

**Yaroslava LEVCHENKO**

DOCTORAL DISSERTATION

**ASSESSING AND ENSURING  
ENTERPRISE INVESTMENT  
ATTRACTIVENESS IN THE  
CONTEXT OF REGIONAL  
DEVELOPMENT**

**SOCIAL SCIENCES,  
ECONOMICS, 04S**  
VILNIUS, 2018

**MRU**  
MYKOLAS ROMERIS  
UNIVERSITY

MYKOLAS ROMERIS UNIVERSITY

**Yaroslava Levchenko**

ASSESSING AND ENSURING ENTERPRISE  
INVESTMENT ATTRACTIVENESS IN THE  
CONTEXT OF REGIONAL DEVELOPMENT

Doctoral Dissertation  
Social Sciences, Economics, 04S

Vilnius, 2018

This doctoral dissertation was prepared during the period 2014-2017 in Kharkiv National Automobile and Highway University (Ukraine) and during the period 2017-2018 at Mykolas Romeris University under the right to organise doctoral studies granted to Vytautas Magnus University together with ISM University of Management and Economics, Aleksandras Stulginskis University, Mykolas Romeris University and Šiauliai University by the order of the Minister of Education and Science of the Republic of Lithuania No. V-1019 dated on June 8, 2011.

The doctoral dissertation is defended externally.

**Scientific consultant:**

Prof. Dr. Asta Vasiliauskaitė (Mykolas Romeris University, Social Sciences, Economics, 04S)

MYKOLO ROMERIO UNIVERSITETAS

**Yaroslava Levchenko**

ĮMONĖS INVESTICINIO PATRAUKLUMO  
VERTINIMAS IR UŽTIKRINIMAS REGIONINIO  
VYSTYMOSI KONTEKSTE

Daktaro disertacija  
Socialiniai mokslai, ekonomika, 04S

Vilnius, 2018

Mokslo daktaro disertacija rengta 2014–2017 metais Charkovo nacionaliniame automobilių ir kelių universitete (Ukrainos Respublika) ir 2017–2018 metais Mykolo Romerio universitete pagal Vytauto Didžiojo universitetui su ISM Vadybos ir ekonomikos universitetu, Aleksandro Stulginskio universitetu, Mykolo Romerio universitetu ir Šiaulių universitetu 2011 m. birželio 8 d. Lietuvos Respublikos švietimo ir mokslo ministro įsakymu Nr. V-1019 suteiktą doktorantūros teisę.

Disertacija ginama eksternu.

**Mokslinė konsultantė:**

Prof. dr. Asta Vasiliauskaitė (Mykolo Romerio universitetas, socialiniai mokslai, ekonomika, 04S)

# CONTENTS

LIST OF FIGURES .....	7
LIST OF TABLES .....	8
LIST OF ANNEXES .....	9
AKNOWLEDGEMENTS .....	10
GLOSSARY .....	11
INTRODUCTION .....	12
1. ENTERPRISE INVESTMENT ATTRACTIVENESS IN THE CONTEXT OF REGIONAL DEVELOPMENT .....	24
1.1. Development of the concept of investment attractiveness .....	24
1.2. Factors influencing investment attractiveness .....	30
1.3. External environment of enterprise investment attractiveness in the context of regional development .....	38
1.4. Ensuring enterprise investment attractiveness in the context of regional development .....	45
CONCLUSIONS TO SECTION 1 .....	52
2. METHODOLOGY FOR ASSESSMENT OF ENTERPRISE INVESTMENT ATTRACTIVENESS IN THE CONTEXT OF REGIONAL DEVELOPMENT .....	54
2.1. Overview of existing models for assessment of enterprise investment attractiveness .....	54
2.2. The model for assessment of enterprise investment attractiveness .....	58
2.3. The model for assessment of enterprise investment attractiveness in the context of regional development .....	68
2.4. The method for ensuring interaction between the state and a private investor withing the framework of the PPP mechanism in the context of regional development .....	74
CONCLUSIONS TO SECTION 2 .....	81
3. TESTING THE PROPOSED MODEL FOR ASSESSMENT OF ENTERPRISE INVESTMENT ATTRACTIVENESS IN THE CONTEXT OF KHARKIV REGION OF UKRAINE .....	83
3.1. Results of assessing investment attractiveness of the motor transport sector and Kharkiv region .....	83
3.2. Assesment of enterprise investment attractiveness in the context of regional developement .....	93
3.3. Application of the model for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism in the context of regional development .....	97
CONCLUSIONS TO SECTION 3 .....	101
CONCLUSIONS AND RECOMMENDATIONS .....	102

REFERENCES ..... 105

PUBLICATIONS ..... 124

ANNEXES..... 127

SUMMARY ..... 157

SANTRAUKA ..... 188

## LIST OF FIGURES

Figure 1 The logical structure of the dissertation .....	19
Figure 1.1 Existing factors influencing investment attractiveness.....	29
Figure 1.2 Factors influencing enterprise IA .....	35
Figure 1.3 Factors influencing the IA of a sector and region.....	37
Figure 1.4 Factors influencing IA assessment.....	38
Figure 1.5 The system for ensuring enterprise investment attractiveness in the context of regional development.....	51
Figure 2.1 The procedure for determining the model for assessment of enterprise IA .....	58
Figure 2.2 The model for assessment of enterprise IA in the context of regional development.....	69
Figure 2.3 Determination of the corrected integral index of IA in the context of regional development.....	73
Figure 2.4 The algorithm of assessing enterprise investment attractiveness in the context of regional development.....	79
Figure 3.1. Dynamics of the length and quality of automobile roads in Ukraine, 2010-2016 .....	84
Figure 3.2. Freight transportations in Ukraine, 2010 -2016 .....	85
Figure 3.3. The structure of freight operations in Ukraine, 2010-2016 .....	85
Figure 3.4. Investments in fixed capital, 2010-2016.....	88
Figure 3.5 Investments in fixed capital of Kharkiv region, 2010-2016.....	89
Figure 3.6 Foreign direct investments of world countries in the economy of Ukraine, 2010-2016 .....	90
Figure 3.7 Financial results of the activity of enterprises in the motor transport sector of Ukraine, 2010-2016.....	91
Figure 3.8 Breakdown of the enterprises by performance results, 2010-2016 .....	92
Figure 3.9 The integral index of MTE IA .....	95



## LIST OF TABLES

Table 1.1 Classification of factors influencing IA.....	33
Table 2.1 Directions of financial analysis of enterprise investment attractiveness.....	57
Table 2.2 Indicators for assessment of enterprise IA .....	59
Table 2.3 A sample structure of the questionnaire-based survey.....	61
Table 2.4 The matrix of ranks .....	62
Table 2.5 The coefficient of concordance of expert opinions.....	63
Table 2.6 The calculated value of the Pearson criterion .....	63
Table 2.7 The scale of relative importance of some elements over others .....	65
Table 2.8 Elements of the matrix of pairwise comparisons of factors influencing enterprise IA.....	67
Table 2.9 The classification of enterprises by degree of risk.....	72
Table 2.10 The matrix of investment attractiveness at the macro level.....	73
Table 3.1 Freight operations performed by motor transport in Ukraine, mln tons .....	86
Table 3.2 Dynamics of capital investment in Ukraine and the motor transport sector of the country, 2010-2016.....	87
Table 3.3 The grouping of the regions by level of investment attractiveness .....	94
Table 3.4 The value of the market risk indicator .....	96
Table 3.5 Initial data for calculating the optimal strategy of potential investors .....	98
Table 3.6 The optimal strategy for participation of investors in financing investment projects.....	98
Table 3.7 The optimal strategy in the ascending order .....	99
Table 3.8 Values of financing the selected enterprises.....	100

## LIST OF ANNEXES

Annex A Foreign Direct Investments (FDI, 2016).....	127
Annex B Information on the experts from the scientific community.....	129
Annex C The matrix of ranks .....	131
Annex D Results of the implementation of the hierarchy analysis method for the purpose of determining weighting coefficients for assessment of enterprise investment attractiveness.....	134
Annex E Automobile roads in Ukraine.....	135
Annex F Freight operations by transport modes in Ukraine, 2010-2016 .....	136
Annex G Foreign direct investments in Ukraine, 2010-2016.....	137
Annex H Performance indicators of enterprises in the motor transport sector of Ukraine, 2010-2016 .....	138
Annex I Financial results of the activity of enterprises in the motor transport sector of Ukraine.....	139
Annex J Dynamics of the financial results of the activity of motor transport enterprises of Kharkiv region, 2010-2016.....	140
Annex K Profitability of business operations of enterprises in the motor transport sector of Kharkiv region, 2010-2016.....	141
Annex L Data of financial statements.....	142
Annex M The list of the motor transport enterprises studied .....	154
Annex N The integral index of investment attractiveness of motor transport enterprises .....	155
Annex O Operating profitability of enterprises of the motor transport sector of Ukraine, 2011-2016 .....	156

## ACKNOWLEDGEMENTS

There are many people who have walked alongside me, encouraged and helped me in the processes of preparing the dissertation.

First of all, I would like to express my deepest gratitude to my teacher from Ukraine, Prof. Ilya Dmitriev, who had been encouraging me to take doctoral studies and is still inspiring me in my scientific work.

I am appreciated to the Rector of the KhNAHU Prof. Anatoliy Turenko for the support in organizing my trips to Lithuania.

I would like to express my gratitude to my scientific supervisor Prof. Asta Vasiliauskaitė for providing continuous consulting and giving valuable advice. I am very appreciated for helping me to grow as a researcher.

I would also like to express my special thanks to the experts, Prof. Kristina Levišauskaitė and Prof. Valdona Darskuvienė, who agreed to be interviewed and provided invaluable insights for the dissertation.

Throughout life, both of my parents have been encouraging me to live with an open mind and heart. I am appreciated to them for this and for not allowing me to even think about quitting. I would also like to thank my husband, who not only always accompanied me in my trips and supported me, but was also both Mom and Dad for our little daughter when I was busy with the dissertation.

Last, but not least, I would like to thank my good friend Zhanna Beztsennaya who helped with the proofreading of the dissertation and gave me valuable advice.

## GLOSSARY

**Ensuring enterprise investment attractiveness** – a set of measures and mechanisms to support the investment attractiveness of an enterprise.

**Ensuring enterprise investment attractiveness in the context of regional development** – a set of measures and mechanisms at the regional level to support the investment attractiveness of an enterprise.

**Factors influencing investment attractiveness** – the components the set of which determines the investment attractiveness in general (Andrash, 2012).

**Indicators of investment attractiveness** – the components the set of which determines a separate group of factors influencing investment attractiveness, i.e., the constituent elements of the factor (Andrash, 2012).

**Investment attractiveness (IA)** – a complex concept consisting of a set of factors that determine it and influence the final results of investing.

**Investment attractiveness of enterprise** – a set of internal and external factors that determine the position of an enterprise among other enterprises within an industrial sector.

**Investment attractiveness of enterprise in the context of regional development** – the concept combining the elements of enterprise investment attractiveness, elements of sector-region attractiveness, sustainability of an enterprise in the sector and ensuring effective interaction between the state and a private investor.

**Public-private partnership (PPP)** – a modern mechanism for managing transformational processes in economy, which allows attracting private investments and private business competencies to solve state tasks of economic modernization, distribute risks and obligations between the state and business.

**Region** – an administrative area, division, or district (Webster, 2008).

**Sector** – a portion of a sociological, economic, or political subdivision of area of operation (Webster, 2008).

## INTRODUCTION

### **Relevance of the research.**

Nowadays, a number of studies are being carried out to assess attractiveness of individual enterprises, regions and countries. To date, the investment attractiveness of an enterprise is determined not only by indicators of its economic activity but also by factors that influence the investment attractiveness of the city, region, sector, in which it operates. That is why, the interest of science, politics, business in investment attractiveness continues to grow and this happens, in particular, due to its impact on competitiveness and sustainable development of national economies. Therefore, it is necessary to conduct additional research in the field of assessment of enterprise investment attractiveness in the context of regional development, which constitutes the main objective of the thesis.

Research projects focusing on inflows of foreign direct investment into specific areas and investment attractiveness are conducted both by academic economists and world leading consulting companies. UNCTAD is an institution that deals with incentives for investors and foreign investment inflows into different world markets. The Polish publications presenting the issues of investment attractiveness include a collective publication "Investment Attractiveness of Polish Regions" (Godlewska-Majkowska, 2008). Some problems related to investment attractiveness are addressed in the work entitled "Investment Attractiveness of a Region" (The BPCC economic debate, 2017). The issues of investment attractiveness are also raised by such consulting companies as Ernst & Young (2009, 2008, 2007, 2006), KPMG (2009), Kearney (2009, 2007). They also try to identify the attractiveness of European cities and certain regions for investment projects (Berger, 2009; Kearney 2007, 2006). Some consulting companies, in particular, PriceWaterhouseCoopers, are interested in attractiveness of the Central and Eastern European market.

Increasing the investment attractiveness can help an enterprise to create competitive advantages, open opportunities for innovation, reduce operating risks and operating costs, and improve the enterprise's profitability.

The researchers speak about the importance of investment attractiveness of an individual enterprise as a constituent and main part of a region's and country's investment attractiveness. The proof of this is that on 16 March, 2017 there took place the conference called "The BPCC economic debate on the investment attractiveness of Podkarpackie in Rzeszów" with the participation of representatives of the business world, entrepreneurs, investors, universities, the provincial marshal's office of the Podkarpackie region, Rzeszów's city hall, the Aviation Valley Association and the special economic zones (The BPCC economic debate, 2017). The Foreign Minister of France mentioned the importance of investment attractiveness for potential and existing investors (Ayrault, 2016). Marcin Dojnik underlined the importance of business support and proposed a service path for potential investors, starting from initial information on the market and a company's potential, through a presentation of particular offers and incentives; and ending at on-going services for investors as well as monitoring of all activities (The BPCC economic debate, 2017).

Competitiveness of an industrial sector as well as of the whole country depends on competitiveness of enterprises. It is the basis of the European Union's economy (European

Commission, 2016). Fluctuations in the economic activity have forced business to change traditional methods of organization and management and to search for new tools, knowledge, resources and competencies in order to strengthen its position and ensure competitiveness of enterprises. It is not enough to pay attention only to the investment attractiveness of an enterprise. Its competitiveness depends on the sector and the region in which it operates (The BPCC economic debate, 2017).

In this regard, researchers pay special attention to a fairly new concept – investment attractiveness – and methods for its assessment.

### **Scientific problem and the level of its investigation**

In order to objectively reveal the level of the analysed problem, an investigation was performed with searching topical publications in scientific databases: EBSCO Publishing, Cambridge Journals Online, Emerald Management e-Journals Collection, Oxford Journals, SAGE Journals Online, Science Direct Journals, Sciences Online, Taylor and Francis, and Wiley Online Library. The search was carried out at the level of the title of the article, keywords and abstract. As a results of the search in the databases, for the analysis there were selected publications for the period from December, 2014 to November 6, 2017.

The research of theoretical and methodological principles of assessment of IA was carried out in works by local and foreign scientists: Snieska & Zykiene (2015), Dorożyński & Kuna-Marszałek (2016), Mittala & Jhamb (2016), Rębiasz & Macioł (2014), Rolik (2013), Nizielska (2012), Kupiec (2005), Godlewska-Majkowska (2008), Zakirova (2016), Birnleitner (2014), Škuflić & Rkman (2013), Serhieieva (2015), Kwang-Hoon (2016), Langalanga (2015), Dumon (2012), Snieska & Zykiene (2011), Litavniece (2014), Bruneckienė, Zykienė & Stankevičius (2016), Kolomits (2013), Liovkin (2013), Golobrodskaya (2013), Wang, Liang, Huiyu Li & Yang (2016), Dierkes, Erner & Zeisberger (2010), Puciato (2016), Myers (2008), Blanc (2004), Porter (2006), Sinkiene & Kromalcas (2010), Valinurova (2011), Korobkov (2012), Krupka & Bachinskiy (2014), Leshchenko (2007), Maifat (2007), Malovichko (2011), Stokovych (2009), Fedorenko (2007), Khachaturov (2006), Andrash (2012). These researchers, based on scientific works of such scientists as Sharpe (2001), Gitman (1997), Northcott (1997), Havranek (1991), proposed a definition of the new concept of investment attractiveness. It should be noted that opinions on the essence of enterprise investment attractiveness are very different. Each author has his own point of view regarding the definition of this concept and offers his own vision of IA and methods for its assessment. And since discussions in the field of research of the theoretical and methodological principles of assessment of investment attractiveness assessment continue, this problem remains relevant.

The conducted research made it possible to draw the following conclusions and generalizations: Ukrainian and foreign scientists, who deal with the problems of investment attractiveness, perform their studies in three areas, namely investment attractiveness of a country, investment attractiveness of an industrial sector, region or territory, and investment attractiveness of an enterprise.

The most recent studies among the scientists of the first group are conducted by Birnleitner (2014), Škuflić, Rkman & Šokčević (2013), Serhieieva (2015), Kwang-Hoon Lee

(2016), Dorożyński & Kuna-Marszałek (2016); Kazakhstan investment attractiveness – Ernst & Young’s investor opinion survey (2011), Langalanga (2015), EY’s attractiveness survey: India 2014. Enabling the prospects (2014), Dumon (2012), who conduct research on investment attractiveness of a country. All of them are sure and assert that since the concept of investment attractiveness of a country is a multifaceted concept, components of its integral index are investment attractiveness of regions and enterprises.

The researchers of the second group, who study the problems of investment attractiveness of a region, sector or territory, feel certain of the importance of the problem under study, since they singled out it as a component of the overall indicator of a country’s investment attractiveness. They are also sure that investment attractiveness of enterprises operating on the territory of a region has a significant impact on the attractiveness of the region. Among these scientists are Snieska & Zykiene (2015), Dorożyński & Kuna-Marszałek (2016), Mustafakulov (2016, 2017), Snieska & Zykiene (2011), Litavniec (2014), Bruneckienė, Zykiene & Stankevičius (2016), Durdieva (2013), Saidi (2016), Symon-Nganga & Maruyama (2015), Damborsky & Rihova (2009), Mohammed Hamri, Zerouali Ouariti & Sadiqui (2014), Lapointe (2004), Nizielska (2012), Zakirova (2016), Sinkiene & Kromalcas (2010).

As for the researchers of the third group (Drábek & Merková (2015), Krupka & Bachinskiy (2014), Strokovich (2009), Mirkin (2006), Tsarev (2012), Anamari-Beatrice (2014), Mittala & Jhamb (2016), Rębiasz & Macioł (2014), Rolik (2012, 2013), Vetlugin (2006), Kolomits (2013), Kredisov (2013), who study the problems of investment attractiveness of an enterprise, consider their studies basic ones, since without increasing investment attractiveness of enterprises, it is impossible to increase the attractiveness of a region, sector, and country as a whole.

All the researchers who deal with the problem of investment attractiveness (scientists of all defined groups) are unanimously convinced that investment attractiveness, as an independent definition, an element of a complex system, is one of conditions for formation of an investment environment and needs be assessed. And since the enterprise is recognized as a fundamental link in the formation of the investment attractiveness of a country, region or territory, there arises the question of how to assess the investment attractiveness of an enterprise, and what factors should be taken into account at the same time? The issue of assessing investment attractiveness is especially relevant when it comes to assessing a large number of applicants for investment. How to determine the most interesting enterprise for investment, which enterprise is the most investment-attractive, and how risky such investments are?

The answer to this question can be found in the works of scientists who offer different models and methods for assessing enterprise investment attractiveness. Models for assessment of investment attractiveness at the micro level are presented in such scientific works as “Model for quantifying the components of the innovation strategy” (Rolik, 2013), “Model for business activity assessment” (Nizielska, 2012), “Assessment model on the basis of forecast estimates” (Rębiasz & Macioł, 2014), Method for integral assessment of investment attractiveness of enterprises and organizations” of Agency on Prevention of Bankruptcy of Enterprises and Organizations (ABEO), which was developed on the initiative of the administration of Agency on Prevention of Bankruptcy of Enterprises and Organizations

(ABEO) and registered in the Ministry of Justice of Ukraine (ABEO, 1998). All these methods for assessing the enterprise investment attractiveness offer a comprehensive approach, taking into account the enterprise's performance indicators, risk and regional affiliation. As a result of assessing the investment attractiveness of the enterprise, it's possible to obtain a number of performance indicators for further comparison and compilation of the final conclusion. None of the methods provides for obtaining one universal value, according to which it was possible to unequivocally answer the question of which enterprise is more investment attractive, which one is less attractive and to what extent?

Snieska & Zykiene (2015) determined that for investors the provision of business support services is an important factor. In the scientific literature this aspect is neither defined nor clarified (Snieska & Zykiene, 2015). Such researchers as Otairua, Umarb, Zawawib, Sodangic & Hammad (2014), Pribadi & Pangeran (2010), Anamari-Beatrice (2014), Yang, Long & Li (2017), Liu, Gao, Cheah & Luo (2016), Wang & Liu (2015), Cedrick & Long (2017), Kurniawan, Mudjanarkoa & Ogunlana (2015), Kurniawan, Ogunlana & Motawa (2014), Hucknall (2010), Siemiatycki (2009), Kaka & Al-sharif (2010), Zeneli (2016) offer systems for ensuring interaction between the state and a private investor within the framework of public-private partnership (PPP). Since self-increasing of the enterprise IA becomes problematic under crisis conditions in the country, such authors as Mankiw (2014), Cedricks & Longs (2017), Yang, Long & Wenbo Li (2017), Liu, Gao, Cheah, & Luo (2016), Wang & Liu (2015), Kurniawan, Mudjanarko & Ogunlana (2015), Zeneli (2016) and Burkov & Novikov (2007) proposed mechanisms and models for ensuring provision of incentives for investors within the framework of PPP.

Summarizing, it can be stated that the question of enterprise IA assesment is important, relevant and new from the point of view of scientific investigations and practical application, however

- enterprise IA needs further research;
- factors influancing IA are not analysed thoroughly enough;
- methodologies and models for assessing enterprise IA require scientific improvements;
- provision of effective functioning of the system for ensuring enterprise investment attractiveness requires new proposals.

In general, assessment of enterprise investment attractiveness requires improvement and consideration in the context of regional development. Deficiency of researches on assessing enterprise IA, disagreements on the assessment methods used motivate further investigation. Researchers analyzing the influence of various factors on enterprise IA concentrated on different aspects. They assessed the IA of an enterprise, a region, and city having obtained a large number of resultive indicators, but no one proposed a universal model for assessment of enterprise investment attractiveness in the context of regional development which determines the influence of the factor of interaction with the state and the mechanism of such interaction. It left a gap concerning assessment of enterprise investment attractiveness in the context of regional development. Furthermore, there is still a lack of complex methodology for assessment of enterprise investment attractiveness in the context of regional development.



**The scientific problem** is how to assess and ensure enterprise investment attractiveness in the context of regional development.

**The object of the scientific research** is methods and models for assessing and ensuring enterprise investment attractiveness in the context of regional development.

**The aim of the scientific research** is to develop the model for assessing and ensuring enterprise investment attractiveness in the context of regional development and to test it in Kharkov region.

**The objectives of the scientific research are**

1. to clarify the conceptual apparatus of the main structural components of investment attractiveness, namely to analyze the approaches of scientists to the understanding of the concept of investment attractiveness, determine its content;
2. to study in detail the factors influencing investment attractiveness as well as the indicators that form these factors, to determine among them the most significant factors, to systematize the obtained results for assessing enterprise investment attractiveness in the context of regional development;
3. using the experience of developed European countries, to determine the role of PPP in ensuring enterprise investment attractiveness in the context of regional development;
4. based on the existing models for assessment of investment attractiveness and by analyzing the existing approaches to IA assessment, to determine their advantages and disadvantages, develop a model for assessment of enterprise investment attractiveness in the context of regional development;
5. with the aim of ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism, to propose for implementation a model for ensuring enterprise investment attractiveness in the context of regional development;
6. to test the proposed model for ensuring enterprise investment attractiveness in the context of regional development based on motor transport enterprises of Kharkiv region;
7. to test the proposed model for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism based on motor transport enterprises of Kharkiv region.

**Relationship with academic programs, plans, themes.** The research topic is relevant to the topic of a scientific and research work of Department of Economy and Entrepreneurship of Kharkiv National Automobile and Highway University (KNAHU) "Prospects for entrepreneurship development in Ukraine" (state registration number 0114U003909) and "The priority directions and prospects of management of business development" (state registration number 0115U004774), in which the author was engaged as a collaborator. Within the frame of the research theoretical aspects of development of entrepreneurship were substantiated, theoretical and methodological approaches to assessment of enterprise investment attractiveness in the context of regional development were considered.

### **The methods of the research**

To solve the problem raised in the dissertation, there applied the following scientific research methods:

- critical analysis, abstract-logical method and generalization of scientific experience – at improving the principles for assessing investment attractiveness;
- analysis, synthesis and comparison – at systematizing factors of influence of the external and internal environment on enterprise IA, determining objectives of the system for ensuring enterprise IA, generalizing methods for assessment of enterprise IA;
- economic and mathematical modeling and factor analysis, optimization method – at developing a model for assessment of enterprise IA;
- the mathematical method of studying optimal strategies – at developing a model for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism;
- mathematical and statistical analysis of research results conducted by employing the software of statistical data processing, SPSS (v21.0) and Microsoft Excel (2010).

### **Data and their sources**

The research is based on historical data from 2011 to 2016 (6 years). The theoretical sources used in the research on assessment of enterprise investment attractiveness include the books, articles, scientific works on investment attractiveness and competitiveness, direct foreign investment, and influence of public-private partnership on investment attractiveness, as well as the methodology for multidimensional comparative analyses.

To determine the collective opinion of specialists on the importance of factors influencing investment attractiveness, the questionnaire-based survey was chosen. It was carried out during the International conferences “Problems and perspectives of business development” in KNAHU in 2017. The participants of the conference were specialists in the field of economy, entrepreneurship and management from Ukraine, Slovakia and Poland.

Also theoretical, methodological and information base of the research is fundamental principles of the theory of investment and market economy, works by local and foreign scientists on problems of enterprise IA, normative and legal acts concerning the regulation of investment activity, official statistical data of the State Statistics Service of Ukraine, and the Central Statistical Office in Kharkiv region, reports and other informational materials.

### **The novelty of the scientific research**

1. The concept of investment attractiveness has been considered in the context of regional development. In the existing definitions of investment attractiveness the most commonly encountered concepts are favorable investment environment, status and opportunities, investment capacity, investment favorability, investment security, investment potential, general characteristics of advantages and disadvantages, stability of an enterprise, investment incentives, competitiveness, good conditions for establishing business activity. There is no generally accepted definition of IA. In different societies it is perceived mainly as conditions of functioning determined by a set of quantitative and qualitative indicators. In other words, it is

a competition between similar enterprises, sectors. *In the dissertation investment attractiveness is defined as a complex concept consisting of a set of factors that determine it and influence the final results of investing.*

2. To solve the problem of assessing enterprise investment attractiveness, *the whole set of factors that are most significant for and have a decisive influence on investment attractiveness have been determined. After sifting and systematizing the factors that influence investment attractiveness, the most significant among them were identified. Internal and external factors of enterprise IA that determine integral assessment were selected.* These indicators of enterprise IA were analysed and estimated in the dissertation and combined into an integral set of indicators used for assessment of investment attractiveness. Based on this, an assumption of investment attractiveness assessment in the context of regional development has been put forward.
3. To determine the significance of the selected factors, i.e., the strength of their influence on the investment attractiveness of an enterprise, the assessment is carried out based on an expert survey of specialists working in this field. *To determine the collective opinion of specialists on the importance of the factors, the method of questionnaire survey was used and the model for assessment of enterprise investment attractiveness has been developed.*
4. *Enterprise investment attractiveness in the context of regional development is defined as the concept combining the elements of enterprise investment attractiveness, factors influencing sector-region attractiveness, evaluating the sustainability of an enterprise in the sector, and ensuring effective interaction between the state and a private investor.*
5. *PPP has been defined as a mechanism influencing and ensuring enterprise investment attractiveness in the context of regional development.*
6. *The model and algorithm for assessment of enterprise investment attractiveness in the context of regional development has been developed and can be used as a tool for assessment of investment attractiveness in the context of regional development.*

### **The structure of the dissertation**

This dissertation consists of three sections. The approaches to the understanding of the concept of investment attractiveness, determination of its content, the factors influencing investment attractiveness and determination among them the most significant ones, the role of PPP in assessment of enterprise investment attractiveness in the context of regional development are discussed in *Section 1*. In *Section 2* the existing models and approaches for assessment of IA, their advantages and disadvantages are analyzed; a model for assessment of enterprise investment attractiveness in the context of regional development and a mathematical model based on the theory of games for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism are developed. *Section 3* of the dissertation work contains the testing of the proposed models employed for the empirical research. The IA assessment was carried out based on Ukrainian motor transport enterprises, the mathematical model of the mechanism for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism was tested at enterprises of Kharkiv region.

The logical structure of the dissertation is presented in Figure 1.

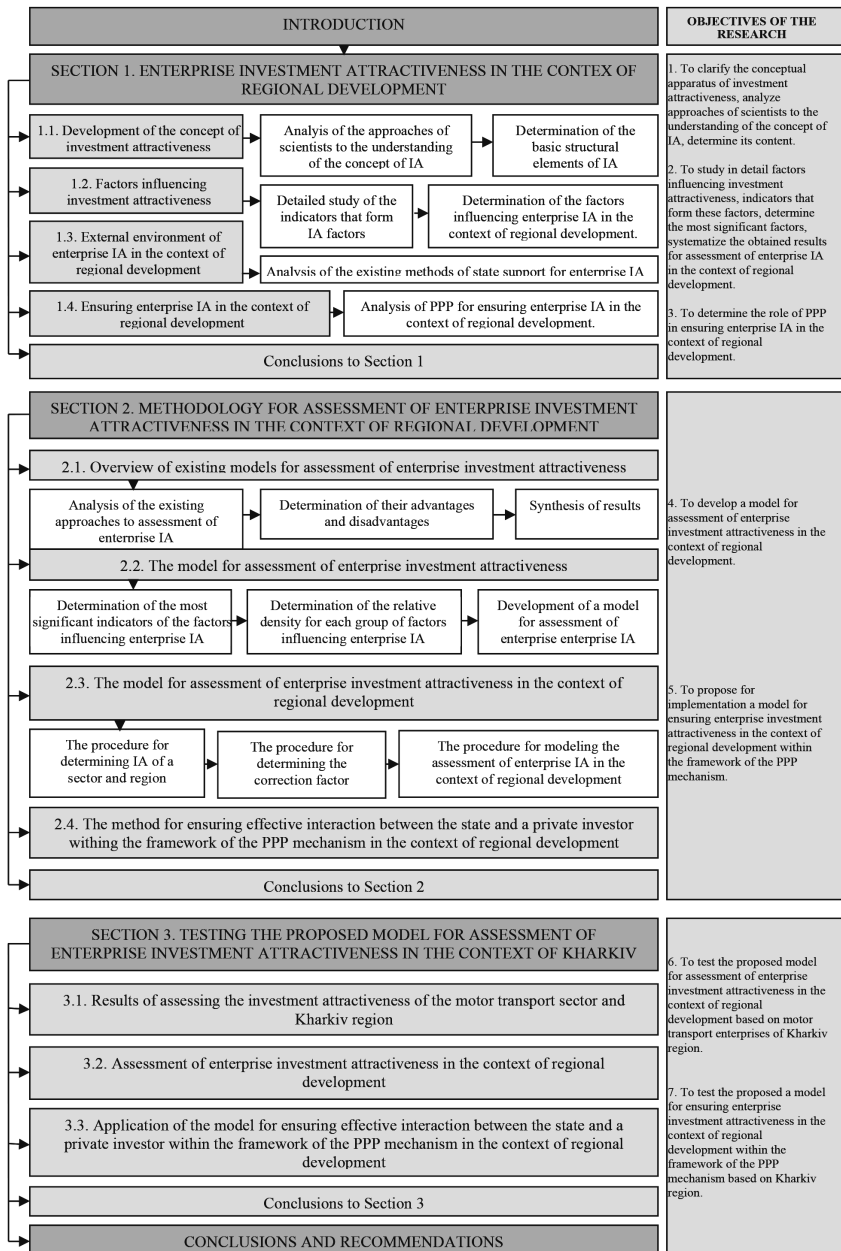


Figure 1. The logical structure of the dissertation

### **Limitations of the research**

The set of factors determining the investment attractiveness of an enterprise depends on the sector in which the enterprise operates. Therefore, the set of factors proposed in this dissertation is not universal and requires further discussions.

The model proposed by the author does not take into account the factors at the state level, as it is oriented to the internal assessment of the investment attractiveness of an enterprise.

This empirical study was carried out at enterprises of the motor transport sector, and the author realizes that results of a similar research in other sectors may differ, which is the basis for further discussions.

The research was conducted in one region of Ukraine – Kharkiv region. But regions with similar characteristics exist in countries with emerging economies, indicators forming a model for assessing the investment attractiveness of an enterprise in the context of regional development may be different and specific for such regions, but they can be adapted, and the model can be implemented in other regions. There are a lot of such regions and the task of science is to support all of them in their development and European integration.

### **Practical value of the research results.**

The theoretical and practical propositions of the dissertation work have been developed into methodological guidelines and practical recommendations, which can be used in ensuring enterprise IA as a mechanism for self-assessment of enterprise investment attractiveness in the context of regional development and to increase investors' interest and confidence in Kharkiv region as well as to receive benefits from investing. For the purpose of further development, the author's idea concerning the model for ensuring effective interaction between the state and a private investor was taken into consideration and recommended for adoption by the Department of Economics and International Relations of Kharkiv Regional State Administration (adoption deed №03-46/2352 of 03.06.2015).

### **The contents of the dissertation.**

The dissertation consists of introduction, three sections, conclusions and recommendations, references and annexes. The dissertation volume is 300 pages (180 pages aside from annexes); it contains 19 figures, 19 tables, 15 annexes; 304 sources of scientific literature in Ukrainian, Russian and English were used as references.

### **The publication of the research results.**

The research results have been presented at scientific conferences in Ukraine and abroad and published in recognized Ukrainian and foreign scientific journals.

### **Publications:**

1. Dmitriyev, I., Levchenko, I. (2017). The investment attractiveness of enterprises of Ukrainian motor transport industry. *Review of Finance*, 6 (2), 1378–1386. [Scopus, Thompson Reuters, Journal Citation Report]
2. Dmitriyev, I., Shevchenko, I., Levchenko, I. (2017). Theoretical, methodological and applied aspects of managing investment attractiveness of automobile enter-

- prises (on the example of Ukraine). Oxford Economic Papers, 4 (2), 1137–1145. [Scopus, Thompson Reuters, Journal Citation Report]
3. Dmytryiev, I. A., Levchenko, I. (2017). Otsiniuvannia investytsiynoi pryvablyvosti pidpriemstva ta upravlinnia yii pokaznykamy. Aktualni problemy ekonomiky, 5 (191), 89–99. [EBSCOhost, EconLit, ABI/Inform (by ProQuest), Erih Plus (Ериверія)]
  4. Grinko, A., Bochulia, T., Grynko, P., Yasinetska, I., Levchenko, I. (2017). Formation of the concept of intellectualization information provision for managing an enterprise. Eastern-European Journal of Enterprise Technologies, 5 (3 (89)), 4–14. doi: 10.15587/1729-4061.2017.111859 [Scopus, Ulrich's Periodicals Directory, OpenAIRE, Bielefeld Academic Search Engine (BASE), WorldCat, Directory of Open Access Journals (DOAJ)]
  5. Levchenko, I. (2015). Evaluation the investment attractiveness of motor transport enterprises // Economics, management, law: problems of science and practice, 112–117. [PIHL Science Index, Thompson Reuters, IndexCopernicus]
  6. Levchenko, I. (2015). Factors of influence are on level of investment attractiveness of motor transport enterprises. Ikonomiceskite perspektivi v globalnata kriza, 142–146. [PIHL Science Index, Thompson Reuters, IndexCopernicus]
  7. Levchenko, I. (2015). Formuvannia systemy upravlinnia investytsiynoiu pryvablyvistiu avtotransportnykh pidpriemstv. Nauka moloda, 23, 20–27. [IndexCopernicus]
  8. Levchenko, I. (2015). Mekhanizm informatsiynoho zabezpechennia systemy upravlinnia investytsiynoiu pryvablyvistiu ATP. Problemy i perspektivy rozvytku pidpriemnytstva, 2, 46–50. [IndexCopernicus]
  9. Levchenko, I. (2015). Methodology of estimation of level of investment attractiveness of motor transport enterprises. Economics, Management, Law: current state and perspectives of development, 116–120. [PIHL Science Index, Thompson Reuters, IndexCopernicus]
  10. Levchenko, I. (2015). Optyimizatsiya rivnia investytsiynoi pryvablyvosti avtotransportnykh pidpriemstv. Zbirnyk naukovykh prats Cherkaskoho derzhavnogo tekhnolohichnogo universytetu. Seriya: Ekonomichni nauky, 39 (2), 150–155. [PIHL Science Index, IndexCopernicus, Google Scholar]
  11. Levchenko, I. (2015). Orhanizatsiine zabezpechennia upravlinnia investytsiynoiu pryvablyvistiu avtotransportnykh pidpriemstv. Problemy i perspektivy rozvytku pidpriemnytstva, 3 (10), 103–107. [IndexCopernicus]
  12. Levchenko, I. (2015). Pryiniattia upravlinskoho rishennia optyimizatsyi rivnia investytsiynoi pryvablyvosti ATP. Zbirnyk naukovykh prats Cherkaskoho derzhavnogo tekhnolohichnogo universytetu. Seriya: Ekonomichni nauky, 40 (2), 89–96. [PIHL Science Index, IndexCopernicus, Google Scholar]
  13. Levchenko, I. (2016). Management of investment attractiveness of motor transport enterprises (on the example of Ukraine). Problemy i perspektivy rozvytku pidpriemnytstva, 3 (14), 104–109. [IndexCopernicus]
  14. Levchenko, I. (2016). The analysis of the motor transport sector investment in Ukraine and Lithuania. Perspective directions of scientific researches, 125–129. [PIHL Science Index, Thompson Reuters, IndexCopernicus]

15. Levchenko, I. (2016). Transport sector development in Lithuania and Ukraine. Problems of development modern science: theory and practice. EDEX, Madrid, España, 115–120. [PIHII Science Index, Thompson Reuters, IndexCopernicus]
16. Levchenko, I. (2017). A model of investment attractiveness evaluation of motor transport enterprises. Economics, management, law: challenges and prospects, 74–77. [PIHII Science Index, Thompson Reuters, IndexCopernicus]
17. Levchenko, I., Tripak, M. M. (2010). Analiz konkurentnosti transportnoi haluzi Ukrainy ta praktychni rekomendatsyi shchodo yii polipshennia. Nauka moloda, 14, 57–59. [IndexCopernicus]

### **Presentations:**

1. Antonova, L., Levchenko, I. (2016). Gridin's group It company: novatorstvo, kachestvo, bezopasnost'. Vol. 3. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: KhNADU, 92–94.
2. Antonova, L., Levchenko, I. (2016). Investments – the main element of the investment activities. Vol. 1. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: KhNADU, 157–160.
3. Dmytriiev, I. A., Levchenko, I. (2016). Rozvytok transportnoi haluzi Polshchi ta Ukrainy: spilne ta vidminne. Vol. 2. “Naynovite nauchni postizheniya – 2016”: nauchnye trudy pomaterialam mezhdunarodnoy nauchno-prakticheskoy konferentsii. B'lgariya: “Byal GRAD-BG” OOD, 25–33.
4. Levchenko, I. (2010). Pidvyshchennia efektyvnosti upravlinnia investytsiynoiu diyalnistiu na pidpriemstvakh avtotransportnoi haluzi. Problemy i perspektyvy rozvytku pidpriemnytstva: zbirnyk materialiv mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: FOP Pavlov M. Yu., 129–130.
5. Levchenko, I. (2015). Investytsyi yak osnovnyi element investytsiynoi diialnosti pidpriemstva. Ekonomika i upravlinnia v umovakh hlobalizatsyi: zbirnyk materialiv IV Mizhnarodnoi naukovo-praktychnoi Internet-konferentsyi. Kryvyi Rih: DonNUET, 41–44.
6. Levchenko, I. (2015). Metodyka otsinky rivnia investytsiynoi pryvablyvosti ATP. Ekonomika pidpriemstva: suchasni problemy teoryi ta praktyky: Materialy chetvertoi mizhnar. nauk.-prakt. konf. Odessa: Atlant, 110–113.
7. Levchenko, I. (2015). Priorytetni metody otsinky rivnia investytsiynoi pryvablyvosti ATP. Finansovi aspekty rozvytku derzhavy, rehioniv ta subiektiv hospodariuvannia: suchasnyi stan ta perspektyvy: Materialy I mizhnar. nauk.-prakt. konf. Odessa, 11–13.
8. Levchenko, I. (2016). Formuvannia systemy upravlinnia investytsiynoiu pryvablyvistiu ATP. Vol. 1. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy Kh Mizhnarodnoi naukovo-praktychnoi konferentsii. Kharkiv: KhNADU, 229–231.

