

Kyiv National University of Trade and Economics

Department of Banking

## **FINAL QUALIFYING PAPER**

on topic:

**Assessment of the company investment attractiveness  
in Ukraine and the ways to increase it**

2nd year master student  
Specialty 072 “Finance, Banking and  
Insurance”  
Specialization “Financial  
Intermediation. English language  
program”

Vasyl Kuz

---

*(student's signature)*

Scientific adviser,  
PhD, MBA

Zhurakhovska  
Lyudmyla  
Valentynivna

---

*(scientific adviser's  
signature)*

Manager of the educational program,  
PhD, Associate Profesor

Erkes Olena  
Yevgenivna

---

*(signature of the  
manager of the  
educational program)*

**Kyiv – 2021**

## Kyiv National University of Trade and Economics

Faculty Finance and Accounting  
 Department of Banking  
 Master's degree  
 Specialty Finance, Banking and Insurance  
 Specialization Financial Intermediation. English language program

### Approved by

Head of the Department  
 Shulga Natalia Petrivna,  
 Doctor of Economic Sciences, Professor  
 on \_\_\_\_\_, \_\_\_\_\_, 20\_\_\_\_

### Task for a final qualifying paper

Vasyl Kuz'

(student's last name, first name)

1. Topic of a final qualifying paper

Assessment of the company investment attractiveness in Ukraine and the ways to increase it

Approved by the Rector's order from \_\_\_\_\_, \_\_\_\_\_, 20\_\_\_\_, No. \_\_\_\_\_

2. Term of submitting by a student his/her terminated paper (project) till 22.11.2021

3. Initial data of the final qualifying paper (project)

Purpose of the paper (project) disclosure of theoretical and methodological principles and development of practical recommendations to increase the investment attractiveness of the company

Object of the research The process of assessing the investment attractiveness of companies in the agricultural sector of the Ukrainian economy from the point of view of a foreign investor

Subject of the research Theoretical, methodical and applied bases of estimation of attractiveness of agrarian corporations of Ukraine

4. Consultants of the research and titles of subsections which were consulted:

Section	Consultant (last name and initials)	Date and signature	
		The task given	The task fulfilled

5. Contents of a final qualifying paper (list of all the sections and subsections)

---

---

## **INTRODUCTION**

### **SECTION I. THEORETICAL AND METHODOLOGICAL FUNDAMENTALS OF THE COMPANY'S INVESTMENT ATTRACTIVENESS RESEARCH AND EVALUATION**

#### **SECTION II. ANALYSIS OF THE UKRAINIAN AGRICULTURAL SECTOR COMPANIES INVESTMENT ATTRACTIVENESS**

- 2.1. The current state of access of Ukrainian issuers to international financial markets
- 2.2. Investment attractiveness assessment of Ukrainian agricultural corporations in international markets

#### **SECTION III. DIRECTIONS FOR INCREASING THE INVESTMENT ATTRACTIVENESS OF UKRAINIAN AGRICULTURAL CORPORATIONS**

- 3.1. Positioning and investment attractiveness of the agricultural holding "Kernel" as a recipient of foreign investment
- 3.2. Increasing the investment attractiveness of the agricultural holding "Kernel"

### **CONCLUSIONS AND SUGGESTIONS**

### **REFERENCES**

### **APPENDICES**

## 6. Time schedule of the paper

No.	Stages of a final qualifying paper	Terms of a final qualifying paper	
		de jure	de facto
1.	Coordination of the plan and registration of the task (Ukr.)	11/02/2020	
	Coordination of the plan and registration of the task (English)	11/23/2020	
2.	Submission of a scientific article to the department (English), paper and electronic versions	03/29/2021	
3.	Section I. (English), List of sources used	04/19/2021	
4.	Section II. (English), List of sources used	06/21/2021	
5.	Section III., Introduction, Conclusions, List of sources used	10/01/2021	
6.	Submission of work to the department (all sections, appendices), review of the supervisor	10/22/2021	
7.	Pre-defense of work at the department, reviewing	11/02/2021	
8.	Submission of completed (bound) work to the department + and electronic version in PDF format, accompanying documents	11/22/2021	
9.	Public defense of work in the EC		

7. Date of receiving the task \_\_\_\_\_, \_\_\_\_\_, 20\_\_\_\_.

8. Scientific adviser of the final qualifying paper

Zhurakhovska L.V.

(last name, initials, signature)

9. Head of the project team

(Manager of the educational program)

Erkes O.Y.

name, initials, signature)

(last

10. The task received by the student \_\_\_\_\_

name, initials, signature)

(last

## 11. Resume of a scientific adviser of a final qualifying paper

### REVIEW of the final qualifying paper by a student

Vasyl Kuz'



Жураховська Людмила Валентинівна

нд 05.12.2021 22:18

Кому: Кузь Василь Зіновійович

Копія: Еркес Олена Євгенівна

The work reveals the content of scientific research about disclosure of theoretical and methodological principles and development of practical recommendations to increase the investment attractiveness of the company.

The practical significance of the results obtained is developed theoretical provisions and methodological approaches outlined in the thesis are brought to the level of practical recommendations and can be used in the development of agricultural corporations complex of measures to form and increase investment attractiveness in international markets to effectively attract foreign investment to ensure economic growth. The conclusions presented in the paper are substantiated by carrying out appropriate calculations and generalizations and illustrated by a large number of tables and figures.

The student Vasyl Kuz' has demonstrated a sufficient level of proficiency in English for professional activities "Financial Intermediation".

The work presented confirms the overall sufficient level of knowledge and skills acquired by the student while studying in the English-speaking program "Financial Intermediation" for the award of the master's degree for Specialty 072 Finance, Banking and Insurance specialization "Financial Intermediation".

Reviewer:

Department of Banking, PhD, MBA,

Associate professor

*Zhurakhovska L.V.*

Scientific adviser of a final qualifying paper \_\_\_\_\_  
(last name, initials, signature)

Note about preliminary paper defence \_\_\_\_\_  
(last name, initials, signature)

## 12. Resume about a final qualifying paper

A final qualifying paper of the student \_\_\_\_\_  
(last name, initials)

can be admitted to defence in the Examination Board.

Head of the project team  
(Manager of the educational program) \_\_\_\_\_  
(last name, initials, signature)

Head of the Department \_\_\_\_\_  
(last name, initials, signature)

\_\_\_\_\_, \_\_\_\_\_, 20\_\_ .

## CONTENT

INTRODUCTION.....	7
SECTION I.THEORETICAL AND METHODOLOGICAL FUNDAMENTALS OF THE COMPANY'S INVESTMENT ATTRACTIVENESS RESEARCH AND EVALUATION .....	11
SECTION II.ANALYSIS OF THE UKRAINIAN AGRICULTURAL SECTOR COMPANIES INVESTMENT ATTRACTIVENESS .....	29
2.1. The current state of access of Ukrainian issuers to international financial markets.....	29
2.2. Investment attractiveness assessment of Ukrainian agricultural corporations in international markets.....	42
SECTION III. DIRECTIONS FOR INCREASING THE INVESTMENT ATTRACTIVENESS OF UKRAINIAN AGRICULTURAL CORPORATIONS....	53
3.1. Positioning and investment attractiveness of the agricultural holding "Kernel" as a recipient of foreign investment.....	53
3.2. Increasing the investment attractiveness of the agricultural holding "Kernel"	61
CONCLUSIONS AND SUGGESTIONS.....	69
REFERENCES.....	73
APPENDIXES .....	81

## INTRODUCTION

**Relevance of this study:** At the current stage of economic development of Ukraine there is a decline in business activity in the investment market of Ukraine and the decline in investment attractiveness of domestic enterprises in international investment markets. The study of this issue is an urgent and priority task of the theory and practice of strategic management in international business. Formation of the effective means of increasing investment attractiveness of Ukrainian enterprises on the international markets will increase the volume of foreign investments to finance technological upgrading, expansion of export activities and innovation development. The solution of this problem requires research, problem solving at both macro- and macro-levels, and the improvement of state investment policy.

The stock market is one of the most promising ways for companies to raise capital. This method of obtaining investment by companies has a number of advantages, as it is debt-free and, therefore, there are no debt service obligations or deadlines for its use, and it is also quite expeditious. However, a company's entry into the stock market with an initial public offering will only be effective if there is a fair market valuation of these securities by the company, which will meet the expectations of potential investors and maximize the amount of capital raised by the company. Thus, the valuation of a company and its securities becomes a determining factor in the effective conduct of a company's initial public offering on the stock market. Therefore, it is important to define such a valuation model,

Actualization and fundamental character of this problem objectively requires complex research of scientific-theoretical support of investment activity realization, and activation of investment field of agrarian sphere requires development of clear methodical substantiation of investment attractiveness evaluation of enterprises in the context of balancing their financial interests and economic security and development on this basis the directions of investment attractiveness increase for effective fund raising.

The problematic of Ukrainian companies entering the international financial markets, evaluation of investment attractiveness and activation of investment activity,

attraction of foreign investments into the country's economy were considered in the works of scientists such as V.M. Geyets [99], V.I. Zakharchenko [56], Savchuk [15], V.V. Sheremet [3]. More detailed questions of attraction and use of foreign investments in agrarian sphere are opened in works of such native practitioners and scientists as A.Gaidutsky [100], V.Zavgorodnyj [101], Bondarevska K. [103], V.Jurchishin [102]. It is worth mentioning the publications on this issue by Y.V. Kozyr [105], P.V. Krush[104].

Despite the multifaceted nature of scientific research, we note that some issues remain understudied and require further scientific understanding. Scientists have not been able to reach a consensus on the prospects of the investment process in the agricultural sector under unstable economic and political conditions and the role of the state in this process. The growth of international competition in the investment market and dynamism of the international business environment cause the necessity of actual research of factors and directions of increase of investment attractiveness of corporations in the agrarian sector, which forms the purpose and subject of the research.

**Purpose of the paper** (project): disclosure of theoretical and methodological principles and development of practical recommendations to increase the investment attractiveness of the company.

**Object of the research:** The process of assessing the investment attractiveness of companies in the agricultural sector of the Ukrainian economy from the point of view of a foreign investor

**Subject of the research:** Theoretical, methodical and applied bases of estimation of attractiveness of agrarian corporations of Ukraine

**Research Objectives:**

- summarize the essence of investment attractiveness of corporations and factors of its formation;
- disclose approaches to assessing the investment attractiveness of corporations;
- identify trends in the development of the global financial and investment market;



- determine the peculiarities of Ukrainian issuers' access to international financial markets;
- assess the investment attractiveness of Ukrainian agricultural corporations in international markets;
- to characterize the positioning and assess the investment attractiveness of Kernel agro-industrial holding as a recipient of foreign investment;
- to develop practical recommendations on how to improve the investment attractiveness of agro-industrial holding "Kernel" and assess their economic efficiency.

**Methods of research:** in the research of the given theme methods of analysis, synthesis, problem consideration in dialectical interaction with other adjacent questions were used, as well as a method of critical analysis (research of categories "investment appeal" and "investment climate"), factor analysis, systematization, specification and generalization (at definition of the factors influencing formation of investment appeal of the enterprise); comparison and statistical analysis (at analysis of investment appeal of Ukraine); prognosis and analysis of investment attractiveness of Ukraine.

**Information base of the research:** scientific domestic and foreign sources, legislative acts, periodical economic literature, actual data, statistical and reporting information of the agrarian holding "Kernel".

**Practical significance of the work:** developed theoretical provisions and methodological approaches outlined in the thesis are brought to the level of practical recommendations and can be used in the development of agricultural corporations complex of measures to form and increase investment attractiveness in international markets to effectively attract foreign investment to ensure economic growth.

**Publications.** Some results of the study are reflected in the scientific article: Kuz V.Z «The company's investment attractiveness assessment and ways to increase it».Financial institutions in the context of global imbalances:a collection of scientific articles by students / resp. ed. N.Shulga – Kyiv: Kyiv National University of Trade and Economics, 2021.

**Approbation.** Some of the results of the study were highlighted in a report at the Student Scientific Conference "Financial Policy in the context of economic transformation": Kuz Vasyl «Assessment of the company investment attractiveness in Ukraine and the ways to increase it», Kyiv, KNUTE, November 17-18, 2021

**Volume and structure of work.** The work consists of an introduction, three sections, conclusions and a list of sources used. The total volume of the work is 62 pages. The list of used sources consists of 105 items.

## SECTION I

### **THEORETICAL AND METHODOLOGICAL FUNDAMENTALS OF THE COMPANY'S INVESTMENT ATTRACTIVENESS RESEARCH AND EVALUATION**

Investment is the process of investing free capital for the purpose of obtaining profit. According to the object in which the capital is invested and according to a number of basic features investments are divided into 2 main types: real investments; monetary investments. One of the most important and responsible stages of investment process is, in particular, the choice of enterprise, in which the investor will invest accumulated funds and resources. The choice of an enterprise is influenced by its investment attractiveness, how successful it is, and what growth prospects the enterprise has.[4]

Investment attractiveness is often defined as the possibility of guaranteed, reliable and timely achievement of investor's goals based on the economic performance of the enterprise. But investing is a process with a non-guaranteed result, as certain investment decisions involve a remarkable degree of risk and under no circumstances can one be fully assured of obtaining a certain amount of profit.

In the following, we will consider the investment attractiveness of corporations in an international context, so, first of all, it is necessary to define the concept of "corporation" [11].

In this paper, the term "corporation" is understood as a form of business organization existing mainly in the form of a joint stock company, whose founders form the share capital by pooling their own resources through the mechanism of issue and sale of securities (primarily shares), and co-owners have limited liability.

The founders of a joint stock company may be individuals and legal entities (enterprises). The share capital (property) formed in this case consists of the total value of issued and sold shares. The founders of the corporation receive the founders' profit, which is the difference between the amount received from the sale of shares and the amount of invested resources.

It should be noted that the scientific literature does not explain the concept of the category "investment attractiveness of the corporation", so first it is advisable to formulate the definition of "investment attractiveness" and the next step is to define the essence of the investment attractiveness of the corporation.

Recently, the analysis of investment attractiveness has been the object of active scientific research. The problem of methodological support for a comprehensive analysis of investment attractiveness is of not only theoretical but also practical interest. The development of appropriate methodological approaches is necessary to assess the possible directions of development and their consequences, to develop proposals for the necessary coordinating and regulatory measures [17].

There is no unified approach to defining the essence of the concept of "investment attractiveness of an enterprise" in the modern economic literature. But this only increases the relevance of the study of approaches to defining the concept of investment attractiveness of companies in the context of modern trends in the country's development.

In order to form a definition of the concept of investment attractiveness of a corporation, let us consider the views of different scientists on this concept (Table 1.1).

Consequently, we can conclude that some scientists, when determining the investment attractiveness of an enterprise, take into account only the indicators of the financial condition of the enterprise and do not take into account the investment risks. The simplest financial analysis no longer meets the requirements of decision-making investors. In accordance with this, new methods and approaches to determine the investment attractiveness of an enterprise and the formation of an investment decision are being developed.

Also, as can be seen from the table above, many authors in providing a definition of this concept omit the result of the process, namely, the direct implementation of investment in the company. Regardless of the approach used by an expert or analyst to define the term "investment attractiveness", it is most often used to assess the appropriateness of an investment in a given facility, select alternatives, and determine

the efficiency of resource allocation [24]

*Table 1.1.*

**Scientific approaches to the interpretation of the concept of "investment attractiveness"**

<b>№</b>	<b>Author</b>	<b>Interpretation of the concept</b>
1	Krykhovskaya N.A.	Investment attractiveness is the coincidence of the conditions of the economy functioning, which could interest an investor regarding further investment of resources.
2	Kotlyar and M. Akimov	Investment attractiveness is the distribution of actual volumes of attracted investments in the region.
3	K. Titov	Investment attractiveness is the establishment of a sustainable cumulative economic effect of production and economic activities.
4	C. Gutkevich	Investment attractiveness is an integral set of criteria of validity of conditions and factors that ensure the interest of investors in investing capital.
5	Zadnepryanaya T.S.	Investment attractiveness is a measure of how well a country or a particular area of development meets the requirements for investment.
6	Semenchuk L.I.	Investment attractiveness of an enterprise is a set of indicators that comprehensively characterize the activities of the enterprise and show the feasibility of investing temporarily free funds in it.

*Source: built by the author based on [2, 3, 4, 5, 12, 14,17,22],*

The investment attractiveness of a corporation is a set of characteristics that can make a company an attractive investment asset for investors. At the same time, both the actual characteristics of the company and the features of the institutional environment in which it exists play a significant role from the perspective of investors. At the same time we should highlight the importance of securities, in particular shares, of corporations, which inherently act as joint-stock companies, in the formation of investment attractiveness.

So, let us return to the concept of "investment attractiveness of corporations", which is the key concept in this paper. Given the above analysis of the category of investment attractiveness, we can formulate the concept we need:

Investment attractiveness of corporations is a set of characteristics (external and internal environment) and indicators of the corporation as an object of investment that determine its comprehensive performance and ability to generate income in the future (net cash flows), and when assessed in the financial markets cause investors to take a certain risk and invest capital in the corporation.

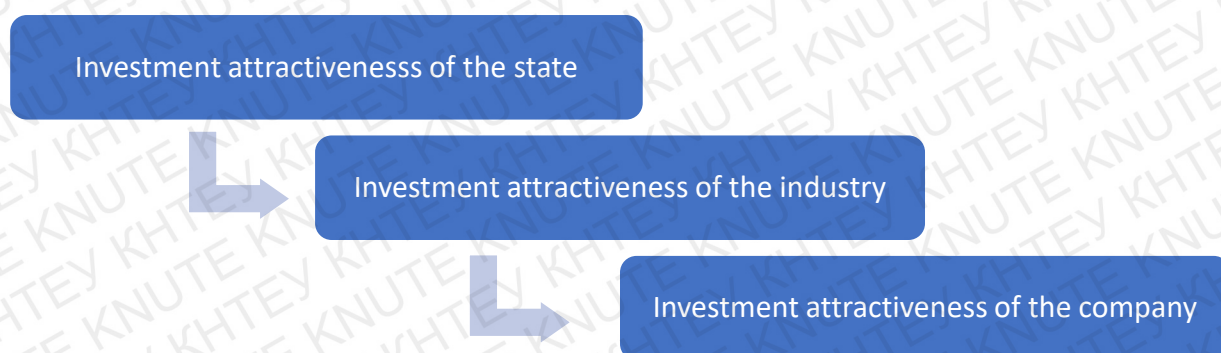
In modern conditions the analysis of investment attractiveness is the object of

active scientific research. The problem of methodological support for a comprehensive analysis of investment attractiveness is not only of theoretical but also of practical interest. The development of appropriate methodological approaches is necessary to assess the possible directions of development and their consequences, to develop proposals for the necessary coordinating and regulatory measures.

Virtually any line of business nowadays is characterized by a high level of competition. In order to maintain their positions and achieve leadership, companies have to constantly develop, master new technologies, and expand their spheres of activity. In such conditions there comes a time when the company's management realizes that further development is impossible without an inflow of investment. Attracting investment into the company gives it an additional competitive advantage and is often a powerful means of growth.

Factors of formation of investment attractiveness of corporations can be defined as the driving forces that ensure the creation of advantages for companies in the competition for limited investment resources. [34]

Investment attractiveness of corporations should be formed at several levels - levels of the state, region, industry and the company itself. Which of the defined levels in terms of influence on investment attractiveness is dominant and which one is less important is extremely difficult to establish. From the hierarchical point of view, the factors that form the state competent investment attractiveness are the highest. Factors that determine the attractiveness of the region and industry, which are hierarchically on the same level as the region, do not follow. The bottom rung is formed by the factors of investment attractiveness of the company itself. [26]



*Fig. 1.1. Stages of Corporation Investment Attractiveness Formation*

*Source: Built by the author on the basis of [28]*

Based on this hierarchical construction of the factors of formation of investment attractiveness, we can argue that its increase can be carried out with the help of:

- state and international organizations, with the help of *which* it is possible to change the indicators characterizing the attractiveness of the state, region and industries;
- policy of the enterprise, directly affecting only its own attractiveness.

The scientific sources are dominated by a multifaceted vision of the classification of factors forming the investment attractiveness of companies. Summarizing the scientists' views, we can present the following classification of factors (Table 1.2):

*Table 1.2*

**Classification of factors of investment attractiveness formation**

<b>Classification criteria</b>	<b>Characteristics of factors</b>
By content.	Political, economic, social, technological;
By level of exposure	Macrolevel, mesolevel, microlevel;
By the general nature of the impact	Institutional, economic, social;
By definition, the environment	Political-legal, economic, social environment;
By the nature of the impact	Tangible, intangible;
In terms of duration of exposure	Short-term, long-term;
By operating environment	Internal, external environment.

