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## **FINAL QUALIFYING PAPER**

**on the topic:**

# **FINANCIAL SUSTAINABILITY AND RELIABILITY OF THE LEASING COMPANY**

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## INTRODUCTION

**Relevance of research.** Market conditions of economic activity predetermine the continuous development of the technological base of production, which in turn requires the availability of significant investment resources for its updating. The modern stage of management for the most amount of its subjects is characterized by a rapid decline or a complete termination of investment in production at the expense of its own funds, which determines the relevance of further development of the financial services market as one of the backgrounds for the effective functioning of all spheres of the state's economy.

In the context of today's socio-economic realities, the need to identify problems in the functioning of the leasing services market and identify ways to develop and enhance the role of the leasing services market becomes high important.

The impact of scientific and technological progress, the transition to a knowledge economy, as well as Ukraine's choice on the way to European integration and increasing the investment attractiveness and competitiveness of domestic goods, requires the urgent search and implementation of the technical updating of materials and modifies the main assets of business entities. One of these methods is financial leasing. This is the most effective alternative to lending, which is confirmed by its widespread use in developed countries.

Acting as an intermediary in the financial services market, leasing companies should provide a continuous flow of funds to finance leasing projects while developing a financing strategy for the whole. But for leasing companies in Ukraine, the lack of a systematic approach to ensuring their financial sustainability is typical.

It is extremely important to investigate the current state of the leasing market in Ukraine, to pay attention to the foreign experience of the operation of leasing, and choosing sustainability and reliability as the main criteria.

Problems of the development of the market of leasing services in Ukraine were considered in many works of such scientists as: Borysiuk, O., Humeniuk, O. [1],

Rogach O. [3], Tatarenko, O. G.[4], Gonta O. , Zhavoronok A. [5], Bashnyanin G.I., Lintura I.V.[6], Tishchenko O. M., Norik L. O., [7], Kovalenko V.V. [9], Ovsak O.P. [13] and others. Despite the current developments, further analysis is required by the problems of the leasing services market in order to identify promising directions for its development. Most researchers indicate that in the process of leasing implementation in particular, international, much will depend on how the Ukrainian standards of Ukrainian economy will meet the world standards. Aspects of financial sustainability of leasing companies were considered by Shklyar A.I. [22], Kuznetsova A. Ya [24], Sosnovskaya O.O. [25], O.M. Melnik [26], Orehova K.V[27], Primak Yu.R. [30], Kravchenko M. C. [32], Y.S. Tsal'ko [38], M.D. Bilyk [39], Kravchenko M. C [41] and others.

**The purpose** is to study the theoretical foundations and the practical functioning of the leasing services, to analyze the current state and to determine the perspective directions, trends of its development. To explore approaches, information provision, models which can help to define sustainability of financial entity. To research the existing methods and indicators of financial sustainability level, its practical application and provide suggestions for their improvement, using innovative technologies.

To achieve this goal, the following **tasks** were formulated:

- to investigate economic nature of the financial sustainability and reliability of the leasing company;
- to classify main tools for assessing the financial sustainability of the leasing company;
- to highlight the basis criteria and indicators of the investigated concept;
- to present information support for analysis;
- to evaluate the influence of internal and external factors on the financial sustainability of the leasing company;
- to investigate practical meaning of the financial sustainability;

- to present some ways of improvement the information provision for assessing the financial sustainability;
- to improve methodological principles for assessing the financial sustainability and reliability of the leasing company;
- to propose some ways for increasing the financial sustainability.

**The object** of the research is leasing companies' activity on the Ukrainian and foreign markets. **The subject** is exploration of approaches of financial sustainability and reliability of the leasing company.

**Methodological base** for the study consist of scientific works, recommendations of the Basel Committee, regulatory documents on the sustainability evaluation of financial institutions. The research is based on general scientific and special methods for the analysis of professional literature (abstract-logical and theoretical generalization) and models for determination the sustainability and reliability of financial institutions. For analysis, the method of averages and the correlation method were selected.

**Theoretical base** of the research are the Laws on document circulation, Law of Ukraine "About financial leasing", publication of authoritative publications such as KPMG, Leaseurope, Forbes, regulatory documents of the National Commission for the State Regulation of Financial Services Markets and the European Commission. The research is based on general scientific and special methods, publications that highlighted the problems under investigation.

**Scientific novelty.** Systematization of methods for determining the sustainability of leasing companies was further developed. Accordingly, there was several key approaches and key identifiers should be clarified

**Practical implementation.** The results of the conducted research can be used to determine the sustainability of leasing companies, both for internal and external users, since the source data, need for the resource, as a rule, are freely available.

**Approbation of scientific research.** The final qualifying work is an independent study by the author. The main results of the research of the thesis were presented at the Ukrainian Student Scientific and Practical Conference "Strategies for

the Development of the Financial Market of Ukraine" of Kiev National University of Trade and Economics, (Kiev, November 22-23, 2017), on the topic "Current state and perspectives for market development leasing services in Ukraine". According to the results of the conference the Diploma of the III degree was obtained.

**Publications.** Some results of the research were reflected in the scientific article: Bartulova O.O. "Current state and perspectives for market development leasing services in Ukraine" // Collection of scientific articles of full-time students studying at the educational level, master's degree, specialty 072 «Finance, banking and insurance» : " Strategies for the Development of the Financial Market of Ukraine", part 2 / rep. ed. by N.P. Shulga : Kiev National University of Trade and Economics – 365 p. (219-226).

**Work structure.** The work consists of 3 sections, introduction, conclusions, references and applications. The volume of the work is 74 p. There are 22 tables, 1 picture, 15 appendix and 83 scientific sources were present.

## **PART I. THEORETICAL PRINCIPLES OF FINANCIAL SUSTAINABILITY AND RELIABILITY OF THE LEASING COMPANY**

### **1.1 The economic nature of the financial sustainability and reliability of the leasing company**

Acting as an intermediary in the financial services market, leasing companies should provide a continuous flow of funds to finance leasing projects while developing a financing strategy for the whole. But for leasing companies in Ukraine, the lack of a systematic approach to ensuring their financial sustainability is typical.

So, to offer methods and tools for determining the financial sustainability and reliability of the leasing company, we should investigate the nature of its operation and definition by the law. [1]

In accordance with Article 1, Section 1, Law of Ukraine on financial leasing, the lessor is a legal entity that transfers the right of ownership and use of the object of financial leasing to the lessee under a financial lease agreement and has acquired the status of a person entitled to provide financial leasing services in the manner established by law; lessee - physical (incl. individual - entrepreneur) or legal entity, which receives under the financial lease agreement the right to own and use the object of financial leasing from the lessor; leasing intermediaries - persons engaged in intermediary activities in the field of financial leasing; financial leasing - a type of civil law relationship in which the lessor is obliged to transfer to the lessee for a specified period (but not less than one year) ownership and use of the thing owned by the lessor and acquired by him without prior agreement with the lessee, or thing, specially purchased by the lessor from the seller (supplier) in accordance with the specifications and conditions established by the lessee. [2]

Transformational processes taking place in the Ukrainian economy require further disclosure and deepening of the economic content and essence of the lease. Its functions in the state economy, justification of the theoretical foundations of the



functioning of leasing companies is also necessary. [3]

Successful activities of such companies as financial market participants are closely linked to their financial sustainability. However, theoretical, methodological and practical aspects of ensuring this phenomenon have not been developed, which has a significant impact on the development of leasing in Ukraine. [4,5]

According to the Law of Ukraine "On Financial Services and State Regulation of Financial Services Markets". Financial institution - a legal entity that, in accordance with the law, provides one or several financial services, as well as other services (transactions) related to the provision of financial services. Non-financial institutions (not having the status of a financial institution) are independent financial intermediaries providing financial guarantee services in accordance with the procedure and on conditions determined by the Customs Code of Ukraine. [2]

An important condition for the functioning and development of any business entity, as a business process, is its financial sustainability. If an enterprise is financially stable, it is able to withstand unexpected changes in market conditions and not be on the verge of bankruptcy.

Lets decide what is actually financial sustainability and different ways of understanding of this term. In scientific literature, the term "sustainability" is identifying with such concepts as constancy (immutability, continuity) and stability.

Sustainability and reliability of financial intermediaries are among the most important conditions for the development of any national economy. Stability and transparency of their development make it possible to substantially increase the predictability of their activities for investors and increase attractiveness for other economic entities. [6] There are several approaches to the interpretation of financial sustainability.

Cybernetic approach treats this term as the preservation of the invariance of some invariants of the system in the process of changing its state. The economic and mathematical approaches to determination of sustainability are characterized by the statement of the conditions that provide the system state of equilibrium or the content of its characteristic features at the appropriate level.

Static financial sustainability can be considered as compliance with the parameters of the leasing company activity (capital, liquidity, solvency, profitability, level of problem assets, etc.) within the permissible limits.

Dynamic one means balancing and growth of positive and decreasing negative parameters of the activity of the leasing company within the permissible risk according to the defined system of agreed strategic and current goals (goals) of its functioning in the process of progressive development. [7]

Thus, financial sustainability is the ability of an enterprise or organization to function and develop fully, and to maintain equilibrium of balance in the external and internal environment. [8]

Often, financial sustainability is equated with the concept of financial state, but this is not correct. Under the term "financial state" is meant to understand the situation in a certain strictly defined period of time. This is a constant indicator of the performance of the institution on a certain date. [9]

The financial state of the company, and in our case, the leasing company, is a complex concept that is the result of the interaction of all elements of the system of financial relations of the enterprise. It's determined by a set of production and economic factors and is characterized by a system of indicators that reflect the availability, placement and use of financial resources. [10]

The main tasks of the analysis of the financial state are:

- research of profitability and financial sustainability of the enterprise;
- research of efficiency of the use of enterprise capital , providing the company with its working capital;
- an objective assessment of the dynamics and state of liquidity, solvency and financial sustainability of the enterprise;
- determining the effectiveness of using financial resources. [11]

From the foregoing, we can observe that within the framework of one concept another is investigated. But at the same time, the financial sustainability of the lessor has a broader notion than the financial state, because it considers the situation in the dynamics. In general, scientists distinguish four types of financial sustainability, that

shown schematically on tab.1.1:

- first type of financial stability - the absolute stability of the financial state of the enterprise, when the stocks and costs less than the amount of its working capital and loans to the bank to inventory values;

- second type of financial stability - the normal stability of the financial state, when the solvency of the enterprise is guaranteed;

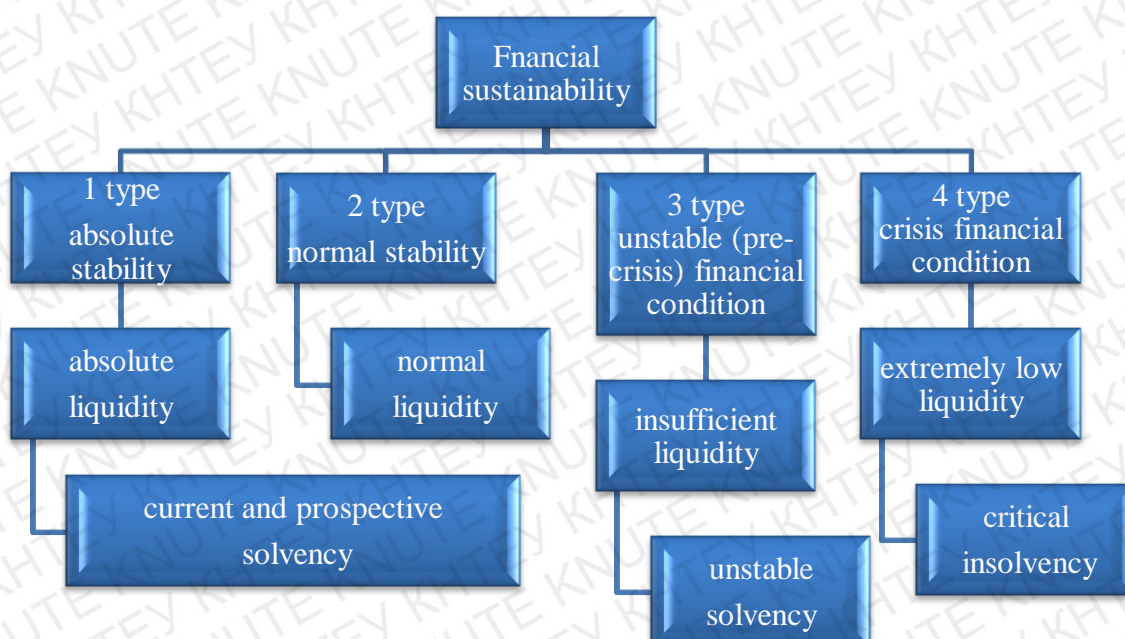
-type of financial stability - unstable (pre-crisis) financial condition, when there is a violation of solvency, but it is possible to restore the balance of payment facilities and payment obligations by attracting temporarily free sources of funds into the turnover of the enterprise;

- fourth type of financial sustainability is a crisis financial condition, when the company is on the verge of bankruptcy, in which stocks and expenses are larger amounts of their working capital, loans to inventories and attracted temporarily free sources of funds. [12]

With regard to determining the reliability of leasing companies, today there is no single clear approach and objective assessment among researchers and researchers.

*Table 1.1*

### Types of financial sustainability



\* Done by the author by source [12]

This indicator is largely determined not only by the level of competitiveness, but also by the overall level of risk, therefore, the availability of transparent information about their level of reliability is an urgent issue in the presence of asymmetry of information on the financial services market. [13]

In order to make informed decisions regarding the activity that corresponds to the chosen profit or risk ratio, economic entities, leasing companies and other entities of the financial services market it is necessary to have objective information about the financial state of the partners. For this purpose, leasing companies ratings are used abroad. The basic principle of determining the rating is to reflect the position of the market participant among similar, with the help of the processed information.

Leasing companies need to be valued according to the following positions:

- the volume of leasing operations, the presence of urgent debt;
- investment reliability for potential buyers of shares;
- reliability for corporations engaged in deposit insurance and risks of a leasing company. [14]

The analysis of scientific sources makes it possible to distinguish three main approaches to understanding the reliability and sustainability of a financial institution.

The first one is to identify the concept of "reliability" with the notion of "sustainability". This approach is based on the technical interpretation of both in the narrow, and in the broad sense. [15]

For example, in the Encyclopedia of Cybernetics, "reliability" is defined as "the ability of systems to maintain their most essential characteristics (reliability, suitability, etc.) at a given level during a fixed period of time under certain operating conditions." This concept describes the sustainability of the structure as "the ability to withstand efforts trying to remove it from the initial state of static or dynamic equilibrium." [12]

Within the framework of the second approach, it is proposed to distinguish between the reliability of a financial institution and its sustainability. At the same time, reliability is seen as precisely the ability without delay in any situation on the market to fulfill its obligations, while sustainability is understood as the stability of

the medium and long-term prospects, which can be estimated by the quality of assets, capital adequacy and the efficiency of its activity. [16]

According to the third approach, reliability is a broader concept and combines the concept of sustainability and stable development, characterizing the financial institution as a whole; stability - the ability to continuously dynamic development, and sustainability - its internal state. [17]

Let's consider the sustainability structure of the leasing company. So, the main elements are (Pic. 1.1):

1. The capital's sustainability of the leasing company, determined by the size of equity. Its size provides a sufficient amount of cash to meet the requirements for repayment of deposits, the formation of reserves for covering unforeseen losses and debts, to finance the development of a leasing company, etc. Equity is also a source for overcoming negative situations.

2. Commercial sustainability of the leasing company.

At the core of this type of sustainability is the degree of integration of the leasing company into the infrastructure of market relations: the degree and sustainability of communication in relations with the state, participation in relations with other subjects of the financial services market, the quality of relations with creditors and other clients.[18]

3. Functional sustainability of the leasing company:

- the specialization of the leasing company in a limited range of services, which enables to efficiently manage the selected assortment of leasing products and services;
- the expansion of functions or the leasing company's universalization, given that most clients prefer to meet all their needs for leasing products and services in one leasing company.

4. Organizational sustainability of the leasing company.

The organizational structure of the leasing company and its management must be consistent with both the purpose of the leasing company's activities and the specific range of leasing products and services performed by the functions. [19]

5. Financial sustainability. Because of it, the company is able to provide marketing and personnel sustainability, promote the development of industrial and technological one, maintain investment sustainability, and improve the efficiency of the management process.



Pic 1.1 Elements of the leasing company sustainability

\* Done by the author by sources [18,19]

The analysis of economic literature showed that insufficient financial sustainability of the entity can lead to insolvency of the enterprise and the lack of funds for it to diversify the business and, in general, the functioning of the entity. Excess financial sustainability also has negative consequences, because it slowdown the development of production and economic activity due to increased surplus stocks and reserves at the enterprise. Therefore, in order to prevent such a situation and determine the type of financial sustainability at enterprises, system of indicators of financial stability is used. [20]

The system of indicators used to assess the financial sustainability of a financial institution must meet the following requirements:

- should be given a complete picture of the financial sustainability of the enterprise;
- it is necessary to give the standards of range of changes;
- coefficients are calculated only on the basis of the financial statements of enterprises;
- in economic terms, financial ratios should have the same direction;

It should be noted that the highest growth rates of financial sustainability indicators depend on the profitability of sales, capital turnover, financial activity in attracting funds, norms of distribution of profits for investment needs.

## **1.2 Classification of tools for assessing the financial sustainability and reliability of the leasing company**

Theoretical aspects of the research of financial sustainability of the enterprise are based on the development of schools of financial reporting analysis. Thus, representatives of the school of empirical pragmatism (R. Folk) singled out issues of management of circulating assets, equity and payables.

