for customers.

The density of branches - the higher the density, the more affordable banking services. This increases the likelihood of a new customer appearing in the bank and, accordingly, increases the expected profit of the credit institution. However, the high density of the branch network can lead to both an excessive increase in transaction costs and, at a certain stage, to oversaturation of the industry, which in both cases will reduce the efficiency of banks (Deitch, Lozano-Vivas, 2000).

The volume of deposits per branch and GDP per branch - the higher these indicators are, the more effective the bank is considered

However, if deposits with the bank will be the only source of funding and at the same time it is not a leader in the industry, then the opposite situation may be observed.

### 3.3. Empirical findings

In connection with the existing correlation between macro factors, it was decided to divide these variables into three groups:

- 1) population density, GDP per capita, exchange rate dynamics and the volume of deposits per branch;
- 2) nominal wages per capita, the index of output for basic types of economic activity, the level of intermediation and GDP per branch;
- 3) inflation, industrial production index, the number of banks per 1 thousand people, coverage of the territory by branches.

In order to eliminate the problem of multicollinearity for each model (for two dependent variables - ROA and ROE, three groups of macro-factors), the coefficient of swelling of the variance VIF does not exceed 10. However, the analysis of all these indicators is justified by the fact that they are actively used in foreign literature, which formed the basis this empirical study.

As a result of adding macro-factors in assessing the profit function (ROA and ROE),  $R^2$  increased for the first and second groups of macro-factors by 10–13 pp, while for the third it fell by 5–7 pp. The growth of this indicator means an increase predictive power of the model, and the fall - that macro variables worse model the macroeconomic situation. Macroeconomic factors are significant at the 1% level (they are marked “\*\*\*” in Table 11) for 22 out of 24 cases, with the exception of per capita GDP and industrial production index for ROA as a dependent variable.

The “Population Density” indicator has the greatest negative impact on profitability indicators. This result can be explained by the fact that in unstable periods (for example, in 2008-2010 and 2019), domestic banks experienced a significant increase in overdue debts on loans issued, and in a relatively prosperous period (2011 - mid. 2019) banks have been particularly active in investing in the development of a network of structural divisions. It is worth noting that during a period of declining demand for retail banking services after a protracted crisis period, Lebanese banks began to incur high costs for opening and maintaining a branch

network. This led to the fact that retail banks began to actively engage in optimizing their branch networks.

**Table 11: The influence of macro factors for two models (ROA and ROE) of bank profitability**

ROA		ROE	
Explanatory variable	Value	Explanatory variable	Value
Group 1			
Density	−9,286*** (0,543)	Density	−9,544*** (0,477)
Exchange rate	2,755*** (0,111)	Exchange rate	4,689*** (0,0991)
Deposits at the branch	−0,882*** (0,116)	Deposits at the branch	−2,122*** (0,0786)
GDP per capita	−0,199 (0,125)	GDP per capita	0,555*** (0,0693)
Group 2			
Release index	−6,999*** (0,241)	Release index	−9,753*** (0,267)
Nominal wages per capita	−2,024*** (0,157)	Mediation Level	3,162*** (0,170)
GDP per branch	1,454*** (0,0692)	GDP per branch	1,891*** (0,0708)
Mediation Level	0,608*** (0,172)	Nominal wage per capita	−1,650*** (0,130)
Group 3			
The number of banks per 1 thousand people	3,095*** (0,247)	The number of banks per 1 thousand people	2,796*** (0,420)
Branch coverage	0,678*** (0,0822)	Branch coverage	0,505*** (0,147)
Inflation	−0,0887*** (0,00969)	Inflation	−0,135*** (0,0165)
IPI	−0,046 (0,0688)	IPI	−0,232*** (0,0887)

**Note.** In parentheses are standard errors. Ellipsis means the presence of the remaining explanatory variables of the model (see formula (2)).