Source: Built by the author on the basis of [37, 28]

For real and financial investors when choosing an investment object it is important to take into account, first of all, factors of external and internal environment of functioning of a corporation. Environmental factors reflect the conditions of functioning of the company in a particular geo-economic system, but they are not always determinative for the decision of an individual investor, because there are no ideal operating conditions in any country of the world. [12] Based on the analysis of scientific publications and practice it is possible to identify the typology of external environment factors (tab. 1.3).

Table 1.3

### Factors of external environment of formation of investment attractiveness of companies

Factor name	Characteristics
Financial and economic factors	<ul style="list-style-type: none"> <li>- general state of the economy (upturn, stagnation, recession, etc.)</li> <li>- the presence of crisis phenomena in the economy;</li> <li>- stability of the national currency;</li> <li>- the level of inflation in the country;</li> <li>- access to credit resources and their cost;</li> <li>- tax conditions for enterprises with foreign investment;</li> <li>- availability of incentives for investors, etc.</li> </ul>
Social factors	<ul style="list-style-type: none"> <li>- per capita income level;</li> <li>- development of the social protection system;</li> <li>- level of security for citizens;</li> <li>- quality of life;</li> <li>- unemployment rate and others</li> </ul>
Scientific and technological factors	<ul style="list-style-type: none"> <li>- the level of development of fundamental and applied science;</li> <li>- innovation activity;</li> <li>- programs to stimulate the creation and implementation of innovations;</li> <li>- the level of depreciation of fixed assets in the economy;</li> <li>- development of info-communication technologies, etc.</li> </ul>
Geoterritorial factors	<ul style="list-style-type: none"> <li>- the advantageous territorial location of countries and regions;</li> <li>- proximity to resources;</li> <li>- the influence of integration associations;</li> <li>- logistical advantages or obstacles, etc.</li> </ul>
Political factors	<ul style="list-style-type: none"> <li>- political stability;</li> <li>- policy decisions on the investment climate of the country and the region;</li> <li>- level of government regulation;</li> <li>- political adequacy and others</li> </ul>
Infrastructural factors	<ul style="list-style-type: none"> <li>- development of the sphere of production services (transport, legal, insurance, etc.);</li> <li>- availability of communication routes in proper condition;</li> <li>- activity of auditing, recruiting companies, financial and credit institutions, etc.</li> </ul>
Administrative and legal factors	<ul style="list-style-type: none"> <li>- favourable and stable legal and regulatory framework for investors;</li> <li>- bureaucratization of investment registration and creation of companies with foreign investments;</li> <li>- The effectiveness and independence of the judiciary;</li> <li>- level of corruption;</li> </ul>
Market factors	<ul style="list-style-type: none"> <li>- the level of development of market relations;</li> <li>- the level of corruption or monopolization of certain markets;</li> <li>- barriers to market entry;</li> <li>- Effectiveness of market laws and other</li> </ul>

Source: Built by the author on the basis of [29]

As practice shows, investors invest not only in companies of highly developed countries, but also in developing countries and even in underdeveloped countries that are in the field of unfavorable investment climate. From this we can conclude that the priority for a certain group of investors is the company's investment attractiveness



parameters, rather than external conditions and operating environment. In this approach, the identification of internal environment factors that form the investment attractiveness of a particular company in spite of the negative investment climate of the region of operation becomes particularly important. On this basis it is possible to represent the typology of factors of investment attractiveness of the company's internal environment (tab. 1.4).

*Table 1.4*

**Factors of internal environment of formation of investment attractiveness of the company**

<b>Factor name</b>	<b>Characteristics</b>
Production and technological	<ul style="list-style-type: none"> <li>- level of depreciation of the company's main assets;</li> <li>- innovativeness and efficiency of production technologies;</li> <li>- level of technical support;</li> <li>- level and intensity of production equipment utilization, etc.</li> </ul>
Financial and economic	<ul style="list-style-type: none"> <li>- profitability, liquidity, solvency, financial independence of the enterprise;</li> <li>- the level of threat of bankruptcy;</li> <li>- the creditworthiness of the enterprise;</li> <li>- capital return;</li> <li>- financial stability;</li> <li>- capital structure;</li> <li>- availability of funds;</li> <li>- investment risks and others</li> </ul>
Property	<ul style="list-style-type: none"> <li>- Ownership of land plots, property complexes (buildings, structures)</li> <li>- enterprise areas and their spatial location, etc.</li> </ul>
Administrative	<ul style="list-style-type: none"> <li>- organizational-legal form of education;</li> <li>- the legal status of the enterprise;</li> <li>- form of ownership;</li> <li>- Availability of cases in court proceedings on the activities of the enterprise.</li> </ul>
Social	<ul style="list-style-type: none"> <li>- qualification level of the enterprise's personnel;</li> <li>- the level of average wages;</li> <li>- working conditions;</li> <li>- social packages;</li> <li>- development of social infrastructure, etc.</li> </ul>
Management	<ul style="list-style-type: none"> <li>- the level of development of the management system ;</li> <li>level of automation of management processes;</li> <li>- qualification of managers at institutional, managerial and technical levels;</li> <li>- effectiveness of strategic, anti-crisis management at the enterprise</li> </ul>
Commodity	<ul style="list-style-type: none"> <li>- competitiveness of the enterprise's products by consumer and economic parameters;</li> <li>- availability and recognizability of the trademark;</li> <li>- uniqueness of products; lack of analogues;</li> <li>- type of product, etc.</li> </ul>

Ending Table 1.4

Recognition	<ul style="list-style-type: none"> <li>- image</li> <li>- The brand</li> <li>- name recognition</li> <li>- reputation in the market, etc.</li> </ul>
-------------	--

Source: Built by the author on the basis of [29]

The main and most common purpose of attracting investment is to improve the efficiency of the enterprise, i.e. the result of any chosen method of investment funds with proper management should be the growth of the company value and other indicators of its activities.

Table 1.5

### **International corporations use different investment methods to implement their global investment strategies**

Investment method	Characteristic
Non-equity-related	export-import, licensing, franchising, management contracts, contract manufacturing or turnkey projects.
Related to equity participations	<ul style="list-style-type: none"> <li>- direct foreign investment;</li> <li>- investing from scratch;</li> <li>- transplants;</li> <li>- strategic alliances;</li> <li>- international mergers and acquisitions;</li> <li>- international bindings and others.</li> </ul>
Through investment attraction tools	<ul style="list-style-type: none"> <li>- investment of funds in the share capital of the enterprise;</li> <li>- debt financing;</li> <li>- bank lending with collateral;</li> <li>- bonded loans.</li> </ul>

Source: Built by the author on the basis of [29]

If an enterprise needs to attract investment, management should formulate a clear program of measures to improve its investment attractiveness.

Improving the investment attractiveness of the enterprise is necessary for:

- ensuring the competitiveness of products and improving their quality;
- structural reorganization of production;
- creation of the necessary raw material base for the effective functioning of enterprises;
- solving social problems: investments necessary to ensure the effective functioning of enterprises, their stable state and, in this regard, they are used to achieve further expansion and development of production;
- restoration of fixed production assets; improvement of the technical level of labor

and production; [29]

The methods of increasing investment attractiveness will differ for different types of investors. An investor who lends funds to a corporation expects the corporation to meet its obligations to return the funds invested as well as to pay the interest due for the use of the invested capital. Investors, on the other hand, who have an equity interest and are an integral part of the business itself, expect the company to use the investment properly in order to substantially increase the value of the equity interest they hold.

Depending on the existing investors' expectations, the corporation may carry out a number of activities affecting its investment attractiveness in one way or another, the priority, of course, being to raise it to a higher level.

We should start with methods such as the development of a corporation's general development strategy or business plan. The main component of these methods is expertise, which allows a corporation to build a general strategy for a long-term perspective. One of the important components, besides the financial strategy, as noted above, is the development of the investment policy of the corporation.

The investment strategy for an investor is an indicator of how the company sees its future in perspective and the appropriateness of the measures taken by the corporation's managers and the conditions for changing the functioning of the business.

Another way to attract an investor is to create a credit history. Its existence is an advantage for both types of investors because a positive credit history can demonstrate to the owner of the money how the corporation has performed its obligations to previous investors. For this purpose, the company may, for example, consider issuing bonds with a short term maturity for a fairly modest amount that the corporation can repay without much difficulty or loss.

Reorganization activities could also be considered as an option.

First, measures for the modernization of industrial production, as well as for the renewal of goods. As part of this process, attempts are made to introduce innovative developments, improve the production process, diversify the range of goods

produced, abandon the production of irrelevant goods, invent modern products that meet consumer demand, introduce the latest technologies that may well meet the standards of environmentally friendly production.

Secondly, the improvement of the organizational structure, as well as the management of the corporation. At detailed consideration of the process of reorganization of management structure of the company it is possible to allocate the following components: identification of more profitable qualities of functioning of the company, differentiation of business actions. Moreover, finding those organizational formations that duplicate each other in functions, as well as the creation of new ones necessary to achieve recently faded goals. To this set of actions it is possible to refer processes of division and association of separate functional units in activity of the corporation.

The last group of measures is aimed at creating an optimal capital structure. First, the origin of the corporation's liabilities as well as the significance of each individual source in the total amount, the value of the liabilities and their impact on the charm of the corporation for the investor should be studied and analyzed. The above category of measures include: adjusting the volume of external capital inflows, replacing short-term investments with longer-term ones or, if necessary, carrying out the reverse process, changing the share capital both upward and downward, regulating the number of issued shares. Often the most effective way to increase the level of investment attractiveness is to change the effect of financial leverage by increasing equity capital.

These measures affect the company's performance, which attracts investor interest (e.g. liquidity), as well as increasing the rights of the corporation's owners.

Directions and methods of analysis of investment attractiveness of the company depend on the objectives facing the investor. The assessment of investment attractiveness can be carried out both from the point of view of the results of the analysis of indicators of the company's financial condition and from the point of view of its production capabilities. The assessment of investment attractiveness is traditional and widely used in investment management.

The most common methods to assess the investment attractiveness of the company based on the indicators of financial performance of the enterprise. It should be noted that the Ukrainian legislation approved the Methodology of integral assessment of investment attractiveness of enterprises and organizations [30], approved by the Agency for Prevention of Bankruptcy of Enterprises and Organizations, which includes assessment of the financial condition of the investment object, determination of the importance of indicators based on expert evaluations; calculation of the rank value for each indicator and determination on its basis of the integral index of investment attractiveness. However, analyzing this by-law, one may assert that it is outdated and inconsistent with the modern realities of the investment climate in Ukraine.

Among global methodologies for assessing investment attractiveness, the most common are Institutional Investor, Euromoney, Business Environment Risk Index (BERI), Transparency International, Moody's Investor Service and the World Bank Investment Climate Survey (ICS) methodology.

Special mention should be made of situations where it is in the interests of the owners to sell the company at the highest possible value. This intention arises, as a rule, when the owners wish to change the field of activity, obtaining in the sale of the business sufficient funds for new investments.

The relevance of the problems of investment assessment of shares is evidenced by numerous studies in these areas [31]. V. Sharpe [23] - model of equity capital pricing (CAMP), J. Gitman - investment processes in the conditions of modern stock markets and equity management of enterprises, G. Markowitz [22] - theory of optimal portfolio selection, R. Sheeler, J. Campbell, J. Doe, etc. - factors of influence on profitability and equity capital pricing processes, etc.

A. Damodaran [32], Yu. Brigham and L. Gapenski, T. Copeland [24] in their works on financial management study the issues of assessing the investment attractiveness.

Various methods of analysis and evaluation of investment attractiveness of the enterprise are applied in Ukraine, the main of which are [33]:

- methodology based on analysis of non-financial indicators;
- integration of financial and financial indicators;
- methodology based on financial performance analysis;
- methodology of integral assessment of investment attractiveness;

The methodology based on the analysis of financial indicators is the best known of all the above methodologies. According to this methodology, the company's investment attractiveness is analyzed in the sequence shown in Table 1.6.

*Table 1.6*

**Sequence of analysis and assessment of investment attractiveness of the enterprise based on the analysis of financial indicators**

<b>№</b>	<b>Stages of analysis and evaluation</b>	<b>Content of the stages</b>
1	General characteristics of the enterprise	a company trait. Compliance with accounting rules and policies
2	Assessment of financial stability of the company	Calculation of the relevant characteristics. Assessing the dynamics of monetary resilience characteristics. Identifying the type of financial resilience
3	Assessment of the company's balance sheet liquidity	Characteristics of composition and dynamics of liquid assets and short-term liabilities Calculation of liquidity characteristics and analysis of its factors. Analysis of the relationship between the dynamics of indicators that ensure the degree of solvency of the enterprise - sales volume, the need for working capital, the availability of net mobile funds
4	Calculation and analysis of cash flows companies	a feature of the parts of the total cash flow and their dynamics. Operational flows. Investment cash flows. Cash flows from financing transactions
5	Analysis of enterprise profitability	Calculation and assessment of the dynamics of characteristics of profitability of production, return on equity or return on equity (depending on the form of affiliation). Analysis of the relationship between profitability indicators and their dynamics
6	Market value analysis of the enterprise	Calculation of the market value of the enterprise
7	Generalized estimate the investment attractiveness of the company	In order to obtain a comprehensive assessment, a priority of indicators that meets the objectives of the subject of the analysis is determined. Scoring methods are used. A consolidated rating of the enterprise is determined

Source: Built by the author on the basis of [35]

A variety of financial ratios are used to assess investment attractiveness. Their composition is determined in accordance with the objectives and depth of analysis, as well as taking into account the interests of three main groups of users - short-term creditors (investors), long-term creditors (investors), shareholders (investors). It should be emphasized that the ratios have the greatest content in those cases where it is possible to trace their dynamics over a certain period of time, for example, 3 to 5 years, or to carry out a comparative analysis, for example, before and after the implementation of the investment project. However, even in this case, their interpretation should be approached with caution. [34]

The analysis of the financial condition of the enterprise, despite its importance and significance, does not allow obtaining a full assessment of the investment attractiveness of the enterprise. In this regard, the results of the analysis and assessment of the financial condition of the enterprise should be supplemented with the assessment of its production potential and market opportunities, which can be carried out in the course of the object analysis, which has a comprehensive nature. [35] The assessment of the investment attractiveness of the enterprise should be carried out taking into account the stages of its life cycle, since at different stages the values of the same indicators have different value at the enterprise and its investors.

The final rating score takes into account all the most important parameters (indicators) of financial and economic and production activity of the enterprise, i.e. economic activity as a whole. When constructing it, data on the production potential of the enterprise, profitability of its products, efficiency of use of production and financial resources, state and placement of funds, their sources, etc. are used.

Factor-based assessment of the investment attractiveness of an enterprise is necessary when an investor deals with a variety of different types of indicators that need to be aggregated into groups united by their content. Further work is carried out not with each indicator, but with an aggregated group - a factor.

Accounting metrics are sometimes the most important in investors' and shareholders' analysis of a company's attractiveness.

The most optimal for a strategic investor is the value-based valuation method. To

use it, financial statements are supplemented with a large amount of external and internal information, value factors.

To date, there are several known approaches and methods implemented as part of them, by which monetary valuation of the enterprise (business) is given. The domestic theory declares and uses three main approaches to business value assessment borrowed from the Western practice:

- income approach;
- asset-based approach;
- comparative (market) approach (see Table 1.7). [13]

A comparative analysis of these approaches is shown in Table 1.7.

In the 80-90s of the 20th century, a number of indicators emerged (some of them later served as a basis for even management systems, for example, EVA Based Management), reflecting the value creation process. Besides EVA, the most famous among them are MVA, SVA, CVA and CFROI. [37]

*Table 1.7*

#### **Advantages and disadvantages of the main approaches to business valuation**

<b>Approach</b>	<b>Advantages</b>	<b>Disadvantages</b>
Profitable	Takes into account the future expectations of the investor. Allows the economic obsolescence of the business to be taken into account. Allows the profitability of business investments to be taken into account, taking into account product sales volumes and costs, as well as the market aspect, as the required rate of return is based on market data	Does not accurately determine the discount rate of future revenues of the enterprise due to the lack of market data and economic instability. Limited by lack of sufficient information on current and future net revenues of the enterprise
Comparative	Displays the actual results achieved by the production and economic activities enterprises. It really shows supply and demand for the given object of investment, since the price of the actual transaction most integrally takes into account the situation on the market.	Ignores the prospects of development of the enterprise, as the basis for calculation is the financial results achieved in the past. It is valuable only if there is comprehensive financial information not only on the enterprise being evaluated, but also on a large number of similar peer firms. Laboriousness of correction calculations and their justification. Low reliability of the obtained information



*Ending Table 1.7*

Expendable	It is most attractive when typical sellers and buyers are seriously guided by construction costs in their decisions. However, if the cost approach shows that construction costs can be noticeably lower than acquisition costs as determined by the income approach, this fact may cause an investor to opt for the construction option.	Staticity and inability to take into account the company's development prospects. Does not take into account the location of the property complex being valued. Difficulty of accurate assessment of all forms of depreciation
------------	---	--

Source: Built by the author on the basis of [38]

It is possible to determine the prospects of development of the evaluated company in the long-term period on the basis of the value approach. As the definition of investment attractiveness contains the prospects of long-term development of the company, and increasing the value of the company in the long term is one of its main objectives (as well as the external investor and the state), it can be considered as the criterion of investment attractiveness of the company and used to compare its state relative to competitors attraction of investments. It causes the necessity to study the correlation between the value and investment attractiveness of the company, as well as to determine the place of the company's value in the management aimed at increasing its investment attractiveness.

Some methodologies for assessing the investment attractiveness of an enterprise take into account non-financial indicators and analyze intangible assets [39], because, as reality shows, it is the presence and development of intangible assets that have a significant impact on the investment attractiveness of the enterprise. However, as noted by G.V. Kozachenko, despite a number of obvious advantages of non-financial indicators in assessing the investment attractiveness of an enterprise, numerous studies have revealed their significant drawbacks. In some cases, no clear causal interdependence between the non-financial indicator and the expected result of its implementation is not established, which leads to an incorrect assessment of the investment attractiveness of the enterprise. In addition, non-financial indicators are not always reliable.

For large Ukrainian corporations the relevant factor of investment attractiveness has become the presence of a specified set of characteristics necessary for recognition

of the company's success in international markets. Some of these factors: the presence of vertical and horizontal management structure, the absence of non-core assets in the company, reporting under international standards, the presence of foreign managers in the top management, financial transparency, the presence of corporate conduct codes, developed dividend policy, protection of minority shareholders' rights, care about staff, the environment, etc. [43]

The level of risk and its consequences should also be an important criterion in making an investment decision. In order to calculate this indicator it is necessary to know what category the risk belongs to. Risks are divided into the following: reduction of income, configuration of pricing policy, configuration of market conditions, unnecessary capacity of the company, increased competition, loss of liquidity, non-fulfillment of obligations, etc.

A comprehensive systematic approach to the mechanism of selection of investment-attractive shares, the procedure for substantiating the evaluation criteria and the choice of indicators-indicators should be formed on the basis of scientifically sound basic provisions and basic principles.

A number of authors prefer market activity indicators when assessing the investment attractiveness of corporations. The methodology for assessing investment attractiveness proposed by N.V. Shevchenko consists in the calculation of indicators of corporate capitalization, namely: stock returns, market and actual value of shares, dividend yield of corporate shares. [40]

The indicators that characterize the attractiveness of corporate stock are: liquidity of stock; earnings per share; rate to earnings per share; profitability (return to price); company capitalization; valued enterprise ratio (P/E ratio); and capitalization in net income. [41]

In general, the evaluation of investment qualities of shares is carried out according to the following parameters:

1. Characteristics of the type of shares by the degree of protection of the amount of dividend payments.
2. Assessment of the industry in which the Issuer operates.

3. Assessment of the main characteristics of business activity and monetary condition of the Issuer.
4. Evaluating the nature of stock circulation in the stock market.
5. Assessment of the terms and conditions of the share issue.

The characteristic of the type of shares by the degree of protection of the amount of dividend payments implies the division of shares by the nature of the issuer's liabilities into preferred and common shares. It has the most significant meaning for investor from the point of view of principal differences of their investment qualities.