The school of statistical financial analysis (A. Wall) focuses on identifying the coefficients of accounting by statistical methods. The theoretical developments of the school of multivariate analysis (J. Bliss) are based on the definition of the structure of the connection of partial indicators of financial reporting with the general indicators of effective activity. Representatives of the School of Strategic Aspects (E. Altman, William Beaver, R. Taffler G. Tishou, Jean Conan M. Golder) prefer perspective analysis compared to the retrospective and in the works of stock market participants (G. Foster), reporting was used to predict the level of efficiency of investing in securities.

The scientific works of modern domestic and foreign scientists prove that the process of forming the conditions for ensuring financial sustainability of the

enterprise is an important economic problem, the solution of which requires the improvement and development of modern methodological support and application in the management of the analytical apparatus of evaluation and forecasting. [21]

The global financial crisis has led to a revision of supervisory approaches to system interconnections and their regulation, as well as the need for more sophisticated identification tools and limitation of systemic risk spreading.

In order to minimize losses due to systemic damage, systemic risk monitoring should be carried out at the level of financial institutions, markets and sectors, which results in further complication of research tools.

All this indicates the need for systematic analysis of macroprudential instruments for their use in countries that differ in terms of economic development, openness of the economy, development of the financial market. [11]

In recent years, many publications on systemic risk identification, financial stress prediction and impact assessment of shocks on key variables of the financial sectors have appeared. Despite the large number of instruments, the preference is given to those that are recognized by international regulatory practice (Appendix A).

According to the information base and the direction of their use, they are divided into:

- financial sustainability indicators (FSIs), based on the financial statements of the financial institutions;
- fundamentals-based models - models that use macroeconomic or balance information to establish macro-financial relationships (for example, macro-based models and network models);
- market-based models - models that display risk information based on changing market data and are used to track the unstable state of firms or sectors;
- hybrid, structural models - models that are used to assess the impact of shocks on key variables of the financial and real sectors. [22]

The mechanism for assessing financial sustainability of an enterprise is based on the following principles:



- the principle of transparency - provides that information on the financial sustainability of an enterprise should be accessible, since today it only holds public financial statements;
- the principle of systemicity is to use system analysis to assess the financial sustainability of the enterprise;
- the principle of objectivity takes into account the influence of factors of the economic environment on the financial sustainability of the enterprise in accordance with reality;
- the principle of complexity combines certain methodological approaches to the assessment of financial sustainability of an enterprise and takes into account the necessity of determination of its level. [23]

As the review of scientific publications shows, there were no attempts to systematically cover issues of financial sustainability of leasing companies in Ukraine. As a result, there is no information security of such research, which involves several directions, namely:

- methodological - availability of methods for calculating the state of a leasing company;
- statistical - availability of reporting information about leasing companies;
- systemic - the availability of benchmarks for progress, identification of the stages of operation and development of leasing companies.

The methodological direction of the information support analysis of the financial stability of the leasing company involves knowledge of ways to identify the current state of the leasing company. [24]

The statistical direction provides for the possibility of obtaining reliable and comprehensive information on the state of the state of the leasing company being investigated, and the related issue is the disclosure of leasing companies' reporting in the mass media.

The system direction implies the presence of clearly defined limitations of the leasing company that would identify its market status, thus identifying the positive

and negative directions of development; while the analysis of the financial stability of the leasing company requires the full or partial certainty of its state in the market, which is associated with the risk category. [25]

However, it's not enough to follow only the directions, for timely determination of the financial position of financial institution. So for a more complex one, various methods have been developed. It gives a deeper understanding of the situation for internal and external users. In most cases, it's similar, and to obtain the optimal amount of relevant information, several techniques are often used simultaneously. And there is no single integrated system. (Appendix B) presents methods for assessing financial sustainability. [26]

Now we will consider some methods of financial sustainability more detaily.

Statistical method is based on tracking the results of fluctuations in a certain set of selected indicators for a certain period. The main thing is that based on the patterns of past events you can predict the organization's activities for subsequent periods. [27, 28]

The disadvantage of the method is that it does not give exact results for short-term periods. It isn't a precise method for short-term risk tracking.

The main advantage is a high probability of forecasting results for long-term periods.

As for stress testing, this method consist of a complex of analytical tools that used to identify the key risks of the financial and economic system on the basis of determining the quantitative effect of possible shocks on financial system.

The implementation of this method began in the aftermath of the crisis period in 2009-2010. The first country that applied it at the state level was the United States. As I. B. Ivasiv and AV Maksimov write, central banks of different countries, including Ukraine, introduce the practice of stress testing of banks on a regular basis. But in most cases, the results of such testing are exclusively confidential.

Talking about disadvantages, the main one is limited access to results. Possibility of distorted and inaccurate results. Benefits - Ability to forecast activity in subsequent periods.[29]

Macroprudential analysis proposed as a method of continuous monitoring, a comprehensive analysis of the state of the financial system, its internal relationships, interaction with the real sector, etc. Based on market research and analysis of macroeconomic information: key asset markets, financial intermediaries, macroeconomic development, potential imbalances and systemic risks.[23]

Disadvantages presented as a limited access to results, does not give an exact description of the risks of an individual institution. Benefits - gives understanding of the effectiveness of interconnections within the financial system and their disadvantages.

As for expert method, it based on the generalization of the opinions of experts. Intuitive characteristics, based on the knowledge and experience of an expert, give in some cases rather accurate estimates. Expert methods allow quickly and without large time and labor costs to obtain the information, that necessary for the development of managerial decision.

The experts themselves choose a set of the main criteria. They must characterize the various components of the institution. After calculating the indicators, experts determine the importance of each and its impact on financial stability. The situation is optimal if the complex indicator is 100.

Disadvantage of this method is a high chance of error due to human factor. As for benefits of the one - it is easy to calculate, accessibility and comprehensiveness.[30]

Coefficient method of assessing the financial sustainability of an enterprise based on a series of coefficients calculated on the basis of the balance sheet. Method is based on a comparison of the data of financial statements for the period. It also includes qualitative structural analysis.

The most complete picture of the state of a financial institution, its reliability and stability presents actually the detailed coefficient analysis.

The main disadvantage is the sufficient level of complexity of this technique, the results will be understandable only for professional users. Benefits - The most accurate and complete result of the analysis.

Factor analysis method represents a set of factors. It can show us not only main problems of the financial institution, but also reveals its cause.

The analysis can be carried out by the method of chain substitutions or by the method of absolute differences.

Disadvantages of the one is that mathematical and statistical methods require specialized knowledge for complex calculations. The main benefit is a high accuracy of results.

Rating system method based on the fact that after the analysis, institution assigns a certain estimate, which shows the effectiveness or ineffectiveness of its activities based on the main indicators. It is often called an additional method, since it is possible to assess the general state of the financial sector on its basis.

The most famous and popular in Ukraine is the CAMELSO rating and the rating built by the Kromonov system. The NBU is guided by the CAMELSO rating system. [26]

Disadvantage of the presented method is some inaccuracies of information.

Benefits are the follow: comprehensiveness to the general public and accessibility.

Integral method is that analysis of financial sustainability is based on the weighing of the basic financial ratios on the respective weighting factors, the results are added or multiplied to determine the final assessment.

Disadvantages presented like the correctness of weighting coefficients determination, and advantage of this method is in the simplicity of the method, we got the only result of the evaluation.

The next is structural-functional analysis method. This one is defined as an approach to the description and explanation of a system in which its elements and dependencies between them. The essence of the structural-functional method consists in the separation of the complex object into its constituent parts, the study of the connections between them and the definition of their specific functions, aimed at satisfying the corresponding needs of the system, management. It should take into account the integrity and interaction with the external environment.

Disadvantage of the investigated one is that it does not provide a complete and solid result, can be used as an additional analysis.

Benefit presented like possibility to show the features of interconnections in the financial sector. [32]

Correlation analysis used, when there is such a link between the indicators, in which some of them are factors that determine others, if there are no common factors that affect both performance indicators. Benefits - Calculations based on correlation models increase the degree of accuracy of the analysis. provides an opportunity to solve problems that cannot be solved by other methods of economic analysis.[18]

Thus, among the methods discussed in the section on financial stability assessment of financial institutions in Ukraine today the coefficient, factor, integral methods, and the system of rating assessments are the most popular.

### **1.3 Criteria and indicators of financial sustainability and reliability of the leasing company**

In the domestic economic literature there is no single approach to determining the financial stability of leasing companies, commercial banks and other financial institutions.

The complex nature of the term of financial sustainability of the company necessitates the justification of a system of criteria that can be considered as key features of its analysis. Under the criterion is understood the set of characteristics that make it possible in a formalized form to describe the level of financial sustainability of the enterprise and on this basis formulate recommendations for its optimization.

Due to the fact that the concept of financial sustainability is complex, it should be comprehensively considered and explored, to consider this indicator, scientists also advise to research it even a little more broadly, namely in the context of the

financial condition of the company. Taking into account internal and external analysis. [7]

Financial analysis, based on data only in public accounting, acquires the nature of external analysis, that is, analysis carried out outside the enterprise by interested counterparties, owners or state authorities. This analysis, based on only the accounting data, contains a very limited part of the information about the company's activities, not allowing us to disclose all the secrets of the company's success.

The main features of external financial analysis include:

- a large number of subjects of analysis, users of information about the activity of the enterprise;
- the variety of goals and interests of subjects of analysis;
- an availability of standard methods of analysis, accounting and reporting standards;
- public orientation of analysis, only on external reporting of the enterprise;
- the maximum level of openness the analysis results for users of information about the activity of the enterprise. [33]

Main content of external financial analysis:

- analysis of absolute profit indicators; analysis of relative indicators of profitability;
- analysis of financial condition, market stability, sustainability, liquidity balance, solvency of the enterprise;
- analysis of the efficiency of borrowing capital

In the system of internal financial analysis, we can be deepened through the involvement of data management economic analysis and evaluation of the effectiveness of economic activity.

The main content of the internal financial analysis can be supplemented by aspects that are important for optimizing management, such as the analysis of the efficiency of the advance of capital, an analysis of the relationship of costs, turnover and profit. We can deepen the research by attracting data from managerial economic analysis and assessing the effectiveness of economic activity, and already having a

wider range of factors of internal influence, to clarify the sustainability, stability, reliability and financial position of the company as a whole.

The main purpose of the financial analysis of the enterprise is to obtain a small number of key (most informative) parameters that give an objective and exact picture of the financial condition of the enterprise, its profits and losses, changes in the structure of assets and liabilities, in settlements with debtors and creditors. [34]

Also, the development and implementation of measures aimed at the rapid recovery of solvency, the recovery of a sufficient level of financial stability of the enterprise, the establishment of the possibility of the enterprise to continue its economic activity, the possibility of further development, ensuring profitability and growth of production capacity and the adoption of appropriate solutions.

At the same time, we are interested in both current and prospective financial state of the enterprise. The purpose of the financial analysis also depends on the objectives of the subjects of this analysis, that is, the specific users of financial information. The purpose of the analysis is achieved by solving a certain interrelated set of analytic tasks. The main factor of financial analysis is the volume and quality of the source information. [35]

The lack of a clear definition of the concept of financial sustainability leads to the identification of it with other economic concepts - reliability, solvency, liquidity. As a result, there is a terminological confusion.

There is a significant difference between the concepts of "liquidity" and "solvency". From the classical definition of the liquidity category, it follows that it characterizes the mechanism for the conversion of financial or tangible assets of a financial institution to real funds in order to timely fulfill obligations.

The solvency of the financial institution is assessed by comparing the institution's own funds and its liabilities. [36]

One-sided is also the identification of financial sustainability with profitability (over-income over expenditure). In the medium-term and long-term periods, the profitability of a leasing company is very important. It is a reliable generalized

indicator of financial sustainability, and a stable profit trend is one of the guarantees of the ability to get out of a difficult situation.

As for the approach to financial sustainability as a set of indicators, it is worth noting that the group of coefficients for its estimation is formed mainly on the basis of analysis of sources of its funds.[37]

It should be noted that the development of the financial services market is constantly changing approaches to determining the financial sustainability of the leasing company. However, the integrated characteristic of the one should not be reduced to a set of quantitative indicators, because financial sustainability - a qualitative characteristic of the leasing company.

Financial sustainability is a multi-component concept. The system of indicators developed in the domestic and world practice is used to assess the financial sustainability of the enterprise. Different sources may include different sets of indicators. So, according to some sources, the set may look like this: liquidity; capital adequacy; asset quality; solvency.

Y.S. Tsal'ko believes that about 18 factors are necessary, among which there are the maneuverability of equity, the coefficients of financial dependence, the concentration of attracted capital, the attracted sources in non-current assets, long-term attraction of borrowed funds and others. [38]

According to M.D. Bilyk, 7 indicators will be enough: financial autonomy, financial dependence, financial risk, maneuverability of equity capital, long-term investment coverage structure, long-term attraction of funds, financial independence of capitalized sources. [39]. Ms Krolenko allocates 5 groups of indicators of financial stability in terms of obtaining and using monetary assets of the enterprise: provision of entrepreneurial activity by own means of the enterprise; provision of the company with borrowed funds; solvency and creditworthiness of the enterprise; the structure of sources of formation and efficiency of the use of fixed and working capital of the enterprise; profitability of enterprise capital. G. Ilyasov considers it necessary to allocate only 2 indicators: the ratio of equity to all liabilities, the ratio of equity to borrowed capital. [25]



According to the analyzed source we can conclude that there are in general two approaches to determining financial sustainability. According to the first, financial sustainability of the company can be understood on the basis of determining the ratio of debt and equity. According to the second approach, an enterprise is financially sustainable if it has enough own current assets.

Also, speaking about the long-term prospects for company development, it should be remembered that financial stability also depends on the ratio of income and expenditure. Even if the company has some problems with its current solvency, in the future a positive financial result will balance the incoming and outgoing cash flows, which will make the company financially sustainable. It follows that a high profitability of the company positively affects the company's ability to conduct a stable business.

The size of debt capital in relation to equity or total amount of financial resources. The company can operate stably in conditions of high financial dependence on the funds of creditors. However, changing the market situation and other negative external and internal impacts may result in the company being unable to meet interest obligations and obligations to repay the loan body. Therefore, a high proportion of liabilities creates a threat to the company's financial sustainability in the medium and long term.

The generalization of different approaches to the assessment of financial sustainability of an enterprise made it possible to allocate the following ratios:

- coefficient of equity (coefficient of autonomy);

It determines the share of funds owned by the owners in the total amount of funds invested in the property of the enterprise. It also characterizes the ability of an enterprise to fulfill its external obligations through the use of its own funds, the independence of its operation from borrowed funds.

- coefficient of concentration of debt capital;

This indicator is reversed to the coefficient of autonomy. It allows you to determine the proportion of company assets that are funded by long-term and short-

term borrowing resources. The growth of this indicator causes an increase in the borrowed funds share in financing the enterprise;[23]

- an amount of working capital (WC);

This one indicates the part of the entity's current assets, which can be financed by its financial resources. It defines the difference between the amount of equity, long-term liabilities and non-current assets. So, there is a positive presence of the company's working capital in a positive amount. The dynamics of the increase in the indicator is also positive.

- working capital ratio

Working capital is a measure of both company's operational efficiency and its short-term financial health. A good working capital ratio is considered anything between 1.2 and 2.0. A ratio of less than 1.0 represents a negative working capital, with potential liquidity problems, while a ratio above 2.0 might indicate that a company does not effectively use its excess assets to generate maximum possible revenue.

- coefficient of maneuverability of own assets;

The maneuverability of its working capital indicates which part of its working capital is in cash. The high value of the indicator indicates the ability to quickly respond to their short-term liabilities at the expense of equity; [20]

- the ratio of maintenance of current assets by own means;

It indicates the ability of the company to finance current assets at its own expense. In case of a lower value, it is necessary to attract additional funds to cover the gap in the payment calendar.

- financial stability ratio;

This ratio shows the ratio of own and borrowed funds, and the normative value is a unit.

- ratio of own and attracted capital (coefficient of financial sustainability);

This coefficient allows you to specify which part of the asset is financed by long-term financing sources - equity and long-term borrowed financial resources. The

high value of the one indicates a low level of risk of loss of solvency and good prospects for the operation of the company.

- ratio of current receivables and payables;

It indicates the ability to pay suppliers, employees and other creditors at the expense of debtors within the research year. Recommended value of the indicator = 1.

If it is more than one, it should be said that a significant distraction of the company's financial resources by debtors, which reduces the ability to meet its short-term obligations. In case if the indicator is smaller than 1, the company is able to finance receivables and part of other assets on the creditors expense.

- absolute liquidity indicator;

The high value of liquidity indicators is negative, as evidenced by the excessive distraction of the company's resources for the formation of cash, which leads to the inefficient use of available financial resources.

The low value of liquidity indicators is negative, as it indicates problems with the ability to meet their short-term obligations. It is important to note that the normative values of liquidity indicators are rather conditional and to a large extent depend on the scope of the enterprise, the factor of seasonality, typical cooperation agreements with suppliers of goods, works and services, and a combination of other factors. [40]

One of the most specific coefficient, adapted to the activities of leasing companies, allows you to find out the dependence of profits on advance payments of customers. So, the bigger this indicator, the stronger dependence.

So, summing up the above, we can form the table. (Appendix C).

To conclude, the financial sustainability of the leasing company is a dynamic integrated characteristic of the ability of the leasing company as a system for crediting investments and the type of entrepreneurial activity in the transformation of resources and risks to fully perform its functions while maintaining the influence of factors of external and internal environment.

This is a guaranteed solvency, a balance between own and borrowed funds, independence from the randomness of the market situation and partners, the

credibility of creditors and investors and the level of dependence on them, the availability of such profits that would provide self-financing.