9. Levchenko, I. (2017). Derzhavno-pryvatne partnerstvo, yak zaporuka rozvytku pidpriemstv Ukrainy. Economy. Zarzadzanie. Teoretyczne I praktyczne aspekty rozwoju wspolczesnej nauki. Warszawa:Wydawca "Diamond trading tour", 62–65.
10. Puksas, A., Levchenko, I. (2016). Razvitie transportnoy otrasli v Litve i Ukraine. Vol. 2. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: KhNADU, 203–205.
11. Puksas, A., Levchenko, I. (2016). Upravlenie investitsionnoy privlekatel'nost'yu predpriyatiy avtotransportnoy otrasli. Vol. 3. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: KhNADU, 272–275.



# 1. ENTERPRISE INVESTMENT ATTRACTIVENESS IN THE CONTEXT OF REGIONAL DEVELOPMENT

## 1.1. Development of the concept of investment attractiveness

The modern economy is characterized by innovations and challenges. This period is considered the most favorable for restructuring activities of enterprises associated with the impact of factors on the investment activity.

The research in this dissertation is carried out with the aim of developing a procedure for assessing and ensuring enterprise investment attractiveness in the context of regional development, using the experience of developed countries, which helps avoiding unnecessary procedures. This approach will allow, on the one hand, to simplify the procedure for assessing enterprise investment attractiveness in the context of regional development, and on the other hand, draw the attention of the authorities to ensuring and supporting the investment attractiveness of an enterprise in the context of regional development.

On this basis, there arises a need to provide theoretical foundations aimed at optimizing the investment activity of enterprises. Besides, to clarify the conceptual apparatus of enterprise investment activity, it is necessary to review the existing approaches to improvement of investment activity in the direction of an adequate diagnosis of its condition, determination of integral indexes and criteria-based assessment.

It is appropriate to start the scientific work on this problem by considering the concept "investment attractiveness".

Snieska & Zykiene (2015) looks upon investment attractiveness as environment that is favorable for investment, region with available natural resources and concentration of workforce potential. A favorable investment environment is characterized by an effective institutional activity, optimal tax system and developed physical infrastructure.

Birnleitner (2014) considers investment attractiveness as a complex phenomenon that consists of five major dimensions: political/legal, economic, social, technological and intercultural one. He mentioned that countries can increase their investment attractiveness for foreign direct investments by focusing on political stability, transparency, and stable economic conditions.

Mustafakulov (2017) believes that investment attractiveness is only the status and opportunities of an economic system (country, region or enterprise).

According to Dorożyński & Kuna-Marszałek (2016), the areas attractive to investors are those that help reduce investment outlays and operating expenses, which facilitate profit maximisation and limit a potential risk of failure, and the main indicator of investment attractiveness is foreign direct investment.

In the opinion of Litavniece (2014), attractiveness is the factors essential for ensuring a long-term development and a way to strengthen the competitive advantage.

Igonina (2012) considers that conditions for carrying out the investment process in the market economy take specific forms, which reflects the peculiarities of the interaction of subjects of investing in the system of market relations:

- availability of a significant, diversified by forms of ownership, structure of investment capital characterized by predominance of the private investment capital compared with the state one;
- availability of an inter-sectoral network of financial intermediaries, which facilitate realization of the investment demand and supply;
- availability of a developed market for objects of investment (investees);
- distribution of investment capital between objects of investment according to the economic criteria for assessing investment attractiveness.

As the effectiveness of the investment process and the IA of an investment object are interconnected, the author believes it is important to determine the essence of the definition of “enterprise investment attractiveness” and related categories to identify quantitative and qualitative indicators to be considered in order to build a hierarchical system for improvement of IA.

There is no unified approach to defining IA in the economic literature. The detailed analysis of the proposed by scientists structure of the concept of IA and methods for its assessment has revealed significant differences. Thus, Valinurova & Kazakova (2011) argue that the term “investment attractiveness” is used without contextual and categorical content equating it with the investment risk, investment potential or financial flow. Therefore, the authors propose to define IA as “a set of various objective signs, properties, means, capabilities of an economic system determining the potential solvent demand for investments”. At the same time, scientists consider the concepts of IA, investment activity and investment risk to be related ones.

Investment activity is the ratio of the current investment volume to the previous one; it can be regarded as an auxiliary element in the course of studying problems of investment character without analysis and assessment of their properties and without regard to their impact on other components of the investment process, as well as the result of interaction of investment supply and demand. Thus, IA is a “general characteristic of strengths and weaknesses of the investee from the standpoint of the investor according to the criteria formed by him” (Valinurova & Kazakova, 2011).

A similar view is held by Leshchenko, Denim & Maruschak (2012), who define IA as an integral feature and proposed to determine IA as the combination three main components:

- investment capacity – the volume of investments required to meet the demand, which is determined by availability of products with specific consumption characteristics and the capital investments required for its production;
- investment favorability – a degree of an enterprise’s ability of a targeted using of investments and ability of the best possible deploying of their own resources and capabilities;
- investment security – the indicator determined by the availability and functioning for a long time of legal documents regulating the terms of the enterprise and investor activity.

Ryshnirenko, Bondar and Nikonov (2008) consider that IA is “an integral characteristic of an individual enterprise, sector, region, state in terms of the development prospects, profitability of investments and level of investment risk”. And, according to the scientists, the relevant concept is the investment potential – “a quantitative characteristic considering basic macroeconomic indicators, saturation of a territory by factors of production, level of income of the population and its consumer demand”.

Malovichko (2011) has a different view of the definition of IA. According to the scientist, IA is “a degree of a potential investor’s ability to invest in an enterprise at certain characteristics of its economic activity corresponding to a pre-defined correlation of riskiness and profitability of the investment”.

Blank (2004) has a similar view and defines IA, as “general characteristics of advantages and disadvantages of investing in individual spheres and objects from the standpoint of an individual investor”.

Krylov (2013) considers IA an independent economic category, which is characterized by stability of the enterprise financial status, return on capital, share prices and level of dividends, and is formed due to competitiveness of products and client orientation of the enterprise. According to the scientists, the level of innovation activities in the context the strategic development is important for enhancing the enterprise IA.

In the opinion of Topsakhalova, Lepshokova & Khojichujev (2009), IA should be considered in its narrow and broad meaning. On the one hand, IA is an integral result of reflecting the dynamics, current and projected state of an entity, and on the other hand, it is a system of socio-economic, political, financial and administrative relations, which arise in regard to expediency of investing into a particular economic entity. That is, this is an economic category, which is characterized by an efficient use of resources, capacity for self-development based on increasing the return on capital, technical and economic level of production, quality and competitiveness of products. Also, the scientists believe that IA defines a set of different factors whose list and impact may differ and vary depending on the composition of investors as well as industrial and technical features of the enterprise being invested, quality of its economic development both in the past, at present and in the future.

Bandurin and Tchub (2016), Basalay and Khoruzhyj (2010) use the term “investment attractiveness” to determine the reliability of borrowers by grouping them on the basis of indicators of formal and informal assessment of their enterprise activity. The analysis of the proposed interpretations of IA allows revealing the following unresolved questions:

- the lack of characteristics of IA as a structure-forming component of the system for ensuring IA (criteria to assess the institutional, organizational, information environment);
- IA is not considered as an active component of the process of “purchase and sale”: the higher the market value of the investment object, the higher IA is;
- the lack of IA description from the position of the system and purposeful approach: the level of enterprise IA is informationally significant for both the investors and investee, therefore, to determine this level, there should exist a corresponding database and an exhaustive list of factors influencing the level of the enterprise IA.

The widest understanding of investment attractiveness is its consideration as an aggregate of objective and subjective conditions, external and internal factors which contribute to or hinder the process of investing in a national economy at the macro, mezo, and micro levels (Krupka & Bachinskiy, 2014).

The most popular modern definition of investment attractiveness was proposed by The Gdańsk Institute for Market Economics (iBNGR). According to the authors, investment attractiveness is understood as a set of incentives for investment i.e. offering wide-ranging benefits that may be obtained when conducting business activities in certain areas. They result from the specific features of the area where a given economic activity is being developed. These benefits are defined as location factors. This is a category which has an essential impact on the decision making process related to business activity locations. From this perspective, the region which is attractive for investors is the one that makes the best location for foreign direct investments. Hence, it may be concluded that investment attractiveness has a real character and is reflected in investors' decisions about transferring their capital.

Kupiec (2005), when analysing the term "attractiveness", claims that it means possessing such attributes which appeal, attract and arouse interest due to their uniqueness and exceptionality. Attractiveness is thus a passive notion, but it can be turned into an active one when it is used to stimulate the environment. It is a factor that can attract and encourage various business activities. It enables different forms of cooperation and implementation of all innovations. The author compares attractiveness with the notion of competitiveness, which involves rivalry, competition and winning or even fighting against an economic entity that operates in a similar area of business. Competitiveness, unlike attractiveness, is active and sometimes resembles a fight. It is, therefore, possible to state that it is possible to compete for attractiveness.

Nizielska (2012) determined that IA is a good condition for establishing business activity in a certain area.

According to the report of the annual research project (2014) carried out by the team of GIME in cooperation with the Konrad Adenauer Foundation, investment attractiveness is a multidimensional matter, consisting of many factors and indicators.

In addition, the projection of the proposed definition allows suggesting that the efficient system for ensuring IA of an individual enterprise will enable improving the general level of its IA and the country as a whole, which, in turn, due to the improved investment image at higher levels of the hierarchy will reduce the negative impact of external factors independent from the functioning of an individual enterprise. In the opinion of the author of the dissertation, the concept "investment attractiveness" is indissolubly related to the concept "investment climate", which is proved by the definitions proposed in the scientific literature. Valinurova (2011) identifies that the investment climate is economic, financial and other conditions affecting the efficiency of investments and considers this category as a combination of investment attractiveness and investment activity.

Gursoy (2012) focuses on major obstacles faced by investors. The results of his study indicate that the most serious problem for investors is political instability, government

regulations, infrastructure, safety or corruption, which act as major deterrents of investments inflows.

The results obtained by Holloway, Rochman & Laes (2013) point out that the variables that influence investment climate mean greater stability in earnings, high ROA (Return on Assets), high gross margin, company size, and liquidity of shares.

The research by Ershova (2017) reveals and systemizes the factors restricting the development of investment cooperation and identifies possible ways of overcoming these challenges. She determined 3 groups of factors: external – associated with the problems of the investment climate, internal – associated with specific features of the production and management system, and other factors – non-economic factors that mainly concern business culture and informational issues.

Loginova (2009) is sure that information educational factors, namely, education level, ability to use knowledge as an economic advantage became the key components of investment climate. Primarily these factors significantly form the potential of enterprises and the potential of a region (country) in whole (Loginova, 2009).

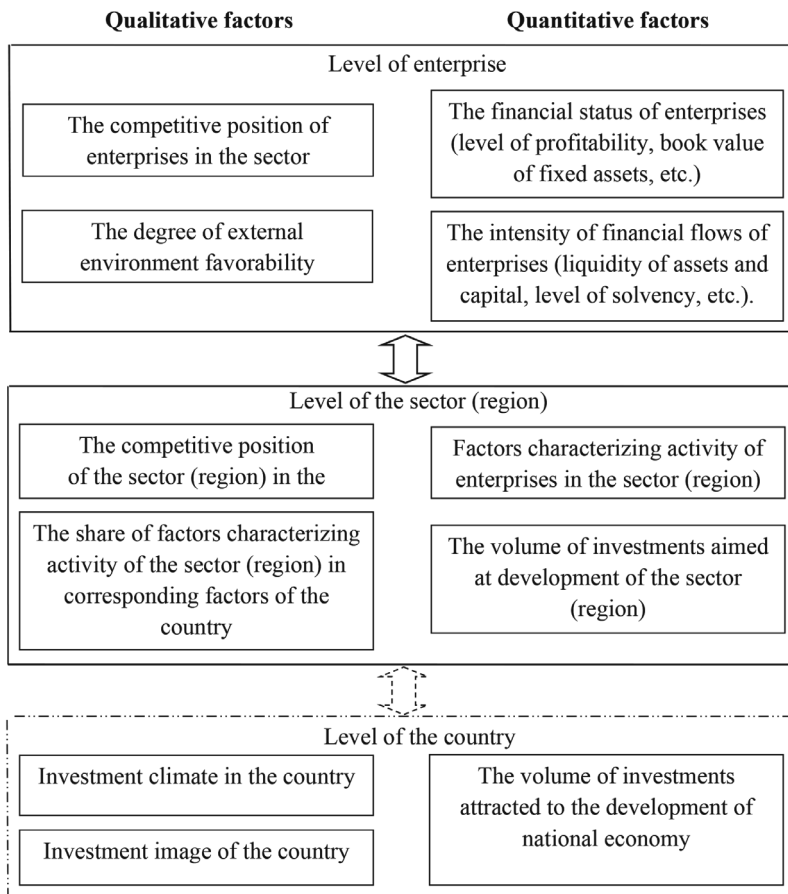
Ohotina & Lavrinenko (2015) agree with Loginova's point of view and state that the important role of education in improving the investment climate in the region and company competitiveness are stipulated, first of all, by the changing role of information in society and each individual company, where information becomes a strategic resource as other traditional material and energy resources.

Tsaryov (2012) interprets investment climate as “a set of social, economic, political and financial factors that condition the degree of attractiveness of the investment market and determine the extent of investment risks”.

Komori (2011) characterizes investment climate as “a situation in a country from the standpoint of a foreign entrepreneur who invests his capital in the economy”.

That is, assessment of investment climate takes into account the foreign economic situation, internal socio-political and economic situation in the country, as well as prospects of their development. Consequently, investment climate is a set of factors that are advisable to be combined into groups. The first group reflects a possibility for an investor to make a profit, the second one determines the structure of the investment risks. Kochemasova (2013) determined IA as a group of subjective factors, such as legislative and legal conditions for investments.

Sinkiene & Kromalcas (2010) argue that in determining attractiveness, it is important, first of all, to focus on satisfying the needs of the target group. As opposed to her, Zakirova (2016) defines investment attractiveness as an independent economic category, a set of external and internal factors, as well as qualitative and quantitative indicators of the investment potential of any level of the economic system – state, regional, sectoral, and the level of economic entities. Since the nature of these factors determines the need to consider enterprises IA, in this dissertation all this factors were summarised (see Fig. 1.1).



**Figure 1.1.** Existing factors influencing investment attractiveness  
(developed based on Andrash (2012), Zakirova (2016), Rochman & Laes (2013), Ershova (2017))

Among the qualitative factors at the level of individual enterprises there can be singled out the indicator characterizing investment risk, degree of favorability of the region, and among the quantitative ones – intensity of financial flows of the enterprise (liquidity of assets and capital, level of solvency), financial status of enterprise profitability, book value of fixed assets, etc.). In turn, factors influencing IA at the enterprise level partially form the sectoral (regional) factors, and the latter form the factors influencing IA at the national level. Considering the factors at the level of sector or region in conjunction with the factors at the enterprise level, it is possible to trace a close relationship.

In addition, the projection of the proposed hierarchy “state-sector-enterprise” allows suggesting that the efficient system for ensuring IA of an individual enterprise will enable improving the general IA of the sector and the state as a whole, which, in turn, due to the im-

proved investment image at higher levels of the hierarchy will reduce the negative impact of external factors independent from the functioning of an individual enterprise. In the opinion of the author of the dissertation, the concept “investment attractiveness” is indissolubly related to the concept “investment climate”, which is proved by the definitions proposed in the scientific literature. Valinurova (2011) determined that investment climate is economic, financial and other conditions affecting the effectiveness of investments and considers this category as a combination of investment attractiveness and investment activity.

Gursoy (2012) focuses on major obstacles faced by investors. The results of his study indicate that the most serious problem for investors is political instability, government regulations, infrastructure, safety or corruption, which act as major deterrents of investments inflows.

According to the author, the conceptual apparatus of enterprise investment activity comprises the basic definition that contains the definition of “investment attractiveness” in the context of regional and state development.

There is still no generally accepted definition of IA. Investment attractiveness remains an evolving and multifaceted concept created by society. Based on the accomplished analysis of the development of the concept, in the dissertation investment attractiveness is defined as a complex concept consisting of a set of factors that determine it and influence the final results of investing. Consequently, in accordance with the aim of the dissertation – to develop the model for assessing enterprise investment attractiveness in the context of regional development – it is necessary to conduct a more detailed study of the internal and external factors. This will make it possible to identify the most significant among them for their further use in assessing enterprise investment attractiveness in the context of regional development.

## **1.2. Factors influencing investment attractiveness**

According to Godlewska-Majkowska (2008), when identifying a set of possible locations for investments, it is vital to examine the potential investment attractiveness of an enterprise and the region. A report entitled “Reinventing European Growth. Ernst&Young’s 2009 European Attractiveness Survey”, in turn, defines the perceived investment attractiveness as a combination of an image of a given area and investors’ confidence (Godlewska-Majkowska, 2008).

Dorożyński & Kuna-Marszałek (2016) consider that the factors important for inflow of foreign direct investment are infrastructure, market size, availability of suppliers, subcontractors, business partners, and state aid schemes, including resources from the European Union budget.

Zeneli (2016) states that the main factor influencing the investment attractiveness and injections of foreign direct investment is corruption.

Snieska & Zykiene (2011) emphasize that attractiveness includes the resources available in a specific area: natural, social and economic, as well as the ability to maintain them and attract new ones.

Topsakhalova, Lepshokova & Khojtchujev (2009) consider IA as a macroeconomic category specified by certain conditions (economic, legal, political, social, etc.) created by the

state for all economic entities and foreign investors for profitable investment aimed at the development of the national economy. Therefore, according to the scientists, IA is determined by the following factors:

- political stability;
- level of basic macroeconomic factors characterizing the condition of the national economy and their forecast for the future;
- availability of statutory regulations on investment activity;
- efficiency of the tax system;
- social, including criminal, situation in the country;
- degree of investment risks.

According to Sinkiene & Kromalcas (2010), investment attractiveness is positively affected by external factors, in particular, geographical location, ensuring good accessibility, favorable land prices, local taxes and regulatory requirements, and a sufficient and quality supply of labor.

Investors are seeking for a region or city that is relatively cheaper, geographically attractive and possesses adequate resources (logistics, human resources, market size, economic and political stability and operating costs). It is important to note that potential investors are also concerned about the public infrastructure, quality of public services, quality of the living environment (Bruneckienė, Zykiene & Stankevičius, 2016).

Topsakhalova, Lepshokova & Khojichuev (2009) do not sufficiently identify the factors influencing IA because they suggest assessing IA only in terms of macro level, without taking into account the factors influencing the level of an individual enterprise. Besides, the factors listed above are more suitable for assessing investment climate, which is not correct to be identified with the category of “investment attractiveness” (see. Subsection 1.1).

The following three systematizations of the factors determine the influence on IA both at the macro- and micro levels but do not take into account the sectoral specificity of an enterprise, therefore cannot be used as instruments for enterprise management.

Holloway, Rochman & Laes (2013) determine IA with the help of 4 main indicators:

- high ROA (Return on Assets),
- high gross margin,
- company size,
- liquidity of shares.

Niedzielska (2012) believes that identification and evaluation of a group of indicators of a specific enterprise business activity determine the IA of the enterprise.

Godlewska-Majkowska (2008) defines enterprise investment attractiveness as a separate category, which is a component of an integral assessment of investment attractiveness of a region. The author also argues that the development of this category, including its calculation, requires research and development.

Malovichko (2011) distinguishes the following factors influencing IA:

- political and macroeconomic environment;
- enterprise financial status;
- production capacity and level of enterprise viability;
- efficiency of the enterprise management system.



In addition, the researchers suggest dividing the factors into two groups: external and internal ones. The first group consists of international, national and market factors. The second group is divided into five subgroups: enterprise competitive position; observing the principles of entrepreneurial activity; availability of the required resources and extent of their use; marketing policy of the enterprise; financial management of the enterprise.

Korobkov (2012) has a similar point of view claiming that IA as a relative characteristic is an indicator that changes over time, so its dynamics is influenced by both subjective and objective factors. The first ones are determined by systematization of internal processes and characteristics of the enterprise forming its IA. Objective ones reflect the investment climate in the state, the tax, credit and financial policy, development of financial institutions, etc.

Leshchenko, Demin & Maruschak (2007), who define IA as an aggregate of investment capacity, favorability and security, systematize the factors that influence it as follows:

- market saturation and production capacity, which determine the cost-effectiveness and commercial viability of the investment project;
- external and internal factors of financial status;
- legal framework, which specifies the conditions of the economic environment, investment legislation and sectoral policies.

The IA of a sector can be evaluated by internal factors, such as economic motives suggested by Fedorenko (2007).

According to the scientist, economic motives can be divided into three groups: searching for resources; searching for markets; searching for efficient production methods (Fedorenko, 2007).

The availability of natural resources, cheap labor, accumulated assets and material infrastructure are favorable factors for activities related to searching for resources. However, it should be noted that the presence of obstacles to improving the productivity in Ukraine reduces the weight of such factor as low labor costs, and the available assets and infrastructure are considerably mentally and physically worn out.

Another group of economic factors of investment inflows includes market factors: market capacity (in absolute terms and in relation to the population quantity and its income) and market growth rate. Currently the market for motor transport services is characterized by a large capacity but also by negative development dynamics (Korobkov, 2012).

Carrying out investments with the purpose of searching for economic efficiency implies rationalization of the structure of the started earlier investment project (aimed at searching for resources or markets) in a way providing creation of geographically diversified conditions for unified management of economic processes (Andrash, 2012).

The conducted studies show that the factors influencing enterprise IA are quite completely reflected in the systematization proposed by Bogolyubov (2005):

- raw materials resources (provision of enterprises with supplies of main types of natural resources);
- production (aggregate result of the economic activity);
- consumption (growth of aggregate purchasing power of the population);
- infrastructure (economic and geographic location of an enterprise and its infrastructure components, in particular, transportation network);
- intellectual (educational and cultural level of the population);

- institutional (development level of leading institutions of the market economy, quality of regulatory activity of authorities);
- innovative level of implementation and effectiveness of studies.

A principal disadvantage of this traditional approach is that enterprise IA is regarded as something permanent that almost does not imply any active changes.

Generalization of the above mentioned classifications of factors influencing IA allows to determine the following basic identification criteria and further to develop a model for assessment of enterprise investment attractiveness in the context of regional development (see Table 1.1).

**Table 1.1.** *Classification of factors influencing IA*

Characteristics	Type of the factor		Author
Evaluation at the micro level	reliability of borrowers	factors of formal evaluation of enterprise activity factors of informal evaluation of enterprise activity	Basalay & Khoruzhyj (2010)
Evaluation at the microlevel	a combination of factors determining the enterprise image investors' confidence		Godlewska-Majkowska (2008)
Evaluation at the micro level	business activity		Nizielska (2012)
Evaluation at the macro and micro level	External factors Internal factors	qualitative and quantitative factors	Zakirova (2016)
Evaluation at the macro and micro level	political stability level of basic microeconomic factors availability of statutory regulations on investment activity efficiency of the tax system social, including criminal, situation in the country degree of investment risks		Topsakhalova, Lepshokova & Khojichujev (2009)
Evaluation at the macro and micro level	External factors  Internal factors	political and macroeconomic environment enterprise financial status production capacity and level of the enterprise viability efficiency of the enterprise management system	Malovichko (2011)
Evaluation at the microlevel	Internal factors		Rolik (2012, 2013) Korobkov (2012)
Evaluation at the macro and micro level	market saturation and production capacity external and internal factors of financial status legal framework		Leshchenko, Demin & Maruschak (2012)

Characteristics	Type of the factor	Author
Evaluation at the micro level	raw materials resources	Bogolyubov (2011)
	production	
	consumption	
	infrastructure	
	intellectual	
	institutional	
	innovative level of implementation and effectiveness of studies	

The conducted researches of the factors influencing IA and their classification have shown that the main factors are the micro level, sectoral and regional factors. Summarizing, the author concludes that the micro level indicators are of the greatest importance and have the most significant influence on enterprise IA. This is logical, since the investments go directly to the enterprise (are directed at its development).

The analysis also gives grounds to assert that the factors of the sectoral (regional) level also have a great influence on the formation of the investment attractiveness of an enterprise. What cannot be said about the factors of influence at the state level. Such factors are also very significant, but they are taken into account more often when attracting a foreign investor. The foreign investor first of all pays attention to the country in which he plans to invest, then to the economic sector, the region and only at the end takes into account the investment attractiveness of the enterprise. Under conditions of instability in Ukraine, foreign investors are very difficult to attract. Therefore, special attention in the dissertation is paid to factors at the level of the enterprise, sector and region.

Taking into account the hierarchical character of IA factors (see Fig. 1.1), the author suggests to divide the factors influencing IA into external and internal ones. And in turn, to divide the external factors influencing IA into sectoral and regionals ones. To the first group there can be attributed such factors as production capacity of the sector, its financial status and Investment climate, which generally determine the competitiveness of the sector.

The internal factors influence the efficiency of an enterprise's functioning (indicators of financial and economic activity), possibility of attracting investment resources – directing them at its development – and their repayment to the investor, determine the competitiveness of the enterprise in a particular sector.

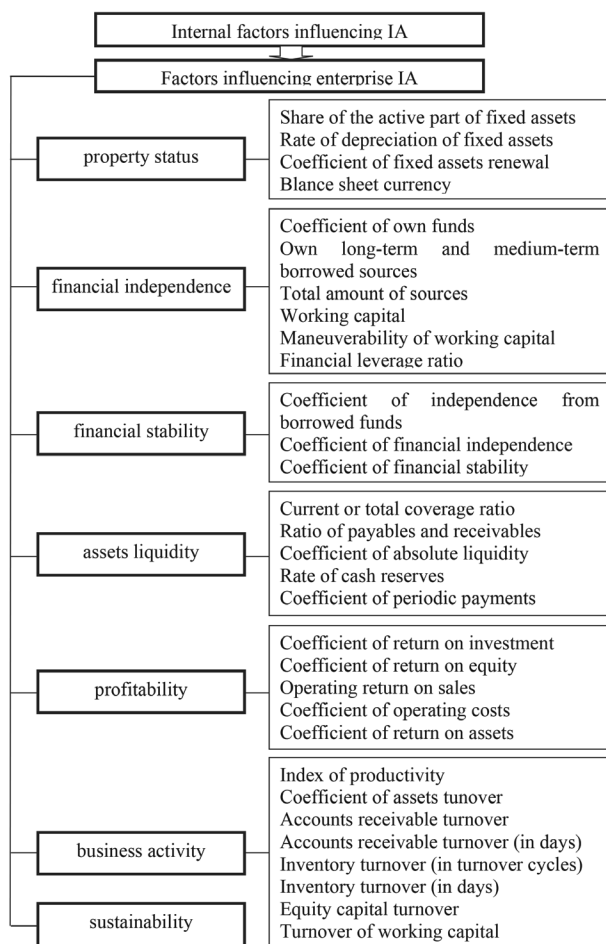
Since such factors as the coefficient of autonomy, funding coefficient and coefficient of financial independence directly evaluate financial independence from the borrowed funds, so the author proposes to single out these indicators to a separate group.

Any enterprise is influenced by external factors, and it is also necessary to take into account such an important factor as risk. To answer the question of how much an enterprise is sensitive to external changes, the author proposes not to assess the risk of investment but to assess the sustainability of the enterprise in this sector. In the opinion of the author, the most appropriate indicator that helps answer this question is market (systematic) risk. Market risk is one of the key indicators used in analysis of financial risks. With this indicator it is possible to compare activities of enterprises and the sector: the coefficient indicates how stable the enterprise is in this sector. The calculation should be carried out on the basis of the time period,

taking the same indicator of the enterprise's activity and the sector's activity. The indicator of the sector's activity can be taken both at the regional level and at the country level.

Based on the conducted studies, it becomes clear that enterprise-level, sector-level and regional-level factors have a significant impact on enterprise investment attractiveness. Of course, factors at the level of the country have no less force of influence, and they are of interest and used to assess investment attractiveness when a foreign investor appears. In the case of attractiveness for domestic investors, they will be interested in the situation at the micro level, and where the enterprise is located. Therefore, it can be concluded that the factors of enterprise and sectoral level are a point for scientific discussions.

On the basis of the conducted research, it is possible to identify factors of enterprise IA and identify indicators that form these factors (see Fig. 1.2).



**Figure 1.2.** Factors influencing enterprise IA

As can be seen from Figure 1.2, factors of investment attractiveness comprise a large number of indicators. To solve the problem of assessment of enterprise investment attractiveness, it is necessary to choose from the whole set of factors those that are most significant and have a decisive influence on investment attractiveness.

To determine the significance of the selected factors, i.e., the strength of their influence on the investment attractiveness of an enterprise, the assessment is carried out on the basis of the collective opinion of specialists working in this field. To determine the collective opinion of specialists on the importance of the factors, the method of questionnaire survey should be used.

But not only internal factors determine the investment attractiveness of an enterprise. A confirmation to this is the work (Damborsky, 2010), in which the theory about the significant effect of location on the investment attractiveness of an object was proved.

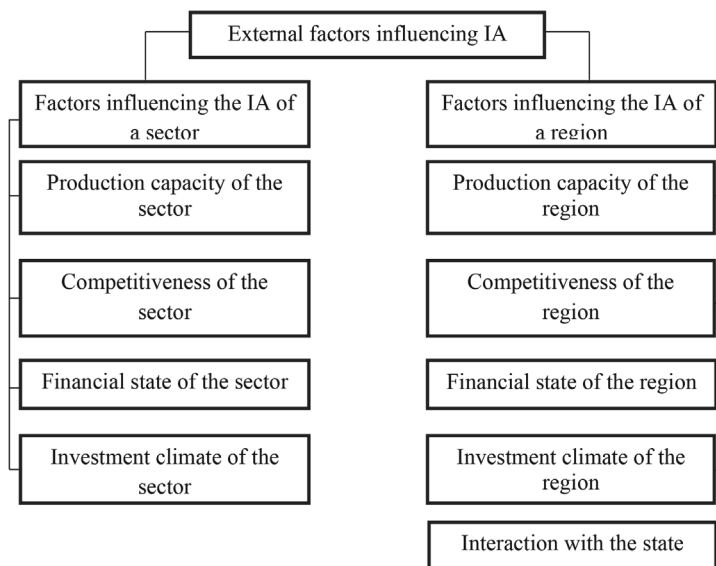
Over the last decade, based on the conditions and situation of territorial development, scientists carried out a study on “the spatial potential of territories”. According to V. P. Efimov, “... if development of territories will be based on the allocation of resources at the spatial and inter-sectoral integration, it will result in both economic and social efficiency” (Efimov, 2006).

Based on the provision of economic development of the country, special importance has been given to such factors as the role of regions. Development of a region provides a significant increase in budget revenues. Methods of econometric analysis used by economists show a direct dependence of a region's economic development from the wealth created in this region. Timely and correct application of regional investments serves to increase new jobs and ensure social and economic development of the region. It helps improve the welfare of its population. Therefore, the problem of conducting a deep analysis of causal dependences to improve the investment climate of the region and to further increase its attractiveness is an urgent issue (Mustafakulov, 2017).

Snieska & Zykiene (2015) determined that for investors the provision of business support services is an important factor. In the scientific literature this aspect is neither identified/defined nor clarified (Snieska & Zykiene, 2015).

Taking into account the opinion of scientists, it can be concluded that under current conditions, along with generally accepted external factors, there is one more – a mutually beneficial relationship with the state. It is not just about interaction at the state level but at the regional level as well.

Having determined the factors of investment attractiveness at the level of enterprise, it is necessary to present a generalized structure of the factors influencing IA assessment in the context of regional development – regional and sectoral factors (see Fig. 1.3).



**Figure 1.3.** *Factors influencing the investment attractiveness of a region and sector*

Among the main indicators that determine the factors influencing the IA of a sector there can be singled out the following:

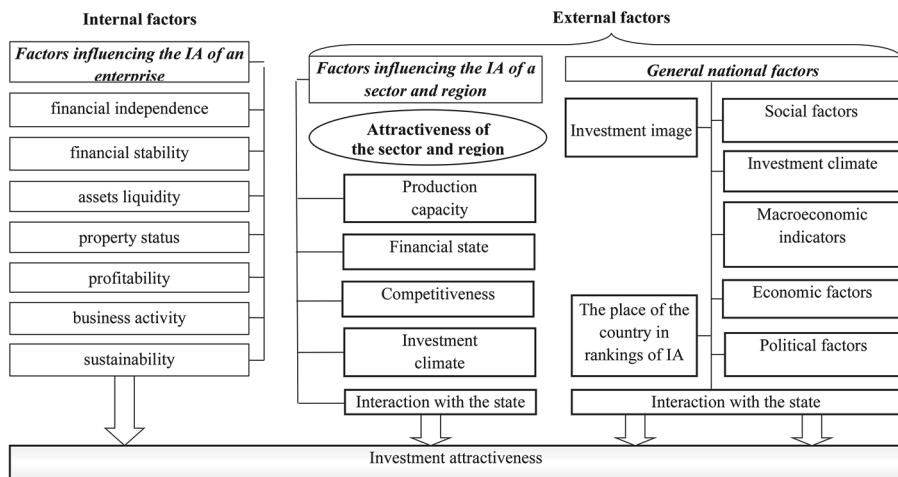
- freight transportations;
- structure of freight operations;
- length of public roads;
- length of roads with hard covering;
- capital investment;
- foreign direct investment.

Among the main indicators that determine the factors influencing the IA of a region there can be singled out the following:

- financial activity indicators;
- profitability indicators of business operations;
- capital investment;
- foreign direct investment;
- models of interaction with the state.

Since the author put forward a bold hypothesis about the inclusion of the factor of investor interaction with the state, it is necessary to pay a special attention to this issue in Section 2 of this dissertation and to study in detail the existing methods and models of such interaction.

Though this dissertation indirectly considers the issue of investment attractiveness of a country, since it is oriented towards a foreign investor, the author will present internal and external factors at all levels, namely enterprise, sector (region) and country (see Fig. 1.4).



**Figure 1.4.** *Factors influencing IA assessment*

Improvement of the systematization of internal and external factors influencing enterprise IA will enable forming an appropriate database required for assessing enterprise IA in the context of regional development.

This approach is the most universal. To further develop and improve this approach, the author proposes to study the existing approaches and models for assessment of enterprise investment attractiveness based on both quantitative and qualitative factors.

Improvement of the systematization of internal and external factors influencing IA corresponds to the aim – to develop the model for assessment of enterprise investment attractiveness in the context of regional development.

### 1.3. External environment of enterprise investment attractiveness in the context of regional development

The author found that the problem of increasing investment attractiveness is to be solved not only by enterprises but also by the state, the interaction of the investor with the state is a factor influencing the investment attractiveness of an enterprise, that is why it is worthwhile to pay attention to the external environment and work of the state concerning its interaction with a private investor.