**Source:** Kantorovich C., 2004

The indicator “Exchange rate dynamics” has the most significant positive impact on the profitability of banking, which is consistent with the studies published in : income may increase primarily due to foreign exchange revaluation. This is quite relevant for Lebanese. The need to take into account foreign exchange revaluation for calculating the cost-effectiveness parameter is shown in. In addition, a higher rate helps to increase the activity of foreign investors.

With an increase in the volume of deposits at the branch, the profitability of banks decreases. Such an effect can be explained by the presence of crisis situations in the economy: banks began to fight for investors, making deposits an increasingly important source of replenishing the resource base. This led not only to an increase in interest expenses of banks, but also to an increase in expenses for advertising and after-sales services, which negatively affects their profitability.

The indicator "GDP per capita" has a positive effect on the profitability of banks (in the case of ROE). This may indicate an increase in both demand and purchasing power of the population, and an improvement in the quality of markets and institutions in general.

The output index for basic economic activities, like the industrial production index, negatively affects profitability. This effect can be explained by the fact that large manufacturing and mining companies do not lend to Lebanese banks, but through raising funds on the international market by issuing debt financial instruments.

The indicator "Nominal wages per capita" negatively affects the profitability of banks. This may be due to the relatively low level of confidence in the banking system in Lebanon. For example, according to statistics, at the beginning of the fourth quarter of 2019, only 57% of Lebanese took loans at least once, and only 4% of the population used them constantly. The credit optimism index in Lebanon was also at a rather low level: its maximum was only 40% (Q2 2019).

The "GDP per branch" indicator had a positive effect on both models (ROA and ROE), and with the growth of this indicator, the profitability of banks increased, since the more funds a bank has, the more operations it can perform (Lozano-Vivas et al., 2001), which fully meets expectations.

The indicator "Level of financial intermediation" has a positive effect on both models (ROA and ROE): the better the bank transforms deposits into loans, the greater profit it should receive from these operations.

The indicator “The number of banks per 1 thousand people” is an indicator of the level of competition in the banking sector. It was revealed that for Lebanese banks a higher level of competition contributes to the growth of profitability indicators. This may be due to the fact that with higher competition, the development of new banking products and services begins and the quality of service improves. All this helps to attract new customers and, accordingly, has a positive impact on profitability.

The indicator “Territory coverage by branches” has a positive impact, i.e. To obtain greater profitability in the current conditions, it is important for Lebanese banks to increase the availability of their services by developing various forms of presence of a credit organization in the region: additional offices, credit and cash offices, operational offices, operating cash desks outside the cash node, as well as other internal structural divisions.

The indicator “inflation rate” negatively affects the profitability of banks. For European banks, inflation is expected to have a positive effect on the bank's financial performance (Dietrich W., 2014). It is worth noting that European countries show moderate inflation rates. It is assumed that at higher inflation rates, the effect may become negative, as it happened in our case.

As the first stage of checking the results for stability, the period under consideration was divided into three sub-periods: 2008-2010; 2016-2018 and 2019, the first sub-period includes the crisis of 2008-2009 and the first year of recovery, when there were serious problems in the banking sector. The second is a relatively calm subperiod in which there were no sharp shocks. The third includes only three quarters of 2019 (for which financial data on banks are available); This sub-period, like the first, is problematic due to the difficult political and economic situation in Lebanese.

As a result of using this approach, it was found that the GDP per capita and the industrial production index became significant, and the “Intermediation Level” indicator became insignificant, but only for one modification (model with ROE in



the first sub-period). For most sub-periods, macroeconomic variables retained their significance and the expected direction of influence on the profitability of banks<sup>9</sup> (Table 12, 13). This means that macroeconomic variables turned out to be mainly resistant to the division of the analyzed period into sub-periods.