Assessment of the industry in which the issuer operates means studying the stage of its life cycle and the expected timeframe for being at this stage. Also, when assessing the factors determining the investment qualities of shares of companies in different industries, special attention should be paid to the place assigned to the industry in the structural reorganization of the country's economy; the average level of profitability of the industry company, as well as the degree of profit (income) taxation. The latter 2 factors can serve as a criterion for assessing the possible level of dividends on shares.

The assessment of the conditions of the share issue is the final stage in the study of its investment qualities. The subject of such evaluation are the whole issue, the conditions and periodicity of dividend payments, the degree of participation of individual shareholders in the management and other information of interest to the investor and contained in the issue prospectus.

In practice, to assess the investment attractiveness of corporations it is not necessary to use the entire set of coefficients, but it is advisable to choose the most significant for a particular corporation, which will allow to make a sufficiently justified investment decision.

To summarize, the investment appeal of a company for an investor is the expectation to receive an acceptable level of return on investment in that company while minimizing risk. In the process of making managerial decisions on financial investments the analysis of company securities plays a determining role. The essence of investments and investment attractiveness of the enterprise was considered.

Assessment of investment attractiveness of companies opens the latest opportunities of diversification for foreign investors, increases the guarantee of investment funds of foreign investors in investment projects. As a result of the integral assessment it is possible to determine the directions of priority investment and economic development of enterprises of the agrarian sector. The development of common evaluation criteria and indicators will contribute to the objective analysis of economic processes.

The integral methodology for assessing investment attractiveness, which follows from the above typology of factors forming the investment attractiveness of enterprises, becomes fundamental for diagnosing and monitoring the feasibility of investing in certain industries or individual enterprises. The methodological principles and criteria for the formation of a system of indicative indicators, methodology and algorithm of comprehensive integral assessment of corporations were noted.

## SECTION II

### ANALYSIS OF THE UKRAINIAN AGRICULTURAL SECTOR COMPANIES INVESTMENT ATTRACTIVENESS

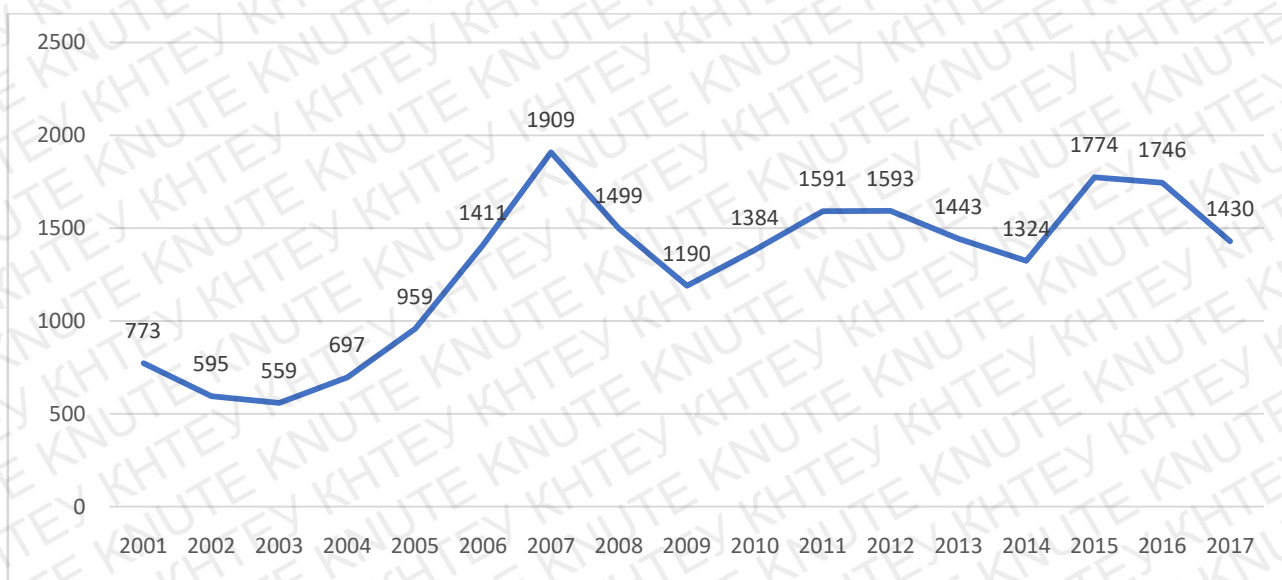
#### 2.1. The current state of access of Ukrainian issuers to international financial markets

To date, the state of the world market (and the entire global economic system) is characterized by increasing instability amid systemic uncertainty of the institutional dynamics of the global development process. A negative development factor is the imbalance of growth among developed and developing countries, which may deepen the crisis phenomena in the budget and financial sectors of these countries. Thus, the consideration of development trends in different segments of the international investment market is an extremely relevant issue.

The world practice shows that TNCs currently act as a driving force for the development of industries and globalization processes in the world. This trend is confirmed by the annual World Investment Report UNCTAD, indicating that TNCs now determine the level and direction of international capital flows (direct investment flow), contribute to the formation of international production and technological complexes (IPTC), and their large-scale activities are fully manifested in the internationalization of production. A characteristic feature of modern TNCs is that they act as the institutional basis of production for a range of countries, and their internationalized ties serve as the main source of IPR, which results in the transfer and implementation of advanced innovative technologies.

Consider the global corporate market characterized by foreign direct investment (hereinafter - FDI) flows. In 2017, the volume of FDI flows decreased by 18% to \$1,430 billion compared to the previous year. (Fig.2.1) However, in general, the FDI dynamics over the period is positive.

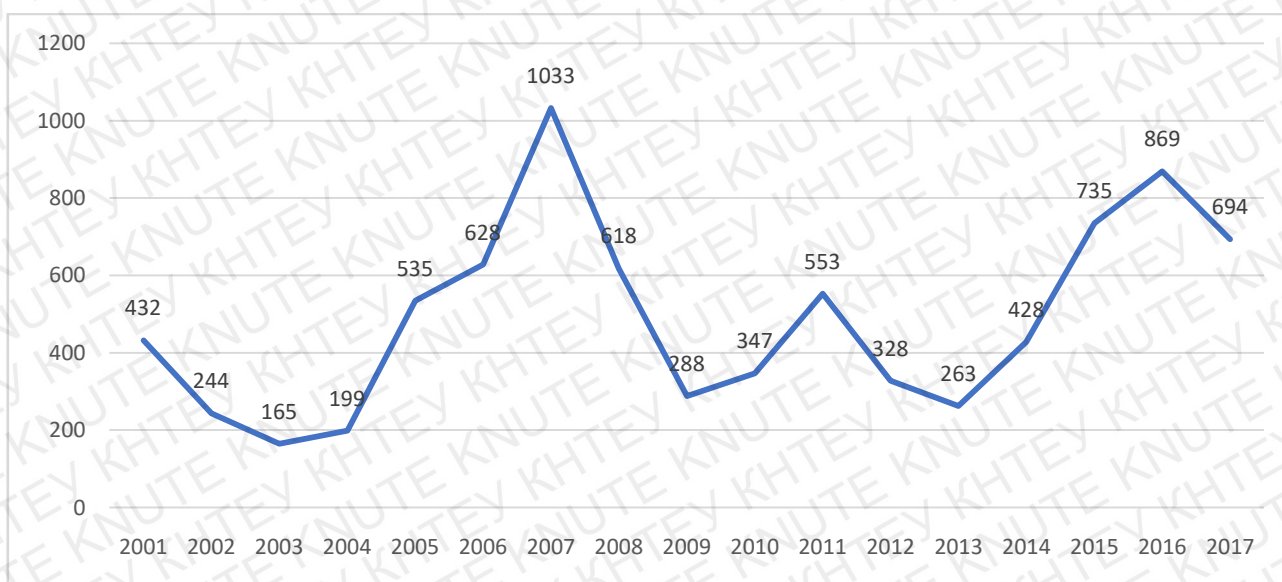
As we know, MNCs are responsible for a large share of FDI in the global economy, and FDI influences economic growth in one way or another.



*Figure 2.1. FDI volume in the world in dynamics, USD billion. The volume of FDI in the world in 2001-2017.*

*Source: Compiled by the author on the basis of data from [45].*

While intracompany loans recorded a decline at the global level in 2016, equity investments were boosted by an 18% increase in cross-border M&A value. Since the beginning of 2016, M&A increased to \$869 billion, the highest level since 2007 due to activity in developed countries. In 2017, following the decline in FDI, cross-border M&As also declined to \$694 billion (Figure 2.2).

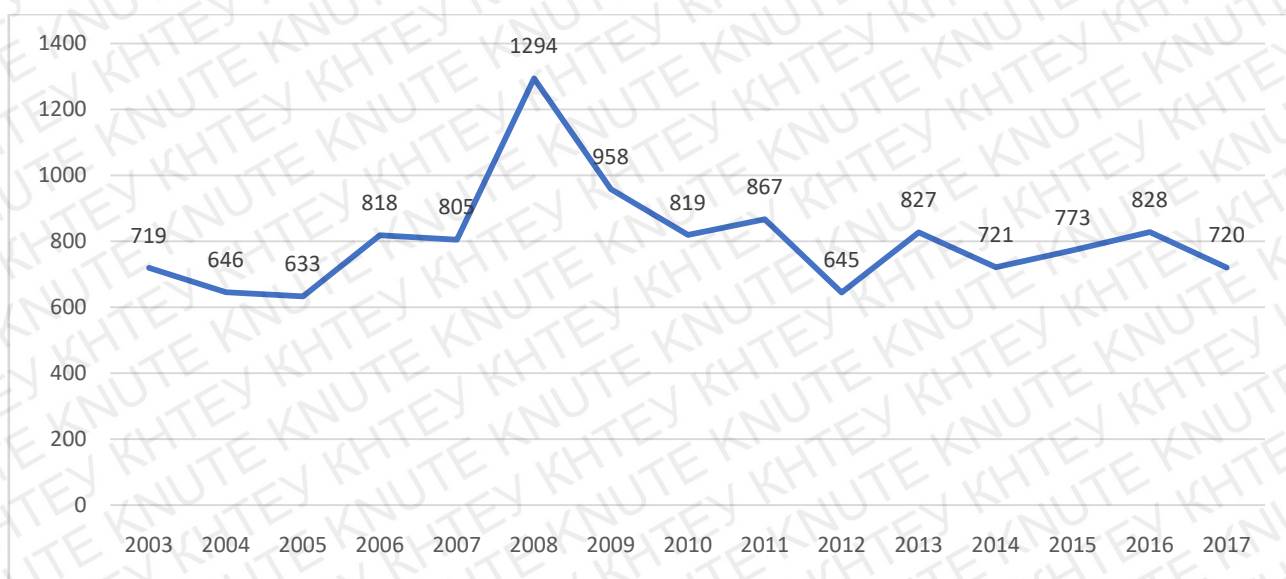


*Fig. 2.2 Global cross-border M&A volumes in dynamics, USD billion. The volume of cross-border M&As in the world.*

*Source: Compiled by the author on the basis of data [45]*

The value of disclosed greenfield projects also increased - up 7 percent from 2015 to \$828 billion - although this was mainly due to a number of very large projects

announced in several developing countries and transition economies. In 2017, the value of announced projects fell slightly to \$720 billion (Figure 2.3).



*Fig. 2.3. volume of disclosed greenfield projects in the world in dynamics, USD billion. The volume of greenfield projects disclosed in the world in dynamics, USD billion over 2001-2017.*

*Source: Compiled by the author based on [45]*

Of particular importance when a company enters the IPO is the choice of the stock market in which the initial offering will be carried out. As noted above, under current Ukrainian law, securities of Ukrainian companies have no right to be listed on foreign stock markets in excess of 20%. That is why companies are increasingly choosing foreign stock exchanges to conduct initial public offerings. It should be noted that this choice is primarily related to the underdevelopment of the domestic stock market which is rather poorly functioning to attract large funds.

To place shares on foreign stock markets, Ukrainian companies use several ways to legally formalize the issuance of their own securities abroad. These include the placement of shares through an offshore subsidiary; placement of shares through depositary receipts; placement through depositary receipts issued by a subsidiary (offshore) company (a combination of the first 2 options)[43].

Consider the mechanism of offering securities through a subsidiary offshore company. Consequently, the company must have the form of ownership of a private joint stock company. The main shareholder of the company creates a trust company in an offshore jurisdiction. That is, in an offshore jurisdiction, a company is created for the benefit of the beneficiary, who is not formally its owner, but in this way he

gets the right to invest his capital abroad. In order to legally enforce this right and the right to acquire beneficial ownership the Ukrainian resident is required to obtain a license from the National Bank of Ukraine (individual license for investment abroad). Thus, after obtaining such license the trust company indirectly owns shares of Ukrainian company.

It was this scheme of IPO used by the first Ukrainian holding company, which entered the IPO in 2005 on the London Stock Exchange - PJSC Poltava Mining and Processing Company. According to the prospectus, the shares were issued on behalf of Ferrexpo plc[45].

This scheme is one of the options for offering shares through offshore subsidiaries. Various modifications of this scheme are possible, in particular in the issue of transferring the proceeds back to Ukraine or in the form of ownership of the offshore subsidiary. However, the three basic steps remain the same: the establishment of an offshore subsidiary, the establishment of an instrument company in the country where the initial offering will take place, and the return of the funds to Ukraine.

However, there are some disadvantages of such structure of the IPO. Since another company is used for the implementation, formally the controlling shareholder is removed from the management of the direct issuer and its actual influence is also significantly reduced. For example, the main shareholder of the company PJSC "Poltava Mining and Processing Plant" enters the board of Ferrexpo plc only on the rights of one of the 5 non-executive independent directors [52].

So, as we can see, regardless of the market on which Ukrainian companies' shares are actually listed, the rights of minority shareholders in Ukraine are not protected at all, which as a consequence doesn't attract Ukrainians to the purchase of company securities.

Let us consider the second option of an IPO in foreign stock markets, it is an offering of shares through depositary receipts. So, first of all, we should define depositary receipts[46].

A depositary receipt (or certificate) is a derivative security that certifies the



ownership right of a resident investor to a certain amount of securities of a foreign issuer, the total issue of which is accounted for in foreign currency. Depository receipt, as well as shares, give its holder certain rights in relation to the issuing company, such as the right to vote, to receive dividends, a share of the company's property in case of its liquidation. In fact, the depository receipts are the documented equivalent of the securities of the issuer for their circulation in the foreign stock market, or the certificate of deposit of the shares. These financial instruments can also be defined as investments in assets of a non-resident issuer and a resident intermediary. Let us note some features of depository receipts as derivative securities:

- they pay a dividend higher than per share;
- enable investors to diversify their securities;
- the issuer may avoid restrictions on the transfer of securities abroad in certain countries and sell securities to foreign investors where their sale is prohibited or restricted or over-regulated;
- the issuer has the right not to be governed by the legal requirements of the country in which the shares issued through depository receipts are traded;
- the liquidity of depository receipts is generally higher than that of shares.

That is, this security is more attractive to investors due to its higher liquidity and higher dividends, while the depository receipts enable the issuing company to enter the foreign stock market.

In general, it should be noted that there are several types of depository receipts, and depending on the type that the company chooses, the rules for issuing this security also differ.

In general, there are American depository receipts, European depository receipts and global depository receipts. During the IPO by Ukrainian companies most often used American depository receipts, in particular, it is in this form circulate securities of Ukrainian companies such as: Dniproenergo, Zaporozhye Ferroalloy Plant, Nizhnedniprovsk Pipe Plant, Ordzhonikidzevsky GOK, Stirol, Ukrneft, Khmel'nitskoblenergo, Centrenergo. A distinctive feature of the American depository receipts is that they are denominated in US dollars and are freely tradable on both the

US and European stock markets, as well as over-the-counter trading systems.

There are four types of ADRs (American Depositary Receipts), which differ according to the strictness of the requirements imposed by US law on the issue of securities. Accordingly, the less "demanding" the issue, the lower the amount of investment the issuer can expect to make. These programs are as follows:

1. The Tier 1 ADR programme is a simple method of accessing the US market. It provides for the circulation of depositary receipts in the OTC market, so the company does not need to be listed (special procedures for the admission of its securities for trading on an exchange). Level One ADRs are also traded on the electronic trading system. In general, the legal requirements for the issue of depositary receipts of this level are the lowest. In particular, the statements of the issuer can be compiled by the standards of his home country (but translated into English). Thus, the main requirement of the SEC to the issuer within the ADR of the first level is the observance by the issuer of the law of his country [53].

Tier 1 depositary receipts are issued only for shares traded on the secondary market of the issuer's country. The cost of the first level ADR program is relatively low - from \$20,000 to \$50,000. However, the reliability of these receipts is considered low, so they are not always an attractive tool for stable investments. In quantitative terms, the majority of ADR programs account for receipts of the first level, but in monetary terms they occupy no more than 5 percent of the total market of ADR. The Tier 1 ADR programme can be subsequently upgraded to Tier 2 and 3.

2. The US Securities and Exchange Commission has more stringent requirements for the Tier 2 ADR programme. The issuer's financial statements for the past three years must, in essence, meet US GAAP requirements. When registering the issue, the issuer is required to file 2 special registration forms. In addition, it will be required to file its annual and interim reports. Tier 2 depositary receipts are traded on three major US stock exchanges. These are the New York Stock Exchange (NYSE), the American Stock Exchange (AMEX) and NASDAQ, the electronic stock trading system for high-tech companies. The cost of the second-tier ADR program is from \$200,000 to \$500,000 [47].

3. Another type of US depository receipts is Rule 144A ADRs. Such receipts are used in private placements and do not require registration with the SEC. The ADR program of this level provides for the circulation of receipts for 2 years among large institutional investors. It can be banks, insurance companies or investment companies. This program is popular among foreign issuers, as it provides minimal registration and reporting requirements. Rule 144A ADRs are traded on the PORTAL electronic system. The costs of this program range from \$100,000 to \$400,000.

4. ADR of the third level are preparing for the shares of the new issue. The requirements to this program are the most serious. During its registration the issuer, besides the forms stipulated by the second level program, presents one more document - prospectus. In particular, it should contain the information on the plan of shares offering, investments use, risk factors, ratio of profit and fixed costs, etc. The issuer's financial statements must be drawn up in full in accordance with US GAAP requirements. Level 3 ADRs are traded on the NYSE, AMEX and the NASDAQ system. The cost of the third-tier ADR program is from \$300,000 to \$500,000[34].

Generally speaking, the scheme of depository receipts issue and of access to foreign stock markets in this way is used not only in Ukraine, and it does not differ much from country to country.

The last method for Ukrainian companies to enter foreign stock markets is through depository receipts issued by a subsidiary (offshore) company. This method is a combination of the first two. As a matter of fact, it is seldom used. Its essence is that a subsidiary company is established in the country where the offering is planned, which will issue depository receipts. The company establishment procedure is similar to that described above.

Today there is a tendency of growth of issues through subsidiary offshore companies, including out of 21 issues aimed at attraction of new capital only one company - Real Estate, working in Ukrainian market, entered foreign stock exchange as company-resident of Ukraine, i.e. without creation of intermediary company by creating depository receipts of foreign investors without violating legislation on issue and circulation of securities, all the rest created subsidiaries in offshore zones.

In general, companies most often prefer depositary receipts when entering foreign stock markets. This is primarily due to the fact that this instrument gives more opportunities for investors and thus is more attractive for them. Also, it should be noted that many banks have been established which directly place Ukrainian securities abroad. Such investment banks include, in particular, Deutsche Bank.

The main advantages Ukrainian issuers receive when issuing depositary receipts are:

- Commercial: expanding the market supply of own securities, improving the style of the issuer;
- Financial: - access to the international capital market; stabilization or increase in quotations of the issuer's shares;
- Strategic: expand the range of potential investors, obtain an efficient mechanism and a profitable tool for mergers and acquisitions.

On the one hand, companies that list their securities on stock exchanges other than the Ukrainian one bypass the law and transfer part of their capital abroad, which of course undermines Ukraine's economy. Yet the Ukrainian stock market is extremely inefficient, with low liquidity, a flawed legal framework, and a deep economic crisis, which significantly impedes its development. Companies enter foreign markets as there is no prospect of raising capital in sufficient quantities in the domestic market due to a lack of large investors and low purchasing power of the population.

The first IPO of a Ukrainian company in the foreign market took place in 2005, when the company "Ukrproduct Group" of the food industry entered the London Stock Exchange. Since then, the number of companies going public has been growing [50].