We treat financial stability of leasing companies as current and strategic planning of the main financial flows due to changes in the balance sheet and the statement of cash flows. An analysis of the sustainability and reliability of any institution or enterprise requires reasonable methods and approaches, systems. It would be advisable to propose the concept of managing the financial stability of leasing companies, which is coordinated management of the company's finances, in which, due to the coordination of management decisions and the achievement of certain proportions between active and passive operations, several objectives can be achieved, including profit growth, risk reduction, liquidity control, stability and reliability. In the context of increasing systemic threats in Ukraine, the role of macroprudential policies is being updated, which necessitates the improvement of institutional mechanisms for ensuring financial sustainability and concretization of the approaches to forming a set of tools for monitoring systemic risks aimed at a more comprehensive coverage of sources of their appearance and distribution channels.

## **PART II. ANALYSIS OF FINANCIAL SUSTAINABILITY AND RELIABILITY OF THE LEASING COMPANIES**

### **2.1 Information support analysis of the financial sustainability and reliability of the leasing company**

Effective functioning of any company is impossible without an analysis of the financial sustainability and reliability of this institution, which becomes possible only if there is a certain security.

The feature of activity of leasing companies is the necessity to satisfy the interests of differentiated groups of economic entities both and in time. Modern business conditions require leasing companies to implement an information security mechanism that is adequate to market conditions.

Implementation of the mechanism for evaluating financial sustainability of the enterprise is carried out in several stages: preparatory; informational; analytical; research; advisory.

The preparatory phase involves specifying of the general and complementary objectives of the study, according to which the order of conducting is determined. At this stage, the necessity for a study of financial sustainability, the object of research, the justification of the expediency of assessing its financial status for external and internal users of information are determined.

An extremely important stage in assessing the financial sustainability of an enterprise is information that involves the preparation, collection and systematization of information. [41]

An adequate information and methodological base is necessary condition for a qualitative analysis of financial sustainability. These questions are the focus of both professional practitioners and theorists.

It is the information that connects individual controls to a single dynamic system. The relationship between information and methodological support is due to

the purpose of the analysis: the provision of information to the management system on the financial condition of the enterprise and the possibilities of its optimization.

The set of information support for the analysis system is represented by: information system, communicative environment and information technologies. The main requirements are: compliance with optimally organized information flows of the company: frequency; timing ; form of information provision [35]

The analytical framework for the study includes a set of external and internal information tools that determine the degree of influence of the relevant factors, the features of which will be discussed in the next paragraph.

The external aspect of financial sustainability of an enterprise is related to the stability of the economic environment in which it operates. Accordingly, external media are data on the legal and regulatory framework for the functioning of the company in the commodity, material and financial markets (adopted legislative acts, projects and forecasts of government decisions); data on the dynamics of the main macroeconomic indicators of the industry and industry as a whole; data on expected trends of developments in domestic and international markets. [42]

The internal aspect of financial sustainability reflects such a state of its resource potential and such dynamics, which provides stable high financial and economic results of the enterprise. Therefore, the purpose of internal information tools is to disclose information about the financial status and financial stability of the enterprise, in accordance with the accounting standards, the Tax Code and other legislative requirements for the formation of financial, statistical, accounting information, as well as the initial documentation of the enterprise.

The main information base for the study of the financial position of the company is the accounting and it has the following features:

- the reporting data is confirmed by the original documents for each business transaction;
- the reliability of the reporting data of the enterprise can be verified by independent experts;
- reporting relates to documents subject to long-term storage.

The main criteria that information should meet are: relevance, comparability, reliability, clarity. [16]

The financial sustainability of an enterprise is determined by a system of interrelated indicators. Changing one of the metrics leads to a change in others. Therefore, the complex, but the main task of managing financial sustainability of any enterprise is the continuous analysis of the interconnections of the main indicators in the overall structure of the system, the dynamics of their changes and the effects of the impact of one indicator on the other.[22]

So, for effective analysis of the financial statements of an enterprise, it is necessary to consider its information support and relevant components. According to Brouhansky R.F., the conceptual significance in today's conditions of dynamic economic development acquires the parameters of transformation and use of information, which accumulate the content of the term information provision. Based on the foregoing, the system of information support analysis of financial sustainability reliability stability should provide the following functions: content; amount of information; the form; composition.[43]

The information system of the analysis of financial sustainability, reliability, allows us to process information in an operational mode, to make managerial decisions, ensures the performance of the functions assigned to it accurately and promptly. It includes external and internal sources of information.

The internal source of information is the data on the state of the financial institution, the communicative environment is the accounting reporting, as well as additional data that allows you to qualitatively disclose the numerical performance indicators for internal users.

To make tactical decisions and within the framework of methodical provision of tactical analysis, we will define specific methods for analyzing the financial sustainability, reliability and stability. Tactical analysis is subordinated to the specification of certain tasks through the prism of plans and their resource support. Accordingly, for the purpose of obtaining analytical information and the possibility

of making tactical decisions, this type of analysis should include a dynamic, structural and coefficient analysis of financial reporting. [44]

With the help of financial reporting information, the analysis of the status and use of financial resources, assessment of financial sustainability, solvency, business activity, analysis of cash flows, assessment of financial results in terms of types of economic activity, analysis of profitability (losses) of production is carried out.

The balance is important because it provides managers of different levels with information that can be used to assess financial sustainability, to see its changes compared with the previous period. [45]

The balance sheet informs: how much capital is used in business (which business value); what is its liquidity (speed conversion of assets into cash); how solvent the business is (what is the likelihood that it might fail); how the business is funded (where funds come from and what portion of their composition are borrowed funds).

Other forms of reporting allow solving individual tasks of financial analysis or detailing the balance sheet information.

The report on financial results (form №2) is an important source of analysis of income, expenses and financial results and a breakdown of the types of activities of the enterprise. The report information allows you to analyze the dynamics of financial results, determine the impact of factors on their change, to calculate the profitability indicators. [46]

The statement of financial results does not provide sufficient information about whether the existing profits allow a sufficient amount of liquid assets to provide a solvency of the enterprise may differ significantly from its available funds. Also, for the analysis of the financial state can be involved regulatory, plan information, data of investment and financial programs and projects, consolidated and individual estimates, calculations. It is they who are able to detect a deviation of the actual achieved values of financial indicators from the planned level.

As for external analysis, sources for this kind of information may be: an Association of Ukrainian Lessors, the Nation Improvement of the legal framework



for leasing business, including tax and special legislation; fight against fraud and discredit in the leasing market; developing rules and standards for leasing business and professional ethics rules in this market; support of programs for raising the professional level and training of specialists, conducting educational and practical conferences; cooperation among specialists within the Association, through the creation of working groups and profile committees; collaboration with other organizations, government regulators and related constituencies. [47]

In order to develop international relations, the Association of Wells entered into the Federation of European Associations of leasing companies Leaseurope in 2005. Members of the Ukrainian Association work in the Leaseurope working groups on Central and Eastern Europe.

The leading motive for the development of the Association is the protection and promotion of the interests of each member of the association, as well as all market participants in general. Leaseurope's mission is essentially to represent and promote the interests of its members as the expert and natural voice of the European leasing and automotive rental industries.

In addition, information provision requires legal regulation, which includes: laws, decrees, decrees, documents defining the legal basis of leasing activity in Ukraine. At first glance, the information provision of this unit is not directly related to the analysis of activities, but allows to separate the sources of necessary information and determine the limits of information analysis.

Legal sources of information include: the Commercial Code of Ukraine, which defines the essence of leasing, types of leasing, leasing objects and features of regulation of leasing relations. [48]

The Civil Code of Ukraine regulating the legal basis for leasing determines the subject of the lease agreement, its risk and liability of the supplier [49];

Law of Ukraine "On Financial Services and State Regulation of Financial Services Markets" No. 2664-14 dated February 10, 2010, which stipulates that leasing is a financial service, and its regulation is carried out by the appropriate authorized body for regulating the activities of financial institutions;

Law of Ukraine "On Financial Leasing" No. 723/97-VR dated 16.12.1997 (new edition No. 1381-IV of 11.12.2003), which defines the legal and economic principles of financial leasing IFRS, Basel International Standards.

## **2.2 Assessment of the influence of external factors on the financial sustainability and reliability of the leasing company**

The next step in assessing the financial sustainability of an enterprise is the study of internal and external factors that affect financial stability, their ranking in significance, quantitative and qualitative assessment. [25]

Despite the development and increase in the popularity of leasing as a financial service, leasing companies, like other financial institutions, face threats that adversely affect sustainability. Financial sustainability is a multi-component concept, that's why it is important to analyze the disadvantages caused by the influence of factors. The degree of influence of these ones and financial risks on the financial activity of the company depends on the state of the financial market and changes in the economic and political situation in the country.[6]

Internal factors include:

- the choice of the type of activity, composition and structure of products (services);
- the introduction of new technological models and ensuring the production of competitive products;
- ensuring the optimal balance between conditional and constant-variable costs;
- the size of expenses, their dynamics in relation to the income of the enterprise;
- effective management of current assets;
- the amount of paid-in share capital;
- the right choice of tactics and strategy of financial resources management;

- studying the economic and financial capabilities of competitors;
- the volume of production of goods, creating services (in accordance with the planned volume provides stability of activity, and, consequently, the stability of income);
- cost of production (production costs form the price and rate of profit);
- the volume of sales of products, services (the demand for it contributes to the timely receipt of proceeds from sales);
- the price of products, services (change of prices affects the proceeds from its implementation).

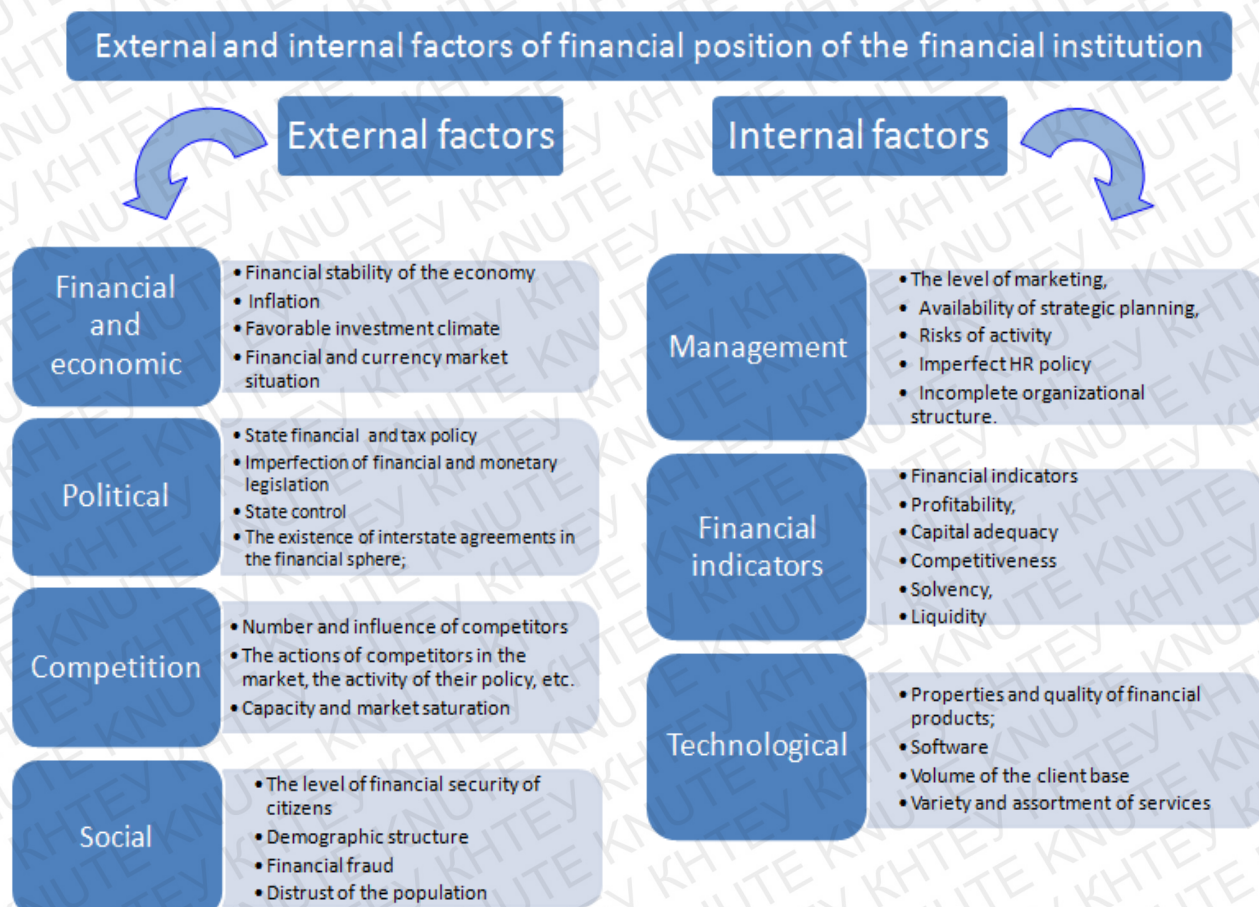
External factors that affect the financial sustainability of the enterprise should be attributed:

- political factors whose actions are determined by the state policy in the tax, financial, credit, investment and foreign economic sectors and is connected with the transparency, stability and perfection of the legislative framework that affects the long-term sustainability of an individual economic entity and the realization of its strategic objectives; [50]
- economic factors determined by the general economic trends in the state (growth, sustainability, decline), the level of bankrupt enterprises and the level of inflation. The effect of these factors is aimed at strengthening the firm's sustainability (in the context of economic recovery, growth of profitability and debt reduction) or its corresponding weakening;
- market factors that characterize the degree of development in the country market relations, that related to the presence of competition, a wide choice of products and services at prices that are relevant to its quality and solvency of buyers, affect the financial stability of an individual company through the formation of pricing policies, volumes of sales. [51]

Table 2.1 provides the author's classification of the main factors influencing financial sustainability of institutions.

Table 2.1

### Classification of the main factors influencing financial sustainability



\* Done by the author by sources [6, 25, 50, 51]

If we analyze the problem of ensuring financial sustainability, reliability and stability of the leasing activity as part of the financial services market in general and of each particular subject, then the system should be seen primarily as part of the overall sustainability of the leasing company, depending on the overall level of risk. The risks experienced by leasing companies in the process of operation, depending on the area of origin, are divided into external and internal. [52]

Externally, there are risks that are not directly related to the activities of the leasing company. Many factors are influenced by their level, including political, economic, social, natural, etc. They may be subject to regional, international and other risks, each of which is characterized by varying degrees of influence.

Internal risks arise from the activities of the leasing company itself and depend on the operations it carries.

Accordingly, they are related: with the assets of the leasing company; with the obligations of the leasing company; quality management leasing company's own assets and liabilities (interest rate risk, the risk of unbalanced liquidity and insolvency risk capital structure, lack of capital); with the process of realization of financial services (operational, technological, strategic, administrative risks).

In view of the foregoing, we conclude that the sustainability of the leasing company depends on many aspects of its activities and has a complex structure.[53]

The risks of leasing companies can be divided into two large groups - the common ones that are typical for enterprises of all industries engaged in production activities in Ukraine and specific ones - for a leasing business or those that acquire certain features in leasing activity.

The list of general risks includes political, macroeconomic, tax, legal (legal), country risks, that is, a number of external factors that any economic entity cannot influence. At the same time, such risks, which significantly change the economic environment, the legal framework and regulatory aspects of the activities of certain enterprises (industries), can lead to corresponding internal risks - the risk of inconsistency or loss of reputation, as well as functional risks, which are strategic, risk inefficiency and implementation risk. [54]

The specific risks of leasing activities include a number of financial risks: currency risk, percentage risk, the lessor's liquidity risk, risk of non-payment, security risk, risk of leased asset (include: market liquidity risk, non-return risk and loss risk).

Risk management of any business, including leasing, is a set of procedures, which includes the identification, assessment, analysis and degree of influence of the risks faced by the object of management, as well as the development and implementation of measures aimed at minimizing risks and, accordingly, increasing the profitability.

Risk may be provoked by lessees who pay lease payments not in time or not fully. Avoiding a negative image in front of the, which financed the leasing transaction, the lessor always tries to pay the debt on repayment of the loan body and interest for using the service in a timely manner. Otherwise the leasing company will become an unreliable borrower and further use of credit resources on standard terms will be very problematic. If the non-payment of lease ones from customers becomes massive, the leasing company would not have a sufficient stock of financial sustainability. [55]

One of the elements that can minimize the risk of non-payment at the stage of making a decision on participation in the implementation of a leasing project is also the corresponding structuring of the leasing transaction, in particular, reduction of the client's application. It is the list of fixed assets that is planned to be leased. Still it can be done by increasing of the first (advance) payment from the lessee (participation of the client in the transaction with its own financial resources) and reduction of the term of the lease agreement, increasing the level of leasing company margin in the calculation of lease payments, as well as different kinds collateral leasing operations.[56,57]

The functional risks of a leasing company include the risk of stakeholders, the subject of management of which are the risk situations appears out of disagreement, in the understanding of the future by the leasing company and its stakeholders (the closest business partners, employees, clients, etc.).

Leasing companies can face the risk of operating or overhead. Such risk is similar to the risk of introducing new products, but applies to all activities of leasing companies and leasing services.

Based on the rapid development of the market and significant competition between leasing companies, there is a risk of inconsistency between the costs of carrying out activities and their efficiency (profitability). Often, there is a need or rejection of any of the directions of activity (leasing products / services, regions of presence), or their substantial revision and improvement. To manage this type of risk, it is also necessary to use appropriate management reporting that enables you to

assess the effectiveness (to determine costs and incomes, profitability or loss-making, to know about the reaction of the market and potential lessees, etc.).

Let's consider the main measures to minimize the risks of leasing companies.