It is worth noting that the crisis in the economy has a long-term impact on the banking sector: even in relatively calm times (2 period), there is a significant decrease in bank profitability. First of all, it is caused by the fact that servicing deposits attracted during the crisis period becomes very burdensome for branches. A similar situation was observed for the indicator “GDP per branch”: as soon as bank deposits began to play a decisive role in funding many banks that until that time were not among the industry leaders in terms of attracted deposits, the effectiveness of these banks in the market for attracting and servicing deposits immediately decreased, thereby reducing the profitability of the banking business.

In times of crisis, the active implementation by the banks of their financial intermediary function significantly reduced their margins, and in this regard, many banks preferred to work with their existing client base, thereby moving away from the aggressive format of retail business development. At the same time, state-owned banks were actively expanding their retail loan portfolios, including having state support from

External economic bank’s funds as part of the External economic bank’s investment program in affordable housing and mortgage projects in 2016–2018. For example, as of December 2018, the growth rate of such loans with state-owned banks was three times higher than that of private banks.

In addition, as part of this approach, a negative effect of the “GDP per capita” indicator on bank profitability (ROA) in 2019 was revealed. A similar effect is most typical for developed markets when bank margins are narrowed as a result of high competition (Chafai et al., 2001). This explanation may be applicable to our case, since the sample contains the largest domestic banks, which had obvious competitive

advantages and between which there was a high competition for market opportunities.

So, in (Fungáčová et al., 2010) based on data from 2001-2007. it was shown that the market power of banks increased with the size of the bank, but this effect was nonlinear.

**Table 12: The Effect of macroeconomic variables on the profitability of banks (ROA) when divided into sub-periods**

ROA				
Explanatory variable	Entire period	Period 1	Period 2	Period 3
Group 1				
Density	−9,286*** (0,543)	−10,13*** (0,660)	−11,82*** (0,672)	
Exchange rate	2,755*** (0,111)	1,705*** (0,129)	3,806*** (0,251)	7,832*** (0,209)
Deposits at the branch	−0,882*** (0,116)	−0,557*** (0,179)	−1,476*** (0,112)	
GDP per capita	−0,199 (0,125)	1,727*** (0,186)	0,832*** (0,124)	−8,343*** (0,220)
Group 2				
Release index	−6,999*** (0,241)	−11,39*** (0,519)	23,96*** (2,038)	
Nominal wages per capita)	−2,024*** (0,157)	−6,966*** (0,419)	−1,360*** (0,0698)	
GDP per branch	1,454*** (0,0692))	4,057*** (0,245)	−1,268*** (0,141)	−3,026*** (0,112)
Mediation Level	0,608*** (0,172)	−2,578*** (0,355)	7,877*** (1,281)	−51,39*** (1,328)
Group 3				
The number of banks per 1 thousand people	3,095*** (0,247)	11,43*** (0,723)	−1,135*** (0,485)	
Branch coverage	0,678*** (0,0822)	7,633*** (0,618)	−0,184*** (0,112)	−13,88*** (0,408)
Inflation	−0,0887*** (0,00969)	0,419*** (0,0222)	−0,049*** (0,0188)	−1,117*** (0,0278)
IPI	−0,046 (0,0688)	−4,835*** (0,222)	0,728*** (0,0976)	

**Note.** In parentheses are standard errors. Ellipsis means the presence of the remaining explanatory variables of the model (see formula (2)) **Source:** Demirguch K. H. 1999