Therefore, let us analyze IPOs of Ukrainian companies for the period 2005-2018 in the context of stock markets, jurisdiction of the issuer, the amount of capital raised and financial intermediaries that were involved in the IPO.

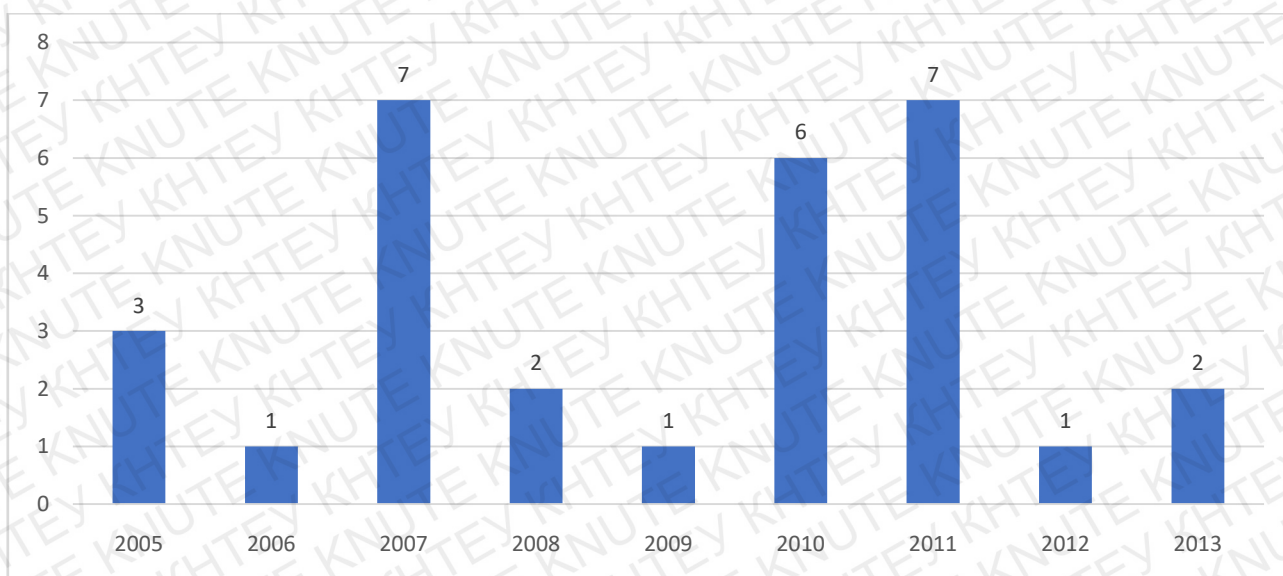


Fig.2.4 Number of IPOs of Ukrainian companies in 2005-2018

Source: Built by the author on the basis of [52]

So, first of all, let us analyze the number of IPOs by years. The most successful years for Ukrainian companies were 2007 and 2011, when the IPO was carried out by 7 companies each. The most unsuccessful year was 2014, during which not a single Ukrainian company carried out the initial offering, which is a consequence of the economic crisis in the country, and hence the deterioration of the companies. Reduction in the number of IPOs in 2008-2009 is also due to the economic crisis, which means that only very large companies can afford the IPO.

A total of 28 Ukrainian companies conducted IPOs from 2005 to 2014 inclusive. Of these, the majority - 43% (12 companies) - are agricultural companies belonging to the agricultural sector. This is the most promising industry in Ukraine, which is rapidly developing and requires attracting large amounts of capital. The second place is taken by real estate companies with the share of 18% (5 companies). Transport and logistics, industrial production and financial services each account for 1 company. The metallurgical and mining industries account for 14% and the oil and gas sub-sector for 7%. In other words, it is obvious that mainly among Ukrainian companies IPOs can be afforded by companies engaged in processing of raw materials and agrarians. This shows the negative trends in the field of domestic science-intensive industries.

Below we consider the structure of the IPO depending on the implementation site:

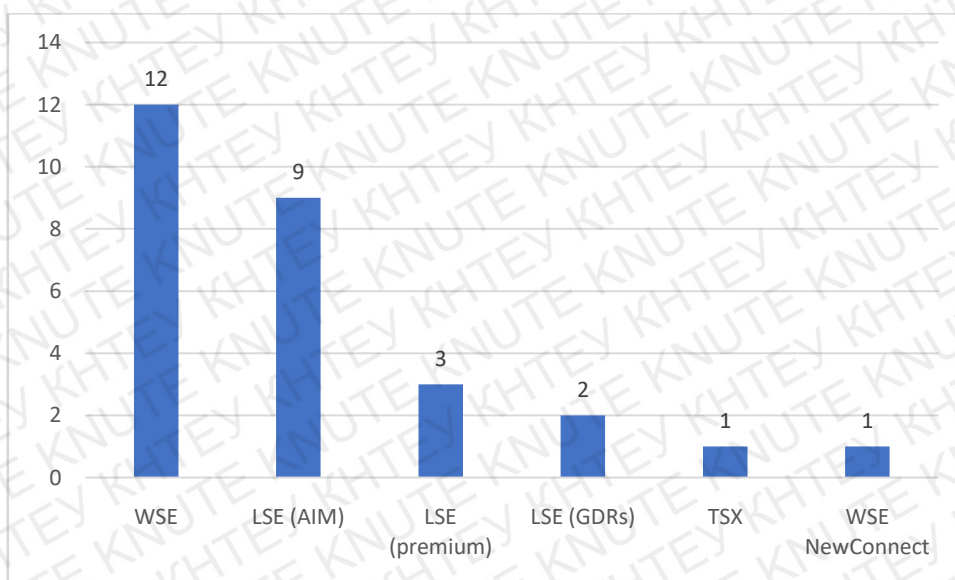


Fig. 2.5 IPOs of Ukrainian companies on stock markets.

Source: built by the author on the basis of [50].

The Warsaw Stock Exchange is leading in IPOs by Ukrainian companies, with 14 Ukrainian companies (including one on WSE NewConnect) having IPOs and are now listed on the Exchange. 13 had their initial public offering on the London Stock Exchange and one IPO of metallurgical company Black Iron took place on the Toronto Stock Exchange.

As we can see, companies belonging to the agricultural sector mostly conduct initial offerings on the Warsaw Stock Exchange. This is primarily due to the fact that in Poland there is a strong interest in Ukrainian agricultural companies, as well as the fact that the amount of placement of these companies is less than 100 million dollars. In other words, going on the London Stock Exchange will not give the company a sufficient level of capitalization as the LSE is mostly invested by large investors interested in buying a large share of large companies.

Companies operating in the field of real estate and finance hold their IPO on the London Stock Exchange, as their financial resources are usually large enough to carry out an initial offering of securities on this platform.

To compare stock exchanges by this very criterion, consider how much money has been raised by companies as a result of the IPO.

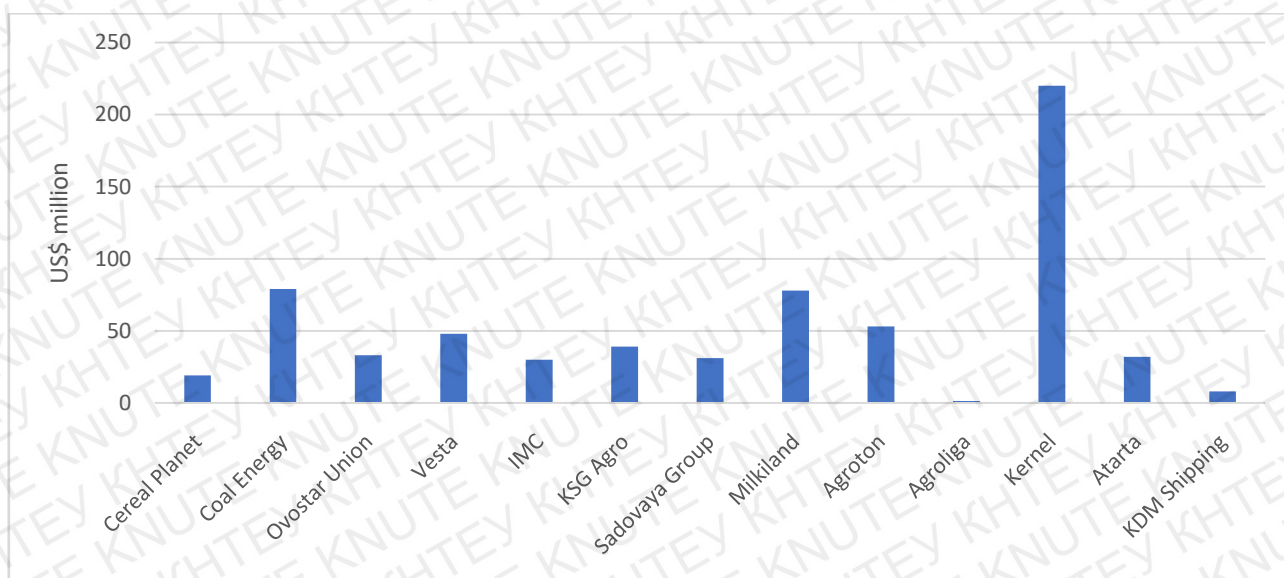


Fig. 2.6. Volume of capital raised as a result of IPO by Ukrainian companies on the Warsaw Stock Exchange.

Source: Built by the author on the basis of [57]

The average amount of funds raised by Ukrainian companies on the Warsaw Stock Exchange was \$51.6 million. The agricultural company Kernel managed to raise the most money - 220 million dollars. The least successful was the initial public offering by Agroliga, which managed to attract only USD 1.4 mln. However, it should be noted that Agroliga is considered a rather small company, as its land bank is small. Therefore, we can consider the raised capital of 1.4 million USD as a very successful exit to the stock market of this company.

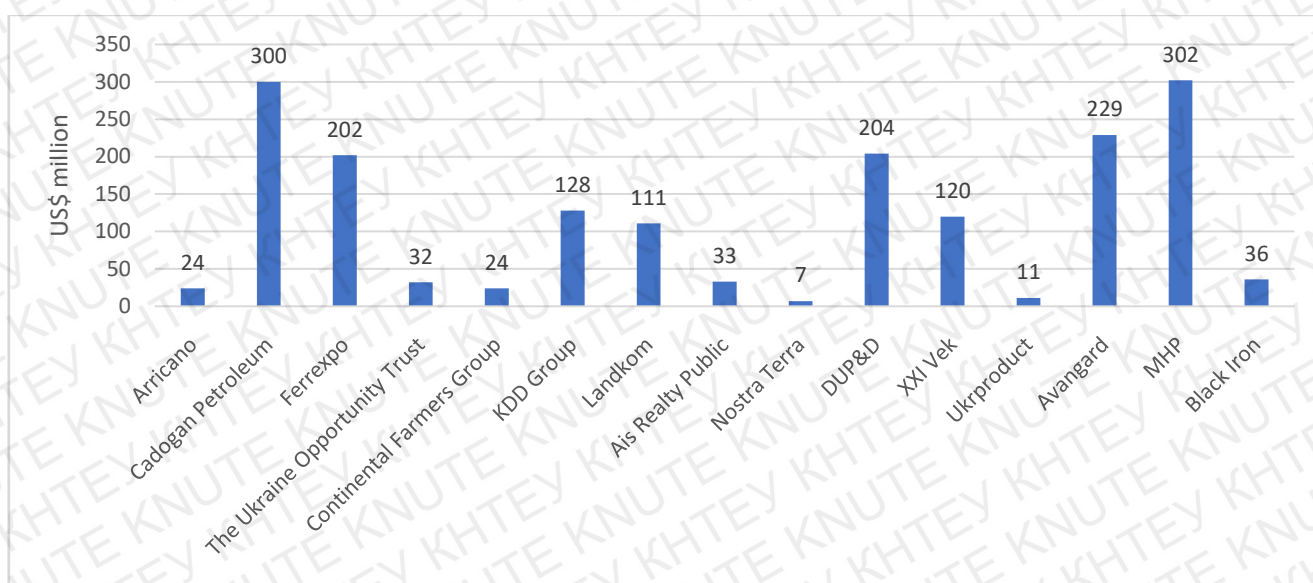


Fig. 2.7. Amount of capital raised by Ukrainian companies through IPO on the London and Toronto Stock Exchanges.

Source: Built by the author on the basis of [56]

On the London Stock Exchange, the average volume of funds raised is on average higher than on the Warsaw Stock Exchange. The first four companies shown in Figure 2.6 were listed on the main market of the London Stock Exchange. The volume of capital raised is highest in the oil and gas sub-sector company Cadogan Petroleum, at \$300 million. US DOLLARS. At the alternative market of the London Stock Exchange DUP&D Company managed to attract the largest amount of funds - \$204 mln. USD 204 MLN. Two Ukrainian agricultural companies entered the LSE not with stocks but with global depository receipts - Agrarian Holding Avangard and Myronivsky Hliboproduct. The amounts raised by both companies are significant - \$229m and \$368m, respectively. The only Ukrainian company that held its IPO on the Toronto Stock Exchange was steelmaker Black Iron,

As for the prospects of Ukrainian companies regarding the initial offering of their securities on foreign stock markets, an IPO of 25 Ukrainian companies was planned for 2015, of which 8 companies have already found investment banks dealing with their entry to the Warsaw Stock Exchange (including 1 company plans to enter the WSE (NewConnect)). The average expected percentage of capitalization from the IPO 25-35%. Among such companies, in particular: Ukrgazdobycha, MCB Agricole, and Ukrzernoprom. Agrarians will actively enter the market, which, despite the situation in the country, continue to be of interest to foreign investors [54].

Summing up the analysis of Ukrainian companies' EDI market we can say that so far such practice remains uncommon for Ukraine, but there is a tendency for the number of transactions to increase. The Warsaw Stock Exchange remains the most popular stock exchange for Ukrainian issuers, primarily because of the high interest in Ukrainian companies there, particularly those operating in the agricultural sector. The London Stock Exchange is more attractive for companies engaged in extraction and processing of raw materials.

However, the amount of funds raised in an initial public offering depends not only on the stock exchange, but also on the size of the company. The most successful IPO of a Ukrainian company in terms of volume of funds raised was the IPO of "Myronivsky Hleboproduct", which raised more than \$ 300 million. U.S. dollars



So, the initial public offering is a rather lengthy process requiring large financial outlays and proper selection of financial intermediaries. Only companies that have long-term growth prospects and predictable market conditions can authorize an IPO, because the time interval between the decision to conduct an IPO and the direct placement of securities on the stock market is about 2 years. There are four phases of an IPO, each of which must be planned. An initial public offering has a number of drawbacks for the issuer - financial statement disclosure, alienation of a certain portion of shares from investors to minority shareholders to meet the listing conditions, reorganization of the business, if necessary. However, such requirements are mainly related to the possibility to attract significant amounts of capital for further growth, which does not have to be returned unlike loans, but has to be paid out as dividends over time. Placing shares on European stock markets increases the company's prestige and the confidence of new investors in it.

Today all IPOs of Ukrainian companies are held abroad through certificates of deposit, or through the so-called "company-instrument", which directly issues the quoted shares on the market. Such ways of entering foreign markets is due to deficiencies of the Ukrainian stock market and legal restrictions. The main reason why large domestic companies ignore the Ukrainian stock market is its low liquidity and acute shortage of investors. Companies carry out IPO to raise capital, which is simply impossible and ineffective without a wide range of buyers for their securities. Therefore it is inexpedient for large companies to carry out IPO in Ukraine, at this stage of development of the country, as their losses will be significant. Another reason is the imperfection of the legal framework,

The effectiveness of the initial public offering of the company's securities can be measured by the investments raised as a result of the IPO. The success of the IPO, and therefore the amount of financial resources raised, depends on many factors: the investment bank, the company's financial capacity, the securities offering venue, market conditions, etc. However, a proper valuation of the company during the IPO is one of the most important factors since undervaluation or overvaluation of its securities may entail significant losses both for the company and the investors.

## **2.2. Investment attractiveness assessment of Ukrainian agricultural corporations in international markets**

Investment in the agricultural sector of any country can be attracted in different ways, the main of which are the following: the additional issue of shares, bonds, attracting a foreign partner to create joint ventures, attracting funds from international financial institutions, holding privatization tenders, which provided for the investment development of enterprises, attracting international loans, etc.

The method of attracting a foreign investor through the establishment of a joint venture is the most common at the beginning of economic reforms. It makes it possible to establish the operation of an enterprise both during and after privatization.

Attracting additional funds by means of a secondary issue of shares is quite attractive. But it concerns only stably operating enterprises. The latter can issue their securities to replenish their own working capital. This way of attracting investments is not yet widespread enough in Ukraine.

The main feature of the modern investment strategy should be an increase in the efficiency of the national economy, which would expand the limits of accumulation, suspend the decline and then stabilize the rate of production accumulation. The purpose of investment programs should be the reorientation of significant financial resources to the development of industries satisfying consumer demands of the population.

Agrarian sector of Ukraine requires significant investments of investment resources to update the material and technical base, its modernization, the use of new technologies, expanded reproduction of productive capacity, all this leads to the need to find additional investment support. In conditions of limited and high cost of domestic investment resources it is relevant to attract foreign investments and funds in international financial markets.

Experts predict that despite the fact that the agro-industrial complex will use only about 10% of the population, Ukraine has a chance of becoming one of the largest food producers in the world by 2050.

The factors that form the attractiveness of the agricultural sector for foreign investors are listed below:

Agribusiness is the main sector of the economy, where investment and innovation projects under the Investment and Innovation Development Programme in Ukraine are implemented.

High level of soil fertility and favourable weather conditions for growing crops. Ukraine has the largest area in Europe that is suitable for growing grain crops (32.5 million ha). Twenty five percent of the world's black soil is concentrated in Ukraine. Ukraine's mild climate gives farmers a significant competitive advantage.

Export potential. Today, Ukraine is the world leader in sunflower oil and barley exports. In recent years, Ukraine has produced about 4,050 million tonnes of wheat and thus strengthened its position as a major supplier of wheat to the world market.

High profitability of Ukrainian agricultural companies. Ukrainian agricultural holdings show higher efficiency than other global companies, mainly due to lower production costs (cheap labour force, low land lease costs), on the one hand. On the other hand, these advantages are only achieved due to the high level of soil fertility and not due to the use of new technologies. Thus, there is an opportunity to increase the efficiency of growing on the basis of the involvement of new technologies.

European integration. Positive factors include the European integration processes (in 2016-17, due to the Association and Free Trade Zone (FTA) regulations, agricultural companies increased their exports to the EU, there are potential opportunities to increase quotas and realize the full potential of trade and investment cooperation with the EU)

The potential for revenue growth from foreign investment. PJSC Myronivsky Hliboproduct announced that it will invest in setting up its chicken processing plant in the Netherlands. This demonstrates that agribusiness companies not only have export potential, but also the potential to generate income from foreign investment.

In recent years, Ukrainian agriculture has demonstrated remarkable resilience to any macroeconomic shocks. During the financial crisis of 2008-2009, against the background of general decline in the economy, the agricultural sector continued to

grow and even actively attracted investment. It turned out to be the most protected sector of the economy, as Ukraine's economy contracted by almost 15% in 2009, while the agricultural sector lost just 2%. Such characteristics of Ukraine's agricultural sector and its high growth potential attract foreign investors, who see this sector as one of the most attractive in Ukraine.

In order to adequately assess the attractiveness of the agricultural sector of Ukraine, we should analyze this market in more detail.

According to the Agrarian Platform "Offer", over the past five years, Ukraine has strengthened its position on the international agricultural market and is firmly in the world's top ten grain producers.

In 2018, 56% of the sown area (about 14,349.5 thousand ha) consisted of cereals and leguminous crops, indicating their leading position in the agricultural sector. In general, the production of cereals and leguminous crops in Ukraine had an upward trend, in particular, between 2012 and 2018 there was an increase in production by 1.43 times (average growth rate of 3,654.5 thousand tons for the period).

In 2017, there was a decline in production, which was due to lower corn and grain production, the reason for which should be attributed to low prices on foreign markets. However, in 2018 production increased again, which in turn led to a record harvest: wheat - 42.1 quintals per hectare, rye - 27.3 quintals per hectare, corn - 66 quintals per hectare, peas - 31.3 quintals per hectare

As of 2018, the distribution of Ukraine's sown areas and production volumes of grain and leguminous crops in Ukraine was as follows:

- wheat - 39% of production and 43% of sown area
- corn for grain - 42% of production and 30% of sown area
- barley - 14% of production and 20% of cultivated area

Production of other types of cereals and leguminous crops in Ukraine was insignificant and varied within 0.08%-1.3% of the total agricultural output.