The structure of the problematic situation is characterised by impossibility of attracting the necessary investment funds to the enterprise, and the selection of financing source is its integral part, it is logical to consider this issue. The transition to market relations in the sphere of investment concerns primarily sources of investment. Investments in enterprise IA can be carried out with the use of:

- own financial resources of the enterprise;
- funds borrowed from investors;

- investment budget allocations;
- borrowed financial resources (Fedorenko, 2007).

The market financial infrastructure provides accumulation of savings, which return in the form of effective investments. This is especially important for Ukraine under current conditions of development and establishment of its market structures, searching for forms of implementing the investment process adequate to the market forms of economic activity. It is the credit and financial sector that provides funds for investments in the disposal of enterprises and within which there takes place movement of funds from those sectors of the economy where there is a certain surplus to the sector that feels lack of funds as well as from the sectors with a lower profitability for investing to the sectors with greater profitability (Fedorenko, 2007).

Currently the production sector, trade, repair of motor vehicles, production of household goods and personal use items are the most profitable activities in Ukraine, while transactions in the real estate market, renting, engineering, providing municipal and individual services and activities in the areas of construction and tourism (including hotel industry activities) are unprofitable. It should be noted that almost half of the funds invested in fixed assets falls exactly to more profitable economic activities (Andrash, 2012).

Banking structures under market conditions are independent economic units, which are actively involved in the investment process by crediting enterprises and exercising control over effective use of financial resources. Banks engage a significant portion of resources to their loan fund on a commercial basis, which is a motivation for increasing investment efficiency (Fedorenko, 2007).

Private investments can be attracted by the following ways:

- establishment of enterprises with participation of foreign capital;
- establishment of enterprises fully owned by foreign investors;
- acquisition of enterprises, property complexes, buildings, structures, shares in enterprises, securities by foreign investors;
- acquisition of land and natural resource rights.

Therefore, private capital can be obtained in the form of direct and portfolio investment. Among direct foreign investors there can be singled out three categories:

- transnational companies (TNCs);
- institutional investors (including international financial institutions, IFIs);
- investors-entrepreneurs.

TNCs and investors-entrepreneurs invest mainly in non-monetary form because, knowing the specifics of the economic sectors very well, try to establish their own business standards and import their equipment and technologies. Institutional investors and IFIs prefer investments in monetary form, which is a natural expression of a typical behavior of financial intermediaries. In the author's opinion, it is TNCs and investors-entrepreneurs that are strategic investors for the motor transport sector of Ukraine, because, except for providing funds, they introduce advanced standards of organization of enterprise functioning. Another reason is that the support of institutional investors and IFIs is focused on the real economy sector (metallurgy, energy, transport, etc.). But under conditions of crisis in Ukraine the state support is almost the main lever in investing into enterprises



of the motor transport sector, since attracting foreign investors to injecting capital into enterprise development on the territory of a country with an unstable economy, becomes almost impossible.

As regards portfolio investments, their share is much smaller than that of direct investments, which is explained by poor functioning of the stock market in Ukraine (Stock market, 2016).

An important role in providing financial assistance to Ukraine plays the activity of international organizations. The first creditor is IMF (International Monetary Fund, IMF), which provides funding of state programs aimed at fighting high inflation rates and general monetary-financial instability. The work of the IMF is governed by the principle of conditionality, under which member countries can receive credits only if they agree to pursue a certain economic policy.

Another international creditor is the World Bank (World Bank, WB). Unlike the IMF, which aims at facilitating the resolution of short-term macroeconomic crises, WB solves problems of long-term economic development. Its priority is structural reforms, such as trade liberalization, privatization, reform of education and health care, investments in infrastructure.

In recent years Ukraine has received support from all these sources but the scope and nature of this assistance did not always correspond to its real needs. Thus, in 2012 the IMF approved a “stand-by” loan of USD 16.4 billion intended to help the official authorities of Ukraine in restoring financial and economic stability and strengthening the confidence in the country. The plan of the official authorities includes the improvement of monetary and exchange rate policy, bank recapitalization, adjusting fiscal policy and income policy (a “stand-by” loan, 2016).

Another lender, WB, collaborates with Ukraine in improving its international competitiveness by financing measures on infrastructure improvement, providing advice on issues of the policy aimed at improving the investment climate. Since 1992, when Ukraine joined the WB, its obligations on providing Ukraine with credits amounted to a total of USD 5.3 billion for carrying out 38 operations (The World Bank, 2016).

Today the EBRD has made investments in 289 projects with a total value of EUA14.8 billion. The money is intended for the following measures:

- improving efficiency, competitiveness and corporate governance standards in the private sector of Ukraine;
- developing internal capital markets;
- increasing energy efficiency and energy security of all sectors of the economy;
- improving efficiency and reliability of infrastructure objects (Strategy in Ukraine, 2016).

Major credit funds of international organizations are aimed at modernization and development of such sectors of the national economy as metallurgy, energy and transport.

The internal investment crisis causes the actualization of attracting foreign investments. They are of great importance for the economy of the host country, as they provide an effective integration of the national economy into the world economy (thanks to the industrial and scientific and technical cooperation), are a source of capital investments (including those in the form of modern means of production), involve domestic entrepreneurs into

the best economic practices, contribute to promoting innovations, stimulating the imitation and borrowing of best business practices of developed countries, increasing labor productivity and improving the population welfare (Pirog, 2005).

Prospective international investors are reluctant to finance the Ukrainian economy, while existing capital providers are constantly faced with difficulties associated with non-transparent, inconsistent, contradictory and largely excessive regulatory regulation, and in some cases, lack of regulatory control (Investing in Ukraine, 2016).

Experts of Flemings/SARS ranked the list of obstacles to investments (Annex A).

According to Annex A, the low level of investments is caused by the unfavorable investment climate in the legal, economic and infrastructural aspects. It should also be noted that the abovementioned obstacles are defined as significant problems, and they appeared to be most considerable for TNCs, which have been identified as strategic investors for enterprises (see Subsection 1.2).

Taking into account these obstacles, experts of Flemings/SARS developed a list of measures intended to improve the IA of investees for foreign investors (Annex B).

The survey respondents estimated these activities as priority ones. Especially important measures are those that will optimize the activity of the financial market, institution of property and tax system.

Thus, according to the survey of foreign investors concerning the low level of foreign direct investments, it can be concluded that among the countries of Central and Eastern Europe Ukraine, despite the comparable natural and climatic advantages, has one of the lowest indicators of fundraising (Main economic indicators, 2016).

The investment process is reflected in the appropriate state policy, the implementation of which is aimed at expanding the scope and increasing the efficiency of investments at the expense of their structure, as well as increasing investment activity of each level of the hierarchy “state-sector-enterprise”. Among regulators of the investment process there can be mentioned:

- means of direct financing of investment projects from the state budget;
- macroeconomic aspects of monetary and fiscal nature;
- macroeconomic levers that influence the volume of funds and investment opportunities of enterprises;
- institutional actions that allow coordinating investment programs of private investors and the state (Dobrovolska, 2006).

The investment process is carried out in a specific legal space, which can either stimulate investment activities or create obstacles to its implementation. And before proceeding to the issue of ensuring investment attractiveness, it is necessary to review the existing legal issues, in other words, to conduct a brief analysis of the proposed “steps towards” the state.

The main legislative act regulating the investment process is the Law of Ukraine “On Investment Activity”, which determines the general legal, economic and social conditions of investment activity in Ukraine. This normative act aims to ensure equal protection of the rights, interests and property of subjects of investment activity irrespective of forms of ownership as well as the efficient investing in the national economy of Ukraine and the development of international economic cooperation and integration.

According to Article 11, the state regulation of investment activity is carried out to implement the economic, scientific, technological and social policies taking into account indicators of economic and social development of Ukraine

Article 18 guarantees stability of the conditions for carrying out investment activity, observance of rights and legitimate interests of its subjects and non-interference of authorities in the activity of subjects of investment activity.

Article 19 defines the protection of investments as a complex of measures directed at creating the conditions contributing to preservation of investments, achieving the goal of their investment, effective operation of objects of investment and reinvestment, protection of legitimate rights and interests of investors including the right to profit from investments (Law of Ukraine, 2012).

Features of foreign investment are defined by the Law of Ukraine “On Foreign Investment Regime”. A national regime of investment and other economic activities is established for foreign investors in Ukraine (Art. 7).

Article 9 guarantees that foreign investments in Ukraine are not subject to nationalization. Besides, foreign investors have the right to compensation of losses caused by the state authorities of Ukraine (Art. 10). In the event of termination of the investment activity, a foreign investor has the right to return the investments within a six month period (Art. 11).

Article 12 ensures unhindered repatriation of profits obtained as a result of investment after paying taxes and other obligatory payments (Law of Ukraine, 2012).

In order to evaluate the effectiveness of the legal framework regulating the investment activity in Ukraine, the author suggests considering the Resolution of the Cabinet of Ministers of Ukraine “On Approval of the Program of Development of Investment Activity for 2006-2014” (the Program).

To stimulate investment during the corresponding period, it was considered necessary:

- to reduce the level of the state regulation of business;
- to complete the judicial reform;
- to improve the legal and regulatory framework for property rights;
- to overcome bureaucracy and corruption;
- to promote the development of capital markets;
- to reduce the tax burden;
- to ensure the stability of the political environment;
- to intensify activities on creating a positive image of the state (Dobrovolska, 2006)].

Let us determine the degree of fulfillment of the mentioned tasks.

First, it is possible to evaluate the level of the state regulation of business judging from the place occupied by Ukraine in the ranking of economic freedom according to HF (162<sup>nd</sup> place out of 179 possible) in 2014, particularly, in terms of the value of the economic freedom index “state intervention in the economy”. This indicator changed from 55.0 in 2002 to 38.7 in 2010 according to a 100-point scale (Index of Economic freedom, 2015) demonstrating a negative trend to an increase in the already high level of the state interference in business activity, and consequently, testifying to the fact of not solving this problem within the frames the Program.

Second, the judicial reform, which envisaged the improvement of the judicial system and rules of court, could be implemented upon condition of political stability in the coun-

try for two years (Onishchuk, 2015). Considering the consequences of the global economic crisis, which hit the political system and led to its instability and negative assessment by Venice Commission (Experts conclusion, 2015) of the Law of Ukraine “On the Judicial System and Status of Judges” (Law of Ukraine, 2015), it is possible to establish the fact of not solving the problem of politicization and transparency of the process of appointment and dismissal of judges and incompletion of the judicial reform with international standards of justice. This determined the failure of implementing the second provision of the Program.

Third, the effectiveness of the legal and regulatory framework for property rights can be judged on the basis of the place occupied by Ukraine in 2014 in the PRA ranking of enforcement of property rights (97<sup>th</sup> place out of 125 possible), and from the value of the index of property rights “legal and political conditions”. Though this figure rose from 2.7 in 2011 to 3.7 in 2014 according to a 10 point scale, it did not give Ukraine an opportunity to significantly improve the situation in the sphere of property rights and, consequently, its position in the ranking. Besides, in 2014 in terms of “property registration” Ukraine occupied only the 149<sup>th</sup> place out of 183 possible in the WB ranking of ease of doing business (IPRI, 2015). Thus, in respect to improvement of the legal and regulatory framework for property rights the Program has not been fulfilled either.

Fourth, according to reports of Transparency International, during the period of 2006-2014 the level of corruption perceptions in the state sector of Ukraine was consistently low (2.4 on a 10-point scale) (Corruption Perception Index, 2015), which, in our opinion, gives grounds to consider the Program to be unfulfilled in terms of overcoming bureaucracy and corruption.

Fifth, in November 2007 the Concept for the State Target Economic Program on Modernization of Capital Markets in Ukraine with the purpose of ensuring their competitiveness through legal, institutional and technological reform (Concept for the State Target Economic Program, 2012) was approved. It should be noted that the adoption of the State Target Economic Program on Modernization of Capital Markets in Ukraine will be only the next step, but taking into account the fact that it is intended for five years, it is clear that the provision of the Program concerning the development of capital markets was not implemented on time.

Sixth, in 2014 Ukraine occupied the 181<sup>th</sup> place out of 183 possible in the WB ranking of ease of doing business in terms of “taxation” (Failed States Index, 2015). This indicates a very large tax burden for investors and inefficiency of efforts of the authorities in this direction.

Seven, the level of stability of the political environment can be evaluated on the basis of the value of the instability index of countries, which is calculated by experts and during the period of 2005-2010 decreased from 88.8 to 69.5 on a 120-point scale. Particularly noteworthy are political indicators “lawlessness and criminalization of the state” and “strengthening of clan elites”, which values for 2005-2010 decreased from 8.9 to 7.2 and from 9.1 to 7.9 on a 10-point scale, respectively (Failed States Index, 2015). However, these fluctuations do not change the overall status of Ukraine as a country with a dangerous level of risks, including political ones, which allows to assess the situation concerning stabilization of the political environment within the framework of the Programme as unsatisfactory.

Eight, in 2016 the Cabinet of Ministers of Ukraine approved the Program “Investment Image of Ukraine” intended to improve the mechanism of functioning of the information market as one of the determining factors of stimulating the investment activity through large-scale measures on highlighting achievements in the formation of a favorable investment climate (Program “Investment Image of Ukraine”, 2016). The degree of revitalization of the activity on creation of positive image of the state should be evaluated with regard to expenditures planned by the State Budget of Ukraine. As of 2014, the funds allocated for the implementation of measures to create a positive investment image of the country decreased, which allows concluding about the failure to solve this problem within the frame of the Program.

Therefore, none of the provisions of the Program was executed. The program of Development of Investment and Innovation Activity for 2011-2015 even does not provide for specific measures to solve the tasks assigned to it. Thus, the legal space does not stimulate the investment process in Ukraine and even creates obstacles to its implementation. On the one hand, the regulatory framework includes legislative acts regulating investment activity, on the other – these acts are not enforced, which is proved by not completing the tasks defined by the Program of Development of Investment Activity.

The tax legislation, in our opinion, is of great importance for revitalization of the investment process (Law of Ukraine, 2012, 2015). According to experts of IMF, the use of additional stimula can lead to a situation when the decrease of the state revenue will exceed the growth of investments. A significant cause of economic inefficiency of tax incentives, in the experts’ opinion, is that their action is extended to all investments that meet the specified requirements, while a considerable part of the investments will be made in any case. According to them, the use of a preferential tax regime for individual taxpayers inevitably complicates the operation of the tax system, so the IMF experts suggest choosing a tax system with a broad base and low rates.

The failure of implementing the state programs is an evidence of ineffective management of IA at the state level. The negative investment image of the country indicates the unfavorable investment climate in the social, economic and political aspects. The results of the conducted studies provide the basis for further research and development of practical recommendations: solving global problems, such as economic and political instability, is possible upon condition of implementation of relevant state programs, and increasing the level of enterprise profitability depends on the effectiveness of their strategic management.

“I will not focus on preferences or exceptions that are necessary to maintain optimism among investors. There are enough long-term examples of successful investments in Ukraine, and there are enough sectors of the economy where investments are seen as successful in the next seven to ten years. The fundamental things that most investors expect are equal rules of the game” (Baranov, 2016).

That is, it is necessary to create favorable conditions not only for an investor from outside but also to stimulate local enterprises. Such incentives may be different types of cooperation between the state and the private sector. Since realization of the tasks on development of infrastructures lies on the shoulders not only of the state, but also of private business, the mutual support between the state and private business is very important.

#### 1.4. Ensuring enterprise investment attractiveness in the context of regional development

The world economy over the past decade has undergone significant changes and continues to transform. It is necessary to take it as a fact and keep pace with such changes. Although this period is considered to be a challenge in the world practice, it is precisely such changes that lead to scientific progress and the birth of new forms of interaction.

For a stable and balanced development of any state, diversification and innovative transformation of its production and the provision of these processes with investment resources are necessary. And in this connection there is a problem of transition from classical forms of mutual investment relations to a new level of relations between the investor and the recipient of investments. Different types of cooperation, exchange of resources, support also should be mentioned.

That is why an alternative form of investment for all of the above options is public-private partnership (PPP). The private sector has always been in cooperation with the public sector to provide public infrastructure in the field of road construction, railways, buildings and structures as contractors (Otairua, 2014).

The findings of Almari (2017) demonstrate that PPPs are considered to be attractive for investors because they facilitate the transfer of private sector's skills and experience to the public party, utilize private sector's funds, add value for money, and transfer risk to the private party. Public and private partners increasingly recognize the importance of cooperation to ensure successful execution of projects (Koops, 2017).

In recent years, PPP has many positive advantages, which include the creation of a private sector of the economy, accelerating development, reducing the life cycle costs of the project, contributing to the growth of the national economy and the strengthening of national infrastructure (Pribadi & Pangeran, 2010).

People respond to incentives (Mankiw, 2014). The study by Cedricks & Longs (2017) has shown that positive externalities and public-private partnership mechanisms are considerable incentives in the projects in some countries.

Yang, Long & Wenbo Li (2017) proposed to perfect the tax policy of PPP projects. They developed a model of establishment of rules and regulations, classification of tax-related expenditure, construction of differentiated dynamic tax preferential policies, and construction of a multi-level coordination and supporting policy system.

Liu, Gao, Cheah, & Luo (2016) proposed new insights into the development of incentives mechanism between the government and the private investors to collectively work. They created a "win-win" contract to curb potential opportunistic behavior.

Wang & Liu (2015) argue on the principle that the benefits one receives should be fairly equal to the risks taken, governments have the right to share any excess revenue the investors gain that is equal to the difference between the actual revenue gained by the investors and the cap of the expected earnings. As a result, the amount of excess revenue sharing has to be determined. Their report presents an integration of the fairness preference theory and the traditional principle – a model for calculating calculating optimal incentives.

An effective modern mechanism for managing transformational processes in the economy that allows attracting private investments and private business competencies to solve state tasks of economic modernization, to distribute risks and obligations between the state and business, is the PPP mechanism. In modern management practice, public-private partnership is positioned as a new technology for economic development, which is gradually being formalized as an independent institution. At the same time, the lack of a common view on the economic nature of the partnership between the state and business, the unconventional terminology and conceptual apparatus, the limited scope of application and the forms of implementing public-private partnerships make the mechanism of public-private partnership uncompetitive among other mechanisms of cooperation between the state and private entities. The idea of attracting financial resources and organizational capabilities of business to remove budgetary constraints, in order to solve state tasks of the reproduction process in priority areas of the economy and implementation of the regional development policy for which PPP is created, remains unrealized.

The formed in the developed countries of the world mechanism of partnership between government and business is a way of introducing market relations in the sphere of state responsibility or, in other words, the way government delegates some of its functions to private business, and is considered a necessary mechanism for a market economy. The goal of the partnership is to combine the advantages of the public and private sectors of the economy for mutual benefit. Leaders in the use of the mechanism of public-private partnership in Western Europe are the United Kingdom, France, Germany. Each country has its own way of developing the mechanism of public-private partnership. Therefore, depending on the country and the project, there are a large number of different options and schemes for applying the public-private partnership mechanism.

Based on the experience of European countries, PPP is considered, primarily, as an alternative to privatization. The bulk of PPP projects implemented in European countries are projects related to infrastructure facilities, the privatization of which in many countries is considered inexpedient for strategic reasons, in order to avoid socio-economic discrimination of the population or for other reasons. Therefore, it is no coincidence that public-private partnerships have emerged in the modern form and have found the greatest application in Great Britain, the country in which privatization is the most common, and where the search for other forms was needed to correct the negative consequences of privatization (Program, 2011). In recent years, the scope and forms of using PPPs have expanded significantly. In most countries of Central and Eastern Europe (Bulgaria, Croatia, Czech Republic, Romania, Poland), the number of projects initiated to implement with the involvement of public-private partnership schemes is constantly increasing. However, despite this, the use of this form of cooperation between government and business is at a relatively early stage. The level of discussions on the application of the mechanism of public-private partnership is not decreasing. To date, most countries do not have a single view on what forms and spheres of interaction between government and business can be attributed to public-private partnership. In different countries the goals, tasks, forms and spheres are different.

There is no single and unambiguous definition of the concept of PPP and a universally recognized systemic understanding of this mechanism. In different countries, different

variations of the same mechanism are used, which makes it difficult to formulate a single concept of public-private partnership. The international best practice is to constantly update the concept of PPP. General regulation of the PPP implementation processes at the international level is carried out with the help of documents that are of recommendatory nature. These include the documents of the European Commission on Regional Policy of the European Union: "A Guide to Successful Public-Private Partnerships" (2003) and the Green Paper on Public-Private Partnerships and Local Legislation on State Contracts and Concessions (2004). The document of the United Nations Economic Commission for Europe "Governance in public-private partnership for infrastructure development" (Centr partnerstva, 2008), and others. These documents represent the development of an international understanding of PPP, claiming standards of the international best practice. For Ukraine, as well as for other post-Soviet countries, public-private partnership, as an independent and institutionalized direction in the organization of cooperation between the state and business, is an innovation brought about by transformational reforms. Among the countries with transformational economies, currently the most intensive studies on the theory and practice of public-private partnership are conducted in Russia. The State Duma of the Federal Assembly of the Russian Federation established the Expert Council on Legislation on Public-Private Partnerships. A number of ministries and agencies have established special councils on partnership issues. For information and consulting services in certain areas and organizational and legal issues of the creation and functioning of public-private partnership, the State Corporation "Bank for Development and Foreign Economic Affairs (Vnesheconombank)" established a public-private partnership consultation center and regional PPP centers (Centr partnerstva, 2008).

In Ukraine, a non-entrepreneurial organization, the Ukrainian Center for Promoting Public-Private Partnership, was established to develop scientific, methodological, legal and organizational support for creating conditions for the implementation of PPP projects of national and regional significance. There is a Public-Private Partnership Development Program, funded by the United States Agency for International Development (USAID).

In 2016, the Ministry of Economic Development and Trade of Ukraine, which is responsible for managing public investments, allocated 321 facilities for the implementation of PPP projects. Among the priority areas: health care, transport infrastructure, energy, engineering, agro-industrial complex. Moreover, in 2016 the Ukrainian parliament tried to change the situation. In May, amendments to the law on PPPs aimed at extending guarantees for the investor came into effect. At present, the parliament is considering changes to the budget legislation, which envisage the possibility of providing by the state of long-term financial guarantees under PPP.

Since PPP is a special form of business organization and a form of investment activity in which the resources are unified, in addition to assessing the effectiveness of such an investment project, a proper distribution of equity participation in the investment process should be carried out based on calculations of mathematical models. Thus, there is a need to develop a system for settling the relationship between all participants in investing.

It should be noted that only upon conditions of state support (partial or complete) it is possible to achieve the goal – a satisfactory IA, to attract potential investors and, thus,



maintain and preserve domestic enterprises. It should be mentioned that with the help of PPP investment climate and infrastructure can be improved. As a result, enterprise investment attractiveness can be increased.

In turn, Cao, Dub & Hansen (2017) proposed compensatory payments to investors with a view to attracting and encouraging them. But Khneyzer (2016) in his studies proved the need for state support upon a number of conditions, including social (improving infrastructure, strengthening education and training, financial support, and rational organization of production). Thus, monopolism will be avoided and support for weak enterprises will be provided.

Since Snieska & Zykiene (2015) determined that for investors the provision of business support services is an important factor, the author concludes that PPP is one of the factors to encourage investors. With the aim of regulating relations between all participants of the investment process in the context of regional development, it is necessary to develop a methodology for ensuring effective interaction between the state and the investor on the terms of mutually beneficial relations.

Based on the carried out researches, it is necessary to synthesize the received results and to present them visually. Since any process in the economy is manageable, there arises a need to present a system for ensuring enterprise investment attractiveness in the context of regional development.

The structure of components of a problem situation described by impossibility of attracting by an enterprise the required investment resources due to a rather low IA, with regard to ensuring enterprise IA is primarily hierarchical both at the territorial, target, criterion levels, and level of government. This reflects the complexity of a certain economic and social system. On the other hand, the structure involves its breakdown into theoretical, methodological and practical components as well as an available information substructure, which provides the functioning of the system for ensuring enterprise IA.

The external mechanism of investment activity of an enterprise is a system of instruments regulating conditions of carrying out its investment activity. It includes the market mechanism of ensuring enterprise investment activity, which presents a self-regulating system and is formed in the sphere of the investment market, and the state mechanism of managing investment activity. In turn, the internal mechanism of managing investment activity of enterprises is a system of management instruments developed and used directly at the enterprise. These include methods for ensuring investment activity and enterprise regulatory documents (Udali, 2006).

The state and market regulation of investment activity is a public mechanism forming conditions for realization of investment activity both at the state level and at the level of an individual enterprise. The state and market components of regulation and the strength of their influence on the results of investment determine possibilities for effective implementation of enterprise investment activity (Khobt, 2005).

The investment management and ensuring of enterprise IA in the context of regional development are identical concepts. The only difference is who initiates the management, the investor or the investee. The main idea of the concept of investment management in the real sector of economy is that a targeted point influence of the investor or investee on key

properties of the investment object allows them to receive a global control over reliability and efficiency of investments, i.e. of enterprise IA (Fedorenko, 2007).

On the other hand, the aim of ensuring investment activity of an enterprise is systemizing its IA.

From the perspective of financial engineering, in the process of ensuring enterprise attractiveness, it is appropriate:

- to rationalize the use of all types of resources and technologies and, consequently, ensure a stable position of the enterprise in the market;
- develop a form of strategic management that involves making decisions as a reaction to current challenges to management based on prediction analysis and planning;
- increase the market value of the enterprise and profitability of its current business transactions;
- strengthen the solvency of the enterprise in its relations with external counterparties (Puciato, 2016).

Ensuring of enterprise IA is closely related to the problems of stable development. The task of choosing a strategy for steady development as a component of economic-ecological-social system is solved by means of

- simulation of a set of hierarchical systems;
- methods based on using the methodology for studying steady development, procedures of scenario analysis (Zgurovskii, 2008);
- technological forecasting (Zgurovskii, 2016).

Using the methodologies of system analysis, steady development and simulation of complex systems allows making decisions, which will be balanced, holistic, coherent elements of an optimal system for ensuring enterprise IA in the context of regional development, and provide practical improvement in IA of a region and sector as a whole as well as each enterprise in particular. Structural elements of the regional system for ensuring enterprise IA are

- system of objectives;
- objects that implement these objectives and act in compliance with the strategy of achieving the goal;
- system of management functions associated with objects that implement the goals;
- institutional mechanisms that ensure realization of synthesis of regulatory functions.

The system for ensuring enterprise IA in the context of regional development can be formed by consistent inclusion of these elements. Depending on the hierarchy level and priorities of the system, IA may be purpose-, function- or organization-oriented.

The local approach takes into account characteristics of a certain object, such as an individual enterprise, or its combination with infrastructure. However, the attraction of additional funds (investments) to a particular enterprise is the realization of a common goal – attracting investments into a region (or sector) and a country as a whole. Combining local results of ensuring IA in the context of regional development at the lower level of the hierarchy – the level of an enterprise – will allow obtaining results at the global level – the level of the state. Thus, it is important to shift the management center to the enterprise level

by using local integral indexes (indicators) and the technology of their multi-criteria evaluation as well as delegating them the coordination levers of influence from the upper level of the hierarchy – the level of the state.

Thus, ensuring enterprise IA in the context of regional development is associated with

- making specific decisions under certain conditions, therefore, requires implementation of a complex of measures for analysis of the enterprise IA based on initial data (statistical, quantitative and qualitative, expert ones);
- diagnosing enterprise IA and detecting negative components;
- modeling the development of enterprise IA.

But it should be noted that the multi-criteria character of assessing enterprise IA in the context of regional development reduces the efficiency of searching for optimal decisions concerning their further development. One indicator without quantitative determination or several aggregate indicators simplify the decision-making process, but at the same time it is necessary to decipher them for the lower level of the hierarchy to the level of specific indicators (statistical and those calculated at enterprises).

The author considers specification of the system for ensuring IA in the context of regional development as a projection onto the lower level of the hierarchy – the level of enterprise. Since the IA of an enterprise is an integral part of investment process, the system for ensuring its IA in the context of regional development is a constituent of ensuring the investment activity in general.

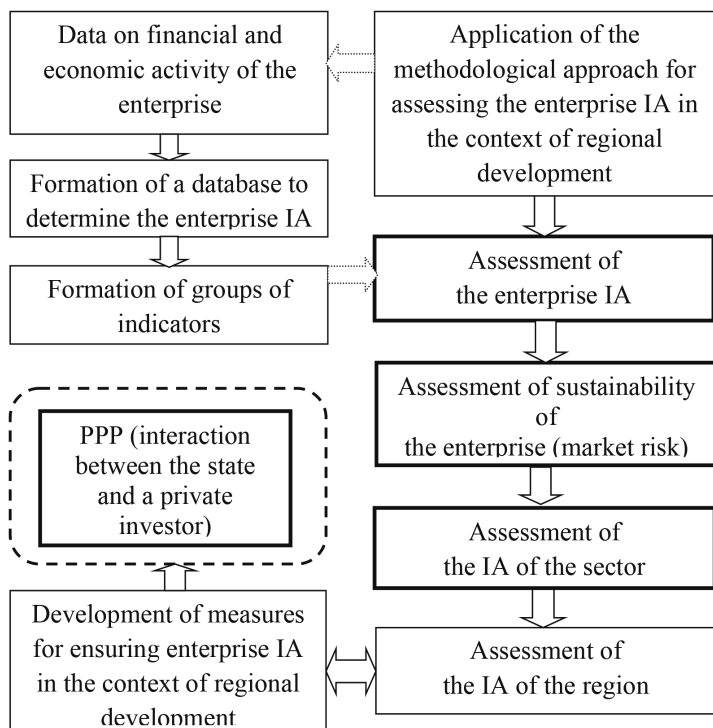
The system for management of investment activity includes “drawing up plans, forecasts for the purpose of the most effective investment of financial resources in various types of assets for consistent solution of tasks formulated in the mission” (Tsarev, 2012). The justified system for ensuring investment activity includes the following elements:

- planned and accounting unit – the investment project realized independently;
- planned and accounting period – the period during which the accounting of cash flows resulting from implementation of the investment project is performed;
- planned period – the period during which the implementation of the investment project is planned;
- regulatory support – a system that takes into account the existing mechanism of taxation, inflation rate, criterion risks values, interest rates, etc.

However, for the determination of management functions within the system for ensuring enterprise IA in the context of regional development, it is more appropriate to use the classification implying that “a set of management actions – at any level and in any system – can be reduced to a limited range of functions that are relatively strictly localized and make a closed cycle of ensuring” (Kuskov, 2013).

On the basis of realization of these functions, the author proposes a system for ensuring enterprise investment attractiveness in the context of regional development (see Fig. 1.5), which, in contrast to the existing ones, includes such important stages as:

- assessing the IA an enterprise;
- assessing the IA of the region;
- assessing the IA of the sector;
- public-private partnership (interaction between the state and a private investor).



**Figure 1.5.** *The system for ensuring enterprise investment attractiveness in the context of regional development*

**Enterprise investment attractiveness in the context of regional development** is defined as the concept combining the elements of enterprise investment attractiveness, factors influencing sector-region attractiveness, evaluating the sustainability of an enterprise in the sector, and ensuring effective interaction between the state and a private investor. Creation of a proper system for ensuring enterprise IA will allow forming an objective mechanism and instruments for diagnosing enterprise IA with the purpose of its improvement through a complex impact on the set of factors influencing enterprise IA.

## CONCLUSIONS TO SECTION 1

The carried out theoretical analysis of enterprise investment attractiveness and its system has revealed uncertainty and multiplicity. By considering different theoretical approaches to the concept of IA, its structure, and patterns of its formation process, it has been found that

- a) the concept of enterprise investment attractiveness remains an evolving and multifaceted system, covering not only activities of enterprises, but also the external conditions of the region (or sector) and the state as a whole;
- b) there is still no generally accepted definition of enterprise investment attractiveness;
- c) the concept of enterprise investment attractiveness arose from the perception of quantitative and qualitative interests with the aim of ensuring long-term sustainable economic development of the region and increasing the public welfare;
- d) enterprise investment attractiveness is a concept created by society, and, therefore, is a change of public attitudes and conditions in which there exist certain subjects of society that influence its development;
- e) sustainable development of an enterprise within the region (or sector) is the basis for development of investment attractiveness of this region (or sector).

With reference to the analysis of the development and structure of the concept of enterprise investment attractiveness, in the dissertation the enterprise investment attractiveness is defined as a complex concept consisting of a set of factors that determine it and influence the final results of investing.

The analysis of the scientific literature has shown that the enterprise investment attractiveness is competitiveness at a micro- and sectoral levels and is a multidimensional phenomenon but in all cases refers to the ability to compete in a given market. It is an enterprise's ability to withstand competition during a long period of time. After analysing the theoretical aspects of enterprise investment attractiveness in the context of the region development, the assumptions of assessment of enterprise investment attractiveness was put forward. Investment attractiveness of an enterprise is a business opportunity, a tool for increasing the enterprise's capacity to maintain its market share and remain productive. The analysis of factors influencing enterprise IA have shown that:

- a) the main factors are microlevel, sectoral ones;
- b) the micro level factors have the greatest importance for and influence on enterprise investment attractiveness.

Based on the conducted studies, it is determined that

- a) factors at the level of the country are used to assess investment attractiveness mainly when a foreign investor appears;
- b) the factors of the enterprise and sectoral level are of interest to scientific discussions. They are indicators of financial and economic activity and sustainability of the enterprise in a particular sector.

The role of PPP in assessment of enterprise investment attractiveness in the context of regional development was determined and there was offered: the joint funding of especially important transport infrastructure projects (direct financing and issuing guarantees), including participation in the statutory capital of the managing company; issue of secured by the state guarantees targeted bonds or loans; granting the investor the right to rent land plots adjacent to objects of the transport infrastructure. Theoretical studies of enterprise investment attractiveness in the context of regional development have shown the importance of mutual support between the state and private business.

Since science does not stand still, the approaches to assessing enterprise investment attractiveness are changing. To date, only conducting an analysis of the financial condition of an enterprise is not enough. The investment attractiveness of an enterprise is influenced by factors that do not depend on its activities. These factors should be taken into account when determining the investment attractiveness of an enterprise. Therefore, the procedure for assessing enterprise investment attractiveness in the context of regional development is required. Since the authors do not give an answer to this question, it is appropriate to develop a model for assessing enterprise investment attractiveness in the context of regional development. To do this, it is necessary to analyze the existing methods for assessing enterprise investment attractiveness and determine a set of factors' indicators with the help of which the calculation will be made.

## 2. METHODOLOGY FOR ASSESSMENT OF ENTERPRISE INVESTMENT ATTRACTIVENESS IN THE CONTEXT OF REGIONAL DEVELOPMENT

### 2.1. Overview of existing models for assessment of enterprise investment attractiveness

At the current stage of innovation challenges in Ukraine the urgency of choosing directions and volumes of investment increases. This is primarily conditioned by a significant growth of responsibility and risk in the process of using investment resources. The changes that occur during the formation of capital in the modern age of information technology should also be pointed out. With the dynamic accumulation and development of science and technology there observed an increase in the proportion of fixed capital, improvement of technical equipment of labor, growth in the scope of instruments of labor and its productivity. As a result, the responsibility at choosing objects and scope of investment increases.

The economic science faces the problem of searching for criteria for selecting the most profitable investment projects and the decisive criterion is making a maximal profit. Apart from direct benefits, which is received immediately, an increasing importance is attached to the expected benefit. In this case a probability of superseding competitors from the market is evaluated and benefits of “secondary effect” are calculated, which provides for production development and further investments.

Science also faces such a problem as labor intensity and sometimes the impossibility of evaluating the most profitable objects for investment. Especially relevant this issue becomes when the applicants for investment are dozens of enterprises of a particular sector. It is very laborious and time consuming to conduct a thorough audit of each of these enterprises. What is the way to solve the problem? In order to understand this situation, it is necessary to conduct a study and find out what methods scientists suggest to conduct such an assessment.

Evaluation of investment projects should be carried out with the help of quantitative assessment, which allows to comprehensively assess the advantages of the project for the company, and also represents the real level of valuation of the invested capital (Drábek & Merková, 2015).

Assessment of investment attractiveness is the system of actions of potential investor, directed on a selection to the investment portfolio of the most effective projects being relevant to the financial resources (Krupka & Bachinskiy, 2014).

Assessment of enterprise IA is a complex of factors that influence the state of economic entities, and, in terms of economic and mathematical analysis, is a set of indicators of enterprise effectiveness (Strokovich, 2009).

Some scientists propose assessing IA by means of investment analysis. For this purpose, Mirkin (2006) introduces the concept of “investment productivity” and defines it as return on investment measured by the ratio of the GDP changes to investments. Tsarev (2012) speaks of “investment efficiency” and considers it the end result from realization of investments to be used.

Thus, Anamari-Beatrice (2014) proposes to determine efficiency and feasibility of investing in traditional methods – DCF discounting, namely, net present value (NPV) and internal rate of return (IRR). The main drawback of this approach is the inability to assess managerial flexibility under uncertainty.

Mittala & Jhamb (2016) argue that the definition of investment attractiveness should be carried out on the basis of factor analysis, since they are sure that each consumer, and, accordingly, the investor, has an individual taste and idea of attractiveness. This shows that each investor can have his own view on enterprise attractiveness.

Rębiasz & Macioł (2014) say that for each sector a model for determining enterprise IA should be developed on the basis of forecast estimates. They also define universal criteria that can be used to assess enterprise IA. These are

- financial criterion: index profitability, return on equity;
- market criterion: predicted market dynamics, product competitiveness (product quality, product price);
- environmental impact.

With regard to the projections, the last decades have shown that the number and complexity of dependencies both inside and outside the company makes it difficult to use the probability theory to represent all kinds of uncertainty that arise when evaluating effectiveness of investment projects. At present, computer modeling is widely used to assess criteria for financial evaluation of projects. The result is a probability distribution of the selected indicator. Other parameters of multi-criteria evaluation of projects, for example, market aspects, technical aspects, some environmental problems, regional aspects, etc., cannot be expressed in terms of the probability theory. And since these criteria should also be taken into account in the project evaluation process, in many cases, decisions based on predictive estimates do not correspond to the assumptions of the probability theory (Rębiasz & Macioł, 2014).