**Table 13: A Effect of macroeconomic variables on bank profitability (ROE) when divided into sub-periods**

ROE				
Explanatory variable	Entire period	Period 1	Period 2	Period 3
Group 1				
Density	−9,544*** (0,477)	−13,40*** (0,616)	5,132*** (0,755)	
Exchange rate	4,689*** (0,0991)	4,160*** (0,139)	−1,893*** (0,310)	11,69*** (0,379)
Deposits at the branch	−2,122*** (0,0786)	−2,710*** (0,134)	−1,627*** (0,131)	
GDP per capita	0,555*** (0,0693)	2,445*** (0,116)	3,263*** (0,085)	1,549*** (0,339)
Group 2				
Release index	9,753*** (0,267)	−14,20*** (0,617)	22,84*** (2,367)	
Mediation Level	3,162*** (0,170)	0,444 (0,319)	−3,337*** (1,360)	−68,56*** (2,357)
GDP per branch	1,891*** (0,0708)	4,286*** (0,233)	−0,916*** (0,154)	4,177*** (0,190)
Mediation Level	−1,650*** (0,130)	−6,266*** (0,447)	−1,877*** (0,0881)	
Group 3				
The number of banks per 1 thousand people	2,796*** (0,420)	11,43*** (0,641)	−8,314*** (0,451)	
Branch coverage	0,505*** (0,147)	4,492*** (0,458)	−1,164*** (0,126)	9,172*** (0,648)
Inflation	−0,135*** (0,0165)	−0,665*** (0,0244)	0,0564*** (0,0188)	−1,213*** (0,0476)
IPI	−0,232*** (0,0887)	−7,010*** (0,218)	1,387*** (0,0958)	

**Source:** Demirguch K. H. 1999

As an additional check of the stability of the values of macroeconomic variables, a repeated analysis of function (2) was carried out with the involvement of other dependent variables. In this case, similar to the work, instead of ROA, bank

interest income, bank non-interest income and bank operating income were alternately used, each of which was normalized to total assets. In general, the addition of macroeconomic variables to the models under consideration had a positive effect both on bank variables and on the coefficient of determination of models, which increased for all dependent variables when any of the three blocks of macro factors was added. In the table. 3.3.1 compares the model results for ROA and for interest, non-interest and operating income models as dependent variables.

Let us dwell on the consideration of those factors for which macroeconomic factors have changed the direction of their influence compared with basic calculations (see table 14).

The “Population Density” indicator had a positive effect on the model with interest income. This means that a higher population density contributes to the growth of the loan portfolio, which increased this indicator.

The indicator “Volume of deposits per branch” has a positive effect on operating income, but negatively on interest income. These contradictory results can be explained by tightening requirements for borrowers and falling purchasing power of the population, as a result, a decrease in effective demand. In addition, a significant role was played by the activation of depositors to reissue deposits in more attractive conditions, as a result of which banks did not manage to place loans at the same rate at which they attracted deposits. Finally, payment services and money transfer systems have been more actively developed.

The indicator “GDP per capita” had a positive impact on the interest income of banks, normalized to the balance sheet currency, which in good times may indicate an increase in demand and purchasing power of the population, since GDP growth stimulates demand for loans. At the same time, despite the continued stagnation of business activity, the growth of the corporate loan portfolio and the reorientation of these clients from private banks to banks with state participation were clearly observed. This indicator negatively affects non-interest and operating income of the

bank, which, as mentioned above, may be a consequence of high competition between banks.

**Table 14: Alternative indicators of profitability**

Explanatory variable	ROA	Interest income to assets	Non-interest income to assets	Operating income to assets
Group 1				
Density	−9,286*** (0,543)	0,795*** (0,196)	−0,887*** (0,295)	0,453 (0,306)
Exchange rate	2,755*** (0,111)	0,513*** (0,0868)	2,810*** (0,167)	1,759*** (0,118)
Deposits at the branch	−0,882*** (0,116)	−2,657*** (0,0736)	0,037 (0,0909)	0,117* (0,0690)
GDP per capita	−0,199 (0,125)	2,939*** (0,0688)	−0,971*** (0,0775)	−0,624*** (0,0841)
Group 2				
Release index	−6,999*** (0,241)	−3,716*** (0,257)	−7,433*** (0,448)	−5,530*** (0,339)
Nominal salary per capita	−2,024*** (0,157)	0,477*** (0,0217)	−0,011 (0,0359)	0,0306 (0,0374)
GDP per branch	1,454*** (0,0692)	0,563*** (0,0346)	0,636*** (0,0750)	0,457*** (0,0551)
Mediation Level	0,608*** (0,172)	1,237*** (0,150)	−0,415** (0,205)	−0,815*** (0,224)
Group 3				
The number of banks per 1 thousand people	3,095*** (0,247)	1,676*** (0,177)	−3,153*** (0,399)	−2,595*** (0,395)
Branch coverage	0,678*** (0,0822)	0,226*** (0,0695)	−1,142*** (0,135)	−0,864*** (0,117)
Inflation	−0,0887*** (0,00969)	−0,231*** (0,00620)	−0,0447*** (0,00915)	−0,0386*** (0,0114)
IPI	−0,046 (0,0688)	2,718*** (0,0733)	−0,309*** (0,0736)	−0,0811 (0,0640)