Despite the growth of production volumes, the level of consumption in the domestic market is decreasing. In the period from 2012 to 2018, there was a 1.12-fold decrease, which was caused by the decrease in the population and the decrease in the

consumption of bread products per year per person. The total decrease since 2000 was 1.21 times (from 124.9 to 103.2 kg), which, despite the demographic reasons, indicates a decrease in the purchasing power of the population.

Despite an overall downward trend, consumption increased by 0.81% in 2018.

Over the last three years, export volumes in monetary terms have slightly decreased (from 2014 to 2018, the decrease was 1.4 times). This fluctuation was caused by lower commodity prices in foreign markets and, however, did not affect the increase in export volumes in quantitative terms (in 2018, 50 mln t of grain was exported, which is 25% more than last year and is a record high for the years of Ukraine's independence).

The structure of agricultural exports is as follows:

- wheat - 44.73%
- corn - 43.69%
- barley - 10.96%

The Ukrainian agricultural sector is export-oriented; in particular, imports of agricultural products are significantly less than exports and continue to decline. In 2012-2018, imports increased by 1.4 times and consisted mainly of niche crops (77.46% of total imports) and rice (16.61%).

The largest producers and exporters of grain in Ukraine in recent years were Nibulon (7.9% of total supplies), Kernel (7.2%), GPZKU (4.6%), Cargill (3.3%) and ADM Trading (3.2%).

Compared to 2015, Nibulon's share of total grain exports decreased by 0.2% (from 8.1% in 2015 to 7.9% in 2016). In recent years, there has been a trend towards displacing foreign companies from leading positions. For example, in 2017 there were no foreign companies in the top three, when in 2016 there were two. In 2018, the trend persisted.

Let us consider the dynamics of foreign direct investment (FDI) in Ukrainian agriculture and its share in the total volume of FDI in Ukraine. From 2009 to 2015, there was an upward trend in the volume of FDI in the agricultural sector of Ukraine. However, FDI in agriculture accounts for a small share of total FDI in Ukraine: the

average share of FDI in agriculture over the last 5 years is about 1.47%. At the beginning of 2015, this share decreased slightly (from 1.64% at the beginning of 2011 to 1.3%).

By 2014, FDI inflows to the economy and the agricultural sector in particular were on the rise, but over \$245 million of foreign direct investment (equity capital) was withdrawn from agriculture, forestry and fisheries in Ukraine in 2014, accounting for about 29% of the total.

The decline in investment did not occur only in the agricultural sector. At the same time, the overall rate of reduction of FDI in the Ukrainian economy was slightly lower and amounted to about 21% [60].

Agriculture in Kyiv and Ivano-Frankivsk regions is the most attractive to foreign investors. These regions receive about half of the industry's investments, with Kyiv region attracting 20%, Kyiv region 15.8%, and Ivano-Frankivsk region 12% as of early 2016. This is followed by a group of seven regions with FDI attracted in the range of 3-7% of the total: Dnipropetrovsk, Kharkiv, Lviv and others.

More than half of the investments (56%) are directed to crop production, mainly to the cultivation of annual and biennial crops. In 2016, 34% of foreign direct investment was directed to livestock farming[55].

Ukraine's agricultural sector is significantly export-oriented, which protects it from currency risks and provides more opportunities to attract capital from abroad. Thus, many agricultural holdings use such methods of attracting foreign investment as IPO, Private Placement, Eurobonds, syndicated loans, loans of economic development organizations.

For Ukrainian agricultural companies the year 2013 was ambiguous. The fall in global and domestic food prices amid rising production costs led to a decrease in the quotations of a number of Ukrainian companies operating in the segment of crop production - Industrial Milk Company, KSG Agro, Agroton - and oilseeds processing, such as Kernel [64].

Assessing the investment attractiveness of Ukrainian agricultural holdings in 2017, it should be noted that even despite the lack of real IPOs in 2014-2017, foreign

investors still remain interested in this segment. However, today the type of investor who has this interest differs from the type previously observed.

Whereas in 2005-2011, investors were buying shares of Ukrainian agrocompanies in order to make a fundamental investment, which should have good long-term profitability, now these shares are bought by investors who expect to make a quick buck on the volatility of Ukrainian issuers as a class.

In the first half of 2017, share prices of Ukrainian agricultural companies underwent not so unambiguous changes (Table 2.1). Avangard, Milkiland and Agro suffered the biggest drop in value, while Kernel saw the biggest increase.

The significant growth in Kernel's share price can be attributed to the company's successful actions to improve its financial performance, namely by achieving profit over the previous period, a 78% increase in EBIDTA and a successful reduction in various expenses.

Other companies, on the contrary, could not find successful management solutions to overcome the difficult situation in the economy. In particular, Avangard CJSC is now restructuring its \$200m debt. This had a negative impact on investment hopes.

*Table 2.1*

**Dynamics of Ukrainian agricultural companies quotes on global exchanges in 2018**

Companies	Exchange	Change, %	Companies	Exchange	Change, %
Agroton Public Ltd.	WSE	-40,85	Ovostar	WSE	+15,47
Astarta Holding NV	WSE	-5,78	Agroliga	WSE	-35,12
Kernel Holding SA	WSE	+68,84	Cereal Planet PLC	WSE	+2,36
Milkiland	WSE	-75,93	CJSC Avangard	LSE	-85,79
CJSC Industrial Dairy Company	WSE	-38,29	OJSC Mironovsky bakery products	LSE	-9
KSG AGRO SA	WSE	-74,76	Ukrproduct	LSE	-26,05

*Source: Built by the author on the basis of [54]*

In general, the investment attractiveness of companies in the Ukrainian agricultural sector is affected by a number of problems and advantages.

Among the main problems faced by farmers are changing geopolitical conditions, loss of some land, devaluation of the hryvnia, and problems with financing. Issues

related to the security of transport corridors have also become more acute. All these factors have a negative impact on the investment attractiveness of Ukrainian agricultural companies.

Among the advantages are the potential for economic growth and export volumes. However, the results of 2014 and the first quarter of 2015 show that the agricultural industry needs a major boost for this. The industry needs new reliable markets and, accordingly, investments in quality improvement and product certification.

The privatization of agricultural enterprises can become an additional factor in the development of the industry. The past year has confirmed the prevalence of management efficiency of private forms of ownership over public ones [55, 56].

Consequently, the international investment attractiveness of the agrarian sector of Ukraine lies in its characteristics such as the presence of constant demand and growth prospects, prosperous conditions for the development of agriculture in Ukraine. Among the main factors that negatively affect the investment attractiveness of the agricultural sector for foreign investors, first of all, it should be noted: political, financial, economic, social and environmental. To increase the inflow of foreign investments into the agricultural sector it is necessary to create favorable conditions for management, which involves the introduction of a system of measures aimed at improving the investment climate, ensuring transparency and stability of legislation in the field of investment.

Ukrainian agricultural corporations have certain risks in international financial markets, which may be justified by sovereign risk, size or liquidity risk, but the available cash generating capacity of companies as a key factor for future revaluation. Sufficiently high profitability Ukrainian agricultural producers translate into tight money-generating capacity, they used their accumulated cash flows extensively for capital investment prior to 2014. Domestic agricultural corporations have recently embarked on medium-term expansion, encouraged by Ukraine's macroeconomic stabilization. Large-scale expansion projects are expected to be completed by 2020, increasing the cash balances available for distribution to lenders and shareholders. The resulting dividend payout potential implies higher sustainable cash flows,



triggering higher prices. (Table 2.2)

Ukrainian agricultural corporations retain their competitive position in international markets due to abundant resource base and low production costs, with profitability of local agricultural operations, which exceeds the performance of competitors.

*Table. 2.2*

**Key performance indicators of Ukrainian agricultural corporations in 2018**

Company	Business	Share price, US\$	Market value, US\$ million	Enterprise value, US\$ million	Change for the year	Trade volumes, US\$ million	2018 EV/EBITDA
Astarta Holding	Sugar	15.71	393	491	14%	11	3.7
IMC	Grain	3.84	127	165	83%	2	3.3
Kernel Holding	Sunflower and the oil	13.85	1,135	1,539	-11%	42	6.4
MHP	Poultry	13.6	1,452	2,548	29%	28	5.5
Ovostar Union	Eggshell	27.6	166	143	22%	0	4.7

Source: Built by the author based on [64, 65, 66, 67, 68,69]

At the same time, Ukrainian agricultural corporations have a median 2018E EV/EBITDA of 4.7x (ranging from 3.3x for IMC to 6.4x for Holding Kernel). While the lower performance of foreign competitors may be partially justified by sovereign risk, size and/or liquidity risk, it should be noted that the cash generating capacity of Ukrainian companies is a key factor in their revaluation and investment attractiveness.

The better profitability of Ukrainian agricultural corporations is supported by their extensive involvement in crops (around 40% of the combined operating margin), benefiting from low production costs, as well as poultry, egg and sugar beet production, all of which are growing more export-oriented. Higher profitability means robust cash generating capacity compared to developed and developing country competitors (based on operating cash flow to net sales) (Figure 3.3), with accumulated cash flows were widely used to expand capital investment in the economic downturn in 2013-2014.

The above Ukrainian agricultural corporations embarked on a medium-term expansion, supported by Ukraine's macroeconomic stabilisation and their successful debt reduction in 2014-2016 (average net debt / operating profit to 0.9x at end 2016 from 2.2x at end 2) returns on invested capital Kernel Holding outperformed local competitors regarding land bank expansion, adding 217.5k ha in 2017 to increase its area by 56% to over 600,000 ha. Other major producers, including MHP and Astarta Holding, expect medium-term expansion to 500,000 ha (+35% of current area) and 400,000 ha (+60%) respectively. Outside of farming, MHP's current project in the second phase of the Vinnitsa project will increase poultry production capacity by 45% by 2022. Error! Bookmark not found. In addition, Kernel continues construction of a 4.0 mln tonne deepwater terminal in Ukraine and is considering a greenfield project to build a 1 mln tonne multi-purpose crusher in western Ukraine. Nevertheless, the lion's share of cash flow from the deals is likely to be used for expansion in 2018-2020, underpinning the growth in operating margins.

The limited decline in capital after 2014 resulted in a decline in free cash flow indicated by producers (FCF) to a peak average of 26% in 2015 (from -4% for MHP, reflecting a significant increase in working capital, to 66% for IMC ). In 2016, the average FCF share normalized at 14%, ranging from 9% for core to 40% for IMC at an average of 12%. When companies returned to expansion last year, their total capital investment in 2018 doubled from last year. FCFs are expected to return to an average annual return of 5% in 2018-19, with individual yields ranging from 8% to 12%, but still outperforming their foreign counterparts. Although the timing of land expansion is less certain, depending on, among other things, high-yield expansion opportunities).

After 2020, assuming the key expansionary goals of companies are achieved by now, higher cash flows from operations and moderation of capital expenditure are expected to result in increased cash available for distribution to lenders and shareholders. Growing increases in FCF contribute to higher dividend distributions. Three of the five companies analysed (MHP, Kernel Holding and IMC) have formal dividend policies, distributing 10-30% (Figure 2.6) of their free cash flow - compared

to their developed and emerging market competitors - 40-50% in 2017, implying increased payouts.

WSE-listed IMC is a new example of the shift in focus from growth financing to dividend growth. According to its recently revised 2016-2020 strategy, the company does not plan any major growth in land banks until there is an emerging market for agricultural land in Ukraine, focusing on operational efficiency projects, debt reduction, and dividend payout to shareholders. With this in mind, it is expected that IMC may allocate US\$7-10m for dividends from 2019. (from the \$2 million paid in 2017), bearing in mind a payout ratio of 35-45% and a gross dividend yield of 6-8% (up from 2% last year). IMC's share price is also up 129% since the company first announced its dividend policy in July 2016,

While the completion of ongoing capital investment programs could result in higher dividend payout ratios for MHP, Kernel Holding and IMC, it is possible to believe that other large agricultural producers, namely Astarta Holding and Ovostar Union, could also choose to move in favor of introducing formal dividends. policy in the medium term As the IRR of new expansion projects normalizes to the level of foreign competitors as the local agricultural market matures, dividend distribution could become vital So far, Astarta Holding and Ovostar Union have not made explicit promises regarding potential dividends in the near term. [66, 67]

So, having analyzed these Ukrainian companies, we concluded that the investment attractiveness of Kernel agroholding is somewhat worse in relation to its competitors. That is why we chose this particular company for further more detailed assessment of investment attractiveness and development of practical recommendations for its improvement.

Having analyzed the state of development of the world investment market and investment attractiveness of Ukrainian agrarian sector we revealed:

The global equity market is characterized by prominent financial centers that concentrate the main circulation of capital. China and India remain the main markets and drivers of global equity trading activity; global market capitalisation has declined by 1% since 2017, mainly due to falling equity trading capitalisation in EMEA and

South America. Key long-term trends in international portfolio investment should include: growth in financial and, in particular, portfolio assets along with increased global financial deepening (financial assets to GDP ratio); growth in foreign portfolio investment and increased interconnectedness between financial markets globally; foreign portfolio investment exceeding FDI; outperforming growth in developing country financial assets, predominantly through equity capital and services

During the period from 2005 to the present day Ukrainian companies conducted a total of about 28 international IPOs. During this time, a number of Russian companies have listed their own shares on international stock exchanges. Especially popular are European stock exchanges, such as London and Warsaw. Most of the Ukrainian companies which carried out IPO, belong to the agricultural sector, which expresses the development of this area of business. It is worth noting that the holding of IPO companies depends significantly on the overall situation in Ukraine, so during the crisis in 2009 and up to 2018, there was no IPO. In addition, the total volume of Ukrainian IPOs is extremely small, which is influenced by a number of restrictions and strict regulation under the Ukrainian legislation, the difficulty in setting up the business according to international practices of transparency and efficiency,

The international investment attractiveness of the agricultural sector of Ukraine lies in such characteristics as the presence of constant demand and growth prospects, the favorable conditions for the development of agriculture in Ukraine. To increase the inflow of foreign investments into the agricultural sector it is necessary to create favorable economic conditions, which involves the introduction of a system of measures aimed at improving the investment climate, ensuring the transparency and stability of legislation in the field of investment and taxation, reforming the tax system.

## SECTION III

### DIRECTIONS FOR INCREASING THE INVESTMENT ATTRACTIVENESS OF UKRAINIAN AGRICULTURAL CORPORATIONS

#### 3.1. Positioning and investment attractiveness of the agricultural holding "Kernel" as a recipient of foreign investment

In order to illuminate the positioning of the company, one should first become familiar with its activities and only proceed to a more detailed assessment of the investment attractiveness of the company.

Kernel is one of the largest agricultural companies in Ukraine and a competitive player in Russia. The company is vertically integrated and has been on the Ukrainian market since 1994. Kernel produces, refines, bottles and sells in bulk sunflower oil - both internationally and domestically - and also grows its own grains and oilseeds and exports corn, wheat, barley, soybeans and rapeseed.

As an export-oriented company, Kernel operates a large asset base necessary for the efficient and uninterrupted supply of agricultural products produced in excess of domestic consumption in Ukraine and Russia. The company's assets include farming enterprises in the Black Earth regions of Ukraine, oil extraction plants located in the sunflower growing areas of Ukraine and Russia, the largest network of elevators throughout Ukraine, and seaport terminals on the Black Sea coast of Ukraine and Russia. The company's business model is based on leading positions in all key segments and competent risk management.

The company specializes in: sunflower oil production; export of sunflower oil and grain crops; domestic distribution of bottled oil; grain cargo handling services at Illichivsk and Nikolaev ports; storage of grain and oil crops at domestic elevators; agricultural production.

The company includes dozens of enterprises in Kyiv, Vinnitsa, Dnipropetrovsk, Donetsk, Zaporozhye, Kirovograd, Lugansk, Lviv, Nikolayev, Odessa, Poltava, Kharkiv, Cherkasy regions.

The portfolio of sunflower oil brands includes the following products: "Schedry Dar", "Stozhar", "Chumak Domashnaya", "Chumak Zolotaya".

*Table. 3.1*

### Segments where company operates

Segment	Description
Sunflower oil	The Company is Ukraine's largest producer and exporter of sunflower oil, whose manufacturing process includes the receipt of sunflower seeds and their processing into crude sunflower oil and meal. Unrefined sunflower oil and meal are sold on the international market.
Bottled oil	The Company is the largest producer and supplier of bottled sunflower oil on the domestic market. Activity in this segment is refining of raw sunflower oil and its packaging. The main sales market is Ukraine, where oil is sold mainly under the Company's brands directly to large retail chains or through regional distributors.
Grain	Kernel is a leading exporter of grain from the Black Sea basin. The company serves as a link between Ukrainian and Russian agricultural producers and international markets, occupying a leading position in grain supply. The Company creates value through its logistics infrastructure, high level of competence, application of modern approaches in international marketing and sales, and by taking advantage of the natural competitive advantages of Ukrainian agriculture.
Port terminals	Kernel is one of the leaders in the provision of services for the transshipment and export of grain, vegetable oil and meal. The company tranships its own grain and also provides services to third parties through the grain terminal Transbulkterminal (Illichevsk).
Elevator services.	Ukraine's most privately owned network of grain elevators. Kernel offers grain and oilseeds storage services at its elevators with a total disposable storage capacity of 2.8 million tonnes. The company's elevators are located in areas with a concentration of processing capacity and agricultural production.
Agriculture	Large-scale agricultural production. Kernel farms 550,000 hectares of land with unique soil quality mainly in the northeast and southwest of the country, providing short distances to storage (elevators) and processing facilities, as well as fast transshipment through Black Sea export terminals.

Source: Built by the author based on [68]

Kernel Holding SA is a joint stock company incorporated in Luxembourg and listed on the Warsaw Stock Exchange.

Since 2014, Kernel Holding SA has maintained a steady annual dividend of \$0.25 per share, payable in U.S. dollars.

Kernel launched its initial public offering (IPO) on the Warsaw Stock Exchange (WSE) on November 13, 2007 in the amount of \$221 mln. The price per share at the IPO was 24 Polish zlotys (PLN). The total number of shares sold was 22.8 million, of which 16.7 million were new shares, 3.13 million were existing shares, and 2.97 million were new shares. The total capitalization of the company is \$613 mln. The

money raised in the IPO will be used for: the construction of an oil extraction plant for sunflower, canola and soybean processing in Mykolaiv region with the capacity of 510 thousand tons per year; acquisition of port facilities for storage and transshipment of exported grains and oilseeds; development of existing production capacities during 2008-2010; increasing the area of leased agricultural land up to 80,000 hectares; increasing the working capital of the main shareholder. The company also identifies three major stakeholders with a controlling stake (over 5%): Namsen LTD (39.3% stake), ING OFE (6.0% stake), Cascade Investment Fund (5.0% stake) [70].

As of the month of March 2019, the value of one Kernel share was about 53 PLN (\$13.75). The company's share price reached its historical maximum in 2011 (85 PLN), but due to falling grain prices and lower yields, Kernel showed a decline in revenues by about half as of 2014, which affected the share price (Figure 3.8). As of today, the company's management has taken decisive measures by improving the company's financial performance.

Kernel shares are included in the following Warsaw Stock Exchange indices: WIG30, WIG-CEE, WIG-Ukrain, InvestorMS, WIG-FOOD, mWIG40, WIG. Separately, it is worth highlighting the WIG-Ukrain index, which was created in 2011 and includes shares of Ukrainian companies that went public via IPO on the Warsaw Stock Exchange (currently it includes 7 companies). Astarta, one of the most liquid companies, and Kernel together account for 75% of the weight of the WIG-Ukraine index. In general, Kernel belongs to the blue chip companies - the most reliable on the Warsaw Stock Exchange [70].

Let's start assessing Kernel's investment attractiveness by analyzing the company's consolidated financial statements - balance sheet, income statement and cash flow statement (Appendices A, B) and the key financial indicators calculated on their basis.

The company's assets grew about 14 times over the studied period from 2007 to 2018 - from \$155, million in 2007 to \$2,210.5 million in 2018 (Fig. 3.9). In value terms, fixed assets grew the most in the period 2007-18, which can be explained by

the company's accession to the Warsaw Stock Exchange 2007 and, consequently, opening up access to funding for the expansion of production of capacity

Equity capital of the company in 2007-18 increased by USD 1,130 million (from USD 47.6 million to USD 1,178 million). The company's equity capital increased from USD 47.6 million to USD 1,178 million. The biggest change occurred in 2007-2008, primarily due to the company's listing on the Warsaw Stock Exchange.