Rolik (2012, 2013) says that it is necessary to comprehensively assess enterprise investment attractiveness. To this end, he suggests using two models: one of the models implies assessing investment attractiveness based on quantitative indicators, the other model includes only qualitative indicators. The scientist offers an integral approach to assessment of enterprise IA. In his view, such an approach involves quantifying components of the innovation strategy, and then an integral assessment, in order to objectively determine the investment attractiveness of an enterprise. He suggested using the concept of innovative potential for an integral assessment of innovation strategy, as it links all components of innovation activity, namely, innovation potential, innovation climate, innovation position.

But it should be noted that not always the IA of an enterprise depends on the innovation level. There is a need for breaking down the enterprises on a sectoral basis. Unlike industrial enterprises, for other enterprises this condition is not mandatory and the information required for their assessment is not always publicly available.

Vetlugin (2006) considers two approaches to assessing an investee's IA on the basis of the ranking evaluation: indirect and direct one. The indirect approach is based on studying the ranking results and their dynamics in recent years as well as the results of national rankings of IA by regions and industries. The direct approach is used when a region independently participates in international rankings of IA.



Kolomits (2013) proposes to assess investment attractiveness by identifying particularly significant indicators that determine investment attractiveness. The author proposes to represent all considered indicators in relative terms: for example, per capita, in indexes or percentage points.

Generalizing the methods for assessing enterprise IA, Kredisov (2013) concludes that in the economic practice there widely used five basic methods for assessing investment attractiveness of capitl investments:

1. The Net Present Value Method (NPV);
2. Internal Rate of Return (IRR);
3. Return on Investment (ROI);
4. Book-Value Rate of Return (BVRR);
5. Profitability Index (PI).

The most common methods for evaluating investment projects are methods using the discounting of cash flow (primarily the net present value method) and index of return on investment. Thus, the popularity of discounting methods is growing very fast (Kredisov, 2002).

Considering the methods for assessing an investees' IA, it is possible to formulate the following disadvantages:

- a primary focus is on portfolio investments;
- not taking into account the time component of investment flows (PP and ARR);
- the difference between the Ukrainian and western financial reporting used as a basis for calculation of the criteria, which complicates their evaluation;
- does not take into account the possibility of access to public information on the enterprise for carrying out an independent assessment of its IA;
- the assessment is carried out based on qualitative and quantitative factors separately, there is no universal model that allows to combine such factors into one by integration.

In the world and Ukrainian practice a number of methods based on financial indicators were elaborated for assessment and analysis of investment attractiveness of economic entities. It should be noted that their main features are:

- they are based on a large number of indexes united in certain groups and directions of analysis;
- indexes characterizing profitability, property and financial status of object of investing are taken into consideration;
- a lot of methods include analysis of indexes of investment risk and exposition of different economic indicators to the present moment by means of the system of discounting;
- determination of relative meaningfulness of certain indexes by means of ranting or determination of their share;
- aggregation of various indexes into universal system of assessment through determination of one or a few integral indexes (Krupka & Bachinskiy, 2014).

The models for assessment of investment enterprise attractiveness existing in the scientific literature are “Model for quantifying the components of the innovation strategy”

(Rolik, 2013), “Model for business activity assessment” (Nizielska, 2012), “Assessment model on the basis of forecast estimates” (Rębiasz & Macioł, 2014), “Method for integral assessment of investment attractiveness of enterprises and organizations” of Agency on Prevention of Bankruptcy of Enterprises and Organizations (ABEO), which was developed on the initiative of the administration of Agency on Prevention of Bankruptcy of Enterprises and Organizations (ABEO) and registered in the Ministry of Justice of Ukraine.

It should be noted that the development of models for assessing investment attractiveness helps develop science. When the result is presented quantitatively, it becomes easy to understand. Results obtained by an integral assessment are especially simple for perception.

The carried out analysis has allowed to single out fundamental principles that are purposeful to apply in assessing investment attractiveness.

Since in Subsection 1.2 of this work the main factors (criterion) influencing enterprise IA (see Fig. 1.3) was determined, the author decides to describe criteria for assessment and analysis of investment attractiveness (see Tbl. 2.1)

**Table 2.1.** *Directions of financial analysis of enterprise investment attractiveness*

Criteria for assessment	Rolik (2013)	Nizielska (2012)	Rębiasz & Macioł (2014)	ABEO (1998)
property status				
financial independence				
financial stability				
assets liquidity				
profitability				
business activity				
correcting the integral index with regard to attractiveness of the region				
sectoral criterion				

The majority of the mentioned methods for assessment of investment attractiveness are built on determination and analysis of economic indicators by certain directions. Each of the mentioned directions contains a few indicators that substantially influence and comprehensively represent the area of an enterprise's activity. The biggest problem is to combine the indexes for determining a single integral index of investment attractiveness.

To evaluate investment projects, there required a sufficient set of indicators, which give the most complete picture of their attractiveness. First of all, it is determined by the composition of the object of investment and investment structure. Taking into account that the main goal of financial justification is the credibility of investment project evaluation, it is necessary to determine a large number of indicators, each of which “diagnoses” the state of a particular sphere of the investment object. The financial evaluation involves calculation of over 40 relevant indicators. Large arrays of indicator values do not allow making a final conclusion, because each of them, except for the numerical one, has also a weight value. Integral evaluation allows combining in one indicator many factors that differ in name, units of measurement, weight, and other characteristics.

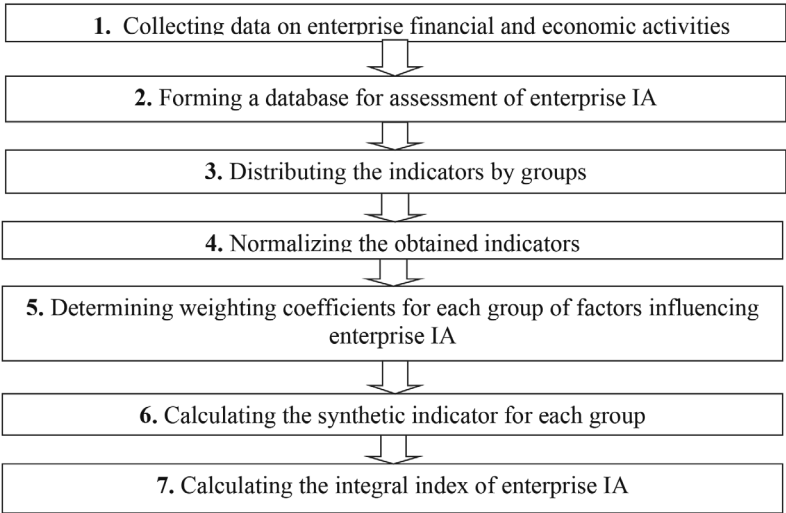
Since at the present moment there is no methodological approach to assessing enterprise IA that involves all the determined criteria, the author proposes to develop a fundamentally new methodological approach to assessing enterprise investment attractiveness in the context of regional development (as noted in Section 1 of this dissertation).

**2.2. The model for assessment of enterprise investment attractiveness**

For evaluation of investment projects a sufficient set of indicators, which give a more clear idea of their attractiveness, is required. Given that the main goal of financial justification is credibility of the investment project evaluation, the required number of indicators, each of which makes it possible to evaluate the state of the sphere of the investee activity, is shown in Figure 1.2.

According to the author, the determination of enterprise IA in the context of regional development depends on complexity of the system of factors influencing enterprise IA (see Fig. 1.3). The operation of such system is best reflected by three levels of the hierarchy including the state, regional and enterprise levels. Each of these levels is characterised by certain indicators (see Fig. 1.1), with the help of which it is possible to trace the dynamics of changes in the investment process, in particular, the dynamics of the investment attractiveness development.

With the purpose of solving the scientific problem – assessing enterprise investment attractiveness in the context of regional development, and according to the system for ensuring enterprise investment attractiveness in the context of regional development (see Fig. 1.4), the first step proposes by the author is the procedure for determining the model for assessment of enterprise IA (see Fig. 2.1).



**Figure 2.1.** *The procedure for determining the model for assessment of enterprise IA*

Let us consider each step of the procedure for determining the model for assessment of enterprise IA.

Collecting data on enterprise financial and economic activities. At this stage collection of information on the actual state of the enterprise and assessment of the existing state of IA is carried out. Indicators of the appropriate forms of financial statements, which are approved by the Ministry of Statistics of Ukraine and are mandatory for all business entities in Ukraine, should be used as the object of relative information. They include Form №1 “Balance of the enterprise”, form №2 “Report on financial results and their use”, form №3 “Report on financial and property status of the enterprise” form №11-OP “Report on the presence and movement of fixed assets, amortization (depreciation)”.

Forming a database for assessment of enterprise IA. At this stage the calculation of indicators of investment attractiveness of enterprises and organizations is carried out on the basis of the proposed by the author internal components of IA (see Fig. 1.2). An important condition is that an increase in each of the indicators should suggest the positive dynamics.

Also it is necessary to pay special attention to such indicator as Balance sheet currency. Unlike all the relative indicators (qualitative) that will be used in calculations, this indicator is natural (quantitative). Therefore, one of the tasks of developing the model is the possibility of unification of these indicators by normalization, which will be described below.

The indicators are calculated on the basis of available reliable data (number of indicators can be revised) by the well-known formulas presented in (Kovalev, 2006; Kazakov, 2016).

Distributing the indicators by groups. Since such indicators as the coefficient of autonomy, funding coefficient and coefficient of financial independence directly evaluate financial independence from borrowed funds, for this reason the author proposed to single out these indicators into a separate group. Therefore, at this stage the author provides the sorting of the obtained indicators by groups:

1. indicators of the investee's property status;
2. indicators of financial independence;
3. indicators of financial stability (solvency) of the investee;
4. indicators of assets liquidity of the investee;
5. indicators of profitability;
6. indicators of business activity of the investee.

As the author proposed to place the indicators of financial independence into a separate group, so the grouping of indicators for assessing enterprise IA will be presented as follows (see Tbl. 2.2):

**Table 2.2.** *Indicators for assessment of enterprise IA*

Symbol name of indicators	Indicators
Group I – factors of property status of the investee	
$\Phi_{11}$	Share of the active part of fixed assets
$\Phi_{12}$	Rate of depreciation of fixed assets
$\Phi_{13}$	Coefficient of fixed assets renewal
$\Phi_{14}$	Balance sheet currency

Symbol name of indicators	Indicators
Group II – factors of evaluation of financial financial stability (solvency) of the investee	
$\Phi_{21}$	Coefficient of own funds
$\Phi_{22}$	Own long-term and medium-term borrowed sources of forming reserves and expenditures
$\Phi_{23}$	Total amount of the sources of forming reserves and expenditures
$\Phi_{24}$	Working capital
$\Phi_{25}$	Maneuverability of working capital
$\Phi_{26}$	Financial leverage ratio
Group III – factors of evaluation of financial independence	
$\Phi_{31}$	Coefficient of independence from borrowed funds
$\Phi_{32}$	Coefficient of financial independence
$\Phi_{33}$	Coefficient of financial stability
Group IV – factors of evaluation of assets liquidity of the investee	
$\Phi_{41}$	Current or total coverage ratio
$\Phi_{42}$	Ratio of payables and receivables
$\Phi_{43}$	Coefficient of absolute liquidity
$\Phi_{44}$	Rate of cash reserves (in case the enterprise owns securities)
$\Phi_{45}$	Coefficient of periodic payments
Group V – factors of evaluation of the investee's profitability	
$\Phi_{51}$	Coefficient of return on investment
$\Phi_{52}$	Coefficient of return on equity
$\Phi_{53}$	Operating return on sales
$\Phi_{54}$	Coefficient of operating costs
$\Phi_{55}$	Coefficient of return on assets
Group VI – factors of evaluation of the investee's business activity	
$\Phi_{61}$	Index of productivity
$\Phi_{62}$	Coefficient of assets turnover
$\Phi_{63}$	Accounts receivable turnover (in turnover cycles)
$\Phi_{64}$	Accounts receivable turnover (in days)
$\Phi_{65}$	Inventory turnover (in turnover cycles)
$\Phi_{66}$	Inventory turnover (in days)
$\Phi_{67}$	Equity capital turnover
$\Phi_{68}$	Turnover of working capital

As it was discovered, investment attractiveness is largely determined by the influence of a combination of microenvironment factors.

Therefore, it is proposed to identify for each group the factors that have the greatest impact on enterprise investment attractiveness.

For this purpose, it is proposed to divide the above factors into main and secondary ones. The main ones include factors that have a decisive impact on investment attractiveness. The breakdown of factors into main and secondary occurs in accordance with their significance, or degree of influence. The selection of these indicators is proposed on the basis of a questionnaire-based survey conducted among specialists in the sector, at the next stages.

### 1. Selection of experts.

It should also be mentioned that the quantitative method of collecting data was an expert poll carried out during the workshop and conferences in Faculty of management and business of KNAHU in 2017.

The main criteria for the selection of experts were:

- academic degree or rank;
- work experience in the specialty;
- official position;
- analysis of the expert's activities and scientific works (Annex B).

The experts were the representatives of:

- scientific circles and who are involved in the field of international economic relations (including scientists from the Czech Republic and Poland);
- strategic management and management of local and regional, as well as urban development;
- business, managers of foreign companies.

The audience surveys were conducted on the sample of 21 experts. Such quantity was determined on the basis of the methodology of “Calculating the Number of Respondents You Need”, presented by the SurveyMonkey Help Center. The experts structure is presented in Table 2.3.

**Table 2.3.** *A sample structure of the questionnaire-based survey (%)*

Area	Percentage of respondents (N = 21)
Science	57
Business	24
Public administration	19

### 2. Formation of questions and development of questionnaires.

Since the reliability of the results of the survey largely depends on the correctness of the development of the questionnaire and the instructions for its completion, a questionnaire containing six groups of factors that determine and substantially affect the investment attractiveness was compiled (example of factors groups are presented in Annex C). According to the instruction, the expert had the right to supplement the existing list of indicators, for which free lines were given in the questionnaire.

3. Formation of rules for the determination of total score based on evaluations of individual experts.

The factor that is considered to be the least significant is assigned the highest score, and the most significant – one one point. Consequently, the rank “one” is assigned to that indicator, which has the smallest amount of points and the greatest significance.

### 4. Work with experts.

The expert survey was conducted in two stages. At the first stage, the experts were given the opportunity to complete the following list of factors, if desired, and at the second – with the help of ranks, to evaluate the significance of a particular factor in comparison with other groups.

The analysis and processing of the score given by the experts.

The results of the survey are presented in Table 2.4.

**Table 2.4.** *The matrix of ranks*

Factors		Number of experts					Sum of ranks	Deviation from the mean, $\Delta$	Sum of squared deviation, $S = \sum \Delta^2$
		1	2	...	j	m			
1	$X_1$	$a_{11}$	$a_{12}$	...	$a_{1j}$	$a_{1m}$	$\sum a_{1j}$	$\Delta a_{1j}$	$\Delta a_{1j}^2$
2	$X_2$	$a_{21}$	$a_{22}$	...	$a_{2j}$	$a_{2m}$	$\sum a_{2j}$	$\Delta a_{2j}$	$\Delta a_{2j}^2$
...	...	...	...	...	...	...	...	...	...
$\kappa$	$X_\kappa$	$a_{\kappa j}$	$a_{\kappa j}$	...	$a_{\kappa j}$	$a_{\kappa m}$	$\sum a_{\kappa j}$	$\Delta a_{\kappa j}$	$\Delta a_{\kappa j}^2$
Total		$\sum_{i=1}^k a_{ij}$	$\sum_{i=1}^k a_{ij}$	...	$\sum_{i=1}^k a_{ij}$	$\sum_{i=1}^k a_{im}$	$\sum_{i=1}^k \sum_{j=1}^m a_{ij}$	-	$\sum_{i=1}^k \Delta a_{\kappa m}^2$

The processing of the survey data was conducted in the sequence described below.

At the first stage, the sum of ranks assigned to a certain factor by all experts was determined:

$$\sum_{j=1}^m a_{ij} = a + a_i + \dots + a_{ij} + \dots + a_{im}, \quad (2.1)$$

where

$a_{ij}$  - the rank assigned to the i-th factor j by an expert;

m – the number of experts.

Further, the author determines the deviation of the sum of ranks of each factor from the mean:

$$\Delta = \sum_{j=1}^m a_{ij} - \sum_{i=1}^k \sum_{j=1}^m a_{ij} / \kappa, \quad (2.2)$$

where

k – the number of indicators.

The next step is to find squares of the deviations of the sum of ranks from the mean ( $\Delta^2$ ) by an individual factor.

The assessment of the consistency of expert opinions is carried out with the help of the coefficient of concordance calculated by the formula:

$$W = \sum \Delta^2 / ((m^2 * (\kappa^3 - \kappa) / 12)), \quad (2.3)$$

where

W – the coefficient of concordance;

$\sum \Delta^2$  – the sum of squared deviation by an individual factor;

m – the number of experts;

k – the number of factors.

The coefficient of concordance varies from 0 to 1. The greater its value, the more consensual the opinions of experts are considered to be (see Tbl. 2.5).

**Table 2.5.** *The coefficient of concordance of expert opinions*

Name of indicators group	Value
property status group	0.79
financial independence group	0.73
financial stability (solvency) group	0.74
assets liquidity	0.87
profitability group	0.89
business activity group	0.97

The verification of significance of the coefficient of concordance is carried out according to the Pearson criterion calculated by the formula:

$$\chi^2_p = \sum \Delta^2 / (1/12) * 12 * (\kappa - 1) * \kappa * m, (2.4)$$

The calculated value of the Pearson criterion is compared with the table contained in the reference literature presented in Annex B. The coefficient of concordance is significant if the calculated value of the Pearson criterion is more than the tabular one.

The result of the calculated value of the Pearson criterion for each group of the studied factors is presented in Table 2.6.

**Table 2.6.** *The calculated value of the Pearson criterion*

Name of indicators group	$f$	$\chi^2$	$\chi^2_p$
property status group	3	7.8	82.8
financial independence group	5	11.1	106.9
financial stability (solvency) group	2	6.0	61.7
assets liquidity	4	9.5	109.3
profitability group	4	9.5	111.8
business activity group	7	14.1	182

Since the table value of the Pearson criterion at the corresponding values of the degrees of freedom of each groupe does not exceed the calculated value and the concordance coefficient approaches to 1 (much greater than zero), the consensus of expert opinions on the rank of factors of investment attractiveness is not coincidental.

One of the aims of the research is to find out which of the presented set of quantitative and qualitative indicators of factors are the most significant in assessing enterprise investment attractiveness.

The results of the study are presented in Annex C.

The following criteria were chosen by the experts:

- *Balance sheet currency* is the sum of all assets or all liabilities reflected in the balance sheet. The importance of this indicator is determined by a fairly broad area of



its application in financial analysis. In addition, the balance sheet currency determines whether the enterprise is subject to audit.

- *Coefficient of renovation of fixed assets* shows the share of new fixed assets in those available at the end of the reporting period. The higher the coefficient of renovation of fixed assets, the higher the technical potential is.
- *Coefficient of concentration of equity capital* is an indicator to the value of which investors and banks that issue loans pay special attention.
- *Coefficient of independence form borrowed funds*. The higher the value of this indicator, the more attractive the enterprise is in the eyes of investors. It is also an indicator to the value of which investors and banks that issue loans pay special attention.
- *Current or total coverage ratio* allows investors to assess the ability of an enterprise to pay off its debts by using available funds.
- *Coefficient of financial stability*. This indicator is important for investors, since it shows the share of the sources of financing that the organization uses in its activity for more than a year.
- *Coefficient of absolute liquidity*. The importance of this indicator for investors is determined by the fact that it indicates enterprise solvency.
- *Working capital* gives investors an idea of the corresponding operating efficiency.
- *Coefficient of return on equity*. This indicator demonstrates the activity of money resources and is taken into account by the investor in determining the risk level.
- *Operating return on sales* shows investors how successfully the enterprise works as a business in performing its ordinary activity.
- *Coefficient of asset turnover*. This indicator is used by investors to assess the effectiveness of capital investments;
- *Turnover of working capital* is important for investors, since it shows how effectively the enterprise uses investments in working capital.

1. Normalization of data. The need for the data to be normalized is conditioned by the nature of the indicators used, because they differ greatly in absolute values (some indicators are qualitative, and some quantitative or some indicators are measured in thousands and others in hundreds). Normalization of data allows to bring all the numerical values of variables used to the same area of changing, so that it becomes possible to bring them together in one model. At this point, the author conducts the normalization of data after defining the mean square deviation of each indicator by means of descriptive statistics. The normalization is performed through dividing the value of a statistical indicator by mean square deviation of the studied group.

$$x_i^* = \frac{x_i}{\sigma_x}, (2.5)$$

$x_i^*$  – normalized indicator,

$x_i$  – indicator value in the group,

$\sigma_x$  – mean square deviation.

2. Determination of weighting coefficients for each factor influencing IA and determination of weighting coefficients for each group of factors influencing IA. The aim of this stage of building a model for assessing investment attractiveness is to calculate weighting coefficients, which are to reflect the contribution of each component of investment attractiveness.

Determination of such coefficients can be performed using the hierarchy analysis method. Unlike commonly used ranking by the expert method, it provides a more reliable and objective results.

The hierarchy analysis method was studied in detail and designed by an American mathematician Thomas Saaty (Kazakov, 2015; Saati, 1993). This method is a systematic procedure for hierarchical representation of components that determine the content of a problem. The method is based on decomposition of a problem into simpler components and further processing of judgments at each hierarchical level by using pairwise comparisons. As a result there can be detected a relative degree of interaction of the components at the considered hierarchical level or advantage of some components in relation to others. These judgments are given a numerical evaluation. When considering issues of investment attractiveness, it is necessary that the decomposition be made until the level at which pairwise comparisons can be carried out by a competent specialist in the field. Let us consider the algorithm for determining weighting indicators.

Stage One. After studying the available information, it is necessary to comprehensively describe the problem, identify the objects that will experience the impact of the planned activities. It is also necessary to perform analysis of the goals pursued in connection with the solution of the problem.

Stage Two involves pair comparison of the detected elements of the problem by means of multidimensional scaling, which, unlike one-dimensional, allows to most accurately determine the priority of some elements over others. The scale for conducting this comparison is shown in Table 2.7.

**Table 2.7.** *The scale of relative importance of some elements over others (Kazakov, 2015; Saati, 1993)*

Degree of importance	Definition	Explanation
1	Equal importance	Importance of objects (factors) $F_i$ and $F_j$ is equal
3	A certain overestimation of significance of one action over another (low importance)	Experience and judgments give a slight advantage of one object over another
5	Significant or of high importance	The data available indicate a significant advantage of $F_i$ over $F_j$
7	Very high or obvious importance	The advantage of object (factor) $F_i$ over $F_j$ is obvious
9	Absolute importance	Obvious advantage of $F_i$ over $F_j$
2,4,6,8	Intermediate values between successive scale values	Used in cases of compromise
The scale of relative importance contains negative values as well 1/2 – 1/9		

Stage Three. At each lower hierarchical level the structural elements are arranged in a matrix of paired comparisons, where expert estimations are tabulated. Here the expert should express the result of comparing two objects or processes in the form of reasonable numerical estimates in each cell of the matrix. To determine the figures, a special scale of relative importance is used (see Tbl. 2.6), which allows to assign numerical estimates characterizing superiority of one element over another. For matrixes of pairwise comparisons it is necessary to perform the evaluation of consistency of expert judgments. If the condition of consistency is not observed, it is advisable to reconsider the task at the given specified hierarchical level and repeat the procedure of expert evaluation. The algorithm of actions is as follows:

1. The components of the eigenvector of matrix  $A^* = (a_{ij})$  is determined by the formula:

$$W_i = (a_{i1} \cdot a_{i2} \cdot a_{i3} \dots a_{in})^{1/n}; \quad (2.6)$$

where:

$a_{ij}$  – the corresponding values of the matrix of pairwise congruences  $A^*$ ;  
 $n$  – the number of matrix elements

2. The normalized vector of matrix  $A^* - W_{\text{норм}}$  is calculated by the formula:

$$W_{\text{норм}} = W_i / \sum_{i=1}^n W_i. \quad (2.7)$$

Now it is necessary to find the maximum eigenvalue of the matrix  $\lambda_{\text{max}}^*$ :

$$\lambda_{\text{max}}^* = \sum_{j=1}^n a_{ij} \cdot W_{\text{норм}j}, \quad (2.8)$$

3. and verify the condition of:

$$\lambda_{\text{max}}^* \geq n, \quad (2.9)$$

4. The index of consistency  $I_c$  is determined by the formula:

$$I_c = (\lambda_{\text{max}}^* - n) / (n - 1) \leq 0.2, \quad (2.10)$$

5. The random consistency index ( $CBI_{\text{y3r}}$ ) is determined for the compliance matrix by means of the average random consistency index (Saaty, 1993).
6. Then the consistency relation is determined by the formula:

$$BY = I_{\text{y3}} / CBI_{\text{y3r}}, \quad (2.11)$$

The condition of consistency is verified:

$$BY \leq 0.2, \quad (2.12)$$

As a result of implementation of all the identified stages, there obtained indicators that can be used as weighting coefficients for the model.

It is necessary to carry out the calculation of weighting coefficients to simulate assessment of enterprise IA by the hierarchy analysis method. At the first stage there should be identified the elements of the problem, which have a significant influence on it.

The factors influencing enterprise IA were determined. It is these data that will be used as elements characterizing the analyzed problem. In view of availability of public information, elements of the matrix of pairwise comparisons and the numbers assigned to them, which will be passed to experts for evaluation, are presented in Table 2.8.

**Table 2.8.** Elements of the matrix of pairwise comparisons *of factors influencing enterprise IA*

№	The matrix element
1	Balance sheet currency
2	Coefficient of renovation of fixed assets
3	Coefficient of concentration of equity capital
4	Coefficient of independence from borrowed funds
5	Current or total coverage ratio
6	Coefficient of financial stability
7	Coefficient of absolute liquidity
8	Working capital
9	Coefficient of return on equity
10	Operating return on sales
11	Coefficients of asset turnover
12	Turnover of working capital

The elements of the matrix shown in Table 2.8 were presented as a form and submitted for the experts, among which there were representatives of

7. scientific circles, who are involved in the field of international economic relations;
8. strategic management and management of local and regional, as well as urban development;
9. business, managers of foreign companies.

The audience surveys were conducted on the basis of opinion for 21 experts. The results of the determination of weighting coefficients for the model for assessing enterprise IA by means of the hierarchy method are shown in Annex D.

As can be seen from Annex D, the result of weighting coefficients indicates that the greatest impact on the overall enterprise IA under modern conditions is made by indicators of property status, indicators of evaluation of financial independence, profitability and indicators of evaluation of business activity. This is quite reasonable because these indicators determine the efficiency of enterprise activity.

On the basis of the determination of weighting coefficients, it becomes possible to form a model for IA evaluation.

The model for determining the integral index regarding assessment of IA takes the following form:

$$I_{IA} = \sum_{j=1}^6 K_j \cdot \alpha_j, \quad (2.13)$$

where  $K_j$  – the synthetic (intermediate) indicator of the  $j^{\text{th}}$  component of MTE IA;

$\alpha_j$  – the weighting coefficient of the  $j^{\text{th}}$  component of enterprise IA;

With regard to the obtained specific weighting coefficients for six main components of enterprise IA, the integral index of enterprise IA has the following form:

$$I_{IA} = 0.162848 \cdot K_{GI} + 0.194772 \cdot K_{GII} + 0.149737 \cdot K_{GIII} + 0.154986 \cdot K_{GIV} + 0.177391 \cdot K_{GV} + 0.160266 \cdot K_{GVI}, \quad (2.14)$$

where  $I_{IA}$  – the integral index of enterprise IA;

$K_{GI}$  – Group I (coefficient of property status);

$K_{GII}$  – Group II (coefficient of financial independence);

$K_{GIII}$  – Group III (coefficient of financial stability);

$K_{GIV}$  – Group IV (coefficient of assets liquidity);

$K_{GV}$  – Group V (coefficient of profitability);

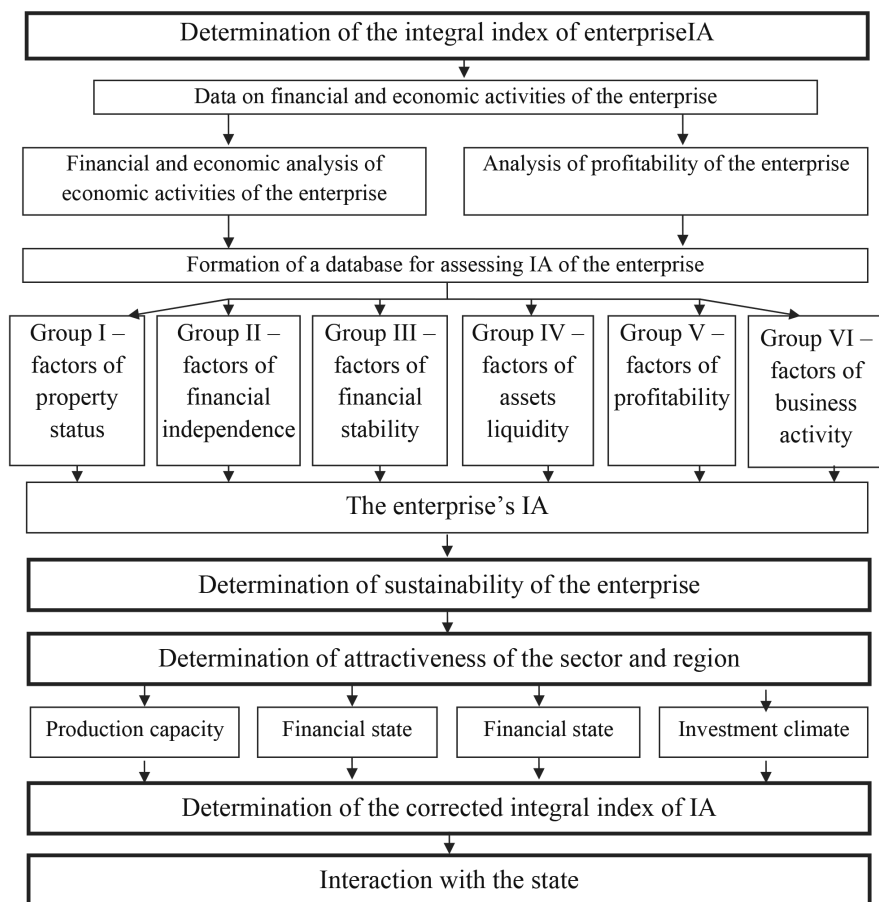
$K_{GVI}$  – Group VI (coefficient of business activity).

With the help of the proposed model (2.14), it is possible to calculate the integral index of enterprise investment attractiveness for several periods, track and assess its dynamics.

Using the developed model, it is possible to solve the biggest problem – to combine information directions and indexes, to determine a single integral index of enterprise investment attractiveness. And since this indicator characterizes the financial condition of an enterprise (with internal factors being used in the calculation), it is the basis for assessing enterprise investment attractiveness in the context of regional development.

### 2.3. The model for assessment of enterprise investment attractiveness in the context of regional development

On the basis of the main factors influencing IA of an enterprise (see Fig. 1.2), those influencing IA of sector and region (see Fig. 1.3) and the system for ensuring enterprise investment attractiveness in the context of regional development (see Fig. 1.4) the author proposes a model for assessing investment attractiveness of an enterprise in the context of regional development. The proposed model will make it possible without any difficulties and expenditures to assess both an individual enterprise and a group of enterprises, assess not just the investment attractiveness in the context of regional development, but also use this indicator for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism in the context of regional development (see Fig. 2.2).



**Figure 2.2.** *The model for assessment of enterprise IA in the context of regional development*

The model for assessment of enterprise IA in the context of regional development (see Fig. 2.2) is based on determining the integral index (see Model 2.14). The justification of the proposed mathematical model is based on the proven statistical methods and algorithms of the statistic, factorial and multicriterion analysis.

Determination of the integral index of enterprise IA involves calculation of six general factors, evaluation of which, in turn, is based on the use of the selected analytical indicators. The synthetic (generalizing) indicator for each group of factors, in this case the synthetic-intermediate ones, are:

- balance sheet currency;
- coefficient of renovation of fixed assets;
- coefficient of concentration of equity capital;

- coefficient of independence form borrowed funds;
- current or total coverage ratio;
- coefficient of financial stability;
- coefficient of absolute liquidity;
- working capital;
- coefficient of return on equity;
- operating return on sales;
- coefficients of asset turnover;
- turnover of working capital.

The synthetic (generalizing) indicator is calculated by the formula:

$$S_k = \sum_{j \in M_i} a_{ijk} \cdot p_j, \sum_{j \in M_i} p_j = 1, i = \overline{1, n}, k \in K, (2.15)$$

where  $i$  – the index of the synthetic indicator in the group;

$j$  – the index of the analytical indicator;

$k$  – the index of the enterprise;

$S_{ik}$  – the quantitative value of the synthetic indicator of the  $i^{th}$  group of the  $k^{th}$  enterprise;

$a_{ijk}$  – the value of the  $j^{th}$  analytical indicator of the  $i^{th}$  group of the  $k^{th}$  enterprise;

$p_{ij}$  – the value of the weight of the  $j^{th}$  analytical indicator in the  $i^{th}$  group;

$K$  – the set of objects of a sample of enterprises;

$M_i$  – the set of the analytical indicators of the  $i^{th}$  group.

Investment projects can be evaluated in terms of different aspects: financial, technological, organizational, and others, each of them being extremely important. However, financial aspects of investment decisions in many cases are determinant. In financial terms, at evaluating investment feasibility there arise questions about the amount of financial resources required, and alternative sources of their involvement, whether the investments made will pay off in the future, i.e. whether the projected proceeds are sufficient compared with the initial investment. These issues should be well thought out in the process of pre-investment studies, especially under conditions of limited financial resources.

Financial justification of an investment project is to give a clear answer both to investors and enterprises attracting investments about the mutual benefit of the project. Credibility and reliability of economic estimates are based primarily on the completeness and accuracy of input information.

Moreover, when assessing investment attractiveness in the context of regional development (see Fig. 2.2), it is necessary to determine the sustainability of an enterprise (market risk) by calculating its value – the coefficient of sensitivity  $\beta$ . Market risk  $\beta$  determines the level of fluctuations or deviations in results of the sector in relation to results of the market or the entire economy. It is part of the overall risk, which depends on the general state of the economy of the country. This risk affects all participants in the economic process and is due to the dynamics of investment, the turnover of foreign trade, changes in legislation, etc. Market risk is one of the key indicators used in analysis of financial risks (Sharpe, Alexander & Bailey, 1998). It is based on the formula:

$$\beta = \frac{V_{R_i R}}{\sigma_R^2} = \rho_{R_i R} \frac{\sigma_{R_i}}{\sigma_R}, \quad (2.17)$$

where  $R$  – the random variable characterizing the whole economy;

$R_i$  – the random variable characterizing the sector;

$V_{R_i R}$  – the coefficient of covariance between  $R_i$  and  $R$ ;

$\sigma_R$  – the mean square deviation of  $R$ ;

$\sigma_{R_i}$  – the mean square deviation of  $R_i$ ;

$\rho_{R_i R}$  – the coefficient of correlation between  $R_i$  and  $R$ .

The calculation of the above numerical characteristics is carried out according to the following formulas:

calculating the coefficient of covariance between  $R_i$  and  $R$ ;

$$V_{R_i R} = \frac{n}{n-1} (\overline{R_i R} - \overline{R_i} \cdot \overline{R}), \quad (2.18)$$

where  $n$  – the number of periods for which the research is being conducted:

calculating the coefficient of correlation between  $R_i$  and  $R$ :

$$\rho_{R_i R} = \frac{V_{R_i R}}{\sigma_{R_i} \sigma_R}, \quad (2.19)$$

– calculating the random variable for  $n$  periods:

$$\overline{R_i R} = \frac{\sum_{j=1}^n R_j R_j}{n}, \quad (2.20)$$

$$\overline{R_i} = \frac{\sum_{j=1}^n R_j}{n}, \quad (2.21)$$

$$\overline{R} = \frac{\sum_{j=1}^n R_j}{n}, \quad (2.22)$$

calculating the mean square deviation of  $R_i$ :

$$\sigma_{R_i} = \sqrt{\sum_{j=1}^n (R_j - \overline{R_i})^2 / n}, \quad (2.23)$$

calculating the mean square deviation of  $R$ :

$$\sigma_R = \sqrt{\sum_{j=1}^n (R_j - \overline{R})^2 / n}, \quad (2.24)$$



With this indicator it is possible to compare activities of enterprises and the sector: the coefficient indicates how stable an enterprise in this sector is. the coefficient indicates how stable the enterprise is in this sector. The calculation should be carried out on the basis of the time period, taking the same indicator of the enterprise's activity and the sector's activity. The indicator of the sector's activity can be taken both at the regional level and at the country level. The higher the  $\beta$  value, the higher the risk associated with the sector, the lower the value of  $\beta$ , the lower the risk associated with the sector (Sharpe, Alexander & Bailey, 1998).

Depending on the results obtained, it is possible to determine how sustainable the enterprise in this sector is (see Tbl. 2.9).

**Table 2.9.** *The classification of enterprises by degree of risk*

Value	The degree of risk
$\beta < 0$	–
$\beta = 0$	There is almost no risk
$0 < \beta < 1$	The risk is below the sectoral average
$\beta = 1$	The risk is at the level of the sectoral average
$\beta > 1$	The risk is higher than the sectoral average

To determine the investment attractiveness of a sector, it is necessary to analyze the dynamics of the following indicators:

- length and quality of roads;
- structure of production;
- dynamics of capital investment;
- foreign direct investments;
- financial performance of enterprises.

To determine the investment attractiveness of a region, it is necessary to analyze the dynamics of the following indicators:

- volume of production;
- dynamics of capital investment;
- foreign direct investments;
- financial performance of enterprises.

Investors are seeking for a relatively cheaper, geographically attractive, with adequate resources (logistics, human resources, market size, economic and political stability and operating costs) region or city (Bruneckienė, Zykienė & Stankevičius, 2016).