**Source:** Demirguch K. H. 1999

The indicator “The number of banks per 1 thousand people” negatively affects the non-interest and operating income of banks, since in some areas that generate

noninterest income, in addition to competition among themselves, banks are also under pressure from non-bank credit organizations. For example, the transfer of funds is possible not only with the help of a bank, but also with the help of some organizations.

In this regard, some banks are beginning to cooperate with similar agents.

The indicator “Nominal wage per capita” has a negligible positive effect on interest income, i.e. indexation of wages increases the propensity to consume, which contributes to a more active issuance of loans and, accordingly, increases the bank's interest income.

The indicator “Level of intermediation” negatively affects non-interest and operating income. This is due to the fact that the more efficient a bank can transform loans into deposits, the more often it takes this opportunity and builds up its loan portfolio. This reduces the amount of other profitable assets, which may adversely affect non-interest and operating income.

The indicator “Territory coverage by branches” has a positive effect on interest income, for which it is important for the bank to have the highest possible number of customers and increase the availability of its services in different formats. For noninterest income (to a greater extent) and operating income (to a lesser extent), it is not so important for a bank to attract a client directly to its office, therefore for these indicators the coverage of the territory by branches has a negative effect. In addition, the negative impact is associated with the proliferation of remote means of access to a bank account, for example, through electronic (Internet or mobile) banking, when a client can perform operations using electronic devices without visiting the office.

The “Industrial Production Index” positively affects the model with interest income normalized to the total assets of banks as a dependent variable, which can be explained by an increase in lending to industrial and mining companies with an increase in industrial production, which is confirmed by the correlation between the industrial production index and the volume of loans industry.

In the course of the study, an analysis of the influence of population density on profitability and profitability indicators of banks was carried out, for which a cyclic variable was added to Group 1 model - the share of overdue debt in the loan portfolio (Table 15).

When adding the indicator “Share of overdue debt in the loan portfolio of the bank” and the corresponding cross variable to the model, the indicator “Population density”, as before, had a negative impact on the profitability of banks (ROA and ROE). The period 2008-2009 characterized by large-scale deductions to reserves, the impact of which on business profitability was enhanced by a significant reduction in interest margins (for example, in 2009, ROE decreased by more than 2.5 times).

At the same time, an increase in the share of overdue debt in the loan portfolio was positively associated with the ROE indicator. When analyzing the cross product of these variables, we can talk about smoothing the effect of population density on the profitability of banks. These results can be explained by the fact that banks were actively involved in prolonging problem loans: for example, in the crisis period, the actual share of problem debts in the banks' loan portfolio was 3–3.5 times higher than the same indicator calculated on the basis of reporting.

The percentage density indicator has a positive effect on interest income, i.e. with a higher population density, bank interest income is increasing. The increase in the share of overdue debt over the entire loan portfolio negatively affects interest income, which is associated with a decrease in interest payments with a deterioration in the loan portfolio. The cross product of these variables positively affects interest income, but is much weaker than the population density indicator. This suggests that with an increase in the share of overdue debt in the loan portfolio, the population density indicator begins to have a smaller impact on interest income.