The company's liabilities increased more than 9-fold over the study period (from \$108.3 to \$1,032.9 million) mainly due to the growth of current accounts payable, which accounted for 66% of the company's total liabilities in 2018 (Figure 3.10).

Based on the analysis of Kernel's income statement, a financial analysis of the company's sales (gross revenue), operating profit and net profit for 2007-18 was conducted (Figure 3.11).

In 2018, the agroholding sold \$2403.0 million worth of products. This was seven times higher than in 2007 (USD 350.4 million).

The share of cost of sales in the company's gross revenue structure as of 2018 is 88%. Operating expenses, which included administrative expenses (\$79.9 million) and distribution-related expenses (\$153.5 million), represented 10% of our total revenues in 2018. Although gross revenue declined in 2018 compared to 2017, operating income halved (from \$265.0 million to \$139.6 million) Kernel ended the financial year with a positive result (net income in 2018 was \$55.9 million) compared to \$178.6 million in 2017.

According to Kernel Agro Holding's 2013-2018 financial statements, financial stability metrics such as liquidity, profitability, and market share value have been calculated and analyzed.

In order to analyze liquidity, we used ratios of total liquidity, current liquidity, absolute liquidity and net working capital (Table 3.2).



Table 3.2

**Kernel Agro Holding liquidity ratios**

Indicator	2014	2015	2016	2017	2018	Boundaries
Total liquidity ratio	1.46063	1.43757	1.92996	3.81379	2.53255	1,5-2
Maneuverability factor	0.26697	0.22501	0.34818	0.71426	0.61884	0,25 0,9
Absolute liquidity ratio	0.10948	0.28185	0.16172	0.48797	0.27763	0,2-0,5

Source: compiled by the author on the basis of data [64]

The total liquidity ratio defines the ratio of current assets to current liabilities; it shows how many units of the most liquid assets are per unit of urgent debts. It was at the recommended limits (1.5-2.0) during the study period, as current assets exceeded current liabilities by more than 1.5 times. Only for 2013-2014, this indicator exceeded the norms, which may indicate inefficient use of working capital for the period.

The working capital ratio defines: the ratio of "free" working capital to equity ("free" working capital = working capital - current liabilities); it shows the proportion of "free" working capital that is contained in equity. (If working capital is increasing and free working capital is decreasing, the sources of working capital are borrowed). The normal limits of the coefficient are 0.25-0.9. For the whole period under study, this coefficient was within the normal range.

The absolute liquidity ratio defines the ratio of cash, cash equivalents and current financial investments (securities) to short-term accounts payable; the absolute liquidity ratio indicates what part of short-term liabilities the enterprise can repay at once. This indicator characterizes the immediate readiness of the enterprise to repay current liabilities and its recommended limits are 0.2-0.5. This indicator is within the norm for the period under review.

To analyze the structure of sources of funds we selected financial stability coefficients, independence coefficient, equity ratio and financial leverage (Table 3.3).

Table 3.3

**Indicators of the structure of Kernel agricultural holding's sources of funds**

Indicator	2014	2015	2016	2017	2018	Boundaries
Financial resilience ratio	0.68871	0.68743	0.75267	0.85373	0.78488	0,5-0,9
Independence coefficient	0.53708	0.60782	0.66058	0.57618	0.53272	0,5-1,0
Financial leverage ratio	1.16024	1.54990	1.9462	1.3595	1.14008	>=1

Source: compiled by the author on the basis of data [64]

The coefficient of financial stability defines the ratio of equity and long-term liabilities to the amount of sources of funds of the enterprise; it shows the share of stable sources of financing in the total amount of sources of funds of the enterprise. The normative limits of this coefficient are 0.5-0.9 and during the whole period the company's characteristics were within these limits, which indicates high efficiency of debt management.

The independence coefficient characterizes the company's ability to meet external obligations at the expense of its own assets; the ratio of equity to all sources of funds of the enterprise; shows the share of equity in the total amount of sources of funds of the enterprise. The normative limits of independence indicators are 0.5-1.0. For the considered period in average "Kernel" equity (shareholder's) capital made 60% of all sources of financing of the company, that shows its financial stability.

The financial leverage ratio determines the share of long-term liabilities in equity; it characterizes the company's dependence on long-term liabilities (an increase in the ratio indicates the possibility of an increase in financial risk). According to the world standards of effective company management, this indicator should exceed 1. For the analyzed period (2013-18) this ratio was only within the normal range.

To analyze the profitability of the agricultural holding company, the profit margin ratio (return on sales), return on assets (ROA), return on equity (ROE) and the operating margin (EBITDA Margin) were selected (Table 3.4).

*Table 3.4*

**Kernel Agro Holding profitability indicators**

<b>Indicator</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Net profit margin ratio, %	-4.1	4.6	11.3	8.12	2.16
ROA (Return on Assets on Net Income), %	-5.01	5.64	15.25	10.15	2.65
ROE (Return on Equity)	-8.31	11.14	23.89	16.41	4.96
EBITDA Margin	9.3	17.0	17.4	14.71	9.3

Source: compiled by the author based on data from [64]

The profit margin ratio describes the share of profit from the sale of products in the company's net income from the sale of products; it shows how much profit from the sale of products is per unit of net income from the sale of the company's products. Over the period under study, the indicator was at a sufficient level. In 2014, each

dollar of sales generated 4.1 cents of loss, but by the following year this indicator had improved, reaching a level of 11.3% in 2016. The improvement was only due to business process optimization - total revenue in 2014 decreased by \$403 million. In 2014, total revenues decreased by \$403 million, but the level of operating profit changed only slightly, which gave an impetus to the improvement of the indicator.

The ROA coefficient determines the share of net profit of the enterprise in the average value of assets of the enterprise during the period; it shows how much net profit is per unit of funds invested in the assets of the enterprise. This coefficient showed similar dynamics. The decrease in the return on assets to a negative value in 2014 (-5.0%) was due to a sharp increase in assets and a decrease in net income (from \$226.3 million to -98.3 million). This negative trend was overcome and net income increased to USD 396.6 million in 2015. In 2015. Subsequently, this figure has improved. In 2018, it fell again due to a poor harvest in 2017.

EBITDA Margin shows the ratio of profit before taxes, depreciation and interest rates and is quite common among foreign investors, because on an international level, I often use EBITDA. In general, this ratio shows the same dynamics over the entire period.

To analyze the market value of shares, we calculated net income per share, market value/price per share ratio, price/book value per share ratio and others (Table 3.5).

*Table 3.5*

**Indicators of the market value of Kernel's shares**

<b>Indicator</b>	<b>"Kernel."</b>	<b>Industry average</b>
Price/earnings ratio	4,36	13,01
Price/volume ratio	0,52	0,79
Price/book value ratio	1,14	1,48
Earnings per share	101,15	148,8
Basic earnings per share	5,48	12,8
Cash flows per share	15,21	17,56
EPS growth for the year, %	297,94	191,76
Dividend per share ratio, %	1,83	2,27
Beta coefficient	0,38	-
Alpha coefficient for 2016-18.	-0,0123	-

Source: compiled by the author on the basis of data [64, 70]

The calculated indicators show that on the whole the company performs worse than the industry average, which undoubtedly has a negative effect on the investment attractiveness of the company.

The value of the price/book value ratio per share is approximately the same, comparing to the p/e ratio and indicates the interest of investors in the shares of Kernel agroholding, because these ratios are higher than 1.

As mentioned above, from the point of view of a financial investor, investment attractiveness is a comprehensive characteristic of an enterprise, reflecting the economic benefits and risks of investing in the securities of the enterprise. This means that real and financial investors consider the investment attractiveness of an enterprise in different ways, putting into this category different content, depending on their priority goals.

Ciaran Walsh, a leading expert in the field of investment, who has worked as CFO, CEO, COO in large companies in Western and Eastern Europe, has developed his own approach to the assessment of the investor company as a potential object of investment.

Karyan Walsh believes that the key financial metrics for a portfolio investor are ROE (return on equity) and ROA (return on total assets).

The company's strategic development plan, approved at the general meeting of the company's stakeholders, states that the company should invariably develop in three main directions: expanding production, strengthening vertical integration and improving the efficient business model by accumulating unique experience and introducing high technologies. On the basis of the strategic plan, tactical and operational plans are adopted in a timely manner.

The assessment of the developed investment strategy of the company is based on the following criteria: - consistency of the investment strategy with the overall strategy of economic development of the company; internal balance of the investment strategy, which determines how consistent with each other individual strategic objectives and areas of investment activity; consistency of the investment strategy with the external environment (changes in economic development and investment

climate of the country, as well as the investment market conditions

So, as it was mentioned above, the agroholding is skillfully using assets, which indicates the growth of the company's market capitalization, but there are ways to strengthen the company's position in the market because of the solution of the following problem. Kernel agroholding shows excellent growth rates of grain cultivation, as well as increased sales of both grain and oil. Optimization of production allowed the company to increase its profitability indicators, significantly increasing its net income. The analysis of the company's valuation also shows that the holding is undervalued in the market and has further growth prospects. Based on these findings, we believe it is appropriate to continue to ramp up production and increase the company's value to investors.

### **3.2. Increasing the investment attractiveness of the agricultural holding "Kernel"**

In assessing Kernel's investment case, we assume that the market has already priced in almost all of the negative factors that the corporation experienced in 2017/18, mainly unfavorable weather in 2017 and increased imbalances in the seed splitting business. It is expected that 2018/19 will finally lead to an improvement in EBITDA after three consecutive years of decline, mainly due to the long-awaited resumption of crushing and the forecast of normalized weather during the 2018 harvest campaign. EBITDA 2018/19E is forecast at \$350 million. The company's EBITDA is projected to be US\$350 million (up 43% YoY and in line with Bloomberg consensus).

Changes in Ukraine's soybean market are expected to result in the long-awaited resumption of barley grain crushing. This improvement should significantly improve the attractiveness for Kernel's business after several years where the company's crushing stocks came under severe pressure from increased installed capacity and insufficient sunflower seed supply in Ukraine.

The Ukrainian soybean crop was 3.9 million tonnes (down 9% year-on-year) in

2017 after a significant decline in yields per hectare (down 14% in the river to 1.97 t/ha). According to Astarta, annual demand for soybeans in Ukrainian soybean crushing capacity (i.e. used exclusively for soybean crushing) is around 1.0-1.1 million tonnes. (Astarta estimates that market share is 21% of the 1.04 million tonnes of processed soybeans in 2017). The remaining volumes are mostly exported: according to APK-Inform, Ukraine exported 2.9 million tonnes of soybeans (23% year-on-year) in the 2016/17 marketing year (i.e. September-August).

In December 2017, Ukrainian Parliament abolished VAT refunds on exports of oilseeds, including soybeans. [64] (According to the latest update, this new regulation will take effect in September 2018). The lack of VAT refunds is likely to significantly reduce the profitability of soybean exports and actually business operations in Ukraine. This could be the reason for the shift in seed use from the 2018 crop between exports and crush volumes. This is especially true because the projected soybean acreage is expected to be around 2, million hectares (down 1% year-on-year) in 2018, despite UkrAgroConsult's initial estimates from February 2018, which represented a 14 -17% drop in acreage this year (as quoted by Reuters). A similar or greater decline in acreage is expected, but operational problems,

An obvious place for additional soybean volumes is sunflowers. Some sunflower crushing can crush other oilseeds such as soybeans as well as sunflower seeds. If it is economically viable for farmers (i.e. a higher price can be obtained compared to exports, minus VAT refunds), and if certain sunflower crush sites would like to switch to production, the end effect could be a significant reduction in the capacity gap in the sunflower market.

Kernel estimates the current sunflower processing capacity in Ukraine at around 18.5 mln tonnes annually: the effective total capacity next season will increase slightly to 19.0 mln tonnes. Ukraine's Ministry of Agrarian Policy expects sunflower planted area to be 5.5 million to 5.6 million hectares in 2018 (4.9 million hectares or 88% of the plan was planted as of May 1, 2018). While the ministry's target may seem disappointing at first glance, we hope to see a repeat of last year's pattern: on May 10, 2017, the ministry projected a total planting of 5.4 million hectares (after 4.2

million hectares or 78% of the plan, was achieved), while official data shows that the final harvested area was 6.1 million hectares in 2017. In our view, expectations are justified for a similar 6.1 million hectares in 2018 with slightly improved yields compared to the previous year due to better weather conditions. Overall, we believe this should result in a harvest of 13.4 million tonnes in 2018. As for the discrepancy between USDA data and official Ukrainian figures, it seems to us that USDA is trying to reflect a potential grey area in sunflower production.

We believe that some sunflower processing plants most likely those currently trying to be profitable in an unfavorable overcapacity environment may be willing to use some of their capacity for soybean volumes if their facility is able to do so. Even Kernel, which in such market conditions is still able to operate at a high capacity utilization rate (around 90%, which means aggressively procuring seed, in our view), is considering switching one of its facilities to soybeans to allow it to suppress at least its soybean volume. In our view, Kernel's plans confirm that in some cases switching to crushing soybeans may prove more profitable than exporting under the new regime.

In our view, it is too early to accurately estimate how much soybean export volumes to Ukraine could be placed under sunflower seed crushing in the 2018/19E season (or in subsequent seasons). However, a figure of 0.5m to 1.5m tonnes seems realistic. While it is difficult to expect a reduction in overcapacity to result in a return to the margins seen 3-4 years ago, in the case of Kernel we believe that a return to margins of over USD100 per tonne achievable is likely. We estimate a fractional margin of USD 84/t in 2018/19E. We estimate fractional margins at USD 84/tonne for 2018/19E, compared to an expectation of USD 50/tonne for 2017/18E.

In the coming years, the firm's grain processing stock is expected to be supported by the launch of a new plant in Western Ukraine and new green projects. We expect a long-awaited recovery in the operating profitability of Kernel's grain processing sector, which will change the sentiment for the stock.

However, some uncertainties relate to factors that could impact the Ukrainian market: external factors include the potential impact of a trade war between the US

and China on global demand for unprocessed soybean product, while domestic factors include the stability of Ukrainian regulations. In addition, material utilisation of soybean volumes is likely to result in weaker players remaining in the market, although they were expected to exit in previous quarters.

Kernel's cash flow movements between 2016/17 and 2019/20E reflect the company's extensive investment schedule (i.e., new land bank acquisition, new terminal construction, new crush opportunities, in addition, we include new green projects mentioned by Kernel management). While changes in capital investment and working capital alter FCF performance in specific years, the healthy cash generating ability of the corporation should be highlighted.

It should be noted that profitability in the agriculture and trading segments (e.g. grains, terminals and elevators) are not as positive as corporate management expects. In addition, the outlook has become even more positive for the wholesale oil segment as market balance configurations related to the introduction of soybean sizes are expected to support a rapid return to profitability. In addition, corporate management is not yet getting the potential effect of new green projects (e.g., burning biomass clusters in the sunflower business) in the profitability outlook. We expect that these projects could add \$10 to \$15 per tonne to the profitability of wholesale oil under a neutral scenario depending on the year.

Thus, summarizing the above, we can highlight the following general recommendations for Kernel Agricultural Corporation to improve its investment attractiveness:

- intensification of capital investment in expansion of production, in particular, grain processing;
- shifting some production capacity to soybean processing, thus increasing exports of finished products rather than raw soybeans, and responding to the current market situation;
- The prospect of further investment in green projects (production of biofuels from waste production) and taking advantage of the "green tariff" opportunity.

We use a DCF model based on free cash flow projections by consolidated



numbers for the period 2017/18E-2021/22E to assess Kernel Holding's investment attractiveness after the above measures. As Kernel operates primarily in Ukraine, a risk premium of 10% is applied to reflect the political risk associated with the stock. Since Kernel's business is overwhelmingly linked to USD currency (over 90% of revenues, most of the debt is denominated in USD), we used a risk-free rate of 2.0% and around 7.0% debt risk premium. The assumption for the beta coefficient is 1.0x.

Table 3.6

### Calculation of the cost of capital for Kernel Agro Holding

	FY2021	FY2022	FR2023	FR2024	FR2025	FR2026	FR2027	FR2028
Sovereign risk-free rate	10.4%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Equity investment risk premium	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Company risk premium	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Cost of equity capital	18.4%	18.0%	18.0%	18.0%	18.0%	18.0%	18.0%	18.0%
Cost debt	9.9%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%
Effective tax rate	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Cost of debt after tax	9.9%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%
Weight of share capital	58%	63%	67%	73%	77%	80%	82%	84%
WACC (%)	14.9%	14.8%	15.2%	15.7%	16.1%	16.3%	16.5%	16.7%

Source: Built by the author on the basis of [64]

For Kernel, the WACC is around 15%. This is mainly due to the high sovereign risk-free rate, which is around 10%.

Table 3.7

### Calculation of net cash flows for Kernel agricultural holding

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026
EBIT adjusted for taxes	267.6	227.0	282.7	308.8	324.4	323.8	322.3	322.3
Depreciation	79.8	91.5	92.9	97.3	98.7	99.9	101.1	101.0
Change in working capital	(43.4)	50.9	(42.9)	(51.6)	(22.5)	(2.5)	(2.0)	(2.1)
Capital investments	(323.3)	(189.0)	(90.4)	(88.4)	(89.2)	(89.9)	(80.7)	(80.7)
Free Cash Flow to Firm	(19.3)	180.4	242.3	266.1	311.3	331.2	340.6	340.5
Factor discounting	0.93x	0.81x	0.71x	0.61x	0.53x	0.45x	0.39x	0.33x

Introducing the Value of FCFF	(18.0)	146.6	170.9	162.3	163.6	149.6	132.1	113.2
-------------------------------	--------	-------	-------	-------	-------	-------	-------	-------

Source: Built by the author on the basis of [64]

By discounting these cash flows by the cost of capital and estimating the present value of the company in the terminal period, we obtain a valuation of the agricultural holding (Table 3.8).

Table 3.8

### Results of Kernel Agro Holding assessment by DCF method

PV of FCF (mln USD; FCF2019-26; FCF USD; FCF2019-26)	1,020.2
Growth of cash flows in the terminal period	2.0%
Terminal value (millions of US dollars)	2366.7
PV of terminal value	2,366.7
Enterprise value (millions of US dollars)	1,937.9
Net debt (FR2019, mln USD)	752.9
Equity Value (millions of US dollars)	1,185.0
Number of shares (millions)	81.9
Fair value per share (US dollars)	14.46

Source: Built by the author on the basis of [64]

Our comparative valuation (Table 3.9), based on EV/EBITDA of FY2019-20 and P/E for developed and emerging market partners for Kernel, yields a fair value of \$16.02/share or 18% above the current market share price.

Table 3.9

### Comparative assessment for Kernel Agro Holding

	Share price	Currency	Capitalisation US\$ million	EV/EBITDA		P/E	
				2019FY	2020FY	2019FY	2020FY
<b>Kernel Holding</b>	13.58	USD	1,113	5.4	5.6	6.1	7.8
Discount to companies from developed countries			(88%)	(25%)	(22%)	(52%)	(31%)
Discount to emerging market companies			(55%)	(20%)	(5%)	(57%)	(40%)
<b>Companies from developed countries</b>							
Graincorp(AU)	9.1	AUD	1,506.7	12.4	8.9	93.8	23.3
Andersons (US)	31.0	USD	877.6	6.5	-	13.5	10.6
Bunge (US)	58.5	USD	8,249.4	6.2	5.6	10.9	10.4
AMD (USA)	44.6	USD	24,976.7	7.8	7.2	12.1	11.8
<b>Medina for developed countries companies</b>			8,902.6	7.1	7.2	12.8	11.2
<b>Companies from developing countries</b>							
China Agri Industries	2.8	HKD	1,883.9	6.7	5.9	8.2	6.6

*Ending table 3.9*

IOICorporation	4.3	MYR	6,258.5	17.5	16.1	26.9	24.4
China Foods(HK)	3.3	HKD	1,173.9	5.6	4.7	16.3	14.3
ThaiVegetable Oil	27.5	THB	678.3	-	-	11.9	11.6
<b>Median for emerging market companies</b>			2,498.6	6.7	5.9	14.1	12.9

Source: Built by the author on the basis of [64]

To summarize, Ukrainian agricultural holding Kernel has generally positioned itself quite well with investors, as evidenced by the company's strong sales and productivity in each segment of its business (selling sunflower oil both in bulk and bottled, grain, providing port and elevator services and conducting business in general). The company's professional management was able to set up the company's business processes and restore the growth in the value of Kernel's shares on the Warsaw Stock Exchange.