Potential investors are interested not in the value of the investment attractiveness index but a possible level of satisfaction of financial, industrial, organizational and other requirements, or perspectives concerning a certain enterprise, when making decisions about investing, internal and external factors influencing the enterprise should be taken into ac-

count. Therefore, it is necessary to carry out the assessment of IA by correcting the integral index with regard to the factors that significantly affect the investment attractiveness of the enterprise, particularly at the macro level (Grineva, 2013).

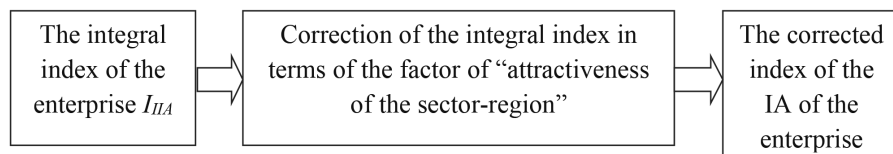
To record the results of assessing the investment attractiveness of a sector and region in terms of the mentioned indicators, the matrix of IA at macro level is used (see Tbl. 2.10).

**Table 2.10.** *The matrix of investment attractiveness at the macro level (Grineva, 2013)*

Attractiveness of the region	Attractiveness of the sector	
	high	low
Attractive	2	1
Unattractive	1	0

If neither the region nor sector is investment attractive, it is obvious that investing in any enterprise operating in this area and situated in the region concerned is out of question. When either the sector or region is attractive to investors, then the effects of negative and positive sides of attractiveness at the mesoeconomic level compensate each other. In this case, making the decision on investing in a particular enterprise can only be possible based on assessing its investment attractiveness (calculation of the integral index). For an enterprise that is in the investment attractive region and belongs to the attractive sector, the coefficient of attractiveness increases twice (Grineva, 2013).

The sequence of conducting corrections of the integral index of IA in the context of regional development is shown in Figure 2.3.



**Figure 2.3.** *Determination of the corrected integral index of IA in the context of regional development*

The corrected index of IA of the enterprise can be represented by the formula:

$$I_{IA} = I_{IIA} \times K, \quad (2.16)$$

where  $I_{IA}$  – the investment attractiveness of the enterprise;

$I_{IIA}$  – the integral index of IA of the enterprise;

$K$  – the correction index.

It is proposed to evaluate the enterprise IA in the context of the region development on the basis of indicators obtained in the course of analysing the business activity of the corresponding enterprise as well as a number of other indicators. The whole set of indicators used to assess investment attractiveness is presented in Table 2.2, the model for assessment of enterprise IA in the context of regional development is shown in Figure 2.2.

The proposed in the work model for assessment of enterprise IA in the context of regional development takes into account the dynamics of the initial data involved in the formation of the index of enterprise IA. The proposed methodological approach is based on dynamics of the studied investment processes at the level of individual enterprises. To ensure enterprise investment attractiveness in the context of regional development, in the opinion of the author, it is necessary to pay attention to the most important factor – interaction with the state, which will be considered in the next subsection of this dissertation.

#### **2.4. The method for ensuring interaction between the state and a private investor withing the framework of the PPP mechanism in the context of regional development**

In Section 1 of this dissertation it was determined that PPP is a factor influencing enterprise investment attractiveness in the context of regional development and helps create a favorable environment for investment. Within the framework of the proposed system for ensuring enterprise investment attractiveness in the context of regional development (see Fig.1.4), PPP is one of the ways of such provision. At implementing investments, it is necessary to precisely describe the interaction of their participants in order to ensure their cost-effectiveness. This means not only coordination of interests (criteria) of participants of investing but also development of rules of the game, i.e. holding potential investors competitions, optimizing the structure of the invested capital.

The market conditions require coordination of recommendations on implementation of investments with international guidelines for conducting technical and economic research, which will enable introducing elements of standardization in preinvestment studies.

Motives for implementation of investment projects may vary, but in general there are three main reasons necessitating investments: updating the existing material base, increasing the volume of production, developing new activities. The degrees of responsibility for investment decisions in these areas differ from each other. In case of replacing the available production facilities, the decision can be made painlessly, as there are certain ideas about the scope and main features of the required new methods. The task becomes more complicated when it comes to investing in expansion of core activities in view of the need to take into account a range of new factors, opportunities to enter new sales markets. It is even more difficult to assess possible consequences of development of new activities.

The scientific research of Musson (2012) has demonstrated that business leaders would be willing to invest in sustainable development upon condition of cooperation with government and friendly public policy. At the same time, successful cooperation and successful regional development will be ensured with the joint work of government and enterprises or investors (Musson, 2012).

As a rule, investors have to make decisions in the presence of alternative or mutually exclusive projects, i.e., there arises a need to choose one or more projects. Two projects are called independent if the decision to accept one of them does not affect the decision to accept the other. If two or more projects cannot be taken simultaneously, and the acceptance of only one

of them is possible, they are considered alternative ones. The division of projects into independent and alternative is particularly important in formation of the investment portfolio in the context of constraints on the total amount of investments. The value of the upper limit of the amount of invested funds at the time of planning can be undetermined and depends on various factors, for example, on the amount of profits from current and future periods. In this case, it is necessary to rank independent projects by degree of their priority.

It should be noted that the self-optimizing of enterprise IA becomes problematic under challenging conditions in the state.

Due to the limited financial capital and budgetary constraints of the public sector, mobilizing private capital was an emergency to rapidly implement expensive projects. It is actual and has a great importance for lower-middle and low-income economies, which face difficulties to access financing for the development of infrastructures (Cedricks & Longs, 2017).

The emergence and development of private entrepreneurship causes the emergence of relationships between the state and private structures concerning the pooling of efforts to meet social needs. Under market conditions, a number of functions fall on the state, which often fails to fulfil them. The way out of this situation is the integration of state regulation with opportunities of the private sector, i.e., the building of partnership between them. These relations manifest themselves in various models designed to satisfy the corresponding social needs. A demonstrative example of this kind of relations is public-private partnership, which was discussed in Subsection 1.3 of the dissertation work.

In recent years, PPP has demonstrated a lot of positive benefits, which include creating the private sector of the economy, accelerating the development, reducing the life cycle costs of investment projects, contributing to the growth of the national economy and the strengthening of the national infrastructure.

PPP project's arrangement involves many participants with complex transactions and diverse interests at different project stages. The importance of utilizing financial model as a tool for project evaluation and negotiation is highlighted in the study of Kurniawan, Mudjanarko & Ogunlana (2015).

The financial model helps the government authority map out the best scheme for the best of public while developing policies and negotiating with the investor. The government authority might provide policy initiatives data such as fiscal incentives scheme, retained responsibilities for the delivery of core services, governmental loan guarantee, royalty, tariff cap, etc. (Kurniawan, Mudjanarko & Ogunlana, 2015).

Since PPP is a special form of business organization and a form of investment activity in which the resources are unified, in addition to assessing the effectiveness of such an investment project, a fair participation in the investment tender.

Thus, there is a need to apply a system for settling the relationship between all participants in investing through mathematical models. It is also possible to exclude the corruption component from the decision-making process regarding investing (Zeneli, 2016).

Koops (2017) proposed to apply Q methodology. Q methodology helps to find correlations between subjects across a sample of variables. Q-factor analysis reduces the individual viewpoints down to a few factors. A factor can be seen as the mathematical representation of an "average" perspective shared by a group of people. But the research results may have a

national character. The way project success is perceived by public project managers may be culture dependent (Koops, 2017). In order to avoid such limitations, it is necessary to apply a methodology that does not depend on opinions but only takes into account the figures.

The most suitable model for honest behavior between the state and the investor is the model proposed by Burkov & Novikov (2007) – “Mixed credit model”. At the moment, this model is used for lending investment projects in the interaction of the state with the bank. The author makes the decision to adapt it with the purpose of development of mechanisms of interaction of the state with a private investor. To prove the validity and practical application of the adapted model, the author needs to change some initial indicators that are identical to those in the original model. The reasoning is provided by the author below.

For the purpose of ensuring the development of mechanisms of state investment policy, the author proposes to introduce a program of interaction with the state.

The regional program comprises the  $n$  number of projects (enterprises which need investments). For the implementation of program projects, it is expedient to attract funds of private companies. However, for private companies, the projects can be economically unsound due to low returns (if the effect per unit of costs invested is less than 1). The index of the company taking part in investment processes will be denoted by  $i$ ,  $i = \overline{1, n}$ . Let the effect from the projects per unit of costs invested make for the  $i^{\text{th}}$  company  $a_i$ ,  $(a_i < 1, i = \overline{1, n})$ .

Due to the fact that regional economic resources are limited, the most efficient method of increasing production is to raise additional capital resources (Mustafakulov, 2017). Private companies are interested in obtaining budgetary funds or soft credits. The idea of interaction with the state is that budget funds or soft credits are granted under the condition that the company will participate in the financing of a project and take obligations to provide its financial resources for its funding. In practice, only a share of the funds that should be provided by the company is fixed. However, the rigid fixation of budget funds has its negative sides. If this share is small, then the volume of private funds will also be negligible. If it is large, then there will be many companies willing to invest their own funds. At the same time the efficiency of using budget funds will decrease.

The use of economic and mathematical methods allows to make an optimal management decision, which will be beneficial both for the budget and the investors.

Let us consider a model for ensuring effective interaction between the state and a private investor, which takes into account the extent of budget funding. The model can be adapted for investing enterprises as well.

The author proposes to introduce the program at the regional level perfecting it in the following way: having funds for the implementation of the investment project, the enterprise simultaneously can play the role both of a candidate for receiving investments and an investor. In the case of success, the enterprise develops at the expense of its own resources and receives benefits from the state.

The program has the following content and is carried out on the basis of the given algorithm:

the  $n$  number of companies are potential investors in the region. It is assumed that the volume of the centralized fund for the development of a particular region is known. Each of the companies proposes to include into the development program projects the total financ-

ing of which amounts to  $S_i$ . The projects are subject to the expertise, which determines the social utility of each of them as a utility function  $f_i(S_i)$ . Except the social utility, the package of projects proposed by the company has the economic utility  $\varphi_i(S_i)$  for the company itself. On the basis of the applications made by the companies and taking into account the volume of budgetary funds ( $K$ ),  $x_i$  of funds (as a rule  $x_i \leq S_i$ ) are allocated to the  $i^{th}$  company for financing the projects. The procedure  $\{x_i = \bar{f}_i(S_i), i = \overline{1, n}\}$  is called the mechanism of effective interaction. The lack of funds amounting to  $y_i = S_i - x_i$  the company covers at its own expense. The economic interest of the  $i^{th}$  company can be described by the expression:

$$Z_i(S_i, x_i) = \varphi_i(S_i) - y_i = \varphi_i(S_i) - (S_i - x_i), i = \overline{1, n}, (2.25)$$

where  $\varphi_i(S_i)$  – the income of the  $i^{th}$  company (under conditions that the company takes a bank credit amounting to  $y_i$ , the interest for the credit being taken into account);  
 $Z_i$  – the net income of the  $i^{th}$  company.

The task of the author is to develop a financial mechanism  $\Pi(S)$ , proposed by Burkov & Novikov (2007), which will ensure a maximum social effect for a region (in this case, the social effect for the region can be considered the development of an enterprise in the territory of this region, and, consequently, the increase of its investment attractiveness):

$$\begin{aligned} \hat{O} &= \sum_{i=1}^n f_i(S_i^*) \rightarrow \max \\ &\quad \text{àâî} \\ Z &= \sum_{i=1}^n Z_i(S_i, x_i) \rightarrow \max \end{aligned}$$

where  $S^* = \{S_i^*\}$  – equilibrium strategies of the  $i^{th}$  company (Nash Equilibrium Point of the corresponding game, that is, the one in which none of the participants can increase the gain by changing his strategy while the other participants do not change their strategies).

The task is a linear case, that is:

$$\varphi_i(S_i) = a_i S_i, f_i(S_i) = b_i S_i, 0 < a_i < 1, b_i > 0, i = \overline{1, n}.$$

On this basis an analysis of the financial mechanism of direct priorities is carried out:

$$x_i(S_i) = \frac{l_i S_i}{\sum_{i=1}^n l_i S_i} \cdot K, i = \overline{1, n}, (2.26)$$

where  $l_i$  – priority ((the integral index of IA in the context of regional development) of the  $i^{th}$  enterprise,  $S = (S_1, \dots, S_n)$ ;

$K$  – limits of budget funds;

$a_i$  – efficiency (sustainability of the enterprise).

With  $K = 1$ , it should be noted that it can be possible that  $x_i(S) > S_i$  (the MTE receives more funds than it has claimed for). Let us assume that in this case the difference  $[x_i(S) - S_i]$  remains for the enterprise.

Also, an artificial indicator suggested by the authors of the model is needed for the calculation.

Burkov & Novikov (2007) take that;

$$\frac{1 - a_i}{I_i} = q_i, \quad (2.27)$$

To determine the number of enterprises-candidates for participating in social programs of development of enterprises and the region in whole, it is required to find such maximum value of  $n$ , which satisfies the inequality:

$$q_i < Q_n / (1 - n), \quad (2.28)$$

If the condition (2.28) is not met, the corresponding enterprises are excluded from the list of candidates.

Under condition that  $b_i = I_i$  for all investors and at the level of capital  $K = 1$ , the total effect from the investment program amounts to:

$$L(S^*) = \frac{n - 1}{Q}, \quad (2.29)$$

where  $S^*$  – the optimal value.

The total financing of enterprises chosen for the investment program makes up:

$$I_i S_i^* = L(S^*) [1 - q_i (L(S^*))], \quad i = \overline{1, n}. \quad (2.30)$$

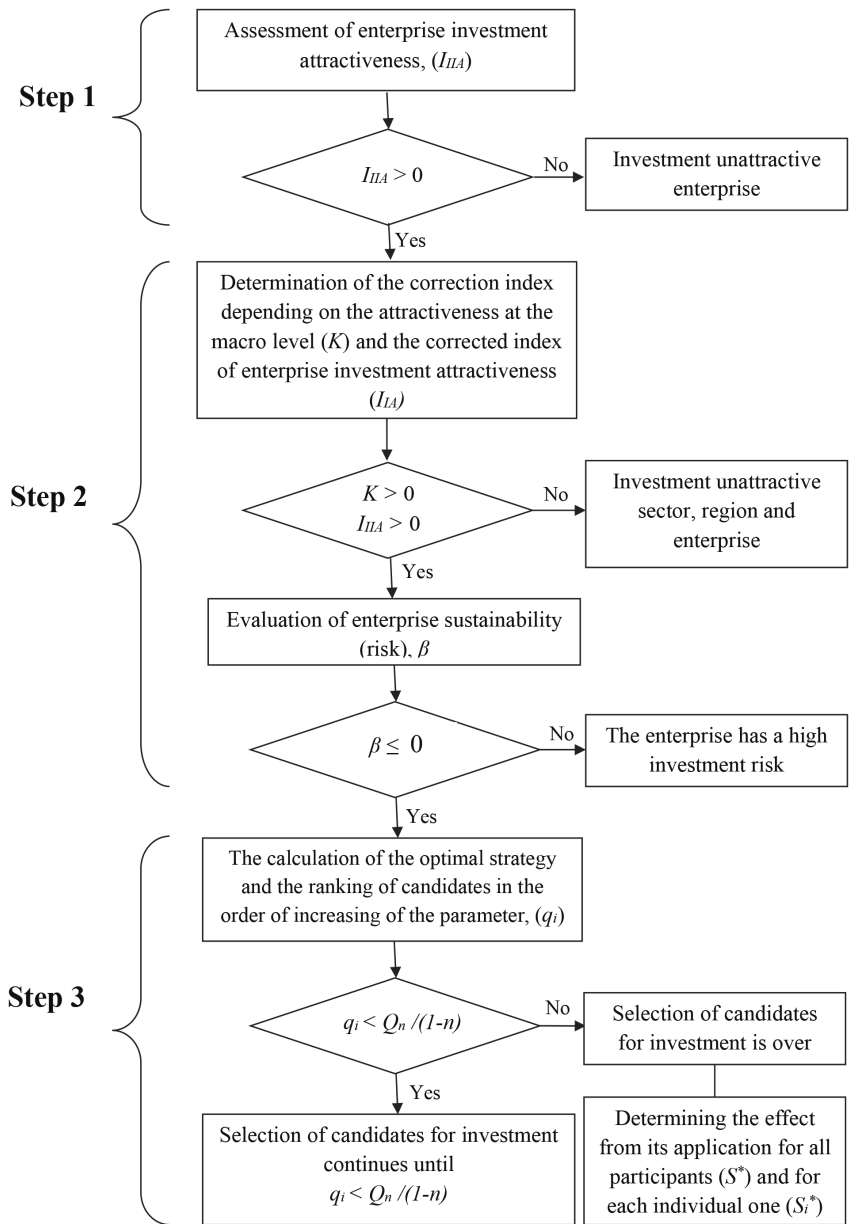
In this case it is necessary to meet the following condition:

$$S_i^* \geq 0 \Leftrightarrow 1 - \frac{q_i(n-1)}{Q} > 0; \quad \frac{q_i(n-1)}{Q} < 1; \quad \frac{q_i}{Q} < \frac{1}{n-1}, \quad i = \overline{1, n-1}. \quad (2.31)$$

The mathematical model for ensuring effective interaction between the state and a private investor as a part of the mechanism of PPP allows to ensure effective interaction between the state and a private investor in the context of regional development and to determine the budget of public funds and private investments. Such a development corresponds to the aim set in the work and is designed to attract a potential investor. It is this kind of development that provides the basis for further scientific discussions.

Since all steps of assessing enterprise investment attractiveness in the context of regional development are described in detail by the author, a general algorithm for assessment of

enterprise investment attractiveness in the context of regional development can be presented (see Fig. 2.4).



**Figure 2.4.** The algorithm of assessing enterprise investment attractiveness in the context of regional development



The algorithm presented in Figure 2.4 is a sequence of actions to assess enterprise investment attractiveness in the context of regional development. It includes three steps, namely

1. assessment of the investment attractiveness of an enterprise based on internal indicators of the enterprise (see Subsection 2.2);
2. assessment of the investment attractiveness of the sector, the region and an enterprise in this sector and region, as well, evaluation of the sustainability of an enterprise in this sector (see subsection 2.3);
3. determination of the number of enterprises-candidates for participating in social programs for development of enterprises and the region, and determination of the effect for all enterprises-participants and each individual one (see Subsection 2.4).

To prove the effectiveness of the proposed by the author model for assessment enterprise investment attractiveness in the context of regional development, it is necessary to test it. Testing will be carried out based on motor transport enterprises of Kharkiv region. Before starting the testing, the author puts forward the following hypotheses:

- the model is applicable to enterprises of any sector and any region;
- using the model for ensuring effective interaction between the state and a private investor within the framework of PPP mechanism in the context of regional development, it is possible to accurately assess the effect from its application for all participants and for each individual one. And since interaction with the state acts as a factor influencing the investment attractiveness of an enterprise in the context of regional development, it is possible to increase this attractiveness with the help of the proposed model.

## CONCLUSIONS TO SECTION 2

The analysis of the proposed in the scientific literature models and methods for assessment of enterprise investment attractiveness, selection of factors and their integration into a single assessment system has allowed to characterize features that will be applied in assessment of enterprise investment attractiveness in the context of regional development. The methodological justification of the model for assessment of enterprise investment attractiveness in the context of regional development and the grouping of their constituents ensure the assessment accuracy. The perception of enterprise investment attractiveness in the context of regional development as an evaluation of the competitiveness factor and as a systematic process ensures a greater accuracy in the interpretation of the results.

In the dissertation, it has been established and argued that, for assessment of enterprise investment attractiveness in the context of regional development a system approach to the integrity, functionality and applicability of the assessment methods is essential. The theoretical analysis of the development of the concept of enterprise investment attractiveness, elements and levels of enterprise investment attractiveness has proved the importance of selecting elements of competitiveness and factors influencing enterprise investment attractiveness and their incorporation to the general methodology of the assessment system as well as the need for integral assessment. Taking into account the complexity of the analysed problem of assessing enterprise investment attractiveness in the context of regional development, the scientific research was carried out at two levels: theoretical and empirical ones. On the basis of the theoretical analysis, the concept of enterprise investment attractiveness has been defined, its levels have been analysed and used in the assessment. The application of quantitative research is determined by the required statistical reasoning of enterprise investment attractiveness in the context of regional development.

By following the methodological principles of assessment of enterprise investment attractiveness in the context of regional development, there has been formed a conceptual model consisting of

- a) elements of enterprise investment attractiveness with the determination of weighting coefficients for each indicator;
- b) factors influencing region-sector attractiveness;
- c) evaluating the sustainability of an enterprise in the sector by identifying market risk;
- d) ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism in the context of regional development for calculating the optimal strategy for participating enterprises.

**Enterprise investment attractiveness in the context of regional development** is defined as the concept combining the elements of enterprise investment attractiveness, factors influencing sector-region attractiveness, evaluating the sustainability of an enterprise in the sector, and ensuring effective interaction between the state and a private investor. All the four elements of enterprise investment attractiveness in the context of regional development should be used together. The number of constituents of enterprise investment

attractiveness in the context of region development that should be used depends on the enterprise's strategy, nature of its economic activity and the sector in which the enterprise operates.

The factors of the micro level of enterprise investment attractiveness are chosen in accordance with the following requirements: availability, reliability, suitability, and comparability. Six groups of financial indicators are determined to describe enterprise investment attractiveness.

On the basis of the theoretical analysis of the interaction between elements of enterprise investment attractiveness and competitiveness factors of the region and sector, the interrelation between the investment attractiveness of an enterprise and competitiveness factors of the region and sector at the micro level has been determined. The model for ensuring enterprise investment attractiveness in the context of regional development is seen as a system of processes, where the outcome of one process becomes a contributor of the succeeding one.

With the aim of regulating the relationships between all participants of the investment process in the context of regional development, a methodology for ensuring effective interaction between the state and a private investor on mutually beneficial terms has been developed.

These sequential actions have resulted in the main outcome – assessment of enterprise investment attractiveness in the context of regional development. The model reflects the influence of individual elements of enterprise investment attractiveness on different factors. The model is easily modifiable depending on the economic entity, or sector, which ensures the model's functionality and adaptability.

Although this research was carefully prepared, the author is still aware of its limitations.

First of all, the set of factors proposed in this dissertation is not universal and requires further discussions.

Secondly, the model proposed by the author does not take into account the factors at the state level, as it is oriented to the internal assessment of the investment attractiveness of an enterprise.

### 3. TESTING THE PROPOSED MODEL FOR ASSESSMENT OF ENTERPRISE INVESTMENT ATTRACTIVENESS IN THE CONTEXT OF KHARKIV REGION OF UKRAINE

#### 3.1. Results of assessing investment attractiveness of the motor transport sector and Kharkiv region

The testing of the proposed model is conducted based on enterprises of Kharkiv region in Ukraine. The choice fell on this region, because there are a lot of regions with similar characteristics. We are talking about regions that do not have much experience in developing methods for attracting investments, and the development of such regions depends on the activity of enterprises that operate in the given territory. Taking into account the proposals presented in this dissertation and with the aim of adopting the experience of Western countries, where assessment of investment attractiveness is paid special attention, it is reasonable to carry out the testing based on enterprises of Kharkiv region.

The transport sector is vital for economic development of any country. It is a guarantee of its trade turnover, and, consequently, effective functioning of most of the other economic sectors. Therefore, the rate of economic growth and the population welfare depend on the state of the transport system and efficiency of the functioning of motor transport enterprises.

One of the main positive characteristics inherent to the transport system of Ukraine is its extremely advantageous geographical location contributing to a significant increase in demand for transport services. However, the level of using these possibilities is still at an unsatisfactory level due to a number of objective reasons, which will be considered in this Section.

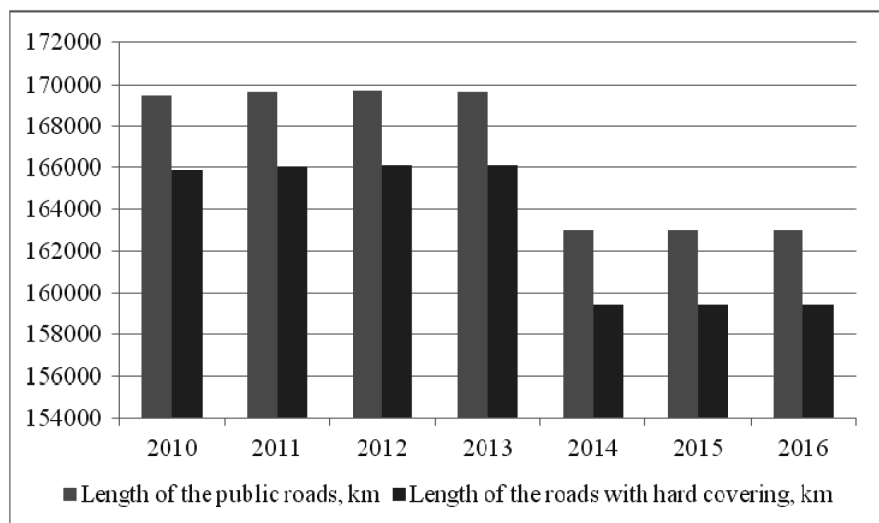
Significant losses were suffered by the transport sector of Ukraine under the influence of the financial and economic crisis, which resulted in a substantial decrease in the production volumes of industrial and construction products, and a consequent decrease in the demand for freight transportation. Incomes of the population also considerably declined, which, in turn, caused a drop in demand for passenger transportations. However, today, the Ukrainian economy shows signs of a gradual exit from the crisis: production activities are intensifying, foreign trade is developing, and, therefore, the transport sector is reviving.

Ukraine's transport sector comprises all currently existing modes of transport, which are characterized by a considerable degree of development, such as the rail, motor, air, water, pipeline ones and also such specific forms of passenger transport as the tram, trolleybus and underground. However, it is the motor transport that is one of the key parts of the sector, which, in turn, determines the relevance of studying motor transport enterprises and the state of their investment attractiveness. Therefore, it is appropriate to carry out a thorough analysis of the motor transport sector of the Ukrainian economy.

An important and necessary condition for the development of the motor transport and transportation activity is the availability and sufficiency of road networks.

All these reasons cause a slowdown in the development of motor transport enterprises and their integration into the global network of carriers.

At the next stage it is necessary to consider indicators of development of the road network in Ukraine for the last ten years. The data about the length of the roads and the share of the roads with hard covering are presented in Annex E.



**Figure 3.1.** Dynamics of the length and quality of automobile roads in Ukraine, 2010-2016 (Annex E)

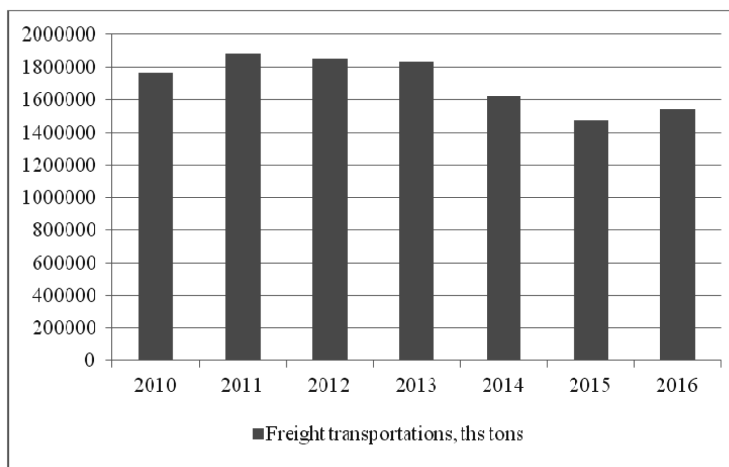
The length of roads in Ukraine at the end of 2014 made up 163027.6 km, of which 97.81 % are roads with hard covering. The analysis of the dynamics of the length of roads in general, as well as of those with hard covering (see Fig. 3.1) shows that no significant changes in the length of roads in Ukraine for 2010-2013 years are observed, and in 2014-2016 a sharp drop in the indicator value is noted. It is, first of all, caused by the fact that the roads of the currently occupied territory of the Autonomous Republic of Crimea, Sevastopol and the zone of the antiterrorist operation were not taken into account.

However, as of today, due to the fact that the roads of the currently occupied territory of the Autonomous Republic of Crimea, Sevastopol and part of the zone of the antiterrorist operation were not taken into account, the indicator of roads with hard covering demonstrates an increase up to 97.81 %.

Thus, the carried out analysis of the development of road networks in Ukraine makes it possible to suggest the existence of a large number of problems. However, it also allows detecting some early signs of improvement of the situation and an increase of the government attention to these problems.

The main indicator characterizing the work of any mode of transport is the volume of transportation. At the next stage it is necessary to analyze these indicators for the transport sector of Ukraine and the motor transport in particular.

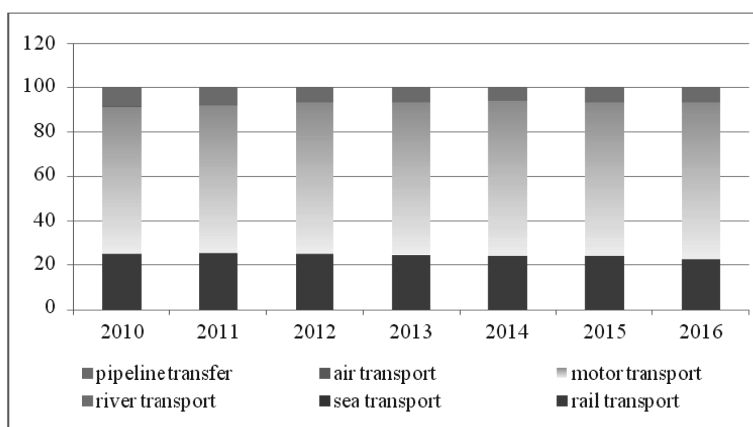
The dynamics of changes in the volumes of freight operations by all modes of transport for the last years is given in Figure 3.2.



**Figure 3.2.** *Freight transportations in Ukraine, 2010 -2016 (Annex F)*

As can be seen from Figure 3.2 and Annex F, in the period of 2011-2015 Ukraine experienced a sharp decline in the volume of freight transportation, which is associated with the slowdown of the national economy as a whole, and, accordingly, the volumes of production and demand for transportation. All these negative trends spread to the motor transport in the direct proportion. However, in 2016 the situation in the market for transport services improves and an insignificant increase in the volume of transportation is observed.

To confirm the suggestion about the key role of the motor transport in the traffic activity of Ukraine, it is necessary to analyze the share of each mode of transport in the traffic activity (see Fig. 3.3).



**Figure 3.3.** *The structure of freight operations in Ukraine, 2010-2016 (Annex F)*

As can be seen from Figure 3.3, the share of the motor transportation accounts for about 70 % of the total freight transportation in Ukraine. Also there should be noted a rapid increase particularly in the share of the motor transport, despite a considerable increase in the cost of fuels and lubricants, at a rapid decrease in the share of other modes of transport.

Thus, the analysis of transportation in Ukraine for the past seven years makes it possible to formulate the following conclusions concerning the motor transport:

- motor transport is the largest carrier;
- in the recent years there have been observed a rapid growth in demand for freight transportation particularly by the motor transport, since it is more maneuverable and convenient for users, while the tariffs for transportation gradually become more attractive compared to rail transport.

The dynamics of the main indicators of activity of motor transport enterprises in Ukraine is presented in Table 3.1.

**Table 3.1.** Freight operations performed by motor transport in Ukraine, mln tons (*Transport i zviazok Ukrainy za 2016 rik (2017)*)

Name	Year							Deviation of the figures for 2016 from the figures for 2010	
	2010	2011	2012	2013	2014	2015	2016	Abso lute	Relati ve, %
Ukraine	<b>99.2</b>	<b>118.3</b>	<b>121.8</b>	<b>126.2</b>	<b>131.2</b>	<b>108.9</b>	<b>123,2</b>	24.00	124.19
Autonomous Republic of Crimea	2.0	2.2	2.2	1.8	...	...	...		
Vinnysia region	1.7	2.2	1.9	2.0	2.2	2.1	2.7	1.00	158.82
Volyn region	1.9	2.2	2.4	2.5	2.5	2.5	3.6	1.70	189.47
Dnipropetrovsk region	5.0	6.4	6.6	14.2	13.2	10.1	13.8	8.80	276.00
Donetsk region	34.1	38.6	33.7	33.0	41.5	25.2	27.7	-6.40	81.23
Zhytomyr region	2.2	3.9	5.5	5.5	3.8	3.7	4.9	2.70	222.73
Zakarpattia region	1.0	0.9	1.0	1.0	1.0	0.9	1.0	0.00	100.00
Zaporizhzhia region	1.9	2.0	1.8	2.2	2.8	2.7	3.0	1.10	157.89
Ivano-Frankivsk region	1.8	2.1	2.9	2.5	3.9	6.3	5.3	3.50	294.44
Kyiv region	1.6	1.8	2.6	2.5	2.1	3.2	3.1	1.50	193.75
Kirovograd/ Kropyvnytskyi region	2.2	2.6	2.9	1.9	2.2	2.6	2.9	0.70	131.82
Luhansk region	3.4	6.0	5.4	6.6	5.5	2.0	1.7	-1.70	50.00
Lviv region	6.5	8.3	9.2	8.2	7.5	7.3	7.8	1.30	120.00
Mykolaiv region	3.2	3.1	3.5	3.8	3.8	4.2	4.4	1.20	137.50
Odesa region	3.1	3.7	4.2	4.0	4.3	6.5	5.0	1.90	161.29
Poltava region	2.4	2.6	3.1	2.3	2.1	2.2	2.2	-0.20	91.67
Rivne Region	2.7	3.9	3.4	3.1	3.0	1.5	1.3	-1.40	48.15
Sumy region	0.9	0.7	0.9	0.8	0.8	0.8	0.7	-0.20	77.78
Ternopil region	0.8	1.1	4.4	4.2	4.7	2.3	3.1	2.30	387.50
Kharkiv region	3.9	3.9	5.2	4.6	4.4	4.2	5.6	1.70	143.59

Name	Year							Deviation of the figures for 2016 from the figures for 2010	
	2010	2011	2012	2013	2014	2015	2016	Abso lute	Relati ve, %
Kherson region	1.0	1.2	1.4	1.6	1.4	1.4	1.4	0.40	140.00
Khmelnyskyi region	3.6	4.5	4.5	4.6	5.2	5.3	6.5	2.90	180.56
Cherkasy region	2.2	2.4	2.3	2.1	1.9	2.0	2.3	0.10	104.55
Chernivtsi region	0.6	0.7	0.5	0.5	1.0	1.0	0.9	0.30	150.00
Chernihiv region	0.5	0.6	0.5	0.6	0.6	0.5	0.6	0.10	120.00
Kyiv	8.7	10.4	9.5	9.6	9.8	8.4	11.7	3.00	134.48
Sevastopol	0.3	0.3	0.3	0.5	...	...	...		

An important indicator of the development of each country is investment attractiveness of an enterprise and sector, since attracting investments testifies to positive development trends and positive expectations of investors as to return on the investment.

As is mentioned above (see Fig. 1.1), there is a close relationship between investment activities at the regional and national levels. Therefore, for the purpose of the integrated assessment of investment activity, it is appropriate to turn to quantitative and qualitative indicators of IA of Ukraine.

The current investment climate in Ukraine is not favorable for investors. This is due not only to the consequences of the economic crisis but to the unstable political situation in the country as well. This fact also indicates the negative image of the institutional system and the low IA of Ukraine abroad, which is proved by the general picture of capital investment in its economy.

Further, it is necessary to consider the volume of investments in fixed capital of land transport enterprises (see Tbl. 3.2).

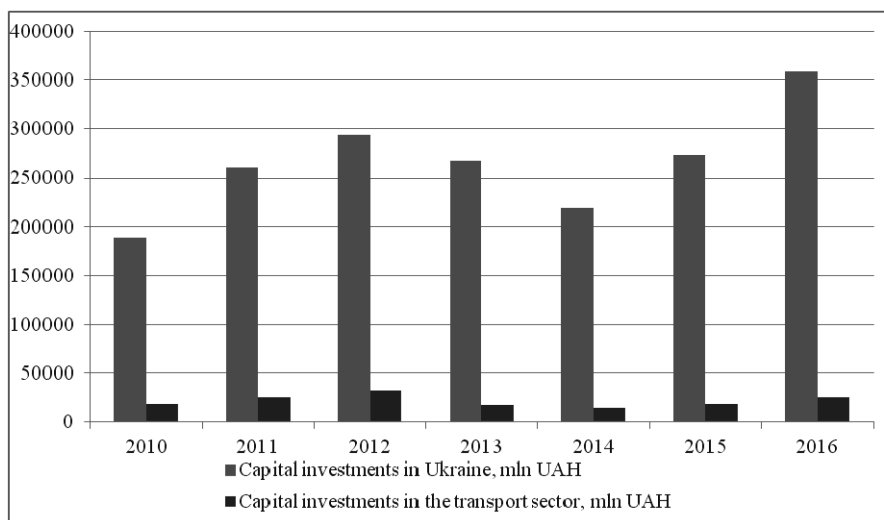
**Table 3.2.** *Dynamics of capital investment in Ukraine and the motor transport sector of the country, 2010-2016 (Statystychna informatsiya, Transport i v'iazok Ukrainy za 2016 rik (2017))*

Name	Year						
	2010	2011	2012	2013	2014	2015	2016
Capital investments in Ukraine, UAH mln	189061	259932	293692	267728	219419.9	273116.4	359216.1
Investment index, %	100	161.66	183.05	115.25	116.06	144.46	190.00
Investment index in relation to the previous year, %	100	161.66	113.23	62.96	81.96	124.47	131.52
Capital investments in the motor transport sector, mln UAH	19322.4	25498.2	32413	18472.6	15498.2	18704.00	25107.80
Investment index, %	100	131.96	167.75	95.60	80.21	96.80	129.94
Investment index in relation to the previous year, %	100	131.96	127.12	56.99	83.90	120.68	134.24



Name	Year						
	2010	2011	2012	2013	2014	2015	2016
Capital investments in Kharkiv region, UAH ths	<b>8063410</b>	<b>13035029</b>	<b>14759161</b>	<b>9292562</b>	<b>8032333</b>	11246700	16545900
Capital investments in the transport sector of Kharkiv region, UAH ths	1469490	2709748	5143774	865251	638618	251154.30	261500

As can be seen from Table 3.2, during the period of 2010-2012 there observed an increase in the money supply by 83.05 %, which amounts to UAH104631 million. In the period of 2013-2014 a decrease in the investment index by 37.04 % and 18.04 % respectively is noticed, which amounts to UAH25964 million and UAH48308.1 million. In 2015-2016 the situation improves – the investment inflows in Ukraine increased by 44.46 % and 90 % respectively. Based on the data presented in Table 3.2, it can be concluded that the amount of money invested in the motor transport sector of Ukraine varies each year and is unstable. However, for the last two years it has been demonstrating a certain growth rate, which testifies to a sufficient level of the sector IA.