In the course of the study, an analysis of the influence of population density on profitability and profitability indicators of banks was carried out, for which a cyclic variable was added to Group 1 model - the share of overdue debt in the loan portfolio (Table 15).

**Table 15: The effect of population density and the cyclical variable on bank profitability**

Indicator	ROA	ROE	Interest income to assets	Non-interest income to assets	Operating income to assets
Population density	−9,233*** (0,740)	−9,460*** (0,474)	0,773*** (0,193)	−1,027*** (0,297)	0,364 (0,305)
The share of overdue debts in the loan portfolio of the bank	−0,0416801 (0,0472)	0,164*** (0,0425)	−0,085*** (0,03095)	0,0067 (0,03791)	−0,0077 (0,01907)
The product of population density and the share of overdue debt in the loan portfolio of the bank	−0,00407 (0,00526)	−0,0344* (0,0195)	0,0232* (0,0118)	0,0540** (0,0237)	0,0208 (0,0233)

**Source:** Compiled by the author.

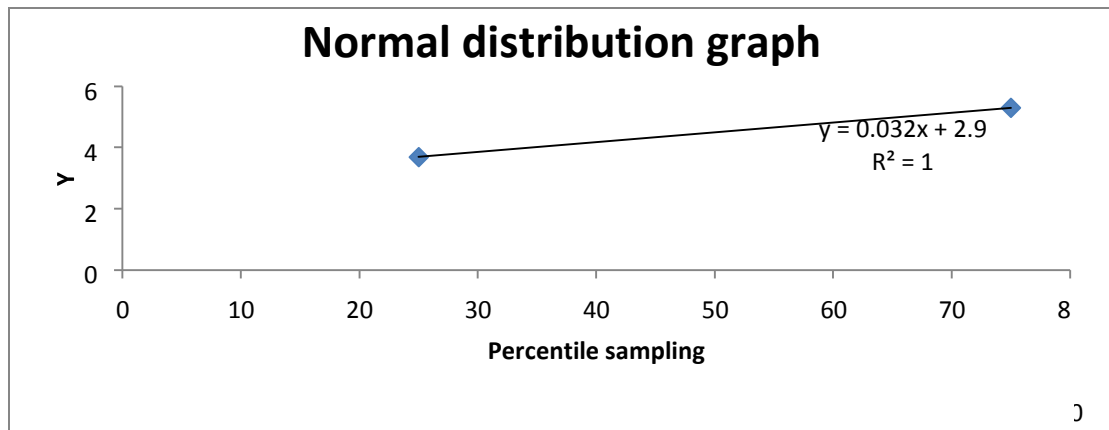
The negative impact of population density on non-interest income may be due to the fact that individuals are not the main sources of this type of income. In addition, a higher population density stimulates a higher demand for loans, which reduces the bank's investments in other assets that generate non-interest income. However, with the increase in the share of overdue loans in the loan portfolio, banks can reduce the issuance of loans and develop additional services that can be provided to individuals (payment services, money transfers, etc.), which may explain the result.

It is possible that the crisis in the finances and economy of Lebanon could adversely affect the already difficult situation of the entire Middle East region.

Considering the aforementioned, let us analyze the macroeconomic impact of the Lebanese banking sector with Excel.



CONCLUSION OF RESULTS								
<i>Regression statistics</i>								
Multiple R	1							
R-squared	1							
Normalized Rsquared	65535							
Standard error	0							
Observations	2							
Analysis of variance								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	1,28	0,426667	#NUMB ER!	#NUM BER!			
The remainder	0	0	65535					
Total	3	1,28						
	<i>Coefficients</i>	<i>Standard error</i>	<i>t-statistics</i>	<i>P-Significance</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95,0%</i>	<i>Upper 95,0%</i>
Y- intersection	35,11818	0	65535	#NUMB ER!	35,11818	35,11818	35,11818	35,11818
Variable X 1	0	0	65535	#NUMB ER!	0	0	0	0
Variable X 2	-1,45455	0	65535	#NUMB ER!	-1,45455	-1,45455	-1,45455	-1,45455
Variable X 3	0	0	65535		0	0	0	0



As we see, the formula according to our model will look like this:

$$y = 0,032x + 2,9$$

This also shows that there is a direct relationship between GDP and investment and savings, cash basis, foreign direct investment. Because  $R^2 = 1$ . This also means that our model is true.