The risk management of a leasing company is usually two-tier and carried out at the micro level when assessing and analyzing the risks of each leasing transaction, as well as at the macro level - the level of development strategies and marketing plan of the leasing company, business processes and organizational structure, leasing products and activities, leasing portfolio and liquidity. [57, 58]

The main measures to minimize the lessor's risks at the micro level are:

- development of parameters and implementation of the initial screening procedure, which allows, at the stage of receipt of an application from a potential client, to decide on the participation of the leasing company in a leasing project or the refusal to implement it (risk avoidance);
- development and continuous monitoring of its own scoring system for assessing similar types of customers (segments of the consumer market);
- development and application of methods for successful analyzing financial and economic activity of a potential lessee;
- development of own standards for the structuring and pricing of a leasing operation depending on the assessment of the risks associated with the lessee's solvency and the liquidity of the leased asset;
- insurance of an object of leasing during the whole term of the lease agreement;
- creation of a system and procedures for monitoring the timeliness and completeness of receipts of lease payments, the use of penalties;[55,59]

The main measures that minimize the risks of leasing companies at the macro level are:

- permanent (quarterly) monitoring of the current strategic plan of company development and strategic control;
- construction of an effective organizational structure of the leasing company;

- organization of the system of risk monitoring and implementation of measures for their minimization;
- creation and continuous monitoring of the management reporting system;
- economic justification of the indicator of the financial leverage - the ratio of own and borrowed capital;
- definition of the structure of the sources of financing of leasing projects.[58]

Thus, it can be argued that the stability of the economic system is its property, which reflects, in the process of interaction of external and internal factors of influence of the achievement of the state of equilibrium and the ability not only to maintain at the appropriate level for some time the main characteristics, but also function and develop.

### **2.3 Assessment of financial sustainability and reliability of leasing companies on the example of domestic and foreign companies**

Based on the data of the balance sheet and income statement, with the help of formulas given in table Coefficients of financial sustainability we will calculate the main coefficients of stability of leasing companies.

For analysis I've selected 3 leasing companies: VAB Leasing, successfully developing Ukrainian leasing company offering leasing not only cars, but also trucks, specialized and agricultural machinery. BNP Paribas Leasing Solutions LTD - which is one of the leading leasing companies in the European market, expanding its business by offering customized solutions for leasing and financing (finance real estate or professional equipment, finance and outsource IT suites or vehicle fleets, develop equipment sales) .Volkswagen Leasing GmbH, which has founded the rise of a new service branch in Germany.

So, we will start from the coefficient of autonomy, and then compare the obtained results.



Table 2.2

**Coefficients of autonomy of the investigated companies for the period  
2014-2015 y.**

Year	"VAB Leasing"	"BNP Paribas Leasing Solutions LTD "	" Volkswagen Leasing GmbH"
2014	0,5122	0,1131	0,0106
2015	0,6315	0,1097	0,0094
2016	0,6129	0,0833	0,0000
2017	0,4300	0,0917	0,0069

\* Done by the author by sources [Appendix D,E,F,G,H,I]

As we can see on the table 2.2, the most stable result has Volkswagen Leasing GmbH, but if we compare value of the coefficient with the normative one (0,5), we can conclude this company has stable dependence of the company on borrowed funds. BNP Paribas Leasing Solutions shows us almost the same level of stability, but the value of coefficient just a little bit more. VAB Leasing has a tendency to decrease of this indicator, which indicates an increase in the company's dependence on borrowed funds. The company has somewhat lost its ability to fulfill its external obligations through the use of its own funds, and independence of its operation.

Table 2.3

**Working capital ratio of the investigated companies for the period 2014-  
2015 y.**

Year	"VAB Leasing"	"BNP Paribas Leasing Solutions LTD "	" Volkswagen Leasing GmbH"
2014	1,9111	1,1148	1,2759
2015	1,4799	0,8947	1,2282
2016	3,0582	1,0812	1,2669
2017	2,2209	0,9832	1,2232

\* Done by the author by sources [Appendix D,E,F,G,H,I]

Talking about the next coefficient, namely the working capital ratio, the meanings shows the VAB Leasing, but increasing of this ratio in the last 2 years may

indicate that a company is not using its excess assets effectively to generate maximum possible revenue. As for two other companies, they have stable results and good working capital ratio, between 1.2 and 2.0 points (Table 2.3).

*Table 2.4*

**Coefficient of financial sustainability of the investigated companies for the period 2014-2015 y.**

Year	"VAB Leasing"	"BNP Paribas Leasing Solutions LTD "	"Volkswagen Leasing GmbH"
2014	0,7115	0,5419	0,0300
2015	0,6848	0,5334	0,0330
2016	0,7834	0,5912	0,0430
2017	0,7361	0,5687	0,0340

\* Done by the author by sources [Appendix D,E,F,G,H,I]

Calculating the coefficient of financial sustainability (Table 2.4), we can highlight almost the similar results of 2 companies: VAB Leasing, BNP Paribas Leasing Solutions LTD, taking into account the fact that normal value of this one is between 0.7 and 0.9, VAB Leasing is within the normal range and BNP Paribas Leasing Solutions is little bit lower. Volkswagen Leasing GmbH have extremely low coefficients, but taking into account stability of the one and the fact that Volkswagen Leasing GmbH is a part of Volkswagen Group, such coefficients can take place.

*Table 2.5*

**Financing ratio due to advance lease payments of the investigated companies for the period 2014-2015 y.**

Year	"VAB Leasing"	"BNP Paribas Leasing Solutions LTD "	"Volkswagen Leasing GmbH"
2014	0,0793	0,0499	0,0221
2015	0,1514	0,0446	0,0240
2016	0,0706	0,0383	0,0244
2017	0,0504	0,0324	0,0188

\* Done by the author by sources [Appendix D,E,F,G,H,I]

And last but not least is some specific indicator - financing ratio due to advance lease payments. VAB Leasing demonstrate quite wavy results, with the decreasing of the coefficient that might means decrease in dependence of the advance lease payments from the net profit. Other two companies show stable low dependence (Table 2.5). So, the lower the ratio, the less the company's dependence on advance payments and the more maneuvers for the company in unforeseen situations.

The complexity and dynamism of modern economic relationships require the introduction of effective and flexible market conditions for financial institution management systems that would provide an opportunity for rapid response to changes in the economic environment and take into account existing structural features. In order to ensure financial stability of the company in modern conditions, for effective management of management it is necessary to assess its real financial condition.

To date, there is no single universal method for assessing the financial stability of the leasing company. Available approaches to assessing the financial stability of financial institutions (methods of economic and mathematical modeling, economic, statistical analysis) differ on the composition of the criteria, a system of indicators that characterize the components of financial stability, indicative values of indicators, etc. [55]

The most common methods for assessing the activities of financial institutions, include a trend regression dispersion, covariance and correlation analysis. [60] The method of correlation and regression analysis is widely used to determine the closeness of the relationship between indicators that are not in functional dependence. Correlation shows the probable relationship between phenomena; it can be detected both between two quantitative phenomena and between many values. The indisputable condition for correlation-regression analysis is the availability of statistical data, the validity of the application to the phenomenon under study, the corresponding probabilistic scheme (practically it reduces to the choice of the corresponding phenomenon). [61]

So we need to determine the dependence of net profit on the reliability indicators of the leasing company. This relationship has no functional dependence, so

it is worth calculating the ratio between the average values of these indicators and based on the data obtained.

Taking into account the fact that the companies selected for analysis have a different currency for financial reporting, it is necessary to bring the single currency. The euro has been selected as the single currency. Based on the course offered on the website of the Ministry of Finance as of September 24, 2018, we converted the hryvnia and the British pound sterling into euros at the following rates: 1 euro = 33 hryvnia, 1 euro = 0.89 pounds sterling. So, firstly we collected output data of each company in a tables: 2,6; 2,7;2,12;2,17 for for better visualization of all figures.

*Table 2.6*

**Output data for the calculation of correlation analysis for VAB Leasing, for the period 2014-2017 y.**

Period	Net profit	Coefficient			
		coefficient of autonomy	working capital ratio	coefficient of financial sustainability	financing ratio due to advance lease payments
2014	5619,2121	0,5122	1,9111	0,7115	0,0793
2015	6681,9697	0,6315	1,4799	0,6848	0,1514
2016	4642,2121	0,6129	3,0582	0,7834	0,0706
2017	7976,1212	0,4300	2,2209	0,7361	0,0504
$\Sigma$	24919,5152	2,1865	8,6700	2,9158	0,3517

\* Done by the author by sources [Appendix D, E]

The values of X average and Y average are determined by the formulas:

$$X \text{ average} = \sum X_i / n, (1), Y \text{ average} = \sum Y_i / n, (2)$$

Where:  $n = 4, I = 1 \dots 4$

*Table 2.7*

**The value of X average and Y average, VAB Leasing**

n	4	y(avge)	x1(avge)	x2(avge)	x3(avge)	x4(avge)
		6229,88	0,55	2,17	0,73	0,09

\* Done by the author by sources [Appendix D,E]

$$r = \delta^{2xy} / \delta x \times \delta y; (3)$$

$$\text{Where, } \delta x = \text{SQR} (\sum ((X_i - X \text{ avg.})^2) / n); (4)$$

$$\delta y = \text{SQR} (\sum ((Y_i - Y \text{ avg.})^2) / n); (5)$$

$$\delta^{2xy} = 1/n \times \sum ((X_i - X \text{ avg.}) \times (Y_i - Y \text{ avg.})) (6)$$

The statistics tells the correlation between the two variables and indicates the strength of the relationship with the aid of some interconnection criterion, which is called the correlation coefficient. This coefficient, always denoted by the Latin letter  $r$ , can take values between -1 and +1, and if the value is closer to 1, then this means a strong bond, and if closer to 0, then it is weak.

The strength of communication is also characterized by the absolute magnitude of the correlation coefficient. The following gradations are used to describe the magnitude of the correlation coefficient: up to 0.2 very weak correlation; up to 0.5 weak correlation; to 0.7 average correlation; up to 0.9 high correlation; over 0,9 very high correlation.

If the correlation coefficient is negative, this means the presence of the opposite connection: the higher the value of one variable, the lower the value of another.

*Table 2.8*

**Calculation of the averages and correlation of coefficient of autonomy, VAB  
Leasing**

№	(X1-X avg.)	(X1-X avg.) <sup>2</sup>	(Y1 - Y avg.)	(Y1 - Y avg.) <sup>2</sup>	(X1-X avg.)×(Y1-Y avg.)
1	-0,0344	0,0012	-610,67	372913,7778	21,033
2	0,0849	0,0072	452,09	204386,1901	38,379
3	0,0662	0,0044	-1587,67	2520685,444	-105,154
4	-0,1167	0,0136	1746,24	3049362,604	-203,752
∑	-	0,0264	-	6147348,017	-249,494
-	δx	δy	δ <sup>2</sup> xy	r	-
-	0,0812	1239,6923	-62,3735	-0,6194	-

\* Done by the author by sources [Appendix D, E]

So, we have started our calculations from the coefficients for VAB Leasing. After calculations of the correlation between net profit and coefficient of autonomy (Table 2.8), the result is: -0,6194. This means, that this coefficient has reverse dependence, with average level. The bigger net profit of the company, the lower autonomy of the one.

Table 2.9

**Calculation of the averages and correlation of working capital ratio, VAB Leasing**

№	$(X_2 - X \text{ avg.})$	$(X_2 - X \text{ avg.})^2$	$(X_2 - X \text{ avg.}) \times (Y_1 - Y \text{ avg.})$
1	-0,2565	0,0658	156,6068
2	-0,6876	0,4728	-310,8566
3	0,8907	0,7933	-1414,1116
4	0,0534	0,0028	93,1868
$\sum$	-	1,3347	-1475,1746
$\delta x$	$\delta y$	$\delta^2 xy$	r
0,5777	1239,6923	-368,7936	-0,5150

\* Done by the author by sources [Appendix D, E]

The second we have calculated correlation between net profit and working capital ratio (Table 2.9), the result is -0,5150. This coefficient, like a previous one, has reverse dependence (the bigger net profit of the company the lower working capital), but with a weak level of correlation.

Table 2.10

**Calculation of the averages and correlation of coefficient of financial sustainability, VAB Leasing**

№	$(X_3 - X \text{ avg.})$	$(X_3 - X \text{ avg.})^2$	$(X_3 - X \text{ avg.}) \times (Y_1 - Y \text{ avg.})$
1	-0,0174	0,0003	10,6415
2	-0,0442	0,0020	-19,9740
3	0,0545	0,0030	-86,4508
4	0,0072	0,0001	12,4957
$\sum$	-	0,0053	-83,2876
$\delta x$	$\delta y$	$\delta^2 xy$	r
0,0363	1239,6923	-20,8219	-0,4627

\* Done by the author by sources [Appendix D, E]

As for the the coefficient of financial sustainability (Table 2.10) result, that we have got is -0,4627. The level of correlation is weak. It also has reverse dependence, so the bigger net profit of the company the lower its sustainability.

Table 2.11

**Calculation of the averages and correlation of financing ratio due to advance lease payments, VAB Leasing**

№	$(X_4 - X \text{ avg.})$	$(X_4 - X \text{ avg.})^2$	$(X_4 - X \text{ avg.}) \times (Y_1 - Y \text{ avg.})$
1	-0,0086	0,0001	5,2667
2	0,0635	0,0040	28,7006
3	-0,0173	0,0003	27,4920
4	-0,0375	0,0014	-65,5603
$\Sigma$	-	0,0058	-4,1010
$\delta x$	$\delta y$	$\delta^2 xy$	r
0,0381	1239,6923	-1,0253	-0,0217

\* Done by the author by sources [Appendix D, E]

And the last but not least is calculation of the correlation between net profit and financing ratio due to advance lease payment (Table 2.11), the result is: -0,0217. This means, that the bigger net profit of the company, the lower amount of lease payments company need for financing, and according to the given gradation, we have very weak correlation.

Table 2.12

**Output data for the calculation of correlation analysis, BNP Paribas Leasing Solutions LTD for the period 2014-2017 y.**

Period	Net profit	Coefficient			
		coefficient of autonomy	working capital ratio	coefficient of financial sustainability	financing ratio due to advance lease payments
2014	26886,5169	0,1131	1,1148	0,5419	0,0499
2015	39513,4831	0,1097	0,8947	0,5334	0,0446
2016	34464,0449	0,0833	1,0812	0,5912	0,0383

Continuation of Table 2.12

Period	Net profit	Coefficient				
		coefficient of autonomy	working capital ratio	coefficient of financial sustainability	financing ratio due to advance lease payments	
2017	34925,8427	0,0917	0,9832	0,5687	0,0324	
$\Sigma$	135789,89	0,3978	4,0739	2,2352	0,1652	
n	4	y(average)	x1(average)	x2(average)	x3(average)	x4(average)
-	33947,4719	0,0995	1,0185	0,5588	0,0413	

\* Done by the author by sources [Appendix F,G]

The next we'll calculate coefficients for BNP Paribas Leasing Solutions LTD (using the data above (Table 2.12), collect results in tables and than analyze them.

Table 2.13

**Calculation of the averages and correlation of coefficient of autonomy, BNP Paribas Leasing Solutions LTD**

№	(X1 – X avg.)	(X1-X avg.) <sup>2</sup>	(Y1 – Y avg.)	(Y1 – Y avg.) <sup>2</sup>	(X1-X avg.)×(Y1-Y avg.)
1	0,0137	0,0002	-	49857086,3054	-96,6494
2	0,0102	0,0001	5566,0112	30980481,0788	56,8888
3	-0,0161	0,0003	516,5730	266847,6992	-8,3321
4	-0,0078	0,0001	978,3708	957209,3959	-7,6109
$\Sigma$	-	0,0006	-	82061624,4792	-55,7036
-	$\delta x$	$\delta y$	$\delta^2 xy$	r	-
-	0,0124	4529,3936	-13,9259	-0,2485	-

\* Done by the author by sources [Appendix F,G]

The result of calculation of the correlation between net profit and coefficient of autonomy (Table 2.13) is -0,2485. This coefficient has reverse dependence, so the bigger net profit of the company, the lower its autonomy. But the correlation level is very weak.



Table 2.14

**Calculation of the averages and correlation of working capital ratio, BNP  
Paribas Leasing Solutions LTD**

No	$(X_2 - X \text{ avg.})$	$(X_2 - X \text{ avg.})^2$	$(X_2 - X \text{ avg.}) \times (Y_1 - Y \text{ avg.})$
1	0,0963	0,0093	-680,2491
2	-0,1238	0,0153	-689,0527
3	0,0627	0,0039	32,4135
4	-0,0353	0,0012	-34,5269
$\Sigma$	-	0,0298	-1371,4151
$\delta x$	$\delta y$	$\delta^2 xy$	r
0,0863	4529,3936	-342,8538	-0,8771

\* Done by the author by sources [Appendix F,G]

The next is the correlation between net profit and working capital ratio (Table 2.14). The result is negative: -0,8771. We have reverse dependence, and average correlation level. Under these conditions, increasing of the net profit will indicate some decreasing of working capital.

Table 2.15

**Calculation of the averages and correlation of coefficient of financial  
sustainability BNP Paribas Leasing Solutions LTD**

No	$(X_3 - X \text{ avg.})$	$(X_3 - X \text{ avg.})^2$	$(X_3 - X \text{ avg.}) \times (Y_1 - Y \text{ avg.})$
1	-0,0169	0,0003	-2,0274
2	-0,0254	0,0006	3,5888
3	0,0325	0,0011	0,5440
4	0,0099	0,0001	0,0956
$\Sigma$	-	0,0021	2,2010
$\delta x$	$\delta y$	$\delta^2 xy$	r
0,0228	4529,3936	0,5503	0,0053

\* Done by the author by sources [Appendix F,G]

Correlation between net profit and financial sustainability (Table 2.15) is: 0,0053. As we can see correlation is positive, but very weak and if net profit will increase, level of financial sustainability will increase too, but just a little bit.