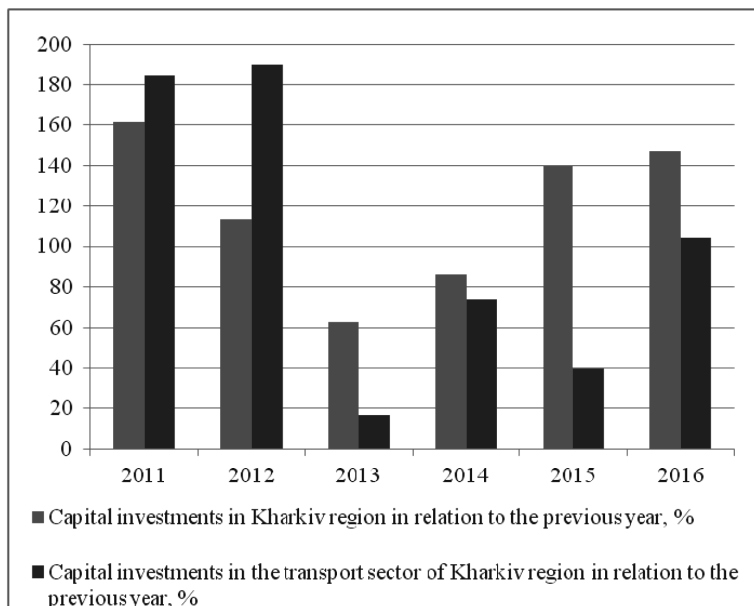


**Figure 3.4.** Investments in fixed capital, 2010-2016 (*Statystychna informatsiya, Transport i v'iazok Ukrainy za 2016 rik (2017)*)

Based on the data in Figure 3.4, it can be concluded that the amount of money invested in the motor transport sector of Ukraine varies each year, however, it is rather stable, which testifies to a sufficient level of the IA of the sector.

The crisis that emerged in the country in 2013 led to a catastrophic fall in the volume of the attracted investments, which, in turn, resulted in a substantial decline in the level of economic stability of transport enterprises. However, the situation stabilized, and in 2015-2016 there observed an increase in the investment inflows both in the country as a whole and the transport sector in particular (the increase amounted to 31.52 % and 34.24 % respectively).

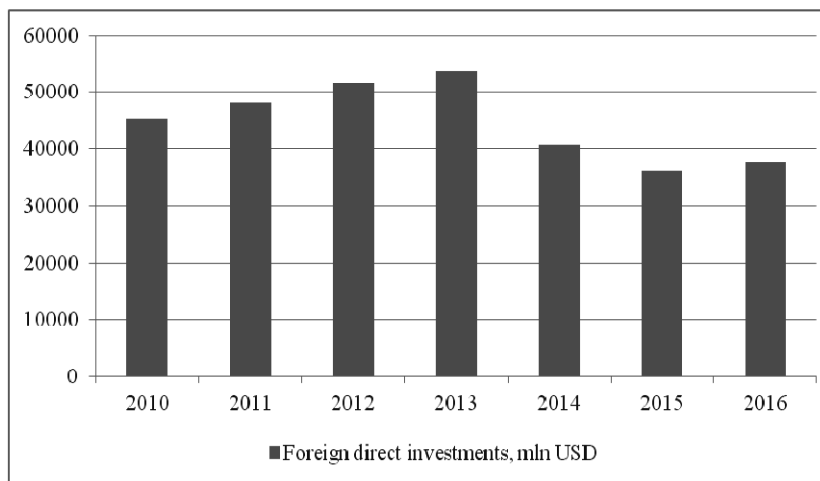
At the next stage it is necessary to consider the dynamics of capital investment in the motor transport sector of Karkiv region for the period of 2010-2016 presented in Fig. 3.5.



**Figure 3.5.** *Investments in fixed capital of Karkiv region, 2010-2016 (Transport i zviazok Ukrainy za 2016 rik (2017))*

The results of the research showed that with the onset of an unstable situation in the country, investment inflows in 2012-2013 declined rapidly (see Fig. 3.5), which is a natural phenomenon, and in 2014-2016 the situation significantly stabilized and the investment in Kharkiv region and the transport sector, in particular, are growing.

Since the data presented by Meyer & Sinani (2009) and Estrin (2015) indicate that foreign direct investment has a positive influence on levels of output and development in transition economies, it should also be paid a special attention. The data are presented in Annex G.



**Figure 3.6.** Foreign direct investments of world countries in the economy of Ukraine, 2010-2016 (Annex G)

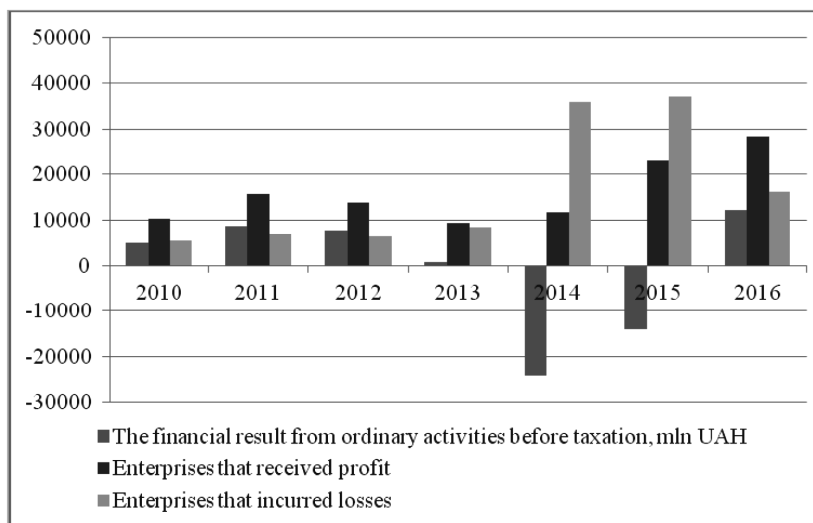
According to the data presented in Figure 3.6, the following conclusions can be made: although the share of foreign direct investments from countries of the world in Ukraine's economy as of 2015 decreased, it is possible to identify the countries that, on the contrary, increased their investments in the Ukrainian economy. For Ukraine this figure indicates that the country has investment attractiveness for potential investors and its major investors are EU countries.

At the next stage it is necessary to analyze the main indicators of motor transport enterprises.

The main performance indicators of the enterprises that are economic entities in the transport and communication sectors for the period of 2010-2016 are shown in Annex H. As can be seen, the following situation was observed in the studied enterprises in 2010-2016:

- the number of employees is decreasing but the total volume of gross payroll and its average level tends to increase;
- the average level of salary in the transport sector is at the average state level;
- the volumes of the provided services, despite the decrease in the number of employees, significantly increased during the period of 2010-2012 and 2015-2016, while the period of 2013-2014 is characterized by a decline in the volumes of the provided services (this was a period of instability in Ukraine).

Further, it is necessary to analyze the financial results of the activity of enterprises in the transport and communications sectors for recent years, since it is they that are direct indicators of the IA of the enterprises. The information regarding large enterprises is presented in Annex I and illustrated by Figure 3.7.



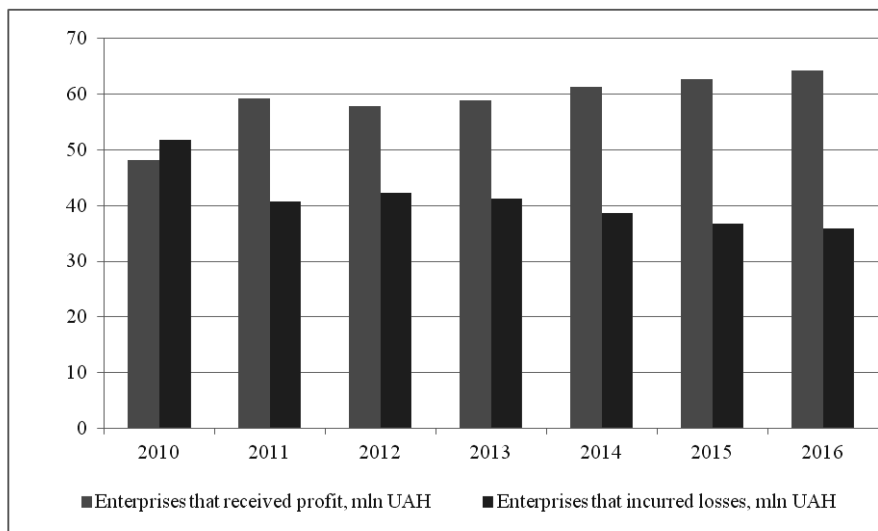
**Figure 3.7.** Financial results of the activity of enterprises in the motor transport sector of Ukraine, 2010-2016 (Annex I)

As can be seen, the overall financial results of the activity of enterprises in the transport sector of Ukraine indicate the predominance of the received profits over losses during the period of 2010-2013. The situation is considerably different in 2014, when the level of financial results decreased to the negative level under the influence of the economic crisis. However, from 2015 the situation stabilizes and as of 2016 the indicator of the enterprises that received profit increases up to 71.6 %.

Further, it is necessary to analyze the data and determine the trend in the dynamics of the financial results of the activity of motor transport enterprises of Kharkiv region for the period of 2010-2016 and present the results in Annex I.

In 2011 the financial results of the enterprises that received profit, exceeded the financial result of the enterprises that incurred losses, which amounted to UAH 617.1 million and UAH 550.7 million respectively. The percentage of the enterprises that received profit only in 2010 was less than that of the enterprises that incurred losses. In 2011-2016 the percentage of such enterprises is, though inconsiderably, but higher.

At the next stage, it is necessary to analyze the breakdown of the enterprises by performance results (see Fig. 3.8).



**Figure 3.8.** Breakdown of the enterprises by performance results, 2010-2016 (Annex K)

As can be seen from Figure 3.8, the share of profitable enterprises in transport from 2010 till 2013 under the crisis was unstable, however, in the period of 2014-2016 the number of profitable enterprises increases, while that of unprofitable ones decreases, which indicates the significance of such enterprises and expediency of providing their support.

As a result of studying the financial results of the activity of motor transport enterprises, the analysis of the indicators of profitability of their activity is carried out (Annex K).

As can be seen from Annex K, the overall financial results of the activity of motor transport enterprises for the period of 2010-2014 decreased under the influence of the economic crisis and as of 2014 reached the value of UAH8081.3 million. However, the period of 2015-2016 is characterized by stability. The indicator of profitability increases and accounts for 5 %.

Thus, the carried out analysis of the state and level of development of the motor transport sector in Ukraine allows to make the following conclusions:

- the existing network of roads in Ukraine is capable of providing international requirements for the full realization of the potential of international transportation;
- the financial and economic crisis and unstable situation, which continues in Ukraine, caused a significant negative impact on the activities of motor transport enterprises in 2010-2014, resulting in the reduction of the demand for transport services, which led to an increase in the share of unprofitable enterprises, as well as to a deterioration in the financial results of the activity of the sector as a whole.

2015-2016 are the years of stabilization and development of the transport sector. The analysis shows an important role of motor transport in the transport system and the economy of Ukraine as a whole. The state of motor transport enterprises is quite stable and is influenced by a significant number of external and internal factors, which, in turn, leads

to fluctuations in the level of investment attractiveness of such enterprises. That is why they need a system of monitoring and support through involving investments. Thus, it will be possible to keep the enterprises at a satisfactory level.

The considered main trends in the development of the Ukrainian economy in 2010-2016 indicate that the process of stabilization is taking place in the country. To date, it can be confidently asserted that only by using the right methods to increase investment attractiveness it is possible to attract additional investments for ensuring the development in the context of the “enterprise-region-state” hierarchy. The preservation of positive trends in the development of all sectors largely depends on the transport capacity to meet the growing demand for the organization of the process of transporting goods. Consequently, it becomes necessary to develop flexible and adequate economic policy instruments, which would take into account the specifics of providing freight transport services. This will help maintain positive short-term trends and lay the foundations of economic growth in the long run.

It is the slow turnover of investment resources that, in the opinion of the author, is one of the main indicators of the low level of IA. This indicates a lack of attention to the investment process on the part of the state and relevant ministries as well as of the management of individual MTEs. Therefore, it is necessary to ensure qualitative influence concerning the improvement of the functioning of individual MTEs, which in the long run will enable creating an investment-attractive motor transport sector and drawing investors’ attention to the economy as a whole.

Based on the study of the investment attractiveness of the sector and the region, it can be concluded that the motor transport sector has a low level of attractiveness, and Kharkiv region is attractive to potential investors. Therefore, according to the matrix of investment attractiveness at the macro level presented in Table 2.8 (Grineva, 2013), the correction factor is 1. This value will be used for assessment of the investment attractiveness of an enterprise in the context of regional development.

### **3.2. Assessment of enterprise investment attractiveness in the context of regional development**

The proposed methodical approach to assessment of enterprise IA in the context of regional development (see Fig. 2.2) allows determining enterprise IA at the level of MTEs in Kharkiv region.

In order to assess enterprise IA, the author determines financial coefficients based on calculating the ratio of some absolute indicators of the enterprise financial performance (Annex L) (Agency for Infrastructure Development, 2016) by the formulas using financial statement documents of the enterprise.

The transport sector of Ukraine comprises all currently existing modes of transport, which is characterized by a considerable degree of development, namely rail, motor, air, water transport, pipeline transfer, and such specific forms of passenger transport as the tram, trolleybus and underground. However, one of the key elements of the sector is still motor transport, which determines the relevance of studying motor transport enterprises

and their investment attractiveness level. Therefore, author will conduct a thorough analysis of the motor transport sector of the Ukrainian economy.

However, motor transport plays a key role in transportations in Ukraine and to confirm this the author analyzes the share of each transport mode in the total volume of transportations.

About 70% of the total volume of freight transportations in Ukraine is accounted for by motor transport. There also should be noted a rapid growth in the share of motor transport despite the constant and significant increase in the cost of fuels and lubricants at a rapid decrease in the volume of transportation by other modes of transport.

Hence, the author draws a conclusion about a low but stable attractiveness of motor transport sector in Ukraine.

Since foreign direct investment is an indicator of investment attractiveness of the state and the region in particular (Birnleitner, 2014; Škuflić, Rkman & Šokčević, 2013; Bayraktar, 2013), it is advisable that IA of the sector at the regional level be considered in terms of investment activity of the region as a whole and the functioning of the motor transport sector in particular.

To determine attractiveness of a region, the author considers it necessary to trace injections of foreign investments in the motor transport sector by regions of Ukraine and on this basis to identify the most attractive region (see Tbl. 3.3).

On the basis of the obtained data and conducted observations and according to the Annual Ukrainian Official Statistics, the author singles out the regions that are potentially attractive to investors, and unattractive ones.

The results of the grouping are presented as a structure in Table. 3.3.

**Table 3.3.** *The grouping of the regions by level of investment attractiveness (Statystychna informatsiya)*

Attractive regions	Unattractive regions
Odesa region	
Kiev	
Donetsk region	
Dnipropetrovsk region	
Mykolayiv region	
Kiev region	Kirovograd region
Rivne Region	Poltava region
Lviv region	Khmelnysk region
Zakarpattia region	Zaporizhzhya region
Kherson region	Ivano-Frankivsk region
Ternopil region	Zhytomyr region
Sumy region	Volyn region
Chernivtsi region	
Cherkasy region	
Vinnitsia region	
Kharkiv region	
Luhansk region	
Chernihiv region	

The results of the conducted studies (see Tbl. 3.3) indicate that Kharkiv region belongs to the group of regions with a medium level of investment attractiveness, which gives grounds for further research and development of practical recommendations as to increasing investment attractiveness of enterprises of the motor transport sector in the region as well as the sector itself in general in the context of the “state-sector-enterprise” hierarchy.

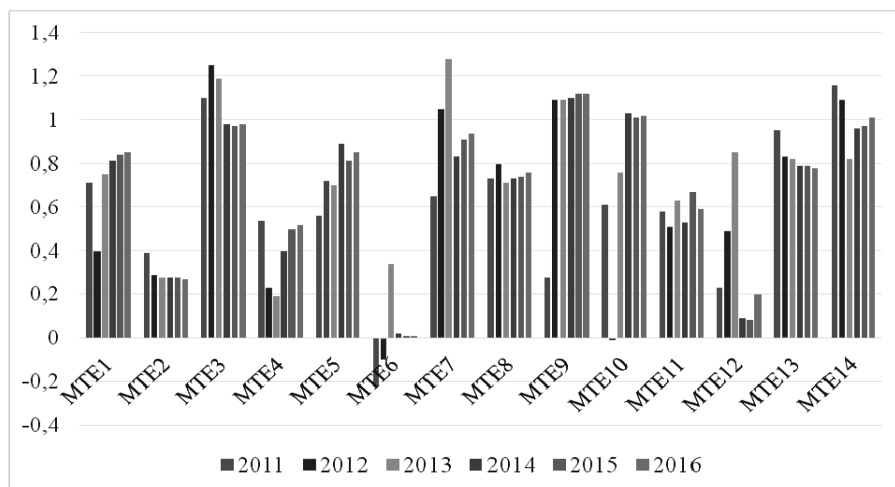
Thus, according to Table 2.8 – the matrix of investment attractiveness at the level of region and sector – it is possible to determine a correction factor with regard to factors that significantly influence enterprise investment attractiveness, namely at the mesoeconomic level, which corresponds to the value 1.

It should be noted that since the correction factor has the value 1, so the integral index of enterprise IA will correspond to the value of the corrected integral index of IA (see Model 2.14).

The proposed procedure for assessment of IA in the context of regional development (see Fig. 2.1) allows determining the MTE IA of Kharkiv region.

For the most detailed and accurate study of motor transport enterprises in Kharkiv region the author offers to conduct a research based on a sample of enterprises (Annex M).

The calculation results are presented in Figure 3.9.



**Figure 3.9.** *The integral index of investment attractiveness of motor transport enterprises (Annex N)*

On the basis of the calculations (Annex N) carried out according to the proposed methodology for assessing IA in the context of regional development, it is possible to draw the following conclusions: all the investigated enterprises can be divided into 3 groups. The first group includes MTE3 and MTE14. Group 2 includes MTE7, MTE9, MTE13, MTE8, MTE5, MTE1, MTE10, and MTE11. Group 3 includes enterprises MTE12, MTE4, MTE2, and MTE6.



Since any investment activity is associated with risk, it is reasonable to put forward the hypothesis that enterprises in Group 1 are least risky for investing funds, since enterprises in this group have the highest integral index among all the enterprises studied. As regards the sums of money injections, they will be insignificant, in comparison with the enterprises of other groups.

To invest in enterprises of Group 2 is more risky. Since the integral index has an average value, which indicates a worse situation for activities of the enterprises, the amount of investment inflows will be greater than that for enterprises in Group 1.

As for enterprises in Group 3, they have the worst integral indexes of IA. This indicates an anime investment attractiveness, infusions are exposed to a high level of risk, and the amount of such investments will be much larger than that for enterprises in Group 1 and 2.

Of course, the author cannot identify which enterprise will be the most attractive for an investor, since each person has his own vision of attractiveness, but given that investors are expecting a positive financial result, it is advisable to choose among the applicants for investments those that are more stable in their financial activities.

Based on the data presented in Annex O, an assessment of market risk was made. The value of the risk indicator for each enterprise was determined. The results are presented in Table 3.4.

**Table 3.4.** *The value of the market risk indicator  $\beta$*

Symbolic designation of enterprises	Value of $\beta$
MTE1	0.350244
MTE2	0.001525
MTE3	-0.00115
MTE4	-0.00712
MTE5	0.00011
MTE6	-0.00037
MTE7	-0.00954
MTE8	-0.00259
MTE9	0.024215
MTE10	-0.09467
MTE11	0.002197
MTE12	-0.88889
MTE13	0.004665
MTE14	0.02016

The following conclusions can be drawn: the lowest values of market risk indicate a minimal risk of investment in an enterprise. A higher risk indicator confirms a higher risk of investment in an enterprise.

The methodological approach to assessing the investment attractiveness of an enterprise that takes into account investment attractiveness of the region and market risk indicator will allow enterprises conducting self-assessment to determine their competitive positions in the region and in a particular sector. In other words, such a methodological approach makes it possible to determine the competitive position of a particular enterprise in comparison with another one.

In the course of the calculations there were obtained synthetic indicators for the enterprise groups, which will enable carrying out the study and determine the synthetic indicator that has the least value. On this basis it will be possible to identify perspective directions for further development of an enterprise and work out recommendations on increasing the MTE IA.

Thus, the problem of ensuring enterprise IA in the context of regional development (see Fig. 1.5) is extremely important for modern enterprises that operate in the unstable domestic market. The consequences of spreading this instability are the increasing instability in all aspects of activities and all elements of the internal environment of MTEs. That is why ensuring MTE IA allows using the integral approach to providing an appropriate level of MTE IA.

It should be noted that self-optimizing MTE IA becomes problematic under crisis conditions in the state.

As mechanisms of the interaction with private investors there offered: joint funding of especially important transport infrastructure projects (direct financing and issuing guarantees), including participation in the statutory capital of the managing company; issuing secured by the state guarantees targeted bonds or loans; granting investors the right to rent land plots adjacent to objects of the transport infrastructure.

The experience of project implementation shows that traditional forms of state support under federal targeted programs, federal targeted investment programs will not allow receiving a maximum benefit from investments and, therefore, restrict the possibilities of interaction with private investors. The current system of budgeted investment does not allow ensuring a flexible schedule of using the funds during the year, accumulating the funds unused during the year, does not provide the prospects for a stable multi-year funding of projects and application of several instruments of state support simultaneously. Since the EU has been demonstrating the great dynamics, the author considers it appropriate to adopt the positive EU's experience, in particular, introducing the mechanism of PPP (See Subsection 1.3, 2.4), which, in turn, gives ground for further recommendations.

### **3.3. Application of the model for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism in the context of regional development**

For the purpose of ensuring the development of mechanisms of state investment policy, the author proposes to use the model for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism in the context of regional development, which proposed in Subsection 2.4.

When calculating the optimal strategy for participating enterprises, two parameters are used: efficiency and priority. In this case, the author suggests taking into account sustainability of a participating enterprise in the sector in terms of the efficiency parameter (see Table 3.4). This indicator has economic essence and characterizes the efficiency of an

enterprise in a particular sector (in this case in the motor transport sector), as it is calculated on the basis of profitability of an enterprise and the sector. As the priority parameter the author suggests using the indicator of enterprise investment attractiveness in the context of regional development (see Annex M). This integral indicator consists of a set of internal and external indicators and determines the most attractive enterprise for investment. In this case, the higher the index of the enterprise investment attractiveness in the context of regional development, the greater its priority is.

The initial data for calculating the optimal strategy for participation of enterprises-candidates in the financing are presented in Table 3.5.

**Table 3.5.** *Initial data for calculating the optimal strategy of potential investors*

Parameters	Enterprises-candidates													
	MTE1	MTE2	MTE3	MTE4	MTE5	MTE6	MTE7	MTE8	MTE9	MTE10	MTE11	MTE12	MTE13	MTE14
$\beta_{(a_i)}$	0.350244	0.001525	-0.00115	-0.00712	0.00011	-0.00037	-0.00954	-0.00259	0.024215	-0.09467	0.002197	-0.88889	0.004665	0.02016
$I_{IA}, (I_i)$	0,85	0,27	0,98	0,52	0,85	0,01	0,94	0,76	1,12	1,02	0,59	0,20	0,78	1,01

It should be noted that the optimal strategy for such development will be a strategy that will ensure the greatest possible effect for the participants. The strategy was developed by the authorities and will be cited by the author as an example, to test the feasibility of its application.

The calculation of the optimal strategy for participation of investors in financing investment projects are carried out by the formula 2.27, and the results are presented in Table 3.6.

**Table 3.6.** *The optimal strategy for participation of investors in financing investment projects*

Parameter	Enterprises-candidates													
	MTE1	MTE2	MTE3	MTE4	MTE5	MTE6	MTE7	MTE8	MTE9	MTE10	MTE11	MTE12	MTE13	MTE14
Optimal strategy, $q_i$	0,76	3,69	1,02	1,93	1,17	100	1,07	1,32	0,91	1,069	1,71	9,45	1,29	1,01

Let us arrange the participants in order of increasing the parameter and present in Table 3.7.

**Table 3.7.** *The optimal strategy in the ascending order*

Parameters	Enterprises-candidates											
	MTE1	MTE9	MTE14	MTE3	MTE10	MTE7	MTE5	MTE13	MTE8	MTE11	MTE4	MTE2
$q_i$	0,76	0,91	1,01	1,02	1,069	1,074	1,17	1,29	1,32	1,71	1,93	3,69
												9,45
												100

The algorithm of the procedure for determining the number of enterprises- candidates (investors-participants) to take part in investment projects can be presented by the following inequality:  $q_i < Q_n / (1-n)$ ,

Let us check the fulfillment of the given condition for the set of obtained values of  $q_i$ .

For  $n = 2$

$$(0,76+0,91)/(2-1)=1,67 > q_2=0,91$$

Since the inequality 2.28 is fulfilled, the selection of enterprises-candidates continues.

For  $n = 3$

$$(0,76+0,91+1,01)/(3-1)=1,34 > q_3=1,01$$

Since the inequality 2.28 is fulfilled, the selection of enterprises-candidates continues.

For  $n = 4$

$$(0,76+0,91+1,01+1,02)/(4-1)=1,23 > q_4=1,02$$

Since the inequality 2.28 is fulfilled, the selection of enterprises-candidates continues.

For  $n = 5$

$$(0,76+0,91+1,01+1,02+1,069)/(5-1)=1,19 > q_5=1,069$$

Since the inequality 2.28 is fulfilled, the selection of enterprises-candidates continues.

For  $n = 6$

$$(0,76+0,91+1,01+1,02+1,069+1,074)/(6-1)=1,169 > q_6=1,074$$

Since the inequality 2.28 is fulfilled, the selection of enterprises-candidates continues.

For  $n = 7$

$$(0,76+0,91+1,01+1,02+1,069+1,17)/(7-1)=1,169 > q_7=1,17$$

Since the inequality 2.28 is not fulfilled, the selection of enterprises-candidates is complete. So the candidates for taking part in the program by the scheme of mixed financing are MTE1, MTE9, MTE14, MTE3, MTE10, and MTE7.

Let us calculate the values of  $S_1^*$ ,  $S_2^*$ ,  $S_3^*$  and present the results in Table 3.8.

**Table 3.8.** *Values of financing the selected enterprises*

Parameter	Enterprises-candidates					
	MTE1	MTE9	MTE14	MTE3	MTE10	MTE7
Values of financing, $S_i^*$	0,39	0,31	0,29	0,28	0,27	0,27

The total financing of the investment program makes up:

$$S^* = 0,39 + 0,31 + 0,29 + 0,28 + 0,27 + 0,27 = 1,81$$

According to the calculations, it can be concluded that the financing of the investment program by 1,81 times exceeds the budget funds ( $K = 1$ ). The optimal strategies for MTE1, MTE9, MTE14, MTE3, MTE10, and MTE7 are 0,39; 0,31; 0,29; 0,28; 0,27, and 0,27 respectively.

By following the given model, it is possible to identify enterprises-participants of state interaction within the framework of the PPP mechanism in the context of regional development.

The model for ensuring effective state interaction with a private investor within the framework of the PPP mechanism has a unique feature – an enterprise that has some funds for implementing an investment project can be both a candidate for receiving investments and an investor. In case of success the enterprise develops at its own expense and gets from the state benefits provided by the optimal strategy for participation of investors in financing investment projects.

The model for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism in the context of regional development, which takes into consideration the share of budget financing, is recommended by the Department of Economics and International Relations in Kharkiv region to be introduced by corresponding bodies of state government (adoption deed №03-46/2352 of 03.06.2015).

## CONCLUSIONS TO SECTION 3

The proposed model for assessment of enterprise investment attractiveness in the context of regional development was tested based on motor transport enterprises of Kharkiv region. Using the carried out empirical research it has been established that

- a) the motor transport sector, although not a leader among the investment-attractive sectors, is the leader in terms of providing transport services. This fact confirms the relevance of its studying;
- b) indicators of investment attractiveness of a region showed that Kharkiv region does not occupy a leading position in terms of investment attractiveness, but it has sufficient values of assessment indicators to define it as an investment-attractive region among other regions of Ukraine;
- c) indicators of investment attractiveness of enterprises of Kharkiv region allow to divide the enterprises under study into three groups: Group 1 – enterprises that are the most attractive for investment, requiring the least amount of investment injections; Group 2 – enterprises with average investment attractiveness; Group 3 – enterprises with low investment attractiveness, requiring significant investment;
- d) the indicators of market risk calculated for enterprises of Kharkiv region make it possible to divide the enterprises under study into three groups: Group 1 – the least risky for investment (the risk indicator is of minimal importance); Group 2 – enterprises with an average level of risk; Group 3 – enterprises with a high level of risk (risk index is the highest among the studied groups).

It is determined that enterprises with a high index of investment attractiveness have the lowest risk values, i.e., are the least risky for investment. On the contrary, enterprises with low investment attractiveness have a high risk index.

The effectiveness of application of the model for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism in the context of regional development is proved. The presented model is approved in Kharkiv region and successfully accepted by the Department of Economics and International Relations in Kharkiv region to be introduced by corresponding bodies of state government (adoption deed №03-46/2352 of 03.06.2015).

Although this research was carefully prepared, the author is still aware of its limitations.

Firstly, this study was conducted at enterprises of the motor transport sector, and the author realizes that results of a similar research in other sectors may differ, which is the basis for further discussions.

Secondly, the research was conducted in one region of Ukraine – Kharkiv region. But regions with similar characteristics exist in countries with emerging economies. There are a lot of them, and the task of science is to support such regions in their development and European integration.

## CONCLUSIONS AND RECOMMENDATIONS

The analysed specificity of enterprise investment attractiveness in the context of regional development and the methodological aspects of its integral assessment reflect a constantly growing interest of world academic economists, practitioners, and politicians in the topic under investigation and prove its relevance, timeliness and novelty. The conducted investigation of enterprise investment attractiveness in the context of regional development and methods for its assessment permits formulating the following research findings:

1. The carried out theoretical analysis revealed the uncertainty and multiplicity of enterprise investment attractiveness and its system. By analyzing different theoretical approaches to the concept of IA, its structure, and patterns of the process of its formation it has been found that
  - a) the concept of enterprise investment attractiveness is an evolving and multifaceted system covering not only activities of enterprises, but also the external conditions of the region, the sector and the country as a whole;
  - b) enterprise IA is a concept created by society, and, therefore, is a change in social relations and conditions in which there are certain subjects of society that influence its development.

Generally, improvement of enterprise investment attractiveness occurs at two levels: internal and external one. With reference to the analysis of the development and structure of the concept of enterprise investment attractiveness, in the dissertation enterprise investment attractiveness is defined as a complex concept consisting of a set of factors that determine it and influence the final results of investing.

2. The analysis of the factors influencing enterprise IA demonstrate a multiple approach to this issue. On the one hand, scientists are encouraged to focus on micro-environment factors, since they are subject to strong influence of the management apparatus and, based on the indicators of these factors, it is possible to accurately determine the current state of an enterprise, make a forecast of its activities and track the change. On the other hand, scientists argue that any enterprise, even the most stable one, is subject to influence of external factors. It is also found that the most powerful external factors that influence enterprise IA are territorial (regional) and sectoral ones. Therefore, the author proposed to assess enterprise IA in the context of regional development.
3. Moreover, it is identified that one of the most important factors influencing investment attractiveness is interaction with the state. PPP is recognized as the most effective mechanism for ensuring effective interaction between the state and a private investor. The positive influence of PPP on ensuring enterprise investment attractiveness in the context of regional development is determined. A method for ensuring effective interaction between the state and a private investor as a part of the mechanism of PPP is proposed for the purpose of increasing the investment attractiveness of not only an enterprise but a region as well. Theoretical studies of enterprise investment attractiveness in the context of regional development have shown the importance of mutual support between the state and private business.

After analysing the theoretical aspects of enterprise investment attractiveness in the context of regional development, the assumptions of assessment of enterprise investment attractiveness was put forward by the author. Therefore, a procedure for assessing enterprise investment attractiveness in the context of regional development and developing a model for assessing enterprise investment attractiveness in the context of regional development was proposed for implementation.

4. It is found that some researchers proposed to assess enterprise IA on the basis of internal factors, others on the basis of internal and external ones, and there is a lack of a single integral indicator that could give an unambiguous answer about enterprise IA in the context of regional development. The analysis of the proposed in the scientific literature models and methods for IA assessment, selection of factors and their integration into a single assessment system has allowed to characterize features that will be applied in assessment of enterprise investment attractiveness in the context of regional development. The methodological justification of the model for assessment of enterprise investment attractiveness in the context of regional development and the grouping of their constituents ensure the assessment accuracy. In the dissertation it is established and argued that, for assessment of enterprise investment attractiveness in the context of regional development, a system approach to the integrity, functionality and applicability of assessment methods is essential. The model for assessment of enterprise investment attractiveness in the context of regional development is seen as a system of processes, consisting of a) elements of enterprise investment attractiveness with the determination of weighting coefficients for each indicator; b) factors influencing sector-region attractiveness; c) evaluating sustainability of an enterprise in the sector by identifying market risk; d) ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism in the context of regional development for calculating the optimal strategy for participating enterprises.
5. These sequential actions have resulted in the main outcome – assessment of enterprise investment attractiveness in the context of regional development. The model reflects the influence of individual elements of enterprise investment attractiveness on different factors. The model is easily modifiable depending on the economic entity, or sector, what ensures the model's functionality and adaptability.
6. The studies have shown that a stable and balanced development of any state requires diversification and innovative transformation of its production and provision of these processes with investment resources. And in connection with this there arose the problem of transition from classical forms of investment relations to a new level of relations between the investor and the the recipient of investments. With the aim of ensuring a mechanism for effective interaction of the state with a private investor in the context of regional development, as a key factor influencing enterprise IA, a model for ensuring effective interaction between the state and a private investor within the framework of PPP in the context of regional development has been developed.
7. The testing of the proposed model for assessment of enterprise enterprise in the context of regional development, based on motor transport enterprises of Kharkiv



region, showed its functionality and efficiency. The conducted assessment of enterprise IA in the context of regional development allowed to determine the IA of the enterprises under study, divide these enterprises into three groups. The grouping made it possible to identify the most-, medium- and least- investment-attractive enterprises.

8. The testing of the proposed model for ensuring enterprise IA in the context of regional development within the framework of the PPP mechanism based on motor transport enterprises of Kharkiv region has confirmed the author's opinion about the possibility of an accurate assessment of the effect from its application for all participants and for each individual one. And since interaction with the state acts as a factor influencing enterprise investment attractiveness in the context of regional development, this model can enhance the attractiveness.

The model for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism, which takes into consideration the amount of the share of budget financing, is recommended by the Department of Economics and International Relations in Kharkiv region to be introduced by corresponding bodies of state government (adoption deed №03-46/2352 of 03.06.2015). The main purpose of this development is to increase the investors' interest and confidence in Kharkiv region as well as to receive benefits from investing.

Although this research was carefully prepared, the author is still aware of its limitations and shortcomings.

First of all, the set of factors influencing the investment attractiveness of an enterprise depends on the sector in which the enterprise operates. Therefore, the set of factors proposed in this dissertation is not final and requires further discussions.

Secondly, the model proposed by the author does not take into account the factors at the state level, as it is oriented to assessment of enterprise investment attractiveness in the context of regional development.

Thirdly, this study was carried out at enterprises of the motor transport sector, and the author realizes that results of a similar research in other sectors may differ, which is the basis for further discussions.

Fourthly, the research was conducted in one region of Ukraine – Kharkiv region. But regions with similar characteristics exist in countries with emerging economies. There are a lot of such regions and the task of science is to support all of them in their development and European integration.

The research results will benefit the fellow researchers and will help to develop scientific discussions related to raising and ensuring enterprise investment attractiveness in the context of regional development.