It shows that macroeconomic effects on the Lebanon banking system is on the high level. The way out of the crisis in Lebanon is possible only with the establishment of civil consent and reforms of the existing confessional democracy, as it has shown its inefficiency. Lebanon's creditor countries will also need assistance in debt restructuring and urgent financial assistance. But the main thing is that the country needs a new economic policy aimed at economic growth, and not at maintaining a fixed rate of the national currency. All the above-mentioned subconscious supports the hypotheses. Recently, macroeconomic forecasting for the banking sector in Lebanon. Poetry and mismanagement of new fiscal policies.

## **CONCLUSIONS AND RECOMMENDATIONS**

It is believed that the large-scale functioning of the banking sector in Lebanon is mainly due to the conservative regulatory measures taken by the Central Bank of Lebanon.

Over the past 30 years, the Central Bank of Lebanon has set clear goals in its instructions and instructions, determined the performance indicators of banking activities and controlled their implementation by the banking system.

In addition to the Central Bank of Lebanon, the following are also involved in the regulation and control of the country's financial and banking system: Banking Control Commission - BKK (Banking Control Commission, BBC), Higher Banking Commission - WBC (Higher Banking Commission, The Commission), Financial Investigation Committee - KFR (Special Investigation Commission, SIC), Association of Lebanese Banks - ALB (Association of Banks in Lebanon, ABL).

The Central Bank of Lebanon is the supreme regulatory body of the banking system and has the largest financial and administrative autonomy. He is entrusted with the task of ensuring the stability of the country's monetary system and the rational management of the banking sector.

To solve these problems, the Central Bank of Lebanon is developing rules and directives aimed at developing the financial market, payment systems, money transfers and settlements between participants in the banking system.

The banking sector of Lebanon in the second half of the previous century had relatively stable growth indicators, steadily withstanding the political storms that raged over the country, threatening its security. The reason for this was an effective financial policy.

Against the background of the country's administration concerned about the sociopolitical problems and the burdened debt of the Lebanese economy, the banking sector almost completely fell out of context. To a large extent, its boom could be attributed to the unique features of the sector itself, as well as to the so-called “tight regulatory platform and conservative policies of the Central Bank of Lebanon”.

Until now, against the background of the constant number of banks operating in Lebanon over the past 10 years, the number of their local and foreign branches has constantly grown. Tight regulation of the number of new banks by the Central Bank of Lebanon, along with other internal and external factors, played a major role in the development of the Lebanese banking sector from a highly competitive state to a more monopolized version.

One of the real tests of strength the Lebanese banking sector passed during the years of the global economic crisis, which began in 2007 and reached its peak in 2009.

In contrast to the situation in other countries of the Middle East and North Africa, the Lebanese banking sector continued to grow and succeeded in expanding its deposit base, increasing lending to the national economy and generating profits, while world banking activities encountered serious obstacles and were accompanied by unprecedented losses.

In this paper, we analyzed the influence of macroeconomic factors on the profitability of Lebanese banks. The stability of the results was checked by dividing the time horizon into three subperiods, excluding the largest banks from the sample, analyzing profitability indicators and assessing the structure of banks' expenses, as well as including a pairwise product of population density with a cyclic indicator.

The results of this study can be demanded by both individual banks and regulators. For a bank, an analysis of the influence of macroeconomic factors can be used both to adjust medium and long-term development strategies and part of the formation of an asset portfolio, and when developing new products offered to customers. The regulator can take these results into account when drawing up stress testing methods to determine the weights of various macroeconomic indicators and to adjust the list of these indicators.

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