Table 2.16

**Calculation of the averages and correlation of financing ratio due to advance lease payments, BNP Paribas Leasing Solutions LTD**

No	(X4 – X avg.)	(X4-X avg.) <sup>2</sup>	(X4-X avg.) ×(Y1-Y avg.)
1	0,0086	0,00007	-60,4063
2	0,0033	0,00001	18,4301
3	-0,0030	0,00001	-1,5479
4	-0,0089	0,00008	-8,6778
∑	-	0,0002	-52,2019
δx	δy	δ <sup>2</sup> xy	r
0,0066	4529,3936	-13,0505	-0,4396

\* Done by the author by sources [Appendix F,G]

The last, that we have calculated for this company is correlation between net profit and financing ratio due to advance lease payment (Table 2.16). The result is -0,4396, it's a weak correlation, that has reverse dependents and when net profit will increase, amount of lease payments, company need for financing will decrease.

Table 2.17

**Output data for the calculation of correlation analysis, Volkswagen Leasing GmbH for the period 2014-2017 y.**

Period	Net profit	Coefficient				
		coefficient of autonomy	working capital ratio	coefficient of financial sustainability	financing ratio due to advance lease payments	
2014	5739699	0,0106	1,2759	0,0300	0,0221	
2015	6055336	0,0094	1,2282	0,0330	0,0240	
2016	6498688	0,0000	1,2669	0,0430	0,0244	
2017	6522009	0,0069	1,2232	0,0340	0,0188	
∑	24815732	0,0269	4,9942	0,1400	0,0892	
n	4	y(average)	x1(average)	x2(average)	x3(average)	x4(average)
-	6203933,00	0,0067	1,2485	0,0350	0,0223	

\* Done by the author by sources [Appendix H,I]

The last but not the least company, we've analyzed is Volkswagen Leasing GmbH. Using the balance sheet data collected in table 2.17, we'll calculate the net profit correlation with some selected coefficients.

Table 2.18

**Calculation of the averages and correlation of coefficient of autonomy,  
Volkswagen Leasing GmbH**

№	$(X1 - X \text{ avg.})$	$(X1 - X \text{ avg.})^2$	$(Y1 - Y \text{ avg.})$	$(Y1 - Y \text{ avg.})^2$	$(X1 - X \text{ avg.}) \times (Y1 - Y \text{ avg.})$
1	0,0039	0,000015	-464234,00	215513206756,00	-1805,029
2	0,0027	0,000007	-148597,00	22081068409,00	-397,338
3	-0,0067	0,000045	294755,00	86880510025,00	-1983,073
4	0,0002	0,000000	318076,00	101172341776,00	52,721
$\Sigma$	-	0,0001	-	4,25647E+11	-4132,719
-	$\delta x$	$\delta y$	$\delta^2 xy$	r	-
-	0,0041	326208,1877	-1033,1799	-0,7707	-

\* Done by the author by sources [Appendix H,I]

So, the result of calculation the correlation between net profit and coefficient of autonomy (Table 2.18) is: -0,7707. This means, that this coefficient is average with reverse dependence and the bigger net profit of the company, the lower its coefficient of autonomy.

Table 2.19

**Calculation of the averages and correlation of working capital ratio, Volkswagen  
Leasing GmbH**

№	$(X2 - X \text{ avg.})$	$(X2 - X \text{ avg.})^2$	$(X2 - X \text{ avg.}) \times (Y1 - Y \text{ avg.})$
1	0,0273	0,0007	-12690,1760
2	-0,0204	0,0004	3026,3820
3	0,0184	0,0003	5420,0878
4	-0,0254	0,0006	-8065,7104
$\Sigma$	-	0,0021	-12309,4166
$\delta x$	$\delta y$	$\delta^2 xy$	r
0,0231	326208,1877	-3077,3541	-0,4076

\* Done by the author by sources [Appendix H,I]

The next is the correlation between net profit and working capital ratio (Table 2.19). The result is negative and is correlation weak, -0,4076. The ratio of net profit and working capital is inversely proportional.

Table 2.20

**Calculation of the averages and correlation of coefficient of financial sustainability Volkswagen Leasing GmbH**

No	$(X3 - X \text{ avg.})$	$(X3 - X \text{ avg.})^2$	$(X3 - X \text{ avg.}) \times (Y1 - Y \text{ avg.})$
1	-0,0050	0,000025	-11,6059
2	-0,0020	0,000004	-0,5944
3	0,0080	0,000064	18,8643
4	-0,0010	0,000001	0,3181
$\Sigma$	-	0,0001	6,9822
$\delta x$	$\delta y$	$\delta^2 xy$	r
0,0048	326208,1877	1,7455	0,0011

\* Done by the author by sources [Appendix H,I]

Correlation between net profit and financial sustainability (Table 2.19) is so: 0,0011. Coefficient is very weak and increasing of net profit mean quite insignificant increasing level of financial sustainability.

Table 2.21

**Calculation of the averages and correlation of financing ratio due to advance lease payments, Volkswagen Leasing GmbH**

No	$(X4 - X \text{ avg.})$	$(X4 - X \text{ avg.})^2$	$(X4 - X \text{ avg.}) \times (Y1 - Y \text{ avg.})$
1	-0,0002	0,0000001	115,8175
2	0,0017	0,0000028	-249,9271
3	0,0021	0,0000043	611,2505
4	-0,0035	0,0000123	-1115,2347
$\Sigma$	-	0,0000195	-638,0938
$\delta x$	$\delta y$	$\delta^2 xy$	r
0,0022	326208,1877	-159,5235	-0,2216

\* Done by the author by sources [Appendix H,I]

After calculation of the correlation between net profit and financing ratio due to advance lease payments (Table 2.21) we have negative result: -0,2216. This coefficient characterize reverse dependence, with very weak level of correlation.

Summarizing the foregoing, we can conclude that financial sustainability reflects such a state of financial resources in which the company is able to ensure the continuity of the business process, as well as have sufficient resources for its optimization and modernization. And the process of ensuring financial stability should be aimed at minimizing the negative impact of the external and internal environment.

Clearly define the stability of the company is very difficult, and sometimes impossible, because the concept is very complicated and complex. The multi-factor influence, both externally and internally, makes the activities of each leasing company unique. From how well built the system of management, marketing, cost, management of working assets, etc. depends on the company's success. [60] An integral part of the impact on the activity of the one is the risk. Specific risks of leasing activities are: currency, interest, non-payment risk, security risk, and so on.

Today, there is no clear algorithm or formula for determining the sustainability of the leasing company, so the results can be sometimes subjective.

In the paragraph for analysis, we selected 3 European leasing companies: VAB Leasing, BNP Paribas Leasing Solutions LTD, Volkswagen Leasing GmbH, with the help of the coefficient method, we calculated some coefficients for them. According to the results, VAB Leasing has the largest financial sustainability ratio, but considering the dependency ratio of advance lease payments, the company has the risk of losing this status. Much more stable and constant results have: BNP Paribas Leasing Solutions LTD, Volkswagen Leasing GmbH. Some low rates of sustainability and autonomy can be argued for the belonging of these companies to the respective groups: Volkswagen Group and BNP Paribas Group. As a result, these companies have a very low level of dependence ratio of advance lease payments and one-time low autonomy.

## **PART III WAYS OF PROVIDING FINANCIAL SUSTAINABILITY AND RELIABILITY OF THE LEASING COMPANY**

### **3.1 Improvement of information provision for assessing the financial sustainability and reliability of the leasing company**

Modern business conditions require leasing companies to implement an information security mechanism that is adequate to market conditions.

The structure of this information mechanism should include: information resource, organizational structure, means of information interaction.

The set of information support for the analysis system is represented by: information system, communicative environment and information technologies. The relationship between individual functional subsystems of management is traced through information flows and shows that on the basis of the initial information on the analysis of the financial state, the regulation of the further activity of the leasing company takes place. The main requirements, observance of which enables to optimally organize information flows of the company: the frequency, timing and form of information provided - are the conditions for effective organization of work.

Guided by this, the organizational structure of information provision to determine the sustainability of leasing companies should determine the clear distribution of information support, its authenticity, consistency, relevance, correctness and orientation. [35, 58]

The effective functioning of the financial analysis system becomes possible only if there is a certain security. Under the analysis of a financial state, it is necessary to understand the following types, quantity and quality of resources that are necessary and sufficient to achieve the purpose of the functioning of the system of analysis of financial condition, in the context of financial stability of the company: organizational, informational, methodical, technical, and material. And, as already

noted, an important role in providing information belongs to: it links individual elements management (including analysis of financial stability and reliability) into a single dynamic system. The relationship between information and methodological support is due to the purpose of the analysis: the provision of information to the management system on the financial condition of the enterprise and the possibilities of its optimization. [35, 56]

Taking into account the specifics of the activities of leasing companies with the need to simultaneously meet the interests of differentiated groups of business entities in the second section, we have already considered the basis for information provision for the analysis of the stability of leasing companies.

Also, a very important vector for improving information provision is the improvement of legal regulation, which includes: laws, decrees, decrees, documents defining the legal basis for leasing activities in Ukraine. At first glance, the information provision of this unit is not directly related to the analysis of the stability and reliability of the leasing company, but the law allows for the separation of sources of necessary information, to determine the norms and limits of the required indicators, to form, first of all, the requirements for the stability of the leasing company. [64]

The process of making all managerial decisions in the company requires the maximum consolidated satisfaction of all groups with which the leasing company itself interacts. Its stability is interesting not only to the top management of the company, but also to everyone with whom it interacts. For example, banking institutions are interested in the stability, reliability and liquidity of a leasing company because all banking institutions are interested in returning loans with a specified remuneration. The lessee, when choosing a leasing company, pays attention to quality, a reputation which is again impossible without stable financial indicators, cooperation programs and loyalty for clients. Sometimes it can reduce the cost of leasing, and sometimes add special services or additional options. Financially stable leasing company, guided by relevant norms and systems of sustainability indicators, will easily calculate for example what kind of discount can afford to give to the

client, which option to freeze it for further technical cooperation. On the other hand, the leasing company at the same time must be sure of lessee's solvency. [62, 63]

The relevance and validity of information for rendering the stability leasing company also needed to attract more investors to expand their operations and leading for the leasing market. After all, investors require a guarantee of investment of their resources and must be sure about the return of investments and bonuses. [21]

The modern development period is oriented on a new correlation of all sides of the information society - information resources and information needs. The built-up mechanism of information provision is focused on this relationship. To meet the information needs of differentiated groups of leasing business due to the direction of structured information flows. [52]

The qualitative characteristic of information flows is closely linked to the main element of the information system and all information support - information. It can be concluded that financial statements are the main source of information necessary to assess the financial condition; however, its form and content can not fully meet the needs of analysts, which is why there is a need for its improvement. [54]

Actually, now we have approached the issue of improving the information provision of financial statements of leasing companies. As we have seen from the previous section, not all leasing companies have now implemented standards in their financial statements, which is, of course, a very negative factor. Let's consider how these standards have affected the foreign companies we have reviewed: Volkswagen Leasing GmbH and BNP Paribas Leasing Solutions LTD.

Volkswagen Leasing GmbH is included in Volkswagen Financial Services AG's consolidated financial statements in accordance with the International Financial Reporting Standards I The companies in the Group — and therefore also Volkswagen Leasing GmbH — are thus managed internally on the basis of the IFRS figures. Operating profit or loss is the main internal key performance indicator. The differences between the operating profit and the profit before tax in accordance with the Handelsgesetzbuch (HGB — German Commercial Code) are caused by shifts in the period of recognition, which largely arise from the differences in the accounting



treatment of leases (operating leases and finance leases) under the HGB and IFRSs, and by differences in the accounting treatment of ABS transactions, which have an adverse impact on the HGB profit before tax.

The differences between the HGB and IFRS financial reporting frameworks produce significant differences in the results of Volkswagen leasing GmbH under each framework especially when business is expanding. The sharp rise in new business at Volkswagen leasing GmbH leads to higher one time expenses under the HGB whereas under the IFRSs these expenses are distributed over the term of the leasing agreement. Financial reporting in accordance with the hrb moreover, sees a higher funding expense figure recorded in connection with ABS transactions than under the ifrs which provide for these programs to be consolidated. [from the auditor's report for Volkswagen leasing GmbH]

The next information is about some standards and rules that BNP Paribas Leasing Solutions LTD use in the formation of financial statements for the success action.

As for standards, amendments and interpretations adopted during the year, the following new ones, amendments and interpretations have become effective:

- IAS 7 (amendment) Statement of cashflows - Effective for acotuning periods beginning on or after I January 2017;
- IAS 12 (amendment) Income Taxes - Effective for accounting periods beginning on or after I January 2017;
- IFRS 15 Revenue from Contracts with Customers - Effective date I January 2018. The standard replaces IAS 11 Construction Contracts. IAS 18 'Revenue' and related interpretations on revenue recognition. It sets out the principles for reporting information about the naive, amount, timing and uncertainty of revenue and cash flows arising from a company's contract with a customer and presents a five step approach to the recognition of revenue;
- IFRS 9 Financial Instruments — Effective date I January 2018. The standard replaces IAS 39 'Financial Instruments: Recognition and Measurement', containing

revised requirements in relation to classification and measurement of financial assets and liabilities, impairment of financial assets and hedge accounting.

The Company estimates that the impact of adopting IFRS 9 will increase the impairment provision on transition by less than 10%. [from the auditor's report for BNP Paribas Leasing Solutions LTD]

So now we will consider the most anticipated standard aimed at introducing a single lessor's accounting model.

IFRS 16 “Leases”, issued in January 2016, will supersede IAS 17 “Leases” and the interpretations relating to the accounting of such contracts. The new definition of leases relies on both the identification of an asset and the right to control the identified asset by the lessee. (Appendix J )

The objective of IFRS 16 is to report information that (a) faithfully represents lease transactions and provides a basis for users of financial statements to assess the amount, timing and uncertainty of cash flows arising from leases. To meet that objective, a lessee should recognise assets and liabilities arising from a lease.

The main change induced by this new standard is related to contracts which, under IAS 17, met the definition of operating leases, and as such, did not require recognition in the balance sheet of the leased assets.

Adopted for use in the European Union as at 31 October 2017, IFRS 16 will become mandatory for annual periods beginning on or after 1 January 2019. Following the publication of the standard, the Group has started to analyse the standard and define its potential impacts.[65]

Some news for lessees: The new standard will affect virtually all commonly used financial ratios and performance metrics such as gearing, current ratio, asset turnover, interest cover, EBITDA, EBIT, operating profit, net income, EPS, ROCE, ROE and operating cash flows. These changes may affect loan covenants, credit ratings and borrowing costs, and could result in other behavioural changes. These impacts may compel many organisations to reassess certain ‘lease versus buy’ decisions.

Some news for lessors: Lessees and lessors may need to consider renegotiating or restructuring existing and future leases. [66]

The next important news is separation of lease and non-lease components.

Currently, many arrangements embed an operating lease into the contract or operating lease contracts include non-lease (e.g. service) components. However, many entities do not separate the operating lease component in the contracts because the accounting for an operating lease and for a service/supply arrangement generally have a similar impact on the financial statements today.

Under the new leases standard, lessee accounting for the two elements of the contract will change because leases will have to be recognised on the balance sheet.

Lessees should separate lease components from non-lease components unless they apply the accounting policy election. Activities that do not transfer a good or service to the lessee are not components in a contract. The standard gives the policy election for lessees to not separate non-lease components from a lease component for a class of an underlying asset. In such cases, the whole contract is accounted for as a lease.[65]

So, what can propose new model. The distinction between operating and finance leases is eliminated for lessees, and a new lease asset (representing the right to use the leased item for the lease term) and lease liability (representing the obligation to pay rentals) are recognised for all leases.

Lessees should initially recognise a right-of-use asset and lease liability based on the discounted payments required under the lease, taking into account the lease term as determined under the new standard. Initial direct costs and restoration costs are also included.[67,68]

There are no changes for lessor accounting but lessors continue to reflect the underlying asset subject to the lease arrangement on the balance sheet for leases classified as operating. The balance sheet reflects a lease receivable, for financing arrangements or sales, and the lessor's residual interest, if any.[66]

As for lease term determination, IFRS 16 defines a lease term as the noncancellable period for which the lessee has the right to use an underlying asset

including optional periods when an entity is reasonably certain to exercise an option to extend (or not to terminate) a lease.

Entities need to consider all relevant facts and conditions that create an economic incentive for the lessee to exercise the option when determining the lease term.

Under IFRS 16 lessees may elect not to recognize assets and liabilities for leases with a lease term of 12 months or less. In such cases a lessee recognizes the lease payments in profit or loss on a straight-line basis over the lease term. The exemption is required to be applied by class of underlying assets.

Leases of low value assets. Based on feedback provided to the IASB on cost and benefits, the Board included some exemption in the new standard to reduce the costs and complexity of IFRS 16. Lessees are not required to recognise assets or liabilities for leases of low value assets such as tablets and personal computers, small items of office furniture and telephones. The IASB has included in the Basis of Conclusions an indicative amount of less than \$5,000 when new as the value of assets that would normally qualify for the exemption. [65,68]

The new standard will gross up balance sheets and change income statement and cash flow presentation. Rent expense will be replaced by depreciation and interest expense in the income statement (similar to finance leases today). This results in a front-loaded lease expense, which for some might decrease earnings and equity immediately after entering into a lease compared to an operating lease today.

As we already know there are a few more users of financial documents and analysis of every leasing company: investors and analysts and IFRS 16 propose some benefits for them too.