## REFERENCES

1. 2014 European Semester: Country Reports (2014). Available at: [https://ec.europa.eu/info/publications/2014-european-semester-country-reports\\_en](https://ec.europa.eu/info/publications/2014-european-semester-country-reports_en)
2. 2015 European Semester: Country Reports (2015). Available at: [https://ec.europa.eu/info/publications/2015-european-semester-country-reports\\_en](https://ec.europa.eu/info/publications/2015-european-semester-country-reports_en)
3. 2016 European Semester: Country Reports (2016). Available at: [https://ec.europa.eu/info/publications/2016-european-semester-country-reports\\_en](https://ec.europa.eu/info/publications/2016-european-semester-country-reports_en)
4. Abid, F., Bahloul, S. (2011). Selected MENA countries' attractiveness to G7 investors. *Economic Modelling*, 28 (5), 2197–2207. doi: 10.1016/j.econmod.2011.06.013
5. Albulescu, C. T., Tămășilă, M. (2014). The Impact of FDI on Entrepreneurship in the European Countries. *Procedia – Social and Behavioral Sciences*, 124, 219–228. doi: 10.1016/j.sbspro.2014.02.480
6. Almarri, K. (2017). Perceptions of the attractive factors for adopting public–private partnerships in the UAE. *International Journal of Construction Management*, 1–8. doi: 10.1080/15623599.2017.1382082
7. Alonso, J. M., Clifton, J., Díaz-Fuentes, D. (2017). The impact of government outsourcing on public spending: Evidence from European Union countries. *Journal of Policy Modeling*, 39 (2), 333–348. doi: 10.1016/j.jpolmod.2017.01.007
8. Anamari-Beatrice, S. (2014). Real Options a Solution for Evaluating Public Private Partnerships. *Procedia Economics and Finance*, 15, 583–586. doi: 10.1016/s2212-5671(14)00516-4
9. Andrash, O. A. (2012). Upravlinnia investytsiynoiu pryvablyvistiu pidpriumstv hotelnoho hospodarstva. *Simferopol*, 179.
10. Antipova, O. M. (2007). *Pravovoe regulirovanie investitsionnoy deyatelnosti (analiz teoreticheskikh i prakticheskikh problem)*. Moscow: Volters Kluver, 248.
11. Ashikbaeva, A. M. (2012). Innovatsionnye investitsii predpriyatiy neftyanoy otrasli Respubliki Kazakhstan. *Rossiyskoe predprinimatel'stvo*, 13 (5), 178–182.
12. Assaf, A., Cvelbar, K. L. (2011). Privatization, market competition, international attractiveness, management tenure and hotel performance: Evidence from Slovenia. *International Journal of Hospitality Management*, 30 (2), 391–397. doi: 10.1016/j.ijhm.2010.03.012
13. Azémar, C., Delios, A. (2008). Tax competition and FDI: The special case of developing countries. *Journal of the Japanese and International Economies*, 22 (1), 85–108. doi: 10.1016/j.jjie.2007.02.001
14. Azwimpheleni Langalanga (2015). South Africa's National Security Interests and Its Investment Attractiveness Conundrum. Available at: <http://www.saiia.org.za/opinion-analysis/south-africas-national-security-interests-and-its-investment-attractiveness-conundrum>
15. Bandurin, A. V., Chub, B. A. (1998). *Investitsionnaya strategiya korporatsiy na regional'nom urovne*. Moscow: Nauka i ekonomika, 132.
16. Bayraktar, N. (2013). Foreign Direct Investment and Investment Climate. *Procedia Economics and Finance*, 5, 83–92. doi: 10.1016/s2212-5671(13)00013-0

17. Beem-Baverk, E. (1992). *Osnovy teorii cennosti hozyaystvennykh blag*. Moscow: Ekonomika, 370.
18. Beyer, J. (2002). "Please invest in our country" – how successful were the tax incentives for foreign investment in transition countries? *Communist and Post-Communist Studies*, 35 (2), 191–211. doi: 10.1016/s0967-067x(02)00007-7
19. Birnleitner, H. (2014). Attractiveness of Countries for Foreign Direct Investments from the Macro-Economic Perspective. *Proceedings of FIKUSZ '14 Symposium for Young Researchers*. Austria, 29–40. Available at: <https://kgk.uni-obuda.hu/sites/default/files/03-Helmut-Birnleitner.pdf>
20. Blank, I. O. (2004). *Finansovyi menedzhment*. Kyiv: Elha, Nika-Tsentr, 656.
21. Bocharov, V. V., Leont'ev, V. E. (2004). *Korporativnye finansy*. Sankt-Peterburg: Piter, 592.
22. Bogolyubov, V. S., Orlovskaya, V. P. (2005). *Ekonomika turizma*. Moscow: Akademiya, 192.
23. Bojic, I., Belyi, A., Ratti, C., Sobolevsky, S. (2016). Scaling of foreign attractiveness for countries and states. *Applied Geography*, 73, 47–52. doi: 10.1016/j.apgeog.2016.06.006
24. Bonaparte, Y., Kumar, A., Page, J. K. (2017). Political climate, optimism, and investment decisions. *Journal of Financial Markets*, 34, 69–94. doi: 10.1016/j.finmar.2017.05.002
25. Bruneckienė, J., Zykienė, I., Stankevičius, V. (2016). Critical analysis of city attractiveness factors in Lithuania – Poland cross-border regions: the viewpoints of businessmen and youth. *Journal of Geography, Politics and Society*, 6 (2), 45–58.
26. Bruno, R. Estrin, S., Campos, N. (2016). A meta-regression analysis of the Micro and Macro Evidence on the Growth Effect of Foreign Direct Investment. Paper presented at Academy of International Business 2016. Florida.
27. Bruno, R. L., Campos, N. F., Estrin, S., Tian, M. (2017). Foreign Direct Investment and the Relationship Between the United Kingdom and the European Union. *The Economics of UK-EU Relations*, 139–173. doi: 10.1007/978-3-319-55495-2\_6
28. Bufoni, A. L., Oliveira, L. B., Rosa, L. P. (2015). The financial attractiveness assessment of large waste management projects registered as clean development mechanism. *Waste Management*, 43, 497–508. doi: 10.1016/j.wasman.2015.06.030
29. Cao, L., Du, Y., Hansen, J. Ø. (2017). Foreign institutional investors and dividend policy: Evidence from China. *International Business Review*, 26 (5), 816–827. doi: 10.1016/j.ibusrev.2017.02.001
30. Cedrick, B. Z. E., Long, P. W. (2017). Investment Motivation in Renewable Energy: A PPP Approach. *Energy Procedia*, 115, 229–238. doi: 10.1016/j.egypro.2017.05.021
31. Cemaniuk, V. Z. (2011). Informatsiyni recury: oblikovo-teoretychnyi acpekt. *Vicnyk Lvivckoi komertsiynoi akademiyi*, 35, 319–322.
32. Centr gosudarstvenno-chastnogo partnerstva Vneshekonombanka. Available at: [http://www.unece.org/fileadmin/DAM/ceci/ppt\\_presentations/2008/ppp/Moscow/bazhenov.pdf](http://www.unece.org/fileadmin/DAM/ceci/ppt_presentations/2008/ppp/Moscow/bazhenov.pdf)

33. Chernorutskiy, I. G. (2005). *Metody prinyatiya resheniy*. Sankr-Peterburg: BHV-Peterburg, 416.
34. Christodoulakis, N., Sarantides, V. (2016). External Asymmetries in the Euro Area and the Role of Foreign Direct Investment. *The World Economy*, 40 (2), 393–423. doi: 10.1111/twec.12406
35. Chudnovskiy, A. D. (Ed.) (2005). *Gostinichnyy i turistskiy biznes*. Moscow: YURKNIGA, 448.
36. Clarke, G. R. G., Cull, R., Kisunko, G. (2012). External finance and firm survival in the aftermath of the crisis: Evidence from Eastern Europe and Central Asia. *Journal of Comparative Economics*, 40 (3), 372–392. doi: 10.1016/j.jce.2012.01.003
37. Corruption Perception Index. Transparency International. Available at: [http://www.transparency.org/policy\\_research/surveys\\_indices/cpi](http://www.transparency.org/policy_research/surveys_indices/cpi)
38. Ctyuart, T. (2007). *Intellektual'nyy kapital. Novyi ictchnik bogatctva organizaciy*. Moscow: Pokolenie, 196.
39. Damborský, M. (2010). Localization of enterprise activities. Available at: <https://vskp.vse.cz/eid/28197>
40. Davenport, T. H., Harris, J. G. (2007). *Competing on Analytics: The New Science of Winning*. Boston: Harvard Business Review Press, 240.
41. Delgado, M., Ketels, C., Porter, M., Stern, S. (2012). The determinants of national competitiveness, NBER Working Paper No. 18249. doi: 10.3386/w18249
42. Derzhavna sluzhba statystyky Ukrainy, ekonomichna statystyka. Available at: <http://www.ukrstat.gov.ua/>
43. Derzhavna sluzhba statystyky Ukrainy, ekonomichna statystyka. Available at: [http://ukrstat.org/uk/operativ/operativ2005/tz/tz\\_rik/tz\\_u/ts\\_u.htm](http://ukrstat.org/uk/operativ/operativ2005/tz/tz_rik/tz_u/ts_u.htm)
44. Dierkes, M., Erner, C., Zeisberger, S. (2010). Investment horizon and the attractiveness of investment strategies: A behavioral approach. *Journal of Banking & Finance*, 34 (5), 1032–1046. doi: 10.1016/j.jbankfin.2009.11.003
45. Dimitrova-Grajzl, V., Grajzl, P., Guse, A. J. (2012). Trust, perceptions of corruption, and demand for regulation: Evidence from post-socialist countries. *The Journal of Socio-Economics*, 41 (3), 292–303. doi: 10.1016/j.socec.2012.01.005
46. Dmytriev, I. A., Blyzniuk, A. O., Onisiforova, V. Yu. (2014). *Upravlinnia ekonomichnoiu bezpekoiu avtotransportnoho pidpriemstva*. Kharkiv: KhNADU, 216.
47. Dobrovolska, O. P., Dobrovolskyi, O. V. (2006). *Derzhavne rehuliuвання ekonomiky*. Simferopol: PP «Elino», 368.
48. Doing Business in Ukraine: Doing business. The World Bank Group. Available at: <http://www.doingbusiness.org/rankings>
49. Dolega, L., Pavlis, M., Singleton, A. (2016). Estimating attractiveness, hierarchy and catchment area extents for a national set of retail centre agglomerations. *Journal of Retailing and Consumer Services*, 28, 78–90. doi: 10.1016/j.jretconser.2015.08.013
50. Dorożyński, T., Kuna-Marszałek, A. (2016). Investments Attractiveness. The Case Of The Visegrad Group Countries. *Comparative Economic Research*, 19 (1). doi: 10.1515/cer-2016-0007

51. Dovidka pro Ukrainu: Countries. The World Bank Group. Available at: <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/UKRAINEINUKRAINIANEXTN/0,,menuPK:455795~pagePK:141159~piPK:51066082~theSitePK:455681,00.html>
52. Drábek, J., Merková, M. (2015). The Importance of Investment Audit for the Company. *Procedia Economics and Finance*, 34, 187–193. doi: 10.1016/s2212-5671(15)01618-4
53. Driffield, N., Love, J., Lancheros, S., Temouri, Y. (2013). How attractive is the UK for future manufacturing foreign direct investment? London: HM Government Office for Science.
54. Dumon, M. (2012). Top 6 Factors That Drive Investment In China. <http://www.investopedia.com/articles/economics/09/factors-drive-investment-in-china.asp>
55. Efimov, V. P. (2006). Spatial potential - the basis of development of the region as an integrated socio-economic complex. Moscow. Available at: <http://rudocs.exdat.com/docs/index-177000.html>
56. Efremov, V., Kotenkova, S., Davletshin, E. (2015). Evaluation of the Potential for Integration of Capital in the Investment Attractive Regions of the Russian Federation. *Procedia Economics and Finance*, 32, 264–270. doi: 10.1016/s2212-5671(15)01390-8
57. *Ekonomika: Ekonomicheskij slovar'* (2003). Minsk: Interpresservis; Knizhnyy dom, 720.
58. Elshof, H., Haartsen, T., van Wissen, L. J. G., Mulder, C. H. (2017). The influence of village attractiveness on flows of movers in a declining rural region. *Journal of Rural Studies*, 56, 39–52. doi: 10.1016/j.jrurstud.2017.07.004
59. Erkan, A., Fainshmidt, S., Judge, W. Q. (2016). Variance decomposition of the country, industry, firm, and firm-year effects on dividend policy. *International Business Review*, 25 (6), 1309–1320. doi: 10.1016/j.ibusrev.2016.04.003
60. Ershova, N. (2017). Investment climate in Russia and challenges for foreign business: The case of Japanese companies. *Journal of Eurasian Studies*, 8 (2), 151–160. doi: 10.1016/j.euras.2017.03.001
61. Estrin, S. (2017). Foreign direct investment and employment in transition economies. *IZA World of Labor*. doi: 10.15185/izawol.330
62. Estrin, S., Millica, U. (2013). FDI Into Transition Economies: Are The Balkans Different? 12th EACES Conference And The International Conference On Occasion Of The 75th Anniversary Of The Faculty Of Economics, University Of Belgrade.
63. EY's attractiveness survey. India 2014. Enabling the prospects (2014). Available at: <http://www.berglobal.com/Archivos/EY-attractiveness-survey-India-2014.pdf>
64. Failed States Index. The Fund For Peace. Available at: <http://www.fundforpeace.org/global/?q=fsi>
65. Fankhauser, S., Lavric, L. (2003). The investment climate for climate investment: Joint Implementation in transition countries. *Climate Policy*, 3 (4), 417–434. doi: 10.1016/s1469-3062(03)00050-0
66. Farkhutdinov, I. Z., Wystorobets, E. A. (2014). Drang Nach Osten: The Ukraine – Is it Possible to Save the Eurasian Space? *Evraziyskiy yuridicheskij zhurnal*, 2 (69), 14–27.

67. Fathutdinov, R. A. (2013). *Strategicheskiy marketing*. Sankt-Peterburg: Piter, 347.
68. Favara, G., Morellec, E., Schroth, E., Valt, P. (2017). Debt enforcement, investment, and risk taking across countries. *Journal of Financial Economics*, 123 (1), 22–41. doi: 10.1016/j.jfineco.2016.09.002
69. Fedorenko, V. H. (2007). Investytsiyi ta ekonomika Ukrainy. *Ekonomika Ukrainy*, 5, 12–16.
70. Feldstein, M. (2017). Why is growth better in the United States than in other industrial countries? *Journal of Policy Modeling*, 39 (4), 655–659. doi: 10.1016/j.jpolmod.2017.05.011
71. Finansovi rezultaty pidpriemstv do opodatkovannia za vydamy ekonomichnoi diialnosti za 2016 rik. Holovne upravlinnia statystyky v Kharkivskiyi oblasti. Available at: <http://kh.ukrstat.gov.ua/index.php/finansovi-rezultaty-pidpriemstv-do-opodatkovannia-za-vydamy-ekonomichnoi-diialnosti>
72. Foreign Minister on how France is boosting its investment attractiveness (2016). Available at: <https://ie.ambafrance.org/Foreign-Minister-on-how-France-is-boosting-its-investment-attractiveness>
73. Gallyamova, D. K. (2015). Development of the Countries with a Transition Economy. *Procedia Economics and Finance*, 24, 251–255. doi: 10.1016/s2212-5671(15)00656-5
74. Garrett, G. (2010). G2 in G20: China, the United States and the World after the Global Financial Crisis. *Global Policy*, 1 (1), 29–39. doi: 10.1111/j.1758-5899.2009.00014.x
75. Gerrard, M. B. (2011). What are public-private partnerships, and how do they differ from privatizations? *Finance & Development*, 38 (3). Available at: <http://www.imf.org/external/pubs/ft/fandd/2001/09/gerrard.htm>
76. Gitman, L. Dzh., Joehnk, M. D. (2010). *Fundamentals of Investing* (11th Edition). Boston: Prentice Hall, 661.
77. Glick, R., Rose, A. (2015). Currency Unions and Trade: A Post-EMU Mea Culpa. NBER Working Paper No. 21535. doi: 10.3386/w21535
78. Godlewska-Majkowska, H. (Ed.) (2008). *Atrakcyjność inwestycyjna polskich regionów. W poszukiwaniu nowych miar*. SGH, Warszawa, 189-194.
79. Greenwood, P. E., Nikulin, M. S. (1996). *A guide to chi-squared testing*. New York: John Wiley & Sons, 280.
80. Grinko, A., Bochulia, T., Grynko, P., Yasinetska, I., Levchenko, I. (2017). Formation of the concept of intellectualization information provision for managing an enterprise. *Eastern-European Journal of Enterprise Technologies*, 5 (3 (89)), 4–14. doi: 10.15587/1729-4061.2017.111859
81. Groh, A. P., von Liechtenstein, H. (2009). How attractive is central Eastern Europe for risk capital investors? *Journal of International Money and Finance*, 28 (4), 625–647. doi: 10.1016/j.jimonfin.2009.01.006
82. Gursoy, F. (2012). Changing of the Investment Climate of Georgia after the War. *Procedia – Social and Behavioral Sciences*, 62, 1303–1307. doi: 10.1016/j.sbspro.2012.09.223
83. Heidenreich, S., Mohr, A., Puck, J. (2015). Political strategies, entrepreneurial overconfidence and foreign direct investment in developing countries. *Journal of World Business*, 50 (4), 793–803. doi: 10.1016/j.jwb.2015.03.002

84. Hildebrandt, A., Nowicki, M., Susmarski, P., Tarkowski, M., Wandałowski, M. (2014). The investment attractiveness of the regions and the sub-regions of Poland. Gdansk, 69. Available at: [http://www.kas.de/wf/doc/kas\\_39941-1522-1-30.pdf?150203124155](http://www.kas.de/wf/doc/kas_39941-1522-1-30.pdf?150203124155)
85. Hoang, H. H., Bui, D. H. (2015). Determinants of foreign direct investment in ASEAN: A panel approach. *Management Science Letters*, 5 (2), 213–222. doi: 10.5267/j.msl.2014.12.015
86. Holloway, P., Rochman, R., Laes, M. (2013). Factors Influencing Brazilian Value Investing Portfolios. *Journal of Economics Finance and Administrative Science*, 18, 18–22. doi: 10.1016/s2077-1886(13)70026-x
87. Holobrodska, N. P. (2013). Ekonomiko-statystychna otsinka investytsiynykh potokiv v Ukrainu: perspektyvy rozvytku. *Visnyk sotsialno-ekonomichnykh doslidzhen*, 3 (50), 106–111.
88. Holovne upravlinnia statystyky v Kharkivskiy oblasti. Available at: <http://kh.ukrstat.gov.ua/index.php/rentabelnist-operatsiinoi-diialnosti-pidpriemstv-za-vydamy-ekonomichnoi-diialnosti>
89. Hucknall, A. (2010). The Value of Financial Model Audit. Paper presented at Financial Modelling for PPP/PFI Conference (SMI). London.
90. Igonina, L. L. (2012). Teorii ekonomicheskikh tsiklov i sovremennyye finansovyye krizisy. *Biuleten Mizhnarodnoho Nobelivskoho ekonomichnoho forumu*, 1 (1), 200–208. Available at: [http://nbuv.gov.ua/UJRN/bmef\\_2012\\_1%281%29\\_\\_21](http://nbuv.gov.ua/UJRN/bmef_2012_1%281%29__21)
91. Iloie, R. E. (2015). Connections between FDI, Corruption Index and Country Risk Assessments in Central and Eastern Europe. *Procedia Economics and Finance*, 32, 626–633. doi: 10.1016/s2212-5671(15)01442-2
92. Index of Economic Freedom: Trade and Economic Freedom. The Heritage Foundation. Available at: <http://www.heritage.org/index/Explore.aspx?view=by-region-country-year>
93. International Property Rights Index (IPRI). Property Rights Alliance. Available at: <http://internationalpropertyrightsindex.org>
94. Investing in Ukraine: Improving Ukraine's international investment attractiveness is key 2016 goal. Available at: <http://bunews.com.ua/economy/item/improving-ukraines-international-investment-attractiveness-is-key-2016-goal>
95. Investitsionnyy interes k Ukraine sderzhivaetsya neblagopriyatnym biznes-klimatom. Available at: <http://interfax.com.ua/news/economic/375653.html>
96. Investors vote “remain” in Europe. EY's Attractiveness Survey – Europe 2017. Available at: <http://www.ey.com/gl/en/issues/business-environment/ey-attractiveness-surveys>
97. Ivashchuk, O. T. (2004). Metody ta modeli pryiniattia investytsiynykh rishen. *Ternopil: TANH “Ekonomichna dumka,”* 219.
98. Jara, J. J. (2017). Determinants of country competitiveness in attracting mining investments: An empirical analysis. *Resources Policy*, 52, 65–71. doi: 10.1016/j.resourpol.2017.01.016
99. Javorcik, B. S. (2004). Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In *Search of Spillovers Through Backward Linkages*. *American Economic Review*, 94 (3), 605–627. doi: 10.1257/0002828041464605

100. Jung, M. (2006). Host country attractiveness for CDM non-sink projects. *Energy Policy*, 34 (15), 2173–2184. doi: 10.1016/j.enpol.2005.03.014
101. Kaka, A., Alsharif, F. (2009). Financial Modelling of PPP Projects. *Policy, Finance & Management for Public-Private Partnerships*, 212–228. doi: 10.1002/9781444301427.ch12
102. Kalinesku, T. V. (Ed.) (2013). *Zabezpechennia investytsiynoi pryvablyvosti pidpryiemstva*. Luhansk: vyd-vo SNU im. V. Dalia, 220.
103. Kapitalni investytsyi za dzherelamy finansuvannia. Holovne upravlinnia statystyky v Kharkivskiy oblasti. Available at: <http://kh.ukrstat.gov.ua/index.php/kapitalni-investytsii-za-dzherelamy-finansuvannia>
104. Kapitalni investytsyi. Holovne upravlinnia statystyky v Kharkivskiy oblasti. Available at: <http://kh.ukrstat.gov.ua/index.php/kapitalni-investytsii-stat>
105. Karadjova, V. (2012). Country Risk – Conditions and Trends in Macedonia, Proposals for Reduction in Conditions of Unstable Environment. *Procedia – Social and Behavioral Sciences*, 44, 470–481. doi: 10.1016/j.sbspro.2012.05.052
106. Karminskiy, A. (2011). Operativnyy analiz ispolneniya byudzheta s pomoshch'yu kontrollinga. *Menedzhment i menedzher*, 6, 15–19.
107. Kazakhstan investment attractiveness – Ernst & Young's investor opinion survey (2011). Available at: <https://www.mpo.cz/assets/dokumenty/43916/49303/577174/priloha001.pdf>
108. Kazakov, N. P., Pshenin, V. N. (2015). Ekspertnoe otsenivanie ekologicheskoy bezopasnosti rekreatsionnogo rayona na osnove metoda analiza ierarhiy. *Vestnik INZ-HEKONa*, 3 (8), 86–90.
109. Keynes, Dzh. M. (1999). *The general theory of employment, interest and money*. Moscow: Gelios ARV, 352.
110. Khneyzer, C. (2016). The territorial attractiveness factors for the service of development in Lebanon: the case of Akkar. Available at: <http://www.theses.fr/2016GREAE005>
111. Khobt, V. M. (2005). *Upravlinnia investytsiyamy*. Donetsk: DonNTU, 394.
112. Kireeva, V., Galiakhmetov, L. (2015). The Assessment of the Intellectual Capital as a Factor of Investment Attractiveness of the Region. *Procedia Economics and Finance*, 27, 240–247. doi: 10.1016/s2212-5671(15)00997-1
113. Kochemasova, A. V. (2013). Pryamyie inostrannye inventsitsii kak faktor innovatsionnogo rosta rossiyskoy ekonomiki: priority i novye vozmozhnosti. *Ekonomicheskyy analiz: teoriya i praktika*, 21, 19–31.
114. Kolomyts, O. (2013). Metody prognozirovaniya izmeneniya investitsionnoy privlekatel'nosti i investitsionnoy aktivnosti munitsipal'nogo obrazovaniya. *Kontsept*, 08. Available at: <http://e-koncept.ru/2013/13158.htm>
115. Komori, Y. (2011). *International Relations II: The Politics of International Economic Relations*. Michigan State University James Madison College.
116. Kontseptsiya kontrollinga: Upravlencheskiy uchet. Sistema otchetnosti. *Byudzhetrovanie* (2008). Moscow: Al'pina Biznes Buks, 296.
117. Koops, L. (2017). Creating public value: Optimizing cooperation Between public and private Partners in infrastructure Projects. doi: 10.4233/uuid:53c3c8cb-ff74-49c9-9e7d-e826a60fba6



118. Kordos, M., Vojtovic, S. (2016). Transnational Corporations in the Global World Economic Environment. *Procedia – Social and Behavioral Sciences*, 230, 150–158. doi: 10.1016/j.sbspro.2016.09.019
119. Korobkov, D. V. (2012). *Investytsiyna pryvablyvist pidpriemstv enerhetychnoi haluzi*. Kharkiv, 23.
120. Kovalev, V. V. (2006). *Finansoviy analiz: Upravlenie kapitalom. Vybor investitsiy. Analiz otchetnosti*. Moscow: Finansy i statistika, 432.
121. Kozachenko, V. H., Ponomarov, V. P., Liashenko, O. M. (2013). *Ekonomichna bezpeka pidpriemstva: sutnist ta mekhanizm zabezpechennia*. Kyiv: Libra, 280.
122. Krarti, M., Dubey, K., Howarth, N. (2017). Evaluation of building energy efficiency investment options for the Kingdom of Saudi Arabia. *Energy*, 134, 595–610. doi: 10.1016/j.energy.2017.05.084
123. Kredisov, A. I.; Kredisov, A. I. (Ed.) (2002). *Upravlinnia zovnishnoekonomichnoiu diyalnistiu*. Kyiv: VIRA-R, 552.
124. Krupka, Y. D., Bachinskiy, V. (2014). Estimation of investment attractiveness for enterprises in Ukraine. *The Małopolska School of Economics in Tarnów Research Papers Collection*, 25 (2), 117–125.
125. Krylov, E. I., Vlasova, V. M., Egorova, M. G. et. al. (2003). *Analiz finansovogo sostoyaniya i investitsionnoy privlekatel'nosti predpriyatiya*. Moscow: «Finansy statistika», 192.
126. Kupiec, L.; Kopczuk, A., Proniewski, W. (Eds.) (2005). *Atrakcyjność regionu a sposób rozprzestrzeniania się innowacji i rozwoju społeczno-gospodarczego*. In: *Atrakcyjność inwestycyjna regionu*. Wydawnictwo Wyższej Szkoły Finansów i Zarządzania. Białystok.
127. Kurniawan, F., Mudjanarko, S. W., Ogunlana, S. (2015). Best Practice for Financial Models of PPP Projects. *Procedia Engineering*, 125, 124–132. doi: 10.1016/j.proeng.2015.11.019
128. Kurniawan, F., Ogunlana, S., Motawa, I. (2014). Stakeholders' expectations in utilizing financial models for public-private partnership projects. *Built Environment Project and Asset Management*, 4 (1), 4–21. doi: 10.1108/bepam-04-2012-0015
129. Kushnirenko, S. P., Bondar', V. N., Nikonov, S. Yu., Dement'ev, A. N. (2008). *Protivodeystvie korruptsii na munitsipal'nom urovne*. Moscow: Volters Kluver, 272.
130. Kuskov, A. S., Sirik, N. V. (2013). *Okazanie turistskih uslug: grazhdansko-pravovoe regulirovanie*. Moscow: Yustitsinform, 210. Available at: <http://base.garant.ru/57622176/#ixzz4tNoLtbJC>
131. Kvartal'nov, V. A. (2002). *Turizm*. Moscow: Finansy i statistika, 320.
132. Kvasnyi, L. H., Shcherban, O. Ya. (2013). *Rozvytok ekonomiky znan yak bezperervnyi protses investuvannia u liudskyi kapital*. Visnyk Natsionalnoho universytetu "Lvivska politekhnika". Menedzhment ta pidpriemnytstvo v Ukraini: etapy stanovlennia i problemy rozvytku, 767, 206–211.
133. Laszlo, C., Zhexembayeva, N. (2011). *Embedded Sustainability: The Next Big Competitive Advantage*. Stanford Business Books: Stanford, CA, 288.
134. Lebedev-Lyubimov, A. (2002). *Psihologiya reklamy*. Sankt-Peterburg: Piter, 368.

135. Lee, K.-H. (2016). The conceptualization of country attractiveness: a review of research. *International Review of Administrative Sciences*, 82 (4), 807–826. doi: 10.1177/0020852314566002
136. Lerner, J., Schoar, A., Sokolinski, S., Wilson, K. (2018). The globalization of angel investments: Evidence across countries. *Journal of Financial Economics*, 127 (1), 1–20. doi: 10.1016/j.jfineco.2017.05.012
137. Levchenko, I., Tripak, M. M. (2010). Analiz krnkurentnosti transportnoi haluzi Ukrainy ta praktychni rekomendatsyi shchodo yii polipshennia. *Nauka moloda*, 14, 57–59.
138. Litavniece, L. (2014). Risk management in provision of city attractiveness. *Journal of Positive Management*, 5 (3), 3. doi: 10.12775/jpm.2014.016
139. Liu, J., Gao, R., Cheah, C. Y. J., Luo, J. (2016). Incentive mechanism for inhibiting investors' opportunistic behavior in PPP projects. *International Journal of Project Management*, 34 (7), 1102–1111. doi: 10.1016/j.ijproman.2016.05.013
140. Loginova, A. V. (2009). Influence of education over competitiveness of economic systems. *Problems of modern economics*, 2 (30).
141. Lovkin, V. M. (2013). *Metody ta zasoby pryiniattia investytsiynykh rishen v umovakh nevyznachenosti*. Kharkiv, 20.
142. Lyasko, V. I. (2003). *Strategicheskoe planirovanie razvitiya avtotransportnyh predpriyatiy*. Moscow: OOO «Firma «Blagovest-V», 200.
143. Magretta, D. (2013). *Klyuchevye idei. Maykl Porter*. Moscow: «Mann, Ivanov i Ferber», 272.
144. Makarov, V. V., Gorbachev, V. L., Arshinov, A. M.; Makarov, V. V. (Ed.) (2002). *Investitsionnaya privlekatel'nost' i informatsionnaya politika predpriyatiya*. Sankt-Peterburg: Izd-vo SPbGUEF, 105.
145. Makoni, P. L. (2015). Foreign Direct Investment – The Case of Botswana. *Acta Universitatis Danubius*, 11 (4), 160–173.
146. Malovychko, A. S. (2011). *Vplyv ryzyk-menedzhmentu na investytsiinu pryvablyvist pidpriemstva*. Donetsk, 21.
147. Marxt, C., Brunner, C. (2013). Analyzing and improving the national innovation system of highly developed countries – The case of Switzerland. *Technological Forecasting and Social Change*, 80 (6), 1035–1049. doi: 10.1016/j.techfore.2012.07.008
148. Masron, T. A., Abdullah, H., Amran, A. (2012). FDI from Developing Countries to Developing Countries: Contributing at More Risky Location? *Procedia – Social and Behavioral Sciences*, 58, 1212–1217. doi: 10.1016/j.sbspro.2012.09.1103
149. Mayfat, A. V. (2007). *Grazhdansko-pravovye konstruksii investirovaniya*. Moscow: Volters Kluver, 328.
150. Mckinnon, A. (2015). Performance measurement in freight transport: Its contribution to the design, implementation and monitoring of public policy. Prepared for the Roundtable on Logistics Development Strategies and their Performance Measurements. Queretaro.
151. *Metodika otsenki investitsionnoy privlekatel'nosti predpriyatiya*. Available at: [http://uchebnikionline.com/investirovania/investuvannya\\_-grinova\\_vm/metodika\\_ot-sinki\\_investitsiynoyi\\_privablivosti\\_pidpriemstva.htm](http://uchebnikionline.com/investirovania/investuvannya_-grinova_vm/metodika_ot-sinki_investitsiynoyi_privablivosti_pidpriemstva.htm)

152. Metody otsinky investytsiynoi pryvablyvosti. Available at: <http://books.br.com.ua/28943>
153. Metodyka intehranoi otsinky investytsiynoi pryvablyvosti pidpriemstv i orhanizat-syi: Zatverdzhena Nakazom Ahentstva z pytan zapobihannia bankrutstvu pidpri-iemstv ta orhanizatsyi vid 23 liutoho 1998 r. (1998). Verkhovna Rada Ukrainy, No. 22. Available at: <http://zakon3.rada.gov.ua/laws/show/z0214-98>
154. Meyer, K. E. (2015). Context in Management Research in Emerging Economies. *Management and Organization Review*, 11 (03), 369–377. doi: 10.1017/mor.2015.36
155. Meyer, K. E., Sinani, E. (2009). When and where does foreign direct investment gen-erate positive spillovers? A meta-analysis. *Journal of International Business Studies*, 40 (7), 1075–1094. doi: 10.1057/jibs.2008.111
156. Ministerstvo infrastruktury Ukrainy. Available at: <http://new.mtu.gov.ua/content/zavdannya-ta-funkcii-ministerstva-u-sferi-bezpeki-na-transporti.html>
157. Mirkin, Ja. M. (2009). Nauchno-informacionnye materialy po teme: Chastno-gos-udarstvennoe partnerstvo v vysshem obrazovanii i nauchnoi sfere: mehanizmy up-ravleniya imushchestvom, privilecheniya finansirovaniya, upravleniya soderzhaniem obrazovaniya i nauchnoi deyatel'nosti. Moscow, 105. Available at: [http://www.mir-kin.ru/\\_docs/\\_budgetfin/\\_obrprog/3\\_1.pdf](http://www.mir-kin.ru/_docs/_budgetfin/_obrprog/3_1.pdf)
158. Mirkin, Ya. M., Mirkin, V. Ya. (2006). *Anglo-russkiy tolkovyy slovar' po bankovs-komu delu, investitsiyam i finansovym rynkam. Syvshe 10000 terminov*. Moscow: Al'pina Biznes Buks, 424.
159. Mittal, A., Jhamb, D. (2016). Determinants of Shopping Mall Attractiveness: The In-dian Context. *Procedia Economics and Finance*, 37, 386–390. doi: 10.1016/s2212-5671(16)30141-1
160. Mota, J., Moreira, A. C. (2015). The importance of non-financial determinants on public–private partnerships in Europe. *International Journal of Project Manage-ment*, 33 (7), 1563–1575. doi: 10.1016/j.ijproman.2015.04.005
161. Moussa, M., Çaha, H., Karagöz, M. (2016). Review of Economic Freedom Impact on FDI: New Evidence from Fragile and Conflict Countries. *Procedia Economics and Finance*, 38, 163–173. doi: 10.1016/s2212-5671(16)30187-3
162. Musson, A. (2012). Is sustainable development an attractive factor for territories? Available at: <http://www.dart-europe.eu/full.php?id=738143>
163. Mustafakulov, S. (2017). Investment Attractiveness of Regions: Methodic Aspects of the Definition and Classification of Impacting Factors. *European Scientific Journal*, 13 (10). doi: 10.19044/esj.2017.v13n10p433
164. Mustafakulov, Sh. I. (2016). Regional capacity: Comparative analysis of theoretical and methodological approaches. *Journal of Economy and Innovative technologies*, 5. Available at: [http://www.iqtisodiyot.uz/sites/default/files/maqolalar/37\\_Sh\\_Mus-tafaqulov.pdf](http://www.iqtisodiyot.uz/sites/default/files/maqolalar/37_Sh_Mus-tafaqulov.pdf)
165. Mykola Onishchuk: «Reformuvaty sudovu systemu potribno nehaino». Available at: <https://minjust.gov.ua/news/ministry/mikola-onischuk-reformuvati-sudovu-siste-mu-potribno-negayno-9902>

166. Nizielska, A. (2012). The criteria, instruments, and determinants of investment attractiveness of Silesia: experts opinions. *Journal of economics & management*, 8, 53–70.
167. Northcott, D. (1997). *Capital Investment Decision-Making*. Moscow: Banki i birzhi, JuNITI, 247.
168. Ofissial statistics portal. Available at: <http://osp.stat.gov.lt/en/temines-lenteles40>
169. Ofissial statistics portal. Available at: <https://osp.stat.gov.lt/>
170. Ohotina, A., Lavrinenko, O. (2015). Education of Employees and Investment Climate of the Region: The View of the Heads of Enterprises. *Procedia – Social and Behavioral Sciences*, 174, 3873–3877. doi: 10.1016/j.sbspro.2015.01.1127
171. Okhrimenko, A. H. (2016). *Osnovy menedzhmentu*. Kyiv: Tsentr navchalnoi literatury, 20.
172. Osnovni ekonomichni pokaznyky: Investytsiyna diyalnist. Derzhavne ahentstv z investytsii ta upravlinnia natsionalnymy proektamy Ukrainy. Available at: <http://www.in.gov.ua/index.php?get=225&id=1962>
173. Otairu, A., Umar, A. A., Zawawi, N. A. W. A., Sodangi, M., Hammad, D. B. (2014). Slow Adoption of PPPs in Developing Countries: Survey of Nigerian Construction Professionals. *Procedia Engineering*, 77, 188–195. doi: 10.1016/j.proeng.2014.07.014
174. Pegkas, P. (2015). The impact of FDI on economic growth in Eurozone countries. *The Journal of Economic Asymmetries*, 12 (2), 124–132. doi: 10.1016/j.jeca.2015.05.001
175. Percoco, M. (2014). Quality of institutions and private participation in transport infrastructure investment: Evidence from developing countries. *Transportation Research Part A: Policy and Practice*, 70, 50–58. doi: 10.1016/j.tra.2014.10.004
176. Phelps, N. A. (2008). Cluster or Capture? Manufacturing Foreign Direct Investment, External Economies and Agglomeration. *Regional Studies*, 42 (4), 457–473. doi: 10.1080/00343400701543256
177. Pidsumky torhiv: Fondova birzha. Persha Fondova Torhova Systema. Available at: <http://www.pfts.com/uk/trade-results>
178. Pirog, O. V. (2005). Inostrannye investitsii kak faktor ekonomicheskogo rosta Ukrainy. *Ekonomika promyshlennosti*, 1 (27), 87.
179. Pocius, V., Stungurienė, S., Paškevičius, A. (2014). The Factors of the Attractiveness of the Capital Market of Lithuania. *Procedia – Social and Behavioral Sciences*, 110, 1052–1062. doi: 10.1016/j.sbspro.2013.12.952
180. Polozhennia pro Departament ekonomiky i mizhnarodnykh vidnosyn Kharkivskoi oblasnoi derzhavnoi administratsyi. Available at: <http://old.kharkivoda.gov.ua/uk/article/view/id/82>
181. Polozhennia pro Departament z pidvyshchennia konkurentospromozhnosti rehionu Kharkivskoi oblasnoi derzhavnoi administratsyi (nova redaktsiya). Available at: <http://old.kharkivoda.gov.ua/uk/article/view/id/1015/>
182. Popova, Y. (2017). Relations between Wellbeing and Transport Infrastructure of the Country. *Procedia Engineering*, 178, 579–588. doi: 10.1016/j.proeng.2017.01.112
183. Popovici, O. (2017). International competitiveness versus location attractiveness for FDI. A theoretical approach. *Annals – Economy Series*, 1, 199–205.