Kernel Agroholding is making good use of its assets, indicating growth in its market capitalization, but there are ways for the company to strengthen its market position due to the following challenge. Kernel Agro Holding shows excellent growth rates in grain growing, as well as an increase in sales volumes of both grain and oil. Optimization of production allowed the company to increase its profitability indicators, significantly increasing its net income. The analysis of the company's valuation also shows that the holding is undervalued in the market and has further growth prospects. Based on these findings, we believe it is appropriate to continue to ramp up production and increase the company's value to investors.

Also, the situation in the market was analyzed and a number of recommendations were developed for the company in order to improve its investment attractiveness:

- Intensification of capital investment to expand production, particularly grain processing;
- Shifting some production capacity to soybean processing, thereby increasing exports of finished products rather than raw soybeans and responding to prevailing market conditions;
- The prospect of further investment in green projects (production of biofuels from waste production) and taking advantage of the "green tariff" opportunity.

The company's DCF and comparative valuation showed that, given these measures, the average fair (intrinsic) value of the stock has strong upside potential (\$16.96 compared to \$13.58 now).

## CONCLUSIONS AND SUGGESTIONS

1. The investment attractiveness of a company for a foreign investor lies in the expectation of obtaining an acceptable level of return on investment with the greatest reduction of risks. In the process of making managerial decisions on international financial investments the analysis of securities and corporate performance plays a decisive role. For this reason the clear analysis and perfection of classification of methods of an estimation of investment appeal is necessary enough. The author's definition of the concept of "international investment attractiveness of corporations" is brought forward, the methods of evaluation and increase of investment attractiveness of the company are systematized.

2. With the help of the description of possibilities and contents of system analysis of set of interacting factors of formation of investment attractiveness of the enterprises the basis for the further realization of effective research of attractiveness of enterprises of agrarian sector on the international markets was laid.

The assessment of investment attractiveness of companies opens up the latest opportunities of diversification for foreign investors, increases the guarantees of investment of foreign investors in investment projects. As a result of the integral assessment it is possible to determine the directions of priority investment and economic development of enterprises of the agrarian sector. The development of common evaluation criteria and indicators will contribute to the objective analysis of economic processes.

The integral methodology of investment attractiveness assessment, which follows from the above typology of factors of formation of investment attractiveness of enterprises, becomes fundamental for diagnosing and monitoring the feasibility of investing in certain industries or individual companies. The methodological principles and criteria for the formation of a system of indicative indicators, the methodology and algorithm of the integrated integral assessment of shares as objects of investment in international financial markets were noted.

Having analyzed the state of development of the world stock market and investment attractiveness of the shares of Ukrainian agricultural companies we revealed:

3. The global equity market is characterized by prominent financial centers that concentrate the main circulation of capital. China and India remain the main markets and drivers of global equity trading activity; global market capitalisation has declined by 1% since 2017, mainly due to falling equity trading capitalisation in EMEA and South America. Key long-term trends in international portfolio investment should include: growth in financial and, in particular, portfolio assets along with increased global financial deepening (financial assets to GDP ratio); growth in foreign portfolio investment and increased interconnectedness between financial markets globally; foreign portfolio investment exceeding FDI; outperforming growth in developing country financial assets, predominantly through equity capital and services

4. During the period from 2005 to the present day Ukrainian companies conducted a total of about 28 international IPOs. During this time, a number of Russian companies have listed their own shares on international stock exchanges. Especially popular are European stock exchanges, such as London and Warsaw. Most of the Ukrainian companies which carried out IPO, belong to the agricultural sector, which expresses the development of this area of business. It is worth noting that the conduct of IPO companies depends significantly on the overall situation in Ukraine, so during the crisis in 2009 and 2017, there was no IPO. In addition, the total volume of Ukrainian IPOs is extremely small, which is influenced by a number of restrictions and strict regulation under the Ukrainian legislation, the difficulty in setting up the business according to international practices of transparency and efficiency,

5. The international investment attractiveness of the agricultural sector of Ukraine lies in such characteristics as the presence of constant demand and growth prospects, the favorable conditions for the development of agriculture in Ukraine. To increase the inflow of foreign investments into the agricultural sector it is necessary to create favorable economic conditions, which involves the introduction of a system of measures aimed at improving the investment climate, ensuring the transparency and stability of legislation in the field of investment and taxation, reforming the tax system.

6. Ukrainian agricultural holding Kernel has generally positioned itself quite well with investors, as evidenced by the company's high sales and productivity in each segment of its business (sales of sunflower oil both wholesale and bottled, grain, provision of port and elevator services and farming operations). ). The company's professional management was able to set up the company's business processes and restore the growth in the value of Kernel's shares on the Warsaw Stock Exchange.

Kernel Agroholding is making good use of its assets, indicating growth in its market capitalization, but there are ways for the company to strengthen its market position due to the following challenge. Kernel Agro Holding shows excellent growth rates in grain growing, as well as an increase in sales volumes of both grain and oil. Optimization of production allowed the company to increase its profitability indicators, significantly increasing its net income. The analysis of the company's valuation also shows that the holding is undervalued in the market and has further growth prospects. Based on these findings, we believe it is appropriate to continue to ramp up production and increase the company's value to investors.

7. Also, the situation on the market was analyzed and a number of recommendations were developed for the company to improve its investment attractiveness: - intensification of capital investment in the expansion of production, in particular, grain processing;

- shifting some production capacity to soybean processing, thus increasing exports of finished products rather than raw soybeans, and responding to the current market situation;
- The prospect of further investment in green projects (production of biofuels from waste production) and taking advantage of the "green tariff" opportunity.

The company's DCF valuation showed that, given these measures, the fair (intrinsic) value of the stock has strong upside potential (\$15.24 compared to \$13.58 now).

In order to improve the methodology for assessing the investment attractiveness of the company and the formation of investment strategy for the company's development, the following proposals were developed:

1) We proposed to improve the methodology for assessing the investment attractiveness of the company by taking into account indicators that have external and internal impact on the investment attractiveness of the enterprise. The system of criteria of an estimation of investment attractiveness of the enterprise which is based on an estimation of influence of the most important factors is offered, allows to form a basis for decision-making concerning investment.

2) To increase the investment attractiveness and investment strategy of Kernel LLC, it was proposed: Achieving the full level of capacity utilization, quality revaluation of fixed assets, introduction of effective marketing policy and creation of a new business unit based on a new promising industry.



## REFERENCES

1. Economic Code of Ukraine; Verkhovna Rada of Ukraine; Code of Ukraine, Law, Code of 16.01.2003 № 436-IV
2. Blank I.A. Fundamentals of Financial Management / Blank I.A. - K., Nika-Centre, 2009. - 592c.
3. Investment management/[V.V. Sheremet, V.M. Pavlyuchenko, V.D. Shapiro et al]. - M.: Vyssh. shk., 1998. - T. 1. - 416 c.
4. Investment attractiveness of the enterprise / O.V. Nosova // Strategic Priorities. - 2007. - № 1(12). - C. 120-126.
5. Sevryugin Yu. V. Assessment of the industrial enterprise's investment attractiveness: Ph. Sciences / Sevryugin Yu. V. - Izhevsk, 2004. - 27 c.
6. Valinurova L. S. Management of investment activity: [textbook] / L.S. Valinurova, O.B. Kazakova. - MOSCOW: KNORUS, 2005. - 384 c
7. Tereshchenko"). Yu. Essence of investment attractiveness of the subjects of the real sector of 'zhonomics / ^ . Yu. Tereschenko, O. V. Konek // Economics and Management Organization. - 2010. - № 1(7). - C. 72-80.
8. Shchiborsch K. V. Evaluation of investment attractiveness of enterprises / K.
9. V. Shchiborshch // Banking Technologies. - 2000. - № 4. - C. 32-36.
10. Analysis of financial condition and investment attractiveness of the enterprise: textbook / [Krylova ^ I., Vlasova V.M., Egorova M.G. et al.] - M.: Finance and statistics, 2003. - 192 c.
11. Ponomarenko S. Increasing the investment attractiveness of enterprises of coal mining industry: Abstract of thesis for the degree of candidate of economic sciences: 08.00.04 / NAS of Ukraine Institute of Industrial Economics. - Donetsk. 2008. - 20 c.
12. Babushkin V. A. A. Organization and Methodology of Analysis of Investment Attractiveness of Economic Entity: Ph. Sci. / Babushkin V. A. - Voronezh, 2009. - 24 c.
13. Belyh LP (1999), "Financial analyses in the assessment of investment attractiveness of enterprises", Buhgalterskij uchet, vol. 10, pp.92-99.

14. Kalashnikov P.L. "Estimation of Strategic Investment Attractiveness of Industrial Enterprise", Ph. D., SPb., 1997.

15. Khrushch N.A. Investment activity: modern strategies and technologies / N.A. Mayskyi Zhuk. - Khmel'nitsky: KHNU, 2004. - 309 c.

16. Savchuk V.P. Analysis and development of investment projects: textbook / V.P. Savchuk, S.I. Prilipko, E.G. Velichko. - K.: Absolute-V, Volga, 1999. - 304 c.

17. Bryukhovetskaya, N.Y. Assessment of the enterprise's investment attractiveness: identification of shortcomings of some existing methods / N.Y. Bryukhovetskaya, O.V. Khasanova // Industrial economics. - 2009. - № 1(44). - C. 110-117.

18. Rusak N.A. Monetary analysis of business entities: case study / N.A. Rusak, V.A. Rusak. - Minsk: Vyssh. shk. 1997. - 309 c.

19. Makary N. Assessment of investment attractiveness of Ukrainian enterprises / N. Makary // The Economist. - 2001. - № 10. - C. 53-60.

20. Sadekov, A.A. Investment attractiveness of the enterprise (methodology and methodology of evaluation): monograph / A.A. Sadekov, N.A. Lysovaya. - Donetsk: Donetsk State University named after M. Tugan-Baranovskiy, 2001. - 270 c.

21. Chupis A.V. Investment in the agrarian sphere / A.V. Chupis. - Sumy: Environment, 2002. - 244 c.

22. Markowitz, H. Portfolio Selection // The Journal of Finance. 1952. Vol. 7(1). P. 77-91.

23. Sharpe W. F. F. Investments: Translated from English / W. F. Sharpe. F. Sharpe, G. D. Alexander, D. W. Bailey.

24. Moscow: INVRA-M, 2001. - XII, 1028 p.

25. Brigham E.F. Fundamentals of financial management: [English] / Brigham E.F. - K.: Molodezh, 1997.- 1000 p.

26. Г. Shportko G.Y.. Evaluation of Industrial Enterprise Investment Attractiveness / G.Y. Shportko, N.P. Kozenkova, V.D. Kozenkova. // Effective Economics. - 2014. - №11.

27. Zaborovskiy V. V. Concept and types of shares and procedure of their conversion / V. V. Zaborovskiy. // Scientific Bulletin of Uzhgorod National University. - 2015. №32. - C. 92-96.

28. Kozak Y. G. International economics: textbook. Edition 2-th revised and additional - Kyiv: Center for Educational Literature, 2008. - 1467 c.

29. Kuzmin O. E. Factors of forming the investment attractiveness of enterprises / O. E. Kuzmin, O. V. Tovstenyuk. // Technological Audit and Production Reserve. - 2013. - №1/3(9). - C. 29-33.

30. Mesropyan M. A., Panova V. A. Investment attractiveness of the enterprise // Young Scientist. - 2016. - №23. - C. 255-257.

31. Bazilevich V.D. Economic Theory: Political Economy: Textbook / Ed. by V.D. Bazilevich. - 9th ed. revised and extended - K.: Znanie, 2014. - 710 c.

32. On Approval of the Methodology of Integral Evaluation of Investment Attractiveness of Enterprises and Organizations, Agen. Methodology Order No. 22 of 23.02.1998

33. Markhaichuk, M.M. Analysis of methods for assessing investment attractiveness in the context of innovative development of enterprises / M.M. Markhaichuk. // Marketing and Management of Innovations. - 2012. - №4. - C. 330-336.

34. Damodaran A. Investing Valuation: Tools and Technique for Determining the Value of Any Asset / A. Damodaran. - New York: Wiley, 2002. - 1008 c. - (Second Edition).

35. Investment management at the enterprise / G.V. Kozachenko, A.M. Antipov, A.M. Lyashenko et al. - K.: Libra, 2004. - 368 c.

36. Investment: the international aspect: / Sazonets I. L., Fedorova V. A. Training manual. - K.: Center for Educational Literature, 2007. - 272 c.

37. International Investment Management: textbook for students of specialties "International economics Economics", "Management" Matyushenko I. Yu. - Kh.: Publishing house of KNEU named after S. Kuznets, - 520 c.

38. Larchenko A.P. Business valuation. Approaches and methods / A.P. Larchenko. - SPb. PRTeam, 2008. - 59 c.

39. Shcherbakov, V.A. Valuation of the company (business) / V.A. Shcherbakov, N.A. Shcherbakova. - Moscow: Omega-L, 2006. - 288 c.

40. Brealey R. Principles of Corporate Finance / R. Brealey, S. Myers, F. Allen. - New Yourk: McGraw-Hill/Irwin, 2014. - 976 c. - (9th Edition).

41. Investment management in the enterprise: textbook / G.V. Kozachenko,

42. O.M. Antipov, O.M. Leshenko, G.I. Dibnis. - K.: Libra, 2004. - 368 c.

43. Shevchenko, N. V. Features of the study of the essence of capitalization of industrial enterprises / N. V. Shevchenko. // Regional Economy. - 2008. - №3. - C. 175-181.

44. Ibragimova A., Abalakina T.V. Investment attractiveness of companies in the context of limited financial resources // Young Scientist. - 2016. - №12. - C. 1257-1264.

45. Andreyak, S. F. Methodical aspects of integral estimation of reliability of the issuer and investment attractiveness of its shares / S. F. Andreyak. // Effective economy. - 2013.

46. T. Nagachevskaya. Peculiarities of foreign investment at different stages of the global agribusiness value chain / T. Nagachevska, N. Plastovets. // Bulletin of Taras Shevchenko National University of Kyiv. Economics. -- №8. - C. 49-59.

47. Khodakovskaya V. P. P. The market of financial services: Textbook / V. P. Khodakovskaya, O. D. Danilov. - Irpen: Academy of State Tax Service of Ukraine, 2001. - 501 c.

48. Ferrexpo IPO Prospectus  
URL:<http://www.ferrexpo.com/system/files/uploads/financialdocs/ipopropectus.pdf>

49. Kozak Y. G. International economics: textbook. Edition 2-th revised and additional - Kyiv: Center for Educational Literature, 2008. - 1467 c.

50. Dragon Capital. 8th Annual Investors Conference URL:[http://dragon-capital.com/en/other/print/dragon\\_v\\_presse/v\\_2017\\_godu\\_novyh\\_ipo\\_ukrainskih\\_agromkom\\_paniy\\_jdat\\_ne\\_stoit\\_rynok\\_ojivit\\_listing\\_na\\_ukrainskoy\\_bire.html](http://dragon-capital.com/en/other/print/dragon_v_presse/v_2017_godu_novyh_ipo_ukrainskih_agromkom_paniy_jdat_ne_stoit_rynok_ojivit_listing_na_ukrainskoy_bire.html)

51. Deloitte Central Europe Top 500, 2018. –URL.:<http://www2.deloitte.com/>
52. Shelekhov, K.V. Dostizhenie IPO (Initial Public Offering of Shares) as an investment tool for raising capital by a manufacturing enterprise [Text] / K.V. Shelekhov. - 2012. - №15. - c.17-24.
53. Review of IPOs of Ukrainian companies by PWC  
URL.[https://www.pwc.com/en\\_UA/ru/services/capital-markets/assets/an\\_overview\\_of\\_ukranian\\_ipos\\_rus.pdf](https://www.pwc.com/en_UA/ru/services/capital-markets/assets/an_overview_of_ukranian_ipos_rus.pdf)
54. State Statistics Service /Publications /Agriculture, forestry and fisheries
55. Farming/Collection "Plant-growing of Ukraine" URL.[http://www.ukrstat.gov.ua/druk/publicat/kat\\_u/2017/zb/04/zb\\_ru2016\\_pdf.zip](http://www.ukrstat.gov.ua/druk/publicat/kat_u/2017/zb/04/zb_ru2016_pdf.zip)
56. According to the State Fiscal Service of Ukraine / Customs statistics / Total volume of import and export by commodity items by UKTVED codesURL.<http://sfs.gov.ua/ms/f11>
57. Official website of the State Statistics Service of Ukraine. – URL.:<http://www.ukrstat.gov.ua/>
58. Quotations of Ukrainian agricultural companies at the world exchanges – URL.<http://uagro.ua/>.
59. REZNIK NP Investment attractiveness of agricultural sector in Ukraine: status and ways to improve / NP REZNIK. // Economics of Agroindustrial Complex. - 2014. - №11. - C. 67-72.
60. Nagachevska TV Financing mechanisms for investment projects in agriculture sector of economy involving angel investors / Nagachevska TV, Zakharchenko V. // Bulletin of Taras Shevchenko National University of Kyiv. Economics. - 2014. - №6. - C. 37-42.
61. Kernel official website URL.<https://www.kernel.ua/>.
62. Official website of MHP company URL.<https://www.mhp.com.ua/ru/home>
63. Official website of Astarta Agropromholding  
URL.<http://www.astartaholding.com/>.
64. Official website of the company Ovostar Union URL.[www.ovostar.ua/](http://www.ovostar.ua/).
65. Official site of the company IMC URL.[www.imcagro.com.ua/ru/](http://www.imcagro.com.ua/ru/)

66. Official website of Bloomberg Professional service (the terminal)  
URL.<https://www.bloomberg.com>

67. Warsaw Stock Exchange URL.[http://www.gpw.pl/root\\_en](http://www.gpw.pl/root_en)

68. AgroNews: Cancellation of export VAT refunds on oilseeds will stimulate the processing industry URL.<https://agronews.ua/node/858092017> M&A Predictor // KPMG

69. URL.: <https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2017/04/global-manda-deals.pdf>

70. Andrews K. The Concept of Corporate Strategy / K. Andrews - Homewood, III: Dow - Jones - Irwin, 1971. - 496 p.

71. Civil Code of Ukraine; Verkhovna Rada of Ukraine; Code of Ukraine, Law, Code of 16.01.2003 № 435-IV

72. On Joint Stock Companies, Verkhovna Rada of Ukraine; Law of 17.09.2008 No. 514-VI

73. On Securities and the Stock Market, Verkhovna Rada of Ukraine; Law of 23.02.2006 No. 3480-IV

74. On the depository system of Ukraine, the Verkhovna Rada of Ukraine; Law of 06.07.2012 № 5178-VI On Joint Investment Institutions; Verkhovna Rada of Ukraine; Law of 05.07.2012 № 5080-VI

75. The concept of the state target program for the development of the agricultural sector of the economy for the period up to 2021  
URL.<http://minagro.gov.ua/apk?nid=24198>

76. Aksimova, N. S. Classification of shares and their accounting interpretation / N. S.

77. Aksimova, O. O. Bespalova. //KH DUHT. - 2010. - C. 64-71.

78. Andreyik, S.F. Methodical aspects of integral estimation of reliability of the issuer and investment attractiveness of its shares / S.F. Andreyik. // Effective economy. - 2013.

79. Andrejuk, S.F. Assessment of investment attractiveness of shares of the energy sector emitters / S.F. Andrejuk. // Effective economy. - 2012.

80. Bazilevich V. D. The stock market: Textbook in 2 books. / V.D. Bazilevich, V.M. Sheludko, V.V. Virchenko et al./ Edited by V.D. Bazilevich. - K.: Znanie, 2015, 2016.

81. Bazilevich V.D. Economic Theory: Political Economy: Textbook / Ed. by V.D.

82. Bazilevich. - 9th ed. revised and supplemented - K.: Znanie, 2014. - 710 c.

83. Bazilevich, V.D. Securities: / V.D. Bazilevich, V.M. Sheludko, N.V. Kovtun et al. - K: Znanie, 2011. - 1094 c.

84. Pratt S. Business Valuation Discounts and Premiums, 2nd ed  
URL/<https://books.google.com.ua/books?id=w2gvUBtr4uAC&pg=PA212&lpg=PA212&dq=57.+Business+Valuation+Discounts+and+Premiums+Shannon+P.+Pratt>

85. Pratt S. Cost of Capital: Applications and Examples, 4th ed / S. Pratt, R. Grabowski. - Hoboken, NJ: John Wiley & Sons, Inc., 2010.