Providing information about a company's undiscounted commitments for off balance sheet leases only in the notes to the financial statements (as required by IAS 17) is not enough. This is because that information:

- is insufficient for some investors and analysts who often estimate a company's assets and lease liabilities based on the limited information;

- is not apparent to other investors and analysts who rely on a company's balance sheet, income statement and cash flow statement to provide information about financial leverage and the asset base of a company without considering information reported in the notes. [68]

Most investors and analysts that the IASB consulted used that information to estimate assets and liabilities arising from off balance sheet leases. Some tried to estimate the present value of future lease payments.

### **3.2 Creation of macroeconomic conditions for strengthening of the financial sustainability and reliability of the leasing company**

Leasing actively influences the size of investments in the country, opens up the opportunity to develop technologies. Leading foreign leasing companies adapt to the actual needs of the modern economy, introducing the latest forms and methods of providing leasing operations and expanding possible areas of application. In the Ukrainian economy, leasing, unfortunately, does not occupy the proper place, and domestic enterprises can not fully use its potential. All changes will only be effective if they are implemented at the legislative level.[69]

So, firstly, let's consider the foreign experience of leasing development in some European countries.

The priority of car leasing in Western Europe is due to the fact that automobile companies are forced to look for ways to implement their products, precisely because of this mechanism as the most effective.

Altogether in Western Europe, through leasing, more than 20% of investments in production funds are being made. At the same time, 80% of the leasing business in Western Europe falls to the UK, Germany, Italy and France. [70]

The level and depth of development of leasing in the country determine: legislative and regulatory framework; state regulation; macroeconomic conditions; use of the accounting system.

Some countries in Western Europe (Great Britain, Spain, Germany, Denmark) did not adopt special leasing legislation, but implemented it under ordinary commercial law, while France, Portugal, Sweden have special legislation, which basically defines the rights of the lessor and lessee, their relations with the producers of property transferred to the lease.

Some countries in Western Europe (France, Belgium, Italy) adhere to the concept of economic owner (as a rule, an option is a mandatory leasing condition)

In fact, in France, financial lease agreements are agreements with the option to repurchase the asset at a residual value (credit (bail)). In this case, direct leasing is prohibited, ie the property producer is not allowed to act as a lessor.[70]

In France, the activities of companies specializing in financial leasing are subject to direct state regulation. They are required to register with the Bank of France, receive the status of financial institution and must comply with certain standards, in particular regarding the minimum size of the authorized capital. According to the French Tax Code, only the lessor, in all cases, for any type of lease transaction has the right to depreciate an asset that is subject to a lease. Depreciation can be calculated using the straight-line method or the method of reducing the residual value. The lease payments are fully owned by the lessee's capital expenditures, which reduces the amount of profit before taxation. The application of these depreciation and tax benefits was useful for all participants in leasing operations. It should also be noted that the laws of France, Italy, have special requirements for the leasing mechanism. Leasing agreements are subject to registration at the judicial authorities in order to alert a certain circle of persons stipulated by law to the owner of the property transferred to the lease. [71,69]

In France, there are two professional associations of lease-years - the National Association, whose members are 123 leasing companies, and the Association of lessors, which includes companies specializing in leasing vehicles.

The experience of France in regulating leasing activities eloquently indicates that leasing, which is a kind of financial service, should have a special legal status, different from the lease relationship.

The concept of financial leasing in Germany is defined as a fixed-term agreement, during which the usual termination of the contract is impossible, and lease payments during this period cover at least the cost of the acquisition or production of the leased asset. If the financial results of the lessee are positive, the lessor must receive at least 25% of their value.

This allows for the successful operation of leasing in Germany.

In cases of financial leasing property taxes are paid by the lessee, if the normal term of use of this property is significantly greater than the term of the lease agreement.[70]

The legislation of Germany, like Switzerland, provides that in the case of a lease, the lessee remains the owner of the property, and in the case of sale by installment, the ownership right transfers to the lessee at the time of the transaction.

Leasing differs from lease and other economic relations in the main economically reasonable amount of payments, that is, the lease contract as such is determined not by economic criteria, but in the form for compliance with legal norms.

The German legislation does not impose any restrictions on the types of assets that can be leased, there are no restrictions on the terms of leasing transactions. All legal conditions of leasing activity in the country are created by the court practice and regulations of the tax service.[69]

In fact, in Germany leasing is regulated more indirectly by methods. Attention is paid not only to tax privileges, but also to the protection of the rights and interests of the subjects of leasing.

The German leasing market is one of the largest in the world. The industry is represented by the Federal Association of German Leasing Companies, which owns about 180 affiliated companies representing more than 90% of the market.

So according to European Commission, the EU has introduced a specific supervisory architecture, consisting of 3 European supervisory authorities.

The European system of financial supervision (ESFS) was introduced in 2010. It consists of: the European Systemic Risk Board (ESRB); 3 European supervisory authorities (ESAs), namely: the European Banking Authority (EBA); the European Securities and Markets Authority (ESMA); the European Insurance and Occupational Pensions Authority (EIOPA).

On 12 September 2018, The European Commission proposed to further strengthen the supervision of EU financial institutions to better address money-laundering and terrorist financing threats.[72]

While the EU has strong anti-money laundering rules in place, recent cases involving money laundering in some EU banks have raised concerns that those rules are not always supervised and enforced effectively across the EU. This not only creates risks for the integrity and reputation of the European financial sector, but may also have financial stability implications for financial institutions.

As part of the broader efforts to complete the Banking Union and the Capital Markets Union, the European Commission therefore proposes today to amend the Regulation establishing the European Banking Authority (EBA) in order to reinforce the role of the EBA in anti-money laundering supervision of the financial sector. This is part of an overall strategy to strengthen the EU framework for prudential and anti-money laundering supervision for financial institutions, which the Commission is setting out in a Communication. These measures will contribute to promoting the integrity of the EU's financial system, ensuring financial stability and protection from financial crime. [73]

In Ukraine, the main regulatory acts in the field of leasing are described in the following laws:

The Civil Code, which establishes the general legal features of leasing operations;

The Commercial Code, which defines the types and forms of leasing;

The Law "On Financial Leasing" is a special law on financial leasing;



The Law "On Financial Services and State Regulation of Financial Services Markets" and the regulations of the National Financial Services Commission regarding the issues of state regulation of financial leasing;

Law "On Banks and Banking" and NBU normative acts, which determine the general conditions and procedures for banks to lease transactions;

Tax Code, which defines the procedure for taxation of leasing operations.

With regard to the progress and improvement of legislation on leasing in Ukraine today, we already have some results.

In the year 2017, National Commission for the State Regulation of Financial Services Markets operated activities except objectives defined:

- Association Agreement between Ukraine and the EU;
- Ukraine-2020 Sustainable Development Strategy;
- Medium-Term Plan of Priority Actions of the Government by 2020;
- Plan of priority actions of the Government for 2017;
- An Integrated Program for the Development of the Financial Sector of Ukraine by 2020;

A strategic plan for the activities of the National Commission, which carries out state regulation in the field of financial services markets.

National Commission for the State Regulation of Financial Services Markets works at the following directions:

- improvement of the regulator's activity and increase of efficiency of public oversight, including by approaching European and international standards of regulation and supervision;
- protecting the interests of consumers of financial services and restoring confidence in non-bank financial services markets;
- creation of favorable conditions for strengthening and sustainable development of non-bank financial services markets. [74]

The drafting of a new version of the Law of Ukraine "On Financial Leasing" is due to the need to bring the legislation in line with modern practices and best international practices.

The draft law is developed in accordance with European practice, a generalized association Leaseurope, which brings together all national leasing associations of European countries.

The main provisions of the new Law of Ukraine "On Financial Leasing" are the follows:

Since the current legislation regulating the financial leasing relationship requires an integrated, rather than a point-of-day update, to bring it into line with European and real market practice, it is proposed to make appropriate changes by adopting the new Law of Ukraine "On Financial Leasing".

In order to avoid contradictions, it is proposed to establish a unified procedure for regulation of relations related to financial leasing and its separate types and forms.

Considering that in the current Law there are no clear requirements to the form of a financial leasing agreement (in particular, there are contradictions regarding the notarial certification of a financial lease agreement), and there is a need to further define the essential terms of the financial leasing contract (including for the protection of consumer rights - lessee) it is proposed to define clear requirements for the form of the financial leasing agreement and the essential terms of the financial lease agreement.[2]

In the current Law there are no rules ensuring the protection of the rights of lessees for the purpose of leasing; therefore, it is proposed to establish the protection of the rights of lessees along with the protection established by the legislation on the protection of the rights of the owner in relation to possession and use of the property.

The current Law does not explicitly provide for the transfer of ownership rights to the lessee; therefore, it is proposed to stipulate the terms and conditions for the transfer of the leased asset to the lessee's ownership, the conditions of acquiring the lessee's right of ownership for the leased asset.

Since the current Law does not take into account the norms of legislation regulating financial leasing in the sphere of prevention and counteraction to legalization (laundering) of proceeds from crime, it is proposed to establish the right of the lessor to abandon the financial leasing agreement and to require return of the

leased asset if the lessee violates the requirements of the legislation in the field of prevention and counteraction to the legalization (laundering) of the proceeds received from crime or financing of terrorism and financing of the proliferation of weapons of mass destruction, and in case of establishing the fact that the lessee submits inaccurate information, documents or information, documents regarding the financial condition of the lessee in order to mislead the lessor. [1, 75]

And from June 10, 2017, in accordance with the new version of the Law of Ukraine "On Financial Leasing", the license conditions apply to all without exception of economic entities engaged in the provision of financial leasing services, the provision of funds on a loan, including on the terms of a financial loan, provision of guarantees and suretyship, factoring services and trust management of financial assets. In the case of conducting activities in the markets of financial services without a corresponding license in accordance with Part One of Art. 41 of the Law "On Financial Services and State Regulation of Financial Services Markets", it applies to participants in financial services markets (except for financial services users) fines in the amount of 1000 to 10,000 non-taxable minimum incomes of citizens. [1, 74]

Another innovation took place at the beginning of 2018. 01.01.2018 has come into force the order of reporting by financial companies, financial institutions - legal entities of public law, trustworthy associations, as well as legal entities - economic entities, which by their legal status are not financial institutions, but have defined by laws and regulations of the Financial Services Commission or The National Financial Services Commission has the opportunity to provide financial leasing services, approved by the decree of the National Commission.

In accordance with the Procedure, the lessors submit the reporting provided for by the Procedure, in electronic form in compliance with the requirements of the Law of Ukraine "On Electronic documents and electronic document circulation ". On this, state measures to screen financially unstable and problematic subjects of the financial market have not been completed. In the nearest future, it is planned to solve the following issues:

- building of the institutional capacity of the regulator with taking into account the standards adopted at the level of the EU member states and the procedures activities according to world standards;
- introduction of effective mechanisms for withdrawal from the market financial institutions;
- creation of compensatory mechanisms for protecting non-bank consumers financial services;
- strengthening the requirements for owners and managers' liability non-bank financial institutions for committed crimes in the financial markets services.[76]

So, starting solution of these items, we'll be able to improve the mechanism of regulation and operation of leasing companies in Ukraine in the future.

### **3.3 Recommendations to increase the financial sustainability and reliability of the leasing company**

In today's complex regulatory environment, financial institutions should provide greater transparency to enhance and maintain the trust of customers and stakeholders. In particular, leasing companies should demonstrate their resilience both for investors and analysts and for clients. But taking into account the speed of the business process, it is almost impossible to do the job and inform as much as possible. As a result of the new standards and the development of the financial services market, modern technologies and new complications raise the issue of the introduction of new technologies. So, IT systems and robust processes and controls needed. Many lessees today use spreadsheets to manage and account for their leases. With the complexity of the new leases standard bringing all leases on balance sheet, using spreadsheets may not be cost-efficient and can lead to errors feeding into financial reporting. Lessees may need to implement contract management modules for lease data and lease engines to perform the lease calculations as required by the

new leases standard. Entities need to think about implementing sustainable lease software solutions that are capable of dealing with the new lease accounting requirements.

The current limited lease software solutions in the marketplace are based on the existing risks and rewards approach (finance versus operating leases). These will need to be modified to the requirements of the new leases standard. [72]

ERP providers have started to think about lease software solutions but they have generally been waiting on the issuance of the lease standard before they can finalise the development of their lease software solutions. [66, 67]

Lessees will need to identify system gaps and changes that may be needed to their IT environments on a timely basis. This will support an entity in its selection of software vendors and a lease software solution that can be integrated with existing (accounting) systems and IT environments and best meets its future needs in a cost-efficient way.

Timely assessment of the system gaps and business and IT requirements will support the software vendor selection process for a lease software solution. This will help reduce reporting and compliance risks.

Today, there are a number of software products and advanced technologies or IT programs that have deep skills and capabilities to help solve a particular compliance or risk problem. Yet siloed solutions are not the whole answer. Risk and compliance should be viewed as an enterprise-wide issue that must be managed accordingly. There is a significant opportunity to implement an end-to-end, integrated risk- management approach to regulatory compliance that improves efficiency and effectiveness.

Advances in artificial intelligence (AI), blockchain, and cybersecurity are poised to transform the financial services industries. These technologies bring capabilities that speed risk modeling, automate fraud detection, ensure regulatory compliance, enable distributed trust, and protect sensitive financial information.

We can indicate some main areas for Digital Disruption within Financial Services market.[77]

So, a few key areas for digital disruption within financial services market are follow:

1. New hybrid cloud platforms will offer unprecedented scalability, agility, and security, optimized for enterprise AI and blockchain.
2. AI-driven predictive analytics and process automation will transform client on-boarding, financial risk, regulatory compliance, financial crimes, and fraud preemption processes.
3. Financial institutions will connect with one another – and third parties – through emerging distributed trust ecosystems and marketplaces, driving unique technology requirements and new business models. [78]

Recently, we can observe the increased activity of cyber attacks that eradicate and steal a lot of strategically important information for companies in the financial services market. Data recovery may be impossible, sometimes it can cost very expensive, and sometimes even a reputation. As you can understand, it can hurt to hit the financial stability of the company. [done by me]

Since the beginning of 2016, hackers have stolen more than 8 billion records — more than double the two previous years combined — and that doesn't account for unreported intrusions.

The current system of patches, firewalls and blacklists isn't working. It's no match for the organized crime rings that carry out more than 80 percent of attacks. These groups systematically probe for weaknesses, share tools and techniques, and continually develop countermeasures for even today's most advanced security technologies. The best course of action is to constantly innovate.

One method is known as fully homomorphic encryption. It provides data which is similar to the original data in its behavior, but bears a significantly lower risk for reidentification of individuals. For example, a customer's name, birthday, address and bank account number would be converted to a completely random set of identifiers. The benefit is obvious. If this protected data were to fall into the wrong hands, it would be completely useless. Therefore, the regulatory constraints for such

data are considerably less restrictive and a range of activities can be executed on the data as before, subject only to some basic operational and technical controls.

While this could be a great solution, it's still a few years away from being practical because of processing speed.

Another innovation is called pseudonymization. The idea is simple, even obvious — transform data so it looks and behaves like the real data, but it's not.

For the past several years, IBM cryptographers in Zurich have been developing this technology and it is commercialized under the name of the IBM High Assurance Desensitization Engine.

The timing for the availability of this technology couldn't be better in light of the recent data privacy leaks and the need to meet the EU's upcoming General Data Protection Regulation (GDPR). This regulation seeks to create a harmonized data protection law framework across the EU which imposes strict rules on those hosting, moving and processing this data anywhere in the world. [79]

A good example of pseudonymization to reduce risk, has become The Netherlands' Rabobank experience, that has replaced identifying client data fields with artificial identifiers, or pseudonyms, i.e. replacing a real name with a fictitious one, more specifically, they replace the customer names with the Latin names of flowers.

Another recently implemented innovation is a financial market forecasting tool together with Mizuho Financial Group to predict price trends and market volatility with compressed learning times, which are key to managing asset liabilities and portfolio risks. It requires lower computational resources.

So, the tool uses advanced AI technologies developed by IBM Research — Tokyo, including a unique artificial neural network technology called dynamic Boltzmann machine (DyBM) which mimics the human brain's learning scheme. The tool is being deployed within Mizuho Financial Group's Global Markets Company to work on Asset Liability Management (ALM) and Treasury portfolio operation.

ALM and Treasury portfolio are always important for financial institutions, especially when demands are sluggish, and forecasting sharp rises and falls in interest rates and prices is a top priority.

Mizuho leveraged outputs of multiple forecast models using market data for the last two decades to identify past dates which have high degree of similarity with the current market, then mapped the subsequent price trends of each similar date to develop the new forecasting tool that predicts future price trends and volatility.

It is also necessary to pay attention for ensuring trust in global financial ecosystems. The financial services industries have a complex relationship with blockchain, the distributed ledger technology that was popularized by cryptocurrencies such as Bitcoin. [80]

Blockchain presents a lot of opportunities to transform how people exchange value. This technology provides participants in a business network with a shared, immutable history of transactions — records cannot be altered once they've been agreed upon through consensus and added to the ledger. On the other hand, blockchain is viewed as a threat to the established models that commerce is run on.

Today there are so many banks and startups that interested in cashing in on the potential value of blockchain technology. That is why it no longer a question of if blockchain will be used in banking and other financial market participants, but when and how.

Speaking about clientorientation together with security of leasing company, It will be useful to propose so called KYC system. For banks and financial institutions, ensuring Know Your Customer (KYC) compliance is an important step, even in preventing inappropriate or criminal use of funds and services. This process involves establishing the identity of the customer using various documentation, understanding the nature of the customer's activities to make sure the source of the customer's funds is legitimate, and assessing whether the customer poses a risk. You might think it would be enough for a leasing company to do this once for each customer and then simply keep the record updated, but that usually isn't the case. More often, a variety of systems separately manage customer identity for different types of financial services.[81]



Well known company - KPMG expressed its vision for improving the operation of leasing companies by offering its product. The main slogan of this is - simple implementation, robust capabilities.

IFRS 16 comes into force on 1 January 2019. Before this deadline, companies will have to collect a lot of additional data about their leases. In addition, they will also have to calculate lease obligations and right of use.

Lease data is currently often stored in a variety of sources – Excel spreadsheets and/or separate databases – and the quality and comprehensiveness of this data sometimes leaves a lot to be desired. The fact that your lease portfolio is constantly being renewed, adjusted and altered makes managing it even more complex.[66,67]

The KPMG Leasing Tool is a software solution that enables you to oversee your entire lease portfolio and to comply with IFRS 16 requirements. The solution was developed based on KPMG's accounting expertise. It allows you to efficiently collate your lease data and gives you assurance that your lease obligations and right of use have been correctly calculated.

The KPMG Leasing Tool is a pre-configured SaaS cloud-based application that is simple and fast to implement. It reduces the resources and costs of long-term compliance, and helps enhance your capabilities in key areas: Lease inventory completeness and data capture, financial reporting and disclosures accuracy, lease activity business intelligence reporting, project management functionality, accounting diagnostics with gap and impact assessment.

So, now a few words about Benefits. As we adopt more effective leasing processes and policies, and become more able to mine leasing data, we'll see vast improvements in visibility, lease-versus-buy decision-making, cost-efficient sourcing, and end-of-term management. In addition, having a centralized, effective lease accounting system means that, down the road, when more changes inevitably come, you'll be able to comply with far greater ease. [82]

The KPMG Leasing Tool helps by providing: complete, accurate lease inventory; effective project management of your long-term lease accounting program service Organization Control (SOC) reports that capture information on security and

controls around financial transactions and reporting, information that can help audits go smoothly;

So in this section we have reviewed the main methods and solutions for improving the resilience of financial institutions, namely leasing companies, legislative regulation of the activities of financial institutions, and also considered the peculiarities of the introduction of the new standard IFRS 16.

The objective of IFRS 16 is to report information that (a) faithfully represents lease transactions and provides a basis for users of financial statements to assess the amount, timing and uncertainty of cash flows arising from leases. [81, 82]

The expediency of updating the law of Ukraine on leasing, the need to bring the legislation in line with current practices and best international practices, the feasibility of licensing and the result of the impact of this procedure on the financial services market has also been considered.

And last but not least, the study concerned innovative, technological solutions to improve leasing activities, including data security, operational analysis of the market.

Good example of innovation solution was presented by KPMG, it is actually KPMG Leasing Tool. It is software solution that enables you to oversee your entire lease portfolio and to comply with IFRS 16 requirements.

Having formidable technical accounting skills combined with deep industry experience, KPMG team stands ready to help leasing companies move quickly on all facets of lease accounting compliance.

## CONCLUSIONS

In the final qualification the essence of leasing, its strengths and weaknesses, its differences from the loan were considered. The concept of financial sustainability of a leasing company was considered. Recall that is a multi-component concept. The system of indicators developed in the domestic and world practice is used to assess the financial sustainability of the enterprise. Different sources may include different sets of indicators. The set may containe of: liquidity; capital adequacy; asset quality; solvency

Speaking about the structure of the sustainability of leasing companies, the following elements were determined: The capital's sustainability of the leasing company, determined by the size of equity; sommercial sustainability (at the core is the degree of integration of the leasing company into the infrastructure of market relations); functional sustainability of the leasing company; organizational sustainability; Financial sustainability, through which the company is able to provide marketing and personnel sustainability, promote industrial and technological development, maintain investment sustainability and improve management process efficiency. We also paid attention to the classification of tools for assessing sustainability, calculation methods, and presented a set of coefficients with their defined limits. Effective functioning of any company is impossible without an analysis of this institution's financial sustainability and reliability. But without informational support it is impossible to do this. Therefore, it was necessary to consider this issue. Recall that the main information base for the study of the financial position of the company is accounting, because each company has to do it regularly, based on well-known rules. In addition, it has the following features: the reporting data is confirmed by the original documents for each business transaction; the reliability of the company's reporting data can be verified by independent experts; reporting relates to documents subject to long-term storage. Also, for the analysis of financial state can be involved regulatory, plan information, data of investment and

financial programs and projects, consolidated and individual estimates, calculations. It is they who are able to detect a deviation of the actual achieved financial indicators from the planned level. All these documents contain more detailed information than financial statements, which, in turn, allows you to obtain additional analytical data and prepare more substantiated conclusions, greatly extend the research boundaries.

Considering that financial sustainability is a multi-component concept, it is also necessary to study and consider this concept comprehensively. So, we thought it necessary to investigate the main internal and external factors of influence, their nature. For example, internal factors may include: - the choice of type of activity and the structure of services; -the introduction of new technological models and the production of competitive products; - ensuring the optimal balance between conditional and constant-variable costs; - the size of costs, their dynamics in relation to the income of the enterprise; - effective management of current assets;

A few examples of external factors that affect the financial sustainability of the company are: - political factors; economic factors determined by the general economic trends in the state; market factors that characterize the degree of development in the country's market relations. Further, on the basis of financial statements, we have identified the main factors of financial sustainability of the three selected leasing companies. Using the above-mentioned work of the formula, and using the obtained results, the correlation method established the dependence of the profits of each company on the corresponding coefficients, and the results were analyzed. In the course of the study, we found that the financial services industry is at a crossroads: It is operating on inadequate, legacy systems and being held back by a manual, labor-intensive approach to regulatory compliance.

We compared the legislation of Ukraine with the specifics of leasing regulation in France and Germany, as well as the regulation of the leasing company in general in the EU. Improving the legal framework for regulation of leasing relations will significantly expand the use of leasing as an alternative long-term financing mechanism for purchasing transport, equipment, equipment, and real estate, and will facilitate the effective use of this mechanism by economic entities. As we know,

progress is an integral part of development, namely technological. We reviewed the main issues, investigated the relevance of the introduction of new technological solutions in the field of leasing. They have quick analysis, uninterrupted business processes, speed, security and confidentiality. The solutions will help companies to manage their risk and compliance function by enabling more informed decisions - from regulatory change management to specific compliance processes such as anti-money laundering, know your customer, conduct surveillance and stress testing, analyzing the market. Through the application of new technologies, companies will be able to more efficiently and efficiently: understand applicability of rapidly changing regulations to ensure that appropriate controls are in place; calculate financial risk to a new level of granularity to optimize your use of capital; understand relationships and behaviors to identify financial crimes and conduct risk.

So, at the present stage of economic development of our state, leasing is the most promising financial instrument capable of effectively intensifying the investment process in the country and developing production. The analysis carried out shows that the leasing market's growth rate is not in line with the needs of industry and economy in Ukraine as a whole. The most significant problems hindering the development of leasing in Ukraine should include: imperfection of legislative provision, in particular, the non-regulation of certain components of leasing activity; lack of long-term sources of funding for the renewal of fixed assets; insufficient number of skilled personnel in the field of leasing and low awareness of leasing issues among representatives small and medium business; limited long-term financial resources in the domestic market of Ukraine; the imperfection of technologies that are being used in leasing companies. Accordingly, the main direction of the state policy in the field of financial leasing development should be a set of measures, which will include: creation of a favorable legislative framework for subjects of leasing activity; development of leasing infrastructure and activation of its use by market participants; introduction of new technologies, creation of conditions for growth of financial stability of lessors.

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## APPENDICES

### Appendix A

#### Instruments for risk identification and measurement

Instruments	Level of coverage		Requirements for information	
	Institutions	Markets	Periodicity	Data type
Conditional Value at Risk, CoVaR	+		high	Balance sheet and asset prices
Systemic Contingent Claims Analysis	+		high	Balance sheet and asset prices
Joint Distress Indicators	+		high	Asset prices
Balance Sheet Approach	major sectors		low	Interbranch balance data
Systemic Liquidity Risk Indicator	+		high	Balance sheet and asset prices
Financial Soundness Indicators	+	+	low	Balance sheet and cash flows
Sovereign Funding Shock Scenarios		+	average	Investment base and data on bank assets

\* Done by the author by sources [22,23]

### Methods of assessing financial sustainability

The name of the method	Countries that apply	Features
Statistical method	USA, France	SAABA systems (France) and GMS (USA) have been developed.
Stress testing	IMF member countries, USA, Ukraine.	Gained popularity after the publication of the results of the United States in 2009 and the EU in 2010.
Macroprudential analysis	Member States of the IMF, USA	Relatively new method, that concerning the complex analysis of the state of the banking system.
Expert analysis	CIS countries, EU, Ukraine, Russia	The system of assessing the financial stability of the banks of the Russian Federation is largely based on the expert estimation method.
Coefficient analysis	USA, Germany, EU, Ukraine	BAKIS system in Germany which includes 47 coefficients; US BMS system, which has 39 coefficients and 35 parameters.
Factor analysis	CIS countries, Ukraine, Poland	Factor analysis enables forecasting of general tendencies of banking activity.
Rating system	USA, France, Italy, Ukraine, Russia, Poland	Insider - UBSS, ROCA, BOPEC, CAMEO; Distances - CAMELSO, PATROL, CAEL, ORAP. Italy and France have their own systems PATROL and O.P.A.P.
Integral method	Ukraine, Poland, CIS countries	The method has long been known in Ukraine, is quite simple and quite popular.
Structural-functional analysis	EU, Ukraine, Russia	The system of structural indicators is based on the calculations conducted on the basis of the published financial statements.
Correlation analysis	USA, EU	It is a statistical study (stochastic) of the relationship between random variables

\* Done by the author by sources [26,27,28,29]

### Coefficients of financial sustainability

Coefficient	Method of calculation	Value
coefficient of autonomy	line 1495 liability balance / line 1900 liability balance	Critical value - 0.5; an increase in the value of this coefficient or an increase of the one indicates the ending of financial dependence of the enterprise on borrowed funds;
coefficient of concentration of debt capital	(line 1595 liability balance + line 1695 liability balance)/ line 1900 liability balance	the normative value is 0.4-0.6;
Amount of working capital (WC)	line 1195 asset balance - line 1695 liability balance sheet	as much as possible
working capital ratio	line 1195 asset balance / line 1695 liability balance sheet	between 1.2 and 2.0.
maneuverability of working capital	line 1165 asset balance /(WC)	For normal functioning of the enterprise this index varies from 0 to 1
coefficient of maintenance of current assets by own funds	(WC)/ line 1195 asset balance	the normative value is 0,1 and above.
financial stability ratio	(WC)/ (line 1595 liability balance + line 1695 liability balance)	the optimal value is 1

## Continuation of appendix C

Coefficient	Method of calculation	Value
ratio of own and attracted capital (coefficient of financial sustainability)	$(\text{line 1495 liability balance} + \text{line 1595 liability balance}) / \text{line 1900 liability balance}$	The normative value is 0.7-0.9.
ratio of current receivables and payables	$\frac{\text{sum of lines (1120+1125+1135+1130+1140+1145+1155) asset balance}}{\text{sum of lines (1605+1615+1635+1620+1650+1630+1640+1645) liability balance}}$	Recommended value = 1.
Absolute liquidity ratio	$\text{sum of lines (1160+1165) asset balance} / \text{line 1695 liability balance}$	normative value = 0,1. It shows the volume and high liquidity of current assets per unit of short-term liabilities.
financing ratio due to advance lease payments	$\text{line 1635 liability balance} / (\text{line 1900 liability balance} - \text{line 1495 liability balance})$	Shows the dependence of the advance lease payments from the net profit, the larger the indicator the stronger the dependence

\* Done by the author by sources [20,23,40]



## Balance sheet of VAB Leasing as of Desember 31 2015

А К Т И В		Код радян	На початок звітного періоду	На кінець звітного періоду
I. Необоротні активи		2	3	4
Нематеріальні активи				
первісна вартість		1000	888	457
накопичена амортизація		1001	3 192	3 343
Незвершені капітальні інвестиції		1002	2 304	2 886
Основні засоби				
первісна вартість		1010	3 428	2 073
знос		1011	6 432	4 170
Інвестиційна верховність		1012	3 004	2 097
Первісна вартість інвестиційної верховності		1015	-	-
Знос інвестиційної верховності		1016	-	-
Довгострокові біологічні активи		1017	-	-
Первісна вартість довгострокових біологічних активів		1020	-	-
Накопичена амортизація довгострокових біологічних активів		1021	-	-
Довгострокові фінансові інвестиції, які обліковуються за методом участі в капіталі інших підприємств		1022	-	-
інші фінансові інвестиції		1030	-	-
Довгострокова дебіторська заборгованість		1035	-	-
Виключені валютні активи		1040	79 183	77 434
Гудвіл		1045	-	-
Відтерчені капітальні витрати		1050	-	-
Залишок коштів у централізованих операційних резервних фондах		1060	-	-
Інші необоротні активи		1065	-	-
Усього за розділом I		1095	74 499	79 964
II. Оборотні активи				
Запаси		1100	352	8
Виробничі запаси		1101	341	8
Незвершене виробництво		1102	-	-
Готові продукти		1103	-	-
Товари		1104	11	-
Поточні біологічні активи		1110	-	-
Депозити переуступання		1115	-	-
Векселі одержані		1120	-	-
Дебіторська заборгованість за продукцію, товари, роботи, послуги		1125	1 286	978
Дебіторська заборгованість за розрахунками: за виданими авансами		1130	967	2 366
у тому числі з податку на прибуток		1135	521	473
Дебіторська заборгованість за розрахунками із зарплатних досвідів		1140	1 923	2 833
Дебіторська заборгованість за розрахунками із внутрішніх розрахунків		1145	-	-
Інші поточна дебіторська заборгованість		1155	81 311	62 158
Поточні фінансові інвестиції		1160	-	-
Гроші та їх еквіваленти		1165	5 583	728
Готівка		1166	-	-
Разумні в банках		1167	5 583	728
Витрати майбутніх періодів		1170	-	-
Частка переуступника у страхових резервах		1180	-	-
у тому числі в: резервах довгострокових зобов'язань		1181	-	-
резервах збитків або резервах підвищених витрат		1182	-	-
резервах безробітних премій		1183	-	-

## Continuation of appendix D

інших операційних резервах	1184	-	-
Інші оборотні активи	1190	145	378
Усього за розділом II	1195	92 088	69 942
III. Необоротні активи, утримувані для продажу, та групи вибуття	1200	458	23
Баланс	1300	167 048	149 929

Позначка	Код рядка	На початок звітного періоду	На кінець звітного періоду
I	2	3	4
<b>I. Власний капітал</b>			
Зареєстрований (пайсовий) капітал	1400	35 350	35 350
Внески до незареєстрованого статутного капіталу	1401	-	-
Капітал у дооцінках	1405	-	-
Додатковий капітал	1410	-	-
Ембейтмент дохід	1411	-	-
Нерозподілені курсові різниці	1412	-	-
Резервний капітал	1415	41 088	41 088
Нерозподілений прибуток (непокритий збиток)	1420	9 121	18 246
Неоплачений капітал	1425	( - )	( - )
Вилучений капітал	1430	( - )	( - )
Інші резерви	1435	-	-
Усього за розділом I	1495	85 659	94 684
<b>II. Довгострокові зобов'язання і забезпечення</b>			
Відстрочені податкові зобов'язання	1500	-	-
Пенсійні зобов'язання	1505	-	-
Довгострокові кредити банків	1510	29 881	7 984
Інші довгострокові зобов'язання	1515	3 418	-
Довгострокові забезпечення	1520	-	-
Довгострокові забезпечення витрат персоналу	1521	-	-
Цільове фінансування	1525	-	-
Безвідпливна допомога	1526	-	-
Страхові резерви	1530	-	-
у тому числі:	1531	-	-
резерв довгострокових зобов'язань		-	-
резерв збитків або резерв наявних витрат	1532	-	-
резерв незароблених премій	1533	-	-
інші операційні резерви	1534	-	-
Інвестиційні контракти	1535	-	-
Привласнений фонд	1540	-	-
Резерв на виплату дивідендів	1545	-	-
Усього за розділом II	1695	33 299	7 984
<b>III. Поточні зобов'язання і забезпечення</b>			
Короткострокові кредити банків	1600	365	1 607
Векселі платні	1605	-	-
Поточна кредиторська заборгованість за:			
довгостроковими зобов'язаннями	1610	38 284	26 764
товари, роботи, послуги	1615	144	1 122
розрахунками з бюджетом	1620	1 113	3 913
у тому числі з податку на прибуток	1621	702	3 630
розрахунками зі страхування	1625	-	-
розрахунками з оплати праці	1630	-	-
Поточна кредиторська заборгованість за одержаними авансами	1635	6 461	8 364
Поточна кредиторська заборгованість за розрахунками з учасниками	1640	-	-
Поточна кредиторська заборгованість із внутрішніх розрахунків	1645	-	-
Поточна кредиторська заборгованість за страхового діяльність	1650	-	-
Поточні забезпечення	1660	-	-
Доходи майбутніх періодів	1665	-	-
Відстрочені комерційні доходи від перестраховиків	1670	-	-
Інші поточні зобов'язання	1690	1 820	5 431
Усього за розділом III	1696	48 187	47 261
IV. Зобов'язання, утримувані для продажу, та групи вибуття	1700	-	-
V. Чиста партія власних акцій (некласифікований актив)	1800	-	-
Баланс	1900	167 048	149 929