86. Pratt S. The Market Appendix to Valuing Businesses / S. Pratt. - John Wiley & Sons, LTD. 2005. - 389 p.

87. Pratt S. Valuing Small Businesses & Professional Practices  
URL:<http://www.bvresources.com/bvstore/PDFs/PUB41.pdf>.

88. Reilly. The Handbook of Advanced Business Valuation

89. URL/<http://www.bvresources.com/bvstore/PDFs/PUB10.pdf>.

90. Blomstrom, Magnus. economics of international investment incentives, in International Investment Incentives. Paris: OECD, 2003.

91. Chandler AD Strategies and Structures. - Cambridge, MA: MIT Press, 1962. - 513 p.

92. Denisia, V. Forex Direct Investment Theories: Overview of Main FDI Theories // European Journal of Interdisciplinary Studies. - 2010. - № 3. - P. 53-59.

93. Dima SC From International Trade / Dima SC // European Journal of International Studies. - 2010. - Vol. 2, No. 2. - P. 59-66.

94. Dinkar, N., Choudhury, RN Selective review of foreign direct investment theories // Asia-Pacific Research and Training Network On Trade. Working paper. - 2014. - № 143.

95. Dunning, JH (1988) The eclectic paradigm of international production: a restatement and some possible extensions. Journal of International Business Studies, 19(1), pp. 1-31

96. Global M&A Market Review Financial Rankings 2016. // Bloomberg URL.<https://data.bloomberglp.com/professional/sites/4/Bloomberg-Global-MA-Financial-Rankings-FY-2016.pdf>

97. Hahnemann T., Gao C. Rhodium Group. China FDI in the United States: 2015 Recap. URL.:<http://rhg.com/notes/chinese-fdi-in-the-us-2015-recap>

98. John-Franc, Valeriu and Ene, Sebastian, (2012), NEW INVESTMENT STRATEGIES OF TRANSNATIONAL CORPORATIONS, Review of General Management, 15, issue 1, p 66-84.

99. Knickerbocker FT Oligopolistic reaction and multinational enterprise // The International Executive. - 1973. - T. 15. - № 2. - C. 7-9.

100. M&A 2017 review and 2018 outlook//PWCURL.<https://www.pwccn.com/en/mergers-and-acquisitions/ma-press-briefing-jan2017.pdf>

101. M&A Financial Advisory Review. Full Year 2018//Thomson ReutersURL.[http://share.thomsonreuters.com/general/PR/MA\\_4Q\\_2016\\_E.pdf](http://share.thomsonreuters.com/general/PR/MA_4Q_2016_E.pdf)

102. The World's Biggest Public Companies // Forbs URL.<https://www.forbes.com/global2000/list/#tab:overall>

103. Vernon, R. (1966). Quarterly Journal of Economics, 80(2), pp. 19

104. Geyets, V. M. and other (2007), Strategic Challenges of the XXI century society and economy in Ukraine

105. Features Of Strategic Planning Of Investment Activities Of Food Industry EnterprisesA. Gaidutsky URL.[http://www.market-infr.od.ua/journals/2019/27\\_2019\\_ukr/8.pdf](http://www.market-infr.od.ua/journals/2019/27_2019_ukr/8.pdf)



## APPENDIXES

### Appendix A

#### *Kernel Holding S.A. Profit and loss statement*

US\$ million, except ratios and EPS	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	LTM
<b>Revenue</b>	<b>215</b>	<b>350</b>	<b>663</b>	<b>1,047</b>	<b>1,020</b>	<b>1,899</b>	<b>2,072</b>	<b>2,797</b>	<b>2,393</b>	<b>2,330</b>	<b>1,989</b>	<b>2,169</b>	<b>5,971</b>
Net IAS 41 gain / (loss)	-	-	-	-	-	-	-	15	(17)	(7)	20	(3)	(21)
Cost of sales	(194)	(306)	(557)	(874)	(844)	(1,610)	(1,814)	(2,599)	(2,231)	(2,009)	(1,707)	(1,882)	(5,482)
<b>Gross profit</b>	<b>21</b>	<b>44</b>	<b>106</b>	<b>174</b>	<b>177</b>	<b>289</b>	<b>258</b>	<b>213</b>	<b>145</b>	<b>314</b>	<b>302</b>	<b>284</b>	<b>468</b>
Other operating income	1	8	25	17	18	26	66	67	60	83	45	41	63
Distribution costs	(20)	(39)	(52)	(143)	(134)	(170)	(199)	(238)	(263)	(199)	(158)	(159)	(332)
G&A expenses	(11)	(13)	(20)	(24)	(27)	(38)	(67)	(78)	(77)	(68)	(59)	(60)	(165)
<b>EBIT</b>	<b>(8)</b>	<b>(0)</b>	<b>59</b>	<b>23</b>	<b>33</b>	<b>107</b>	<b>58</b>	<b>(37)</b>	<b>(134)</b>	<b>130</b>	<b>129</b>	<b>106</b>	<b>34</b>
Financial costs, net	(9)	(19)	(28)	(32)	(23)	(42)	(63)	(75)	(72)	(69)	(57)	(62)	(141)
FX gain(loss), net	(1)	(1)	3	(3)	11	2	5	3	(99)	(153)	30	(3)	7
Other non-operating items	(2)	(2)	5	(4)	(4)	(28)	(3)	(8)	(48)	(5)	(13)	(3)	(30)
Income tax	0	2	(9)	5	0	18	9	(6)	(11)	(0)	(4)	(19)	3
<b>Net profit from continuing operations</b>	<b>(20)</b>	<b>(20)</b>	<b>30</b>	<b>(11)</b>	<b>17</b>	<b>56</b>	<b>7</b>	<b>(123)</b>	<b>(365)</b>	<b>(98)</b>	<b>86</b>	<b>20</b>	<b>(127)</b>
Profit / (loss) from discontinued operations	-	-	-	-	-	-	5	(10)	(6)	(5)	(17)	-	-
<b>Net profit</b>	<b>(20)</b>	<b>(20)</b>	<b>30</b>	<b>(11)</b>	<b>17</b>	<b>56</b>	<b>12</b>	<b>(133)</b>	<b>(370)</b>	<b>(103)</b>	<b>69</b>	<b>20</b>	<b>(127)</b>
Net profit attributable to shareholders	1	20	83	136	152	226	207	112	(98)	107	225	176	200
<i>EPS, US\$</i>		-	2.1	2.0	2.2	3.0	2.6	1.4	(1.2)	1.3	2.8	2.2	2.92
<i>ROE</i>		37%	36%	36%	32%	29%	19%	9%	-8%	11%	24%	16%	14%
<i>ROIC</i>		21%	25%	26%	22%	23%	17%	9%	-1%	11%	21%	15%	12%
<i>Net Income / Invested Capital</i>		14%	36%	21%	23%	24%	15%	6%	-5%	6%	17%	13%	8%
<b>EBITDA<sup>1</sup>, incl.</b>	<b>17</b>	<b>46</b>	<b>123</b>	<b>190</b>	<b>190</b>	<b>310</b>	<b>319</b>	<b>288</b>	<b>223</b>	<b>397</b>	<b>346</b>	<b>319</b>	<b>518</b>
Sunflower oil	-	-	81	89	101	202	198	199	178	213	129	100	185
Grain and infrastructure	-	-	40	112	80	94	59	59	126	114	107	110	214
Farming	-	-	20	7	23	32	74	67	(44)	98	146	146	205
Unallocated expenses and other	-	-	(18)	(18)	(14)	(18)	(12)	(38)	(36)	(29)	(36)	(36)	(86)
<i>Gross margin</i>	<i>10%</i>	<i>13%</i>	<i>16%</i>	<i>17%</i>	<i>17%</i>	<i>15%</i>	<i>12%</i>	<i>8%</i>	<i>6%</i>	<i>13%</i>	<i>15.2%</i>	<i>13.1%</i>	<i>7.8%</i>
<i>EBITDA margin</i>	<i>8%</i>	<i>13%</i>	<i>19%</i>	<i>18%</i>	<i>19%</i>	<i>16%</i>	<i>15%</i>	<i>10%</i>	<i>9%</i>	<i>17%</i>	<i>17.4%</i>	<i>14.7%</i>	<i>8.7%</i>
<i>Net margin</i>	<i>(9.4%)</i>	<i>(5.8%)</i>	<i>4.5%</i>	<i>(1.1%)</i>	<i>1.7%</i>	<i>2.9%</i>	<i>0.6%</i>	<i>(4.7%)</i>	<i>(15.5%)</i>	<i>(4.4%)</i>	<i>3.4%</i>	<i>0.9%</i>	<i>(2.1%)</i>

Source: Built by the author on the basis of [52]

## Kernel Holding S.A. Profit and loss statement

USD million	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	Mar, 2018
<b>Invested Capital</b>													
Cash & cash equivalents	6	25	89	129	59	116	83	79	65	129	60	143	126
Net trade accounts receivable	9	10	49	32	65	112	146	151	100	56	75	87	202
Prepayments to suppliers & other current assets	7	9	30	26	94	81	90	110	57	61	53	83	85
Prepaid taxes	9	22	23	73	206	221	236	210	156	105	138	143	111
Inventory	32	40	145	99	148	184	410	270	300	159	200	387	668
Biological assets	3	10	42	19	26	96	153	247	183	147	190	256	56
Other current assets	-	-	-	-	-	-	-	23	12	2	4	21	160
Intangible assets and goodwill	10	28	103	81	118	152	228	321	233	172	159	219	216
Net property, plant & equipment	72	128	232	222	379	503	728	763	643	535	539	570	690
Other non-current assets	5	3	43	19	29	109	41	187	170	100	91	100	222
<b>Total assets</b>	<b>156</b>	<b>275</b>	<b>756</b>	<b>700</b>	<b>1,125</b>	<b>1,573</b>	<b>2,116</b>	<b>2,362</b>	<b>1,919</b>	<b>1,466</b>	<b>1,509.4</b>	<b>2,009</b>	<b>2,535</b>
Trade accounts payable	1	6	6	8	11	27	25	47	33	27	42	53	132
Advances from customers	5	9	22	26	131	102	155	202	80	63	77	89	122
<b>Interest-bearing debt</b>	<b>93</b>	<b>157</b>	<b>256</b>	<b>295</b>	<b>345</b>	<b>422</b>	<b>693</b>	<b>725</b>	<b>743</b>	<b>463</b>	<b>338.6</b>	<b>655</b>	<b>903</b>
Short-term debt	29	44	127	160	210	266	266	450	483	367	254	152	350
Long-term debt	54	102	98	133	135	156	427	276	260	95	84	8	58
Corporate bonds issued	10	10	31	2	-	-	-	-	-	-	-	494	496
Other liabilities	9	18	32	14	32	24	33	35	32	21	55	56	109
<b>Total liabilities</b>	<b>108</b>	<b>190</b>	<b>315</b>	<b>342</b>	<b>520</b>	<b>575</b>	<b>906</b>	<b>1,009</b>	<b>888</b>	<b>575</b>	<b>512.3</b>	<b>851</b>	<b>1,266</b>
<b>Total equity</b>	<b>48</b>	<b>85</b>	<b>440</b>	<b>357</b>	<b>605</b>	<b>997</b>	<b>1,211</b>	<b>1,352</b>	<b>1,031</b>	<b>891</b>	<b>997</b>	<b>1,158</b>	<b>1,269</b>
<b>Liquidity position and credit metrics</b>													
Gross interest-bearing debt	94	158	259	300	350	428	698	734	749	469	343	657	906
Cash	6	25	89	129	59	116	83	79	65	129	60	143	126
<b>Net interest-bearing debt</b>	<b>88</b>	<b>133</b>	<b>170</b>	<b>170</b>	<b>291</b>	<b>312</b>	<b>616</b>	<b>655</b>	<b>684</b>	<b>339</b>	<b>283</b>	<b>514</b>	<b>780</b>
<b>Adjusted net financial debt</b>	<b>58</b>	<b>95</b>	<b>32</b>	<b>79</b>	<b>148</b>	<b>170</b>	<b>280</b>	<b>498</b>	<b>441</b>	<b>199</b>	<b>99</b>	<b>160</b>	<b>345</b>
Net debt / EBITDA	5.2x	2.9x	1.4x	0.9x	1.5x	1.0x	1.9x	2.3x	3.1x	0.9x	0.8x	1.6x	1.5x
Adjusted net debt / EBITDA	3.4x	2.0x	0.3x	0.4x	0.8x	0.5x	0.9x	1.7x	2.0x	0.5x	0.3x	0.5x	0.7x
EBITDA / Interest	1.8x	2.5x	4.4x	5.9x	8.3x	7.3x	5.1x	3.8x	3.1x	5.8x	6.1x	5.1x	3.7x

Source: Built by the author on the basis of [52]

*Kernel Holding S.A. Cash flow statement*

US\$ million	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	LTM
EBITDA	17	46	123	190	190	310	319	288	223	397	346	319.179	285
Net purchase of PP&E	(6)	2	(24)	(89)	(56)	(48)	(93)	(91)	(42)	(23)	(30)	(40.470)	(201)
Finance cost paid	(9)	(18)	(28)	(32)	(23)	(36)	(67)	(76)	(72)	(68)	(58)	(34.632)	(70)
Income tax paid	(0)	(1)	(3)	(2)	(1)	(3)	(7)	(43)	(40)	(13)	(3)	(6.484)	(4)
Non-cash adjustments and non-operating items	(0)	(1)	7	(32)	12	(36)	(27)	1	(41)	(70)	(18)	5.422	(11)
<b>Funds from Operations</b>	<b>1</b>	<b>28</b>	<b>75</b>	<b>35</b>	<b>123</b>	<b>187</b>	<b>125</b>	<b>78</b>	<b>28</b>	<b>223</b>	<b>237</b>	<b>243.015</b>	<b>4</b>
Change in working capital	(36)	(15)	(210)	(25)	(97)	(180)	(242)	135	(1)	147	(136)	(206)	24
Acquisition of subsidiaries and JVs, net	-	(60)	(97)	(5)	(70)	(11)	(136)	(152)	(41)	2	(36)	(146)	(13)
Other investments	1	0	(49)	(1)	1	(66)	(0)	(23)	(1)	(4)	6	(37)	(80)
Dividends paid	-	-	-	-	-	-	-	-	-	(20)	(20)	(20)	(20)
<b>Free cash flow</b>	<b>(34)</b>	<b>(46)</b>	<b>(281)</b>	<b>4</b>	<b>(44)</b>	<b>(71)</b>	<b>(253)</b>	<b>38</b>	<b>(14)</b>	<b>349</b>	<b>51</b>	<b>(166)</b>	<b>(84)</b>
<b>Financing cash flow</b>	<b>31</b>	<b>64</b>	<b>315</b>	<b>36</b>	<b>4</b>	<b>124</b>	<b>225</b>	<b>(48)</b>	<b>7</b>	<b>(290)</b>	<b>(115)</b>	<b>193</b>	<b>80</b>
Debt	32	62	81	36	(77)	(18)	220	(45)	7	(289)	(115)	178	80
Equity	(1)	3	235	-	81	141	5	(2)	-	(1)	-	15	-
Cash BoP	9	6	25	59	98	58	110	83	73	65	124	60	130
Cash EoP	6	25	59	98	58	110	83	73	65	124	60	87	125
Cash conversion cycle	n/a	<b>66</b>	<b>86</b>	<b>79</b>	<b>117</b>	<b>91</b>	<b>117</b>	<b>90</b>	<b>85</b>	<b>67</b>	<b>63</b>	<b>84</b>	<b>88</b>
Payment period, days	n/a	(4)	(4)	(3)	(4)	(4)	(5)	(5)	(7)	(6)	(7)	(9)	(11)
Inventories processing, days	n/a	43	61	51	53	38	60	48	47	42	38	57	72
Receivables collection, days	n/a	10	16	14	18	17	23	19	19	12	12	14	16
VAT receivables, days	n/a	17	13	17	50	41	40	28	26	18	20	22	10

Source: Built by the author on the basis of [52]

## Comparative analysis of Kernel's competitors

	Ціна	Валюта	Купіталізація	EV/EBITDA			P/E		
			(\$m)	2017	2018	2019F	2017	2018	2019F
<b>Українські компанії</b>									
Astarta Holding	7.20	USD	175	2.5	4.0	3.5	2.7	12.1	8.3
Industrial Milk Company	3.35	USD	111	4.3	3.6	3.3	6.2	5.2	4.9
Kernel Holding	13.95	USD	1,143	5.1	7.8	5.5	6.5	21.9	8.2
MHP	10.50	USD	1,121	4.7	4.7	4.3	4.9	6.6	4.6
Ovostar Union	29.11	USD	175	6.5	4.4	3.1	7.6	5.2	4.2
<b>Медіана українських компаній</b>			457	4.5	4.4	3.5	6.2	6.6	4.9
<i>Премія/дисконт до російських компаній</i>			(69%)	(54%)	(35%)	(41%)	(59%)	(23%)	(41%)
<i>Премія/дисконт до компаній з розвинених країн</i>			(95%)	(59%)	(52%)	(62%)	(60%)	(66%)	(75%)
<i>Премія дисконт до компаній з країн, що розвиваються</i>			(85%)	(49%)	(57%)	(54%)	(41%)	(55%)	(64%)
<b>Російські компанії</b>									
Rosagro	10.86	USD	1,461	9.7	6.8	5.9	15.1	8.6	8.3
<b>Компанії з розвинутих країн</b>									
Bell Holding (CH)	322.50	CHF	2,031	9.4	8.5	8.1	18.8	19.8	17.5
Tyson Foods (US)	58.89	USD	23,380	9.0	8.2	7.9	13.2	7.7	10.8
Archer-Daniels-Midland (US)	45.20	USD	25,341	14.1	8.8	8.1	15.9	12.7	12.3
Andersons (US)	32.97	USD	933	29.5	7.5	6.8	21.9	18.3	14.4
Graincorp (AU)	7.47	AUD	1,238	9.3	10.7	7.6	23.1	76.5	19.0
Bunge (US)	57.51	USD	8,114	6.6	6.1	5.4	12.2	10.7	10.3
Suedzucker (DE)	12.97	EUR	3,006	4.5	4.5	5.4	12.0	11.9	neg.
Agrana Beteiligungs (AS)	17.72	EUR	1,257	6.1	5.3	6.7	10.3	7.8	14.2
Ebro Puleva (SP)	17.75	EUR	3,101	9.4	10.7	9.5	12.4	17.8	15.7
Associated British Foods (GB)	2,483	GBp	25,232	10.4	9.7	9.4	16.6	18.6	18.3
Tate&Lyle	705.20	GBp	4,231	9.6	8.1	8.3	12.6	12.0	13.8
Glanbia (IE)	15.75	EUR	5,295	15.5	15.4	13.5	14.2	19.7	17.8
Emmi (CH)	752.00	CHF	4,031	12.8	12.1	11.3	24.6	20.9	21.4
Dean Foods (US)	5.58	USD	510	5.5	7.6	6.1	8.3	neg.	68.0
Groupe Danone (FR)	65.87	EUR	51,248	13.1	12.7	11.8	18.5	19.8	18.1
Calmaine (US)	50.93	USD	2,477	neg.	10.6	13.6	neg.	16.2	22.9
<b>Медіана для компаній з розвинутих країн</b>			10,089	11.0	9.2	9.1	15.6	19.4	19.6
<b>Компанії з країн, що розвиваються</b>									
BRF (BZ)	22.06	BRL	4,616	10.6	13.9	9.2	neg.	neg.	neg.
Astral Foods (SA)	17,605	ZAr	544	5.5	3.0	4.1	9.6	4.9	6.8
Charoen Pokphand Foods (TH)	25.25	THB	6,584	13.5	15.8	11.4	14.6	32.3	19.4
China Agri-Industries	2.81	HKD	1,889	6.9	6.8	5.9	8.9	8.2	6.6
IOI Corporation (MZ)	4.23	MYR	6,161	16.6	17.3	15.8	8.2	26.3	23.9
China Foods (HK)	3.58	HKD	1,280	7.0	6.0	5.2	21.0	17.9	15.6
Thai Vegetable Oil (TH)	27.25	THB	667	-	-	-	11.5	11.8	11.5
<b>Медіана для компаній з країн, що розвиваються</b>			3,106	8.8	10.3	7.5	10.6	14.8	13.6

Source: Built by the author on the basis of [68].