## Balance sheet of VAB Leasing as of Desember 31 2017

Баланс (Звіт про фінансовий стан)			
		Форми №1 Код за ДКУД 1801001	
А К Т И В	Код ридик	На початок звітнього періоду	На кінець звітнього періоду
1	2	3	4
<b>I. Необоротні активи</b>			
Нематеріальні активи	1000	888	457
первісна вартість	1001	3 192	3 343
накопичені амортизації	1002	2 304	2 886
Незвершені капітальні інвестиції	1005	-	-
Основні засоби	1010	3 428	2 073
первісна вартість	1011	6 432	4 170
знос	1012	5 004	2 097
Інвестиційна нерухомість	1015	-	-
Первісна вартість інвестиційної нерухомості	1016	-	-
Знос інвестиційної нерухомості	1017	-	-
Довгострокові біологічні активи	1020	-	-
Первісна вартість довгострокових біологічних активів	1021	-	-
Накопичені амортизації довгострокових біологічних активів	1022	-	-
Довгострокові фінансові інвестиції: які обліковуються за методом участі в капіталі інших підприємств	1030	-	-
інші фінансові інвестиції	1035	-	-
Довгострокова дебіторська заборгованість	1040	70 183	77 434
Відкриті валютні активи	1045	-	-
Гудвіл	1050	-	-
Відстрочені податковий зобов'язання	1060	-	-
Залишок валютів у централізовані операційні резервні фонди	1065	-	-
Інші необоротні активи	1090	-	-
<b>Усього за розділом I</b>	<b>1095</b>	<b>74 499</b>	<b>79 964</b>
<b>II. Оборотні активи</b>			
Запаси	1100	352	8
Виробничі запаси	1101	341	8
Незвершене виробництво	1102	-	-
Готова продукція	1103	-	-
Товари	1104	11	-
Поточні біологічні активи	1110	-	-
Депозити переотрадування	1115	-	-
Векселі одержані	1120	-	-
Дебіторська заборгованість за продукцію, товари, роботи, послуги	1125	1 286	978
Дебіторська заборгованість за розрахунками: за виданими авансами	1130	967	2 366
з бюджетом	1135	521	473
у тому числі з податку на прибуток	1136	-	-
Дебіторська заборгованість за розрахунками з нарахованих доходів	1140	1 923	2 833
Дебіторська заборгованість за розрахунками із внутрішніх розрахунків	1145	-	-
Інші поточні дебіторська заборгованість	1155	81 311	62 158
Поточні фінансові інвестиції	1160	-	-
Гроші та їх еквіваленти	1165	5 383	728
Готівка	1166	-	-
Рахунки в банках	1167	5 383	728
Витрати майбутніх періодів	1170	-	-
Частина переотрадування у стрихових резервах	1180	-	-
у тому числі в: резервах довгострокових зобов'язань	1181	-	-
резервах збитків або резервах підставних витрат	1182	-	-
резервах валютнообмінних прямих	1183	-	-

## Continuation of appendix E

своєї страхових резервів	1184	-	-
Інші оборотні активи	1190	264	530
<b>Усього за розділом II</b>	<b>1195</b>	<b>112 306</b>	<b>103 195</b>
<b>III. Необоротні активи, утримувані для продажу, та групи вибуття</b>	<b>1200</b>	<b>4</b>	<b>77</b>
<b>Баланс</b>	<b>1300</b>	<b>169 551</b>	<b>176 084</b>

Позити	Код розшир	На початок звітного періоду	На кінець звітного періоду
I	2	3	4
<b>I. Власний капітал</b>			
Зареєстрований (пайовий) капітал	1400	35 350	35 350
Внесок до незареєстрованого статутного капіталу	1401	-	-
Емісія у валюті	1405	-	-
Додатковий капітал	1410	-	-
Емісійні доходи	1411	-	-
Накопичені курсові різниці	1412	-	-
Резервний капітал	1415	8 838	8 838
Перехідний прибуток (незакритий збиток)	1420	59 724	31 520
Неоплачений капітал	1425	( - )	( - )
Випушений капітал	1430	( - )	( - )
Інші резерви	1435	-	-
<b>Усього за розділом I</b>	<b>1495</b>	<b>103 912</b>	<b>78 708</b>
<b>II. Довгострокові зобов'язання і забезпечення</b>			
Недострокові податкові зобов'язання	1500	-	-
Пенсійні зобов'язання	1505	-	-
Довгострокові кредитні банків	1510	17 593	29 019
Інші довгострокові зобов'язання	1515	11 323	24 891
Довгострокові забезпечення	1520	-	-
Довгострокові забезпечення витрат персоналу	1521	-	-
Цільове фінансування	1525	-	-
Безоплатна допомога	1526	-	-
Страхові резерви	1530	-	-
у тому числі:	1531	-	-
резерв довгострокових зобов'язань			
резерв збитків або резерв належних виплат	1532	-	-
резерв відшкодування премій	1533	-	-
інші страхові резерви	1534	-	-
Інвестиційні контракти	1535	-	-
Присвоєні фонди	1540	-	-
Резерв на виплату дисконту	1545	-	-
<b>Усього за розділом II</b>	<b>1595</b>	<b>28 916</b>	<b>53 910</b>
<b>III. Поточні зобов'язання і забезпечення</b>			
Короткострокові кредити банків	1600	338	3 483
Векселі отримані	1605	-	-
Поточна кредиторська заборгованість за:			
довгостроковими зобов'язаннями	1610	22 892	31 065
товари, роботи, послуги	1615	2 118	1 086
розрахунками з бюджетом	1620	156	1 138
у тому числі з податку на прибуток	1621	-	961
розрахунками зі страхування	1625	1 268	737
розрахунками з оплати праці	1630	19	49
Поточна кредиторська заборгованість за одержаними авансами	1635	4 634	5 056
Поточна кредиторська заборгованість за розрахунками з учасниками	1640	-	-
Поточна кредиторська заборгованість із внутрішніх розрахунків	1645	-	-
Поточна кредиторська заборгованість за сировинною діяльністю	1650	-	-
Поточні забезпечення	1660	-	723
доходи майбутніх періодів	1665	-	-
Виділені комісійні доходи від перестраховиків	1670	-	-
Інші поточні зобов'язання	1690	5 298	3 118
<b>Усього за розділом III</b>	<b>1700</b>	<b>36 723</b>	<b>46 466</b>
<b>IV. Зобов'язання, пов'язані з необоротними активами, утримуваними для продажу, та групами вибуття</b>	<b>1700</b>	<b>-</b>	<b>-</b>
<b>V. Чиста вартість активів недержавного пенсійного фонду</b>	<b>1800</b>	<b>-</b>	<b>-</b>
<b>Баланс</b>	<b>1900</b>	<b>169 551</b>	<b>176 084</b>

### Balance sheet of BNP Paribas Leasing Solutions LTD as of December 31 2015

ASSETS	Notes	2015		2014	
		£'000	£'000	£'000	£'000
<b>Non Current Assets</b>					
Investments	11	4,522		4,522	
Deferred Tax Assets	19	26,801		23,853	
Finance Lease Receivables	12	450,775		363,994	
Loans due from Customers	13	37,596		21,939	
Amounts due from Hire Purchase Agreements	14	148,872		138,619	
Pension Reserve	25	10,586		103	
<b>Total Non Current Assets</b>			<b>679,152</b>		<b>553,030</b>
<b>Current Assets</b>					
Finance Lease Receivables	12	241,622		300,392	
Loans due from Customers	13	82,683		102,535	
Amounts due from Hire Purchase Agreements	14	116,324		105,395	
Amounts due from Group Undertakings	23	4,562		1,926	
Cash and Cash Equivalents	16	22,239		45,572	
Other Receivables	17	19,256		21,518	
<b>Total Current Assets</b>			<b>486,686</b>		<b>577,338</b>
<b>TOTAL ASSETS</b>			<b>1,165,838</b>		<b>1,130,368</b>
<b>EQUITY AND LIABILITIES</b>					
<b>Capital and Reserves</b>					
Share Capital	18	55,043		55,043	
Share Premium		4,167		4,167	
Retained Earnings		68,652		68,681	
<b>TOTAL EQUITY</b>			<b>127,862</b>		<b>127,891</b>
<b>Non Current Liabilities</b>					
Amounts due to Group Undertakings	20	494,004		484,604	
<b>Total Non Current Liabilities</b>			<b>494,004</b>		<b>484,604</b>
<b>Current Liabilities</b>					
Provision for Liabilities and Charges	21	5,251		-	
Amounts due to Group Undertakings	20	473,520		461,513	
Other Payables	22	65,201		56,360	
<b>Total Current Liabilities</b>			<b>543,972</b>		<b>517,873</b>
<b>Total Liabilities</b>			<b>1,037,976</b>		<b>1,002,477</b>
<b>TOTAL EQUITY AND LIABILITIES</b>			<b>1,165,838</b>		<b>1,130,368</b>

### Balance sheet of BNP Paribas Leasing Solutions LTD as of December 31 2017

ASSETS	Notes	2017		2016	
		£'000	£'000	£'000	£'000
<b>Non Current Assets</b>					
Investments	11	4,522		4,522	
Deferred Tax Assets	19	23,753		27,814	
Finance Lease Receivables	12	524,339		478,950	
Loans due from Customers	13	88,802		51,519	
Amounts due from Hire Purchase Agreements	14	236,847		195,247	
Pension Reserve*	25	2,650		2,831	
<b>Total Non Current Assets</b>			<b>880,913</b>		<b>760,883</b>
<b>Current Assets</b>					
Finance Lease Receivables	12	242,374		235,099	
Loans due from Customers	13	132,075		112,875	
Amounts due from Hire Purchase Agreements	14	171,332		145,109	
Amounts due from Group Undertakings	23	11,166		7,443	
Cash and Cash Equivalents	16	53,102		72,876	
Other Receivables	17	38,577		29,193	
<b>Total Current Assets</b>			<b>648,626</b>		<b>602,595</b>
<b>TOTAL ASSETS</b>			<b>1,529,539</b>		<b>1,363,478</b>
<b>EQUITY AND LIABILITIES</b>					
<b>Capital and Reserves</b>					
Share Capital	18	55,043		55,043	
Share Premium		4,167		4,167	
Retained Earnings		81,009		54,400	
<b>TOTAL EQUITY</b>			<b>140,219</b>		<b>113,610</b>
<b>Non Current Liabilities</b>					
Amounts due to Group Undertakings	20	725,077		690,904	
Pension Reserve*	25	4,531		1,642	
<b>Total Non Current Liabilities</b>			<b>729,608</b>		<b>692,546</b>
<b>Current Liabilities</b>					
Provision for Liabilities and Charges	21	4,828		5,228	
Amounts due to Group Undertakings	20	605,269		499,858	
Other Payables	22	49,615		52,236	
<b>Total Current Liabilities</b>			<b>659,712</b>		<b>557,322</b>
<b>Total Liabilities</b>			<b>1,389,320</b>		<b>1,249,868</b>
<b>TOTAL EQUITY AND LIABILITIES</b>			<b>1,529,539</b>		<b>1,363,478</b>

## Balance sheet of Volkswagen Leasing GmbH as of Desember 31 2015

€ thousand	31.12.2015	31.12.2014
<b>Assets</b>		
<b>1. Receivables from credit institutions</b>		
a) Repayable on demand	22,258	5,572
b) Other receivables	78,567	41,655
	100,825	47,227
<b>2. Receivables from customers</b>		
a) Repayable on demand	286,810	286,139
b) Other receivables	1,086,084	1,038,008
	1,372,894	1,324,147
<b>3. Shares in affiliated companies</b>	8,651	8,651
<b>4. Lease assets</b>	21,141,405	19,206,087
<b>5. Intangible fixed assets</b>		
a) Purchased concessions, industrial and similar rights and assets, and licenses in such rights and assets	3,616	2,208
b) Prepayments	35	14
	3,651	2,222
<b>6. Property, plant and equipment</b>		
a) Land and buildings	39,598	34,661
b) Operating and office equipment	1,433	998
	41,031	35,659
<b>7. Other assets</b>	1,240,088	787,261
<b>8. Prepaid expenses</b>	641,263	332,683
<b>Total assets</b>	<b>24,549,808</b>	<b>21,743,937</b>

## Continuation of appendix H

€ thousand	31.12.2015	31.12.2014
<b>Equity and liabilities</b>		
<b>1. Liabilities to credit institutions</b>		
a) Repayable on demand	423,005	320,791
b) With agreed maturity or notice period	586,828	420,369
	1,009,833	741,160
<b>2. Liabilities to customers</b>		
a) Repayable on demand	4,722,688	2,976,652
b) With agreed maturity or notice period	5,973,165	4,637,608
	10,695,853	7,614,260
<b>3. Securitised liabilities</b>		
a) Bonds issued	7,010,661	8,179,214
b) Commercial paper	275,945	0
	7,286,606	8,179,214
<b>4. Other liabilities</b>		
	18,185	22,374
<b>5. Deferred income</b>		
	4,505,360	4,162,786
<b>6. Provisions</b>		
a) Provisions for taxes	14,090	16,940
b) Other provisions	787,531	774,747
	801,621	791,687
<b>7. Special tax-allowable reserve</b>		
	1,341	1,447
<b>8. Equity</b>		
a) Subscribed capital	76,004	76,004
b) Capital reserves	154,356	154,356
c) Net retained profits	649	649
	231,009	231,009
<b>Total equity and liabilities</b>	<b>24,549,808</b>	<b>21,743,937</b>
<b>1. Contingent liabilities</b>		
Liability arising from the provision of collateral for third-party liabilities	211,685	0
<b>2. Other obligations</b>		
Irrevocable credit commitments	1,872,295	1,689,914



## Balance sheet of Volkswagen Leasing GmbH as of Desember 31 2017

€ thousand	Dec. 31, 2017	Dec. 31, 2016
<b>Assets</b>		
1. Receivables from banks		
a) Repayable on demand	10,910	5,381
b) Other receivables	160,938	88,895
	171,848	94,276
2. Receivables from customers	3,832,061	1,767,500
3. Lease assets	26,048,897	23,753,366
4. Intangible fixed assets		
a) Purchased concessions, industrial and similar rights and assets, and licenses in such rights and assets	2,953	3,113
b) Prepayments	182	24
	3,135	3,137
5. Property and equipment		
a) Land and buildings	35,319	38,627
b) Operating and office equipment	3,249	1,218
	38,568	39,845
6. Other assets	1,119,167	1,129,834
7. Prepaid expenses	1,004,673	978,613
<b>Total assets</b>	<b>32,218,349</b>	<b>27,766,571</b>

## Continuation of appendix I

€ thousand		Dec. 31, 2017	Dec. 31, 2016
<b>Equity and liabilities</b>			
<b>1. Liabilities to banks</b>			
a) Repayable on demand		96,187	321,887
b) With agreed maturity or notice period		1,108,115	1,193,699
		1,204,302	1,515,586
<b>2. Liabilities to customers</b>			
<b>3. Notes, commercial paper issued</b>			
a) Bonds issued		10,329,687	6,070,837
b) Commercial paper		159,002	1,101,699
		10,488,689	7,172,536
<b>4. Other liabilities</b>			
<b>5. Deferred income</b>			
<b>6. Provisions</b>			
a) Provisions for pensions and other post-employment benefits		2,440	0
b) Provisions for taxes		4,450	9,813
c) Other provisions		611,380	901,071
		618,270	910,884
<b>7. Special tax-allowable reserve</b>			
		1,129	1,235
<b>8. Equity</b>			
a) Subscribed capital		76,004	76,004
b) Capital reserves		145,706	145,706
c) Net retained profits		649	649
		222,359	222,359
<b>Total equity and liabilities</b>		<b>32,218,349</b>	<b>27,766,571</b>
<b>1. Contingent liabilities</b>			
Liability arising from the provision of collateral for third-party liabilities		187,498	169,898
<b>2. Other obligations</b>			
Irrevocable leasing commitments		2,347,736	1,943,035

### Comparison of the requirements for IAS 17 and IFRS 16

Information	Required to apply IFRS 16	Required to apply IAS 17	Costs to apply IFRS 16
<b>Inventory of leases</b> (separate from non lease components of contracts)	<b>Yes</b> A company is not required to separate lease and non-lease (service) components of contracts and, instead, can account for them together as a lease	<b>Yes</b> A company was not required to separate lease and non-lease (service) components of contracts containing operating leases for disclosure purposes if it is impracticable to do so.	<b>No additional costs</b> A company is expected to incur costs in identifying a lease for existing contracts only when it perceives the benefits of this reassessment to be greater than the related costs.
<b>Terms and conditions of each lease</b>	<b>Yes</b>	<b>Yes</b>	<b>No additional costs</b>
<b>Lease term and lease payments for each lease</b>	<b>Yes</b> A company will monitor the following separately for disclosure purposes: variable lease payments, and, if it chooses to apply the recognition exemptions in IFRS 16, shortterm lease payments and low-value asset lease payments.	<b>Yes</b> A company monitored variable lease payments (contingent rent) separately for disclosure purposes, and monitored payments for finance leases separately from those for operating leases.	<b>No additional costs</b> The requirements of IFRS 16 regarding the lease term and lease payments are similar to the requirements in IAS 17
<b>Discount rate</b>	<b>Yes</b> Required for all leases, other than shortterm leases and leases of low-value assets	<b>Yes</b> — Required for finance leases. <b>No</b> — Not required for operating leases	<b>Additional costs for former off balance sheet leases only</b>
<b>Initial direct costs</b>	<b>Yes</b> Not required for leases commencing before the effective date.	<b>Yes</b> — Required for finance leases. <b>No</b> — Not required for operating leases	<b>Additional costs for former off balance sheet leases only</b> (although initial direct costs are expected to be incurred by lessees only on relatively few larger leases)
<b>Classification of leases</b>	<b>No</b> A company will identify short-term leases and leases of low-value assets only when it considers the benefits of doing so to exceed the costs	<b>Yes</b> A company was required to classify all leases as finance leases or operating leases.	<b>Reduction in costs</b>

\* Done by the author by sources [66, 67,68]