184. Popovici, O. C., Călin, A. C. (2012). Attractiveness of Public Policies for FDI in Central and Eastern European Countries. *The Annals of the University of Oradea. Economic Sciences*, XXI (1), 61–67.
185. Popovici, O. C., Călin, A. C. (2012). Competitiveness as Determinant of Foreign Direct Investments in Central and Eastern European Countries. *Revista Economica. Journal of Economic-Financial Theory and Practice*, 658–666.
186. Porter, M (2015). *Competitive strategy. Methodology of analysis of industries and competitors*. Alpina publ., 454.
187. Porter, M. E., Kramer, M. R. (2006). Strategy and Society: The Link Between Competitive Advantage and Corporate Social Responsibility. *Harvard Business Review*, 78–92.
188. Postanova Kabinetu Ministriv Ukrainy «Pro zatverdzhennia Derzhavnoi prohramy rozvytku investytsiynoi ta innovatsiynoi diyalnosti na 2011–2015 rr.» vid 02.02.2011: redaktsiya vid 02.02.2015 (2015). Kabinet Ministriv Ukrainy, No. 389.
189. Postanova Kabinetu Ministriv Ukrainy «Pro zatverdzhennia kryteriyv, za yakymy otsiniuietsia stupin ryzyku vid vprovadzhennia hospodarskoï diyalnosti v turystychni sferi ta vyznachaietsia periodychnist provedennia planovykh zakhodiv derzhavnoho nahliadu (kontroliu)» vid 21.01.2009 No. 25: redaktsiya vid 21.01.2009 (2009). Kabinet Ministriv Ukrainy.
190. Pres-reliz No.08/271 «MVF zatverdyl domovenist pro kredyt «stend-bai» na sumu 16,4 mlrd. dol. SSHA dlia Ukrainy». Mizhnarodnyi Valiutnyi Fond. Available at: <http://www.imf.org/external/russian/np/sec/pr/2011/pr08271r.pdf>
191. Priami inozemni investytsyi: Perspektyvni doslidzhennia (2014). Mizhnarodnyi tsentr perspektyvnykh doslidzen. Available at: <http://www.icps.com.ua/>
192. Pribadi, K., Pangeran, M. H. (2010). Assessing Readiness of Public Sector Risk Management for PPP in Infrastructure Development in Indonesia. Second International Conference on Construction in Developing Countries (ICCIDC-II): “Advancing and Integrating Construction Education, Research & Practice”. Cairo, 217–280.
193. Priede, J., Neuert, J. (2015). Competitiveness Gap of the European Union Member Countries in the Context of Europe 2020 Strategy. *Procedia – Social and Behavioral Sciences*, 207, 690–699. doi: 10.1016/j.sbspro.2015.10.139
194. Pro Ukrainskyi tsentr politychnoho menedzhmentu. Available at: <http://www.politik.org.ua/>
195. Programa rozvitku publichno-privatnogo partnerstva. Diagnostichnyi oghlad zakonodavstva pro derzhavno-privatne partnerstvo. Available at: <http://www.auc.org.ua/>
196. Pryvatne Aktsionerne Tovarystvo “ATP 16329”. Ahentstvo z rozvytku infrastruktury fondovoho rynku Ukrainy. Statystychna informatsiya. Available at: <http://smida.gov.ua/db/participant/03120259>
197. Pryvatne aktsionerne tovarystvo “ATP”. Ahentstvo z rozvytku infrastruktury fondovoho rynku Ukrainy. Statystychna informatsiya. Available at: <http://smida.gov.ua/db/participant/05379027>
198. Pryvatne aktsionerne tovarystvo “AVTOSERVIS-ATP 16327”. Ahentstvo z rozvytku infrastruktury fondovoho rynku Ukrainy. Statystychna informatsiya. Available at: <http://smida.gov.ua/db/participant/31633079>

199. Pryvatne Aktsionerne Tovarystvo "Avtotransportne Pidpriemstvo 16350". Ahentstvo z rozvytku infrastruktury fondovoho rynku Ukrainy. Statystychna informatsiya. Available at: <http://smida.gov.ua/db/participant/03115212>
200. Pryvatne Aktsionerne Tovarystvo "Avtotransportne Pidpriemstvo 16365". Ahentstvo z rozvytku infrastruktury fondovoho rynku Ukrainy, Statystychna informatsiya. Available at: <http://smida.gov.ua/db/participant/03118943>
201. Pryvatne Aktsionerne Tovarystvo "Kharkivska Avtobaza No. 2". Ahentstvo z rozvytku infrastruktury fondovoho rynku Ukrainy. Statystychna informatsiya. Available at: <http://smida.gov.ua/db/participant/01268414>
202. Pryvatne Aktsionerne Tovarystvo "Kharkivske Avtotransportne Pidpriemstvo-16368". Ahentstvo z rozvytku infrastruktury fondovoho rynku Ukrainy. Statystychna informatsiy. Available at: <http://smida.gov.ua/db/participant/21188108>
203. Pryvatne aktsionerne tovarystvo "Valkivske ATP-16341". Ahentstvo z rozvytku infrastruktury fondovoho rynku Ukrainy. Statystychna informatsiya. Available at: <http://smida.gov.ua/db/participant/03115135>
204. Pryvatne Aktsionerne Tovarystvo «Avtotransportne Pidpriemstvo 16301». Ahentstvo z rozvytku infrastruktury fondovoho rynku Ukrainy. Statystychna informatsiya. Available at: <http://smida.gov.ua/db/participant/03115330>
205. Publichne aktsionerne tovarystvo "ATP-16351". Ahentstvo z rozvytku infrastruktury fondovoho rynku Ukrainy. Statystychna informatsiya. Available at: <http://smida.gov.ua/db/participant/14084041>
206. Publichne Aktsionerne Tovarystvo "KATP-2006". Ahentstvo z rozvytku infrastruktury fondovoho rynku Ukrainy. Statystychna informatsiya. Available at: <http://smida.gov.ua/db/participant/04404958>
207. Publichne aktsionerne tovarystvo "Krasnohradске avtotransportne pidpriemstvo 16345". Ahentstvo z rozvytku infrastruktury fondovoho rynku Ukrainy. Statystychna informatsiya. Available at: <http://smida.gov.ua/db/participant/03115175>
208. Publichne aktsionerne tovarystvo «Kharkivske avtotransportne pidpriemstvo # 16363». Ahentstvo z rozvytku infrastruktury fondovoho rynku Ukrainy. Statystychna informatsiya. Available at: <http://smida.gov.ua/db/participant/01332106>
209. Puciato, D. (2016). Attractiveness of municipalities in South-Western Poland as determinants for hotel chain investments. *Tourism Management*, 57, 245–255. doi: 10.1016/j.tourman.2016.06.019
210. Pushkar, M. C., Chumachenko, M. H. (2011). Idealna cyctema obliku: kontseptsiya, arkhitektura, informatsiya. Ternopil: Kart-blansh, 336.
211. Ramírez-Alesón, M., Fleta-Asín, J. (2016). Is the Importance of Location Factors Different Depending on the Degree of Development of the Country? *Journal of International Management*, 22 (1), 29–43. doi: 10.1016/j.intman.2015.10.002
212. Raskin, L., Sira, O., Ivanchykhin, Y. (2017). Models and methods of regression analysis under conditions of fuzzy initial data. *Eastern-European Journal of Enterprise Technologies*, 4 (4 (88)), 12–19. doi: 10.15587/1729-4061.2017.107536
213. Rębiasz, B., Macioł, A. (2014). Hybrid Data in the Multiobjective Evaluation of Investments. *Procedia Computer Science*, 35, 624–633. doi: 10.1016/j.procs.2014.08.144

214. Robbinz, S., Koulter, M. (2007). *Menedzhment*. Moscow: Izdatel'skiy dom «Vil'yams», 1056.
215. Rolik, Y. A. (2012). Complex estimation of industrial enterprise's innovation strategy. *Proceeding of International Scientific Conferense MK-2012-6, Innovation in the industrial sector*. Kazan, 1, 247–251.
216. Rolik, Y. A. (2013). A Complex Approach to Evaluating the Innovation Strategy of a Company to Determine its Investment Attractiveness. *Procedia – Social and Behavioral Sciences*, 99, 562–571. doi: 10.1016/j.sbspro.2013.10.526
217. Rozporiadzhennia Kabinetu Ministriv Ukrainy «Pro skhvalennia Kontseptsyi Derzhavnoi tsilovoi ekonomichnoi prohramy modernizatsyi rynkiv kapitalu v Ukraini» vid 08.11.2007: redaktsiya vid 04.04.2012 (2012). Kabinet Ministriv Ukrainy, No. 976-r.
218. Rozporiadzhennia Kabinetu Ministriv Ukrainy «Pro skhvalennia Kontseptsyi reformuvannia podatkovoi systemy» vid 19.02.2007: ostannia redaktsiya vid 23.12.2009 (vtratyv chynnist) (2007). Kabinet Ministriv Ukrainy, No. 56-r.
219. Rozporiadzhennia Kabinetu Ministriv Ukrainy «Pro skhvalennia Prohramy «Investytsiyni imidzh Ukrainy»: redaktsiya vid 11.01.2016 (2016). Kabinet Ministriv Ukrainy, No. 477-r.
220. Saaty, T. (1993). *Prinyatie resheniy. Metod analiza ierarhiy*. Moscow: Radio i svyaz', 278.
221. Saaty, T. L. (2003). *Theory of the Analytic Hierarchy Process*. Part 2.1. *Systemni doslidzhennia ta informatsiyni tekhnolohiyi*, 1, 48–71.
222. Samuelson, P. E., Nordhaus, V. D. (2007). *Ekonomika*. Moscow: OOO «I.D. Vil'yams», 1360.
223. Sanjo, Y. (2012). Country risk, country size, and tax competition for foreign direct investment. *International Review of Economics & Finance*, 21 (1), 292–301. doi: 10.1016/j.iref.2011.08.002
224. Sanso-Navarro, M. (2011). The Effects on American Foreign Direct Investment in the United Kingdom from Not Adopting the Euro\*. *JCMS: Journal of Common Market Studies*, 49 (2), 463–483. doi: 10.1111/j.1468-5965.2010.02124.x
225. Savchuk, V. P. (2001). *Finansoviy menedzhment predpriyatiy: prikladne voprosy s analizom delovoyh situatsiy*. Kyiv: izdatel'skiy dom «Maksimum», 600.
226. Semenova, A. A., Marushchak, I. I.; Leshchenko, M. I. (Ed.) (2007). *Innovatsionno-investitsionnyy menedzhment*. Moscow: MGIU, 249.
227. Serhieieva, O. (2015). Investment climate in Ukraine: Reality and perspectives. *Socio-Economic Problems and the State*, 13 (2), 254–260. Available at: <http://sepd.tntu.edu.ua/images/stories/pdf/2015/15sorrapp.pdf>
228. Sertifikatsiya ISO 9001:2008. Available at: <http://www.viconsult.com.ua/ua/portal/certifikacation-iso/>
229. Sharma, R. (2016). *Taxing and Subsidizing Foreign Investors* (2016). *Economics Faculty Working Papers*, 50. Available at: [http://commons.colgate.edu/econ\\_facschol/50](http://commons.colgate.edu/econ_facschol/50)
230. Sharpe W., Alexander G., Bailey J. (1998). *Investments*. Boston: Prentice Hall, 962.
231. Shehda, A. V. (2004). *Menedzhment*. Kyiv: Znannia, 687.

232. Shome, S. (2013). India's urbanization and business attractiveness by 2020. *Cities*, 31, 412–416. doi: 10.1016/j.cities.2012.06.015
233. Siemiatycki, M. (2009). Delivering Transportation Infrastructure Through Public-Private Partnerships: Planning Concerns. *Journal of the American Planning Association*, 76 (1), 43–58. doi: 10.1080/01944360903329295
234. Sinkiene, J., Kromalcas, S. (2010). Concept, Directions and Practice of City, Attractiveness Improvement. *Viesoji politika ir administravimas – Public Policy and Administration*, 31, 147–154.
235. Škuflić, L., Rkman, P., Šokčević, S. (2013). Evaluation of the FDI Attractiveness of the European Countries Using Promethee Method. *Croatian Operational Research Review (CRORR)*, 4, 258–269.
236. Smit, A. J. (2010). The competitive advantage of nations: is Porter's Diamond Framework a new theory that explains the international competitiveness of countries? *Southern African Business Review*, 14 (1), 105–130.
237. Snieska, V., Zykiene, I. (2011). Fizinės infrastruktūros įtaka regioniniam patrauklumui. *Economics and Management = Ekonomika ir vadyba*, 6, 465–471.
238. Snieska, V., Zykiene, I. (2014). The Role of Infrastructure in the Future City: Theoretical Perspective. *Procedia – Social and Behavioral Sciences*, 156, 247–251. doi: 10.1016/j.sbspro.2014.11.183
239. Snieska, V., Zykiene, I. (2015). City Attractiveness for Investment: Characteristics and Underlying Factors. *Procedia – Social and Behavioral Sciences*, 213, 48–54. doi: 10.1016/j.sbspro.2015.11.402
240. Solodovnik, O. O. (2006). *Rozrobka orhanizatsiino-ekonomichnoho zabezpechenia rozvytku ATP*. Kyiv, 211.
241. *Sovremennyy tolkovyy slovar'* (1997). Moscow: Izd. «Bol'shaya Sovetskaya Entsiklopediya», 6110.
242. Spilnyi ekspertnyi vysnovok shchodo proektu Zakonu Ukrainy «Pro sudoustrii i status suddiv» (2011). *Venetsiya*: 28.
243. Staroverova, E. (2010). Organizatsionno-ekonomicheskie instrumenty povysheniya investitsionnoy privlekatel'nosti predpriyatiya. *Vladimir*, 183.
244. Statystychna informatsiya. Derzhavnyi sluzhba statystyky Ukrainy. Available at: [http://www.ukrstat.gov.ua/operativ/oper\\_new.html](http://www.ukrstat.gov.ua/operativ/oper_new.html)
245. Stoyanovoa, E. S. (Ed.) (1998). *Finansoviy menedzhment: teoriya i praktika*. Moscow: *Perspektiva*, 656.
246. *Stratehiya diialnosti v Ukraini*. European Bank for Reconstruction and Development. Rezhym dostupu: <http://www.ebrd.com/home>
247. Strokovich, H. V. (2009). *Vybir stratehi investuvannia pidpriemstv*. Kharkiv, 17.
248. Sultanova, B. (2016). Sovremennye problemy byudzheta i byudzhelnogo planirovaniya. *M. Ryskulbekov atyndagy Kyrgyz ekonomikalyk universiteti*, 1 (35), 389–397.
249. Teker, D., Teker, S., Teraman, Ö. (2016). Venture Capital Markets: A Cross Country Analysis. *Procedia Economics and Finance*, 38, 213–218. doi: 10.1016/s2212-5671(16)30192-7



250. Temeljotov, S. A., Bjoerberg, S., Boge, K., Larssen, A. K. (2015). Increasing attractiveness by LCC facility management orientation. *IFAC-PapersOnLine*, 48 (3), 149–154. doi: 10.1016/j.ifacol.2015.06.073
251. The BPCC economic debate on the investment attractiveness of Podkarpacie in Rzeszow. Available at: <http://bpcc.org.pl/en/event-coverages/the-bpcc-economic-debate-on-the-investment-attractiveness-of-podkarpacie-in-rzeszow>
252. The investment attractiveness of the regions of Poland. The report of the annual research project carried out by the team of GIME in cooperation with the Konrad Adenauer Foundation (2014). Gdansk, 69.
253. Tintin, C. (2013). The determinants of foreign direct investment inflows in the Central and Eastern European Countries: The importance of institutions. *Communist and Post-Communist Studies*, 46 (2), 287–298. doi: 10.1016/j.postcomstud.2013.03.006
254. Topsahalova, F. M.-G., Lepshokova, R. R., Koychueva, D. A. (2009). *Sovremennoe sostoyanie i otsenka effektivnosti ispol'zovaniya investitsionnykh resursov v agrarnom sektore*. Moscow: Izdatel'stvo "Akademiya Estestvoznaniya", 216.
255. *Transport i zviazok Ukrainy za 2016 rik* (2017). Kyiv: Derzhavna sluzhba statystyky Ukrainy, 201.
256. *Transportas ir ryšiai 2014* (2015). Lietuvos statistikos departamentas. Vilnius, 151.
257. Tsarev, V. V., Kantarovich, A. A. (2012). *Otsenka stoimosti biznesa. Teoriya i metodologiya*. Moscow: YUNITI-DANA, 572.
258. Udalykh, O. O. (2006). *Upravlinnia investytsiynoiu diyalnistiu promyslovoho pidpriemstva*. Kyiv: Tsentr navch. l-ry, 292.
259. Ukaz Prezydenta Ukrainy «Pro Derzhavne ahentstvo z investytsyi ta upravlinnia natsionalnymi proektamy Ukrainy» vid 12.05.2011: potochna redaktsiya vid 12.12.2011 (2015). Prezydent Ukrainy, No. 583/2011.
260. Ukaz Prezydenta Ukrainy «Pro Ministerstvo ekonomichnoho rozvytku i torhivli Ukrainy» vid 31.05.2011: potochna redaktsiia vid 21.06.2012 (2012). Prezydent Ukrainy, No. 634/2011.
261. Ukaz Prezydenta Ukrainy «Pro Polozhennia pro Derzhavne ahentstvo ekolohichnykh investytsyi Ukrainy» vid 13.04.2011: potochna redaktsiia vid 13.04.2012 (2012). Prezydent Ukrainy, No. 455/2011.
262. Ukaz Prezydenta Ukrainy «Pro Polozhennia pro Derzhavnu podatkovu sluzhbu Ukrainy» vid 12.05.2011: potochna redaktsiya vid 12.05.2011 (2011). Prezydent Ukrainy, No. 584/2011.
263. Ukaz Prezydenta Ukrainy «Pro Polozhennia pro Ministerstvo finansiv Ukrainy» vid 08.04.2011: potochna redaktsiia vid 30.12.2011 (2011). Prezydent Ukrainy, No. 446/2011.
264. Ukaz Prezydenta Ukrainy «Pro Polozhennia pro Ministerstvo infrastruktury Ukrainy» vid 12.05.2011: potochna redaktsiya vid 09.06.2012. Prezydent Ukrainy, No. 581/2011.
265. Ukaz Prezydenta Ukrainy «Pro Polozhennia pro Ministerstvo sotsialnoi polityky Ukrainy» vid 06.04.2011: potochna redaktsiya vid 17.05.2012 (2012). Prezydent Ukrainy, No. 389/2011.

266. Ukaz Prezydenta Ukrainy «Pro zatverdzhennia Polozhennia pro Derzhavne ahentstvo z pytan nauky, innovatsyi ta informatyzatsyi Ukrainy» 08.04.2011 (2011). Prezydent Ukrainy, No. 437/2011.
267. Ukaz Prezydenta Ukrainy «Pytannia Natsionalnoho instytutu stratehichnykh doslidzhen» vid 16.12.2002: potochna redaktsiya vid 08.06.2010 (2010). Prezydent Ukrainy, No. 1158/2002.
268. Ukraine-Private Infrastructure Projects – The World Bank & PPIAF. Available at: [http://ppi.worldbank.org/explore/ppi\\_exploreCountry.aspx?countryId=97#](http://ppi.worldbank.org/explore/ppi_exploreCountry.aspx?countryId=97#)
269. Ulman, S.-R. (2013). Corruption and National Competitiveness in Different Stages of Country Development. *Procedia Economics and Finance*, 6, 150–160. doi: 10.1016/s2212-5671(13)00127-5
270. Ulman, S.-R., Bujancă, G.-V. (2014). The Corruption Influence on the Macroeconomic Environment. Empirical Analysis on Countries Development Stages. *Procedia Economics and Finance*, 16, 427–437. doi: 10.1016/s2212-5671(14)00822-3
271. Valinurova, L. S. (2011). *Innovatsionnoe razvitie regionov. Metodologicheskie osnovy i perspektivnye napravleniya*. Moscow: Paleotip, 200. Available at: <http://www.iprbookshop.ru/10217.html>
272. Vetlugin, S. Yu. (2006). Mezhdunarodnye reytingi, vliyayushchie na otsenku investitsionnoy privilekatel'nosti ekonomiki. *Problemy sovremennoy ekonomiki*, 1, 9–17.
273. Vidkryte aktsionerne tovarystvo “Kharkivske avtotransportne pidpriemstvo “. Ahentstvo z rozvytku infrastruktury fondovoho rynku Ukrainy. Statystychna informatsiya. Available at: <http://smida.gov.ua/db/participant/01268727>
274. Vilisov, M. V. (2006). Gosudarstvenno-chastnoe partnerstvo: politiko-pravovoi aspekt. *Vlast'*, 7, 4–6.
275. Virk, R. (2013). *Zen Entrepreneurship: Walking the Path of the Career Warrior*. Bay-View Labs, 298.
276. Wang, H., Liang, P., Li, H., Yang, R. (2016). Financing Sources, R&D Investment and Enterprise Risk. *Procedia Computer Science*, 91, 122–130. doi: 10.1016/j.procs.2016.07.049
277. Wang, Y., Liu, J. (2015). Evaluation of the excess revenue sharing ratio in PPP projects using principal–agent models. *International Journal of Project Management*, 33 (6), 1317–1324. doi: 10.1016/j.ijproman.2015.03.002
278. Webster, M. (2008). Online Dictionary. Available at: <https://www.merriam-webster.com/dictionary>
279. Yakupova, N. M., Levachkova, S. J., Iskhakova, G. M., Kadochnikova, E. I., Lelyuk, A. V. (2017). Integral Assessment of the Enterprise Investment Attractiveness: Testing the Hypothesis of Non-Conformity to Investor's Interests. *Journal of Engineering and Applied Sciences*, 12, 4927–4930.
280. Yampol'skaya, D. O., Zonis, M. M. (2003). *Menedzhment*. Sankr-Peterburg: Izdatel'skiy dom «Neva»; Moscow: «OLMA-PRESS», 288.
281. Yang, T., Long, R., Li, W. (2017). Suggestion on Tax Policy for Promoting the PPP Projects of Charging Infrastructure in China. *Journal of Cleaner Production*. doi: 10.1016/j.jclepro.2017.10.197

282. Yoo, D., Reimann, F. (2017). Internationalization of Developing Country Firms into Developed Countries: The Role of Host Country Knowledge-Based Assets and IPR Protection in FDI Location Choice. *Journal of International Management*, 23 (3), 242–254. doi: 10.1016/j.intman.2017.04.001
283. Zaharchenko, V. I., Merkulov, N. N., Halikyan, N. V. et. al. (2009). *Ekonomicheskaya bezopasnost' biznesa*. Odessa: Nauka i tekhnika, 176.
284. Zakirova, E. R. (2016). The economic content of the term “investment attractiveness.” *Proceedings of the Voronezh State University of Engineering Technologies*, 2, 327–333. doi: 10.20914/2310-1202-2016-2-327-333
285. Zakon Ukrainy «Podatkovi kodeks Ukrainy» vid 02.12.2010: redaktsiya vid 19.01.2012. Verkhovna Rada Ukrainy, No. 2755-VI.
286. Zakon Ukrainy «Pro aktsionerni tovarystva» redaktsiia vid 09.12.2015 roku. Verkhovna Rada Ukrainy. Available at: <http://zakon5.rada.gov.ua/laws/show/514-17>
287. Zakon Ukrainy «Pro Derzhavnyi biudzheth Ukrainy na 2013 rik». Verkhovna Rada Ukrainy. Available at: <http://zakon3.rada.gov.ua/laws/show/5515-17>
288. Zakon Ukrainy «Pro Derzhavnyi biudzheth Ukrainy na 2014 rik» vid 27.04.2010: ostannia redaktsiia vid 30.12.2013 (2013). Verkhovna Rada Ukrainy, No. 2154-VI.
289. Zakon Ukrainy «Pro Derzhavnyi biudzheth Ukrainy na 2014 rik». Verkhovna Rada Ukrainy. Available at: <http://zakon0.rada.gov.ua/laws/show/719-18>
290. Zakon Ukrainy «Pro Derzhavnyi biudzheth Ukrainy na 2015 rik». Verkhovna Rada Ukrainy. Available at: <http://zakon3.rada.gov.ua/laws/show/80-19>
291. Zakon Ukrainy «Pro Derzhavnyi biudzheth Ukrainy na 2016 rik». Verkhovna Rada Ukrainy. Available at: <http://zakon3.rada.gov.ua/laws/show/928-19>
292. Zakon Ukrainy «Pro finansovi posluhy ta derzhavne rehuliuвання rynkiv finansovykh posluh» vid 12.07.2001: ostannia redaktsiia vid 08.01.2012 (2012). Verkhovna Rada Ukrainy, No. 2664-III.
293. Zakon Ukrainy «Pro investytsiinu diialnist» vid 18.09.1991: ostannia redaktsiya vid 19.01.2012 (1991). Verkhovna Rada Ukrainy, No. 1560-XII.
294. Zakon Ukrainy «Pro Natsionalnyi bank Ukrainy» vid 20.05.1999: ostannia redaktsiya vid 02.07.1999 (1999). Verkhovna Rada Ukrainy, No. 679-XIV.
295. Zakon Ukrainy «Pro opodatkovannia prybutku pidpriemstv» vid 28.12.1994: potochna redaktsiya vid 01.04.2015 (2015). Verkhovna Rada Ukrainy, No. 334/94-VR.
296. Zakon Ukrainy «Pro podatok na dodanu vartist» vid 03.04.1997: ostannia redaktsiya vid 01.01.2015 (vtratyv chynnist) (2015). Verkhovna Rada Ukrainy, No. 168/97-VR.
297. Zakon Ukrainy «Pro Strakhuvannia» vid 07.03.1996: ostannia redaktsiya vid 08.08.2012 (2012). Verkhovna Rada Ukrainy, No. 85/96-VR.
298. Zakon Ukrainy «Pro sudoustrii i status suddiv» vid 07.07.2010: ostannia redaktsiia vid 31.12.2011 (2010). Verkhovna Rada Ukrainy, No. 2453-VI.
299. Zakon Ukrainy «Pro zasady zapobihannia i protydyi koruptsiyi» vid 07.04.2011: ostannia redaktsiia vid 12.08.2012 (2012). Verkhovna Rada Ukrainy, No. 3206-VI.
300. Zamkov, O. O., Tolstopiatenko, A. V., Cheremnyh, Yu. N. (2001). *Matematicheskie metody v ekonomike*. Moscow: Izdatel'stvo «Delo i Servis», 368.

301. Zeneli, V. (2015). Corruption, Foreign Direct Investment, and International Marketing in the Western Balkans. *Thunderbird International Business Review*, 58 (3), 277–291. doi: 10.1002/tie.21753
302. Zgurovskiy, M. Z., Gvishiani, A. D. (2008). Global'noe modelirovanie protsessov us-toychivogo razvitiya v kontekste kachestva i bezopasnosti dlya zhizni lyudey. Kyiv: Politekhnik, 349.
303. Zgurovskiy, M. Z., Pankratova, N. D. (2015). Tekhnologicheskoe prodvizhenie. Kyiv: Politekhnik, 165.
304. Zhuk, V. M. (2013). Bukhhalterskyi inzhynirynh. Zrostannia roli bukhhalterskoho obliku v suchasnyi ekonomitsi: zbirnyk tez ta dopovidei I Mizhnarodnoi naukovo-praktychnoi internet-konferentsyi. Kyiv: TOV "Vseukrainskyi instytut prava i ot-sinky", 51–54.

## PUBLICATIONS

### Publications referred in other international databases

1. Dmitriyev, I., Levchenko, I. (2017). The investment attractiveness of enterprises of Ukrainian motor transport industry. Review of Finance, 6 (2), 1378–1386. [Scopus, Thompson Reuters, Journal Citation Report]
2. Dmitriyev, I., Shevchenko, I., Levchenko, I. (2017). Theoretical, methodological and applied aspects of managing investment attractiveness of automobile enterprises (on the example of Ukraine). Oxford Economic Papers, 4 (2), 1137–1145. [Scopus, Thompson Reuters, Journal Citation Report]
3. Dmytriiev, I. A., Levchenko, I. (2017). Otsiniuvannia investytsiynoi pryvablyvosti pidpriemstva ta upravlinnia yii pokaznykamy. Aktualni problemy ekonomiky, 5 (191), 89–99. [EBSCOhost, EconLit, ABI/Inform (by ProQuest), Erih Plus (Horveria)]
4. Grinko, A., Bochulia, T., Grynko, P., Yasinetska, I., Levchenko, I. (2017). Formation of the concept of intellectualization information provision for managing an enterprise. Eastern-European Journal of Enterprise Technologies, 5 (3 (89)), 4–14. doi: 10.15587/1729-4061.2017.111859 [Scopus, Ulrich's Periodicals Directory, OpenAIRE, Bielefeld Academic Search Engine (BASE), WorldCat, Directory of Open Access Journals (DOAJ), EBSCO, ResearchBib, American Chemical Society, Directory Indexing of International Research Journals, Directory of Research Journals Indexing (DRJI), CrossRef, Open Academic Journals Index (OAJI), Sherpa/Romeo]
5. Levchenko, I. (2015). Evaluation the investment attractiveness of motor transport enterprises // Economics, management, law: problems of science and practice, 112–117. [PIHJ Science Index, Thompson Reuters, IndexCopernicus]
6. Levchenko, I. (2015). Factors of influence are on level of investment attractiveness of motor transport enterprises. Ikonomicheskite perspektivi v globalnata kriza, 142–146. [PIHJ Science Index, Thompson Reuters, IndexCopernicus]
7. Levchenko, I. (2015). Formuvannia systemy upravlinnia investytsiynoiu pryvablyvistiu avtotransportnykh pidpriemstv. Nauka moloda, 23, 20–27. [IndexCopernicus]
8. Levchenko, I. (2015). Mekhanizm informatsiynoho zabezpechennia systemy upravlinnia investytsiynoiu pryvablyvistiu ATP. Problemy i perspektivy rozvytku pidpriemnytstva, 2, 46–50. [IndexCopernicus]
9. Levchenko, I. (2015). Methodology of estimation of level of investment attractiveness of motor transport enterprises. Economics, Management, Law: current state and perspectives of development, 116–120. [PIHJ Science Index, Thompson Reuters, IndexCopernicus]
10. Levchenko, I. (2015). Optyimizatsiya rivnia investytsiynoi pryvablyvosti avtotransportnykh pidpriemstv. Zbirnyk naukovykh prats Cherkaskoho derzhavnogo tekhnolohichnoho universytetu. Seriya: Ekonomichni nauky, 39 (2), 150–155. [PIHJ Science Index, IndexCopernicus, Google Scholar]

11. Levchenko, I. (2015). Orhanizatsiine zabezpechennia upravlinnia investytsiynoiu pryvablystiu avtotransportnykh pidpriemstv. Problemy i perspektyvy rozvytku pidpriemnytstva, 3 (10), 103–107. [IndexCopernicus]
12. Levchenko, I. (2015). Pryiniattia upravlinskoho rishennia optymizatsyi rivnia investytsiynoi pryvablyvosti ATP. Zbirnyk naukovykh prats Cherkaskoho derzhavnoho tekhnolohichnoho universytetu. Seriya: Ekonomichni nauky, 40 (2), 89–96. [PIHI Science Index, IndexCopernicus, Google Scholar]
13. Levchenko, I. (2016). Management of investment attractiveness of motor transport enterprises (on the example of Ukraine). Problemy i perspektyvy rozvytku pidpriemnytstva, 3 (14), 104–109. [IndexCopernicus]
14. Levchenko, I. (2016). The analysis of the motor transport sector investment in Ukraine and Lithuania. Perspective directions of scientific researches, 125–129. [PIHI Science Index, Thompson Reuters, IndexCopernicus]
15. Levchenko, I. (2016). Transport sector development in Lithuania and Ukraine. Problems of development modern science: theory and practice. EDEX, Madrid, España, 115–120. [PIHI Science Index, Thompson Reuters, IndexCopernicus]
16. Levchenko, I. (2017). A model of investment attractiveness evaluation of motor transport enterprises. Economics, management, law: challenges and prospects, 74–77. [PIHI Science Index, Thompson Reuters, IndexCopernicus]
17. Levchenko, I., Tripak, M. M. (2010). Analiz konkurentnosti transportnoi haluzi Ukrainy ta praktychni rekomendatsyi shchodo yii polipshennia. Nauka moloda, 14, 57–59. [IndexCopernicus]

#### **Publications referred in the proceedings of international conferences**

1. Antonova, L., Levchenko, I. (2016). Gridin's group It company: novatorstvo, kachestvo, bezopasnost'. Vol. 3. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: KhNADU, 92–94.
2. Antonova, L., Levchenko, I. (2016). Investments – the main element of the investment activities. Vol. 1. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: KhNADU, 157–160.
3. Dmytriiev, I. A., Levchenko, I. (2016). Rozvytok transportnoi haluzi Polshchi ta Ukrainy: spilne ta vidminne. Vol. 2. “Naynovite nauchni postizheniya – 2016”: nauchnye trudy pomaterialam mezhdunarodnoy nauchno-prakticheskoy konferentsii. B'lgariya: “Byal GRAD-BG” OOD, 25–33.
4. Levchenko, I. (2010). Pidvyshchennia efektyvnosti upravlinnia investytsiynoiu diyalnistiu na pidpriemstvakh avtotransportnoi haluzi. Problemy i perspektyvy rozvytku pidpriemnytstva: zbirnyk materialiv mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: FOP Pavlov M. Yu., 129–130.
5. Levchenko, I. (2015). Investytsyi yak osnovnyi element investytsiynoi diialnosti pidpriemstva. Ekonomika i upravlinnia v umovakh hlobalizatsyi: zbirnyk materialiv IV Mizhnarodnoi naukovo-praktychnoi Internet-konferentsyi. Kryvyi Rih: DonNUET, 41–44.

6. Levchenko, I. (2015). Metodyka otsinky rivnia investytsiynoi pryvablyvosti ATP. *Ekonomika pidpriemstva: suchasni problemy teoryi ta praktyky: Materialy chetvertoi mizhnar. nauk.-prakt. konf.* Odessa: Atlant, 110–113.
7. Levchenko, I. (2015). Priorytetni metody otsinky rivnia investytsiynoi pryvablyvosti ATP. *Finansovi aspekty rozvytku derzhavy, rehioniv ta subiektiv hospodariuvannia: suchasnyi stan ta perspektyvy: Materialy I mizhnar. nauk.-prakt. konf.* Odessa, 11–13.
8. Levchenko, I. (2016). Formuvannia systemy upravlinnia investytsiynoiu pryvablyvistiu ATP. Vol. 1. *Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy Kh Mizhnarodnoi naukovo-praktychnoi konferentsii.* Kharkiv: KhNADU, 229–231.
9. Levchenko, I. (2017). Derzhavno-pryvatne partnerstvo, yak zaporuka rozvytku pidpriemstv Ukrainy. *Economy. Zarzadzanie. Teoretyczne I praktyczne aspekty rozwoju wspolczesnej nauki.* Warszawa: Wydawca “Diamond trading tour”, 62–65.
10. Puksas, A., Levchenko, I. (2016). Razvitie transportnoy otrasli v Litve i Ukraine. Vol. 2. *Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi.* Kharkiv: KhNADU, 203–205.
11. Puksas, A., Levchenko, I. (2016). Upravlenie investitsionnoy privlekatel'nost'yu predpriyatiy avtotransportnoy otrasli. Vol. 3. *Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi.* Kharkiv: KhNADU, 272–275.

**Publications referred in the periodicals, one time collections of publications, etc.**

1. Huzhva, K. O., Levchenko, I. (2017). Rozvytok transportnoi haluzi Polshchi ta Ukrainy: spilne ta vidminne. *Problemy rozvytku ekonomiky pidpriemstva: pohliad molodi: Materialy X Mizhnarodnoi studentskoi naukovo konferentsyi.* Kharkiv, 187–189.
2. Orlov, M. M., Lvovich, I. Ya., Preobrazhenskiy, A. P., Levchenko, Ya. S. et. al. (2017). Perspektivnye dostizheniya sovremennyh uchenyh: ekonomika, menedzhment, geografiya i geologiya, arhitektura i stroitel'stvo, himiya. Odessa: KUPRIENKO SV, 57–64.
3. Tsapko, V. O., Levchenko, I. (2017). Otsinka investytsiynoi pryvablyvosti avtotransportnoi haluzi Kharkivskoho rehionu. *Ekonomichni perspektyvy*, 2 (9), 133–137.

**Obstacles for foreign investors (FDI, 2016)**

Rank	Obstacles	TNC	Institutional investors	IFI	Investors- entrepreneurs	Total
1	Unstable and excessive regulation	1.0	1.0	1.0	1.5	1.03
2	Ambiguous legal system	1.1	1.5	1.0	1.7	1.21
3	Volatility of economic environment	1.1	1.25	1.0	2.0	1.27
4	Corruption	1.2	1.4	1.0	2.0	1.34
5	Large tax burden	1.45	1.5	1.5	1.75	1.46
6	Obstacles to the establishment of property rights	1.55	2.4	1.5	1.3	1.56
7	Low level of the population income	1.5	2.25	1.5	1.7	1.69
8	Difficulties in communicating with the government	1.6	2.5	1.5	1.7	1.78
9	Volatility of the political environment	1.5	2.0	1.5	2.3	1.82
10	Absence of material infrastructure	2.2	2.0	2.0	2.0	2.09
11	Problems of entering the domestic and foreign markets	1.8	2.75	2.5	1.7	2.16



## Measures to increase the level of investees' IA (FDI, 2016)

Rank	Measures	TNC	Institutional investors	IFI	Investors- entrepreneurs	Total
1	Liberalization of capital movement, foreign exchange market and repatriation of profits	1.1	1.4	1.0	1.25	1.12
2	Removal of restrictions on the share of foreign ownership in Ukrainian enterprises	1.1	1.6	1.0	1.25	1.16
3	Minimization of bureaucratic restrictions	1.5	1.2	1.0	1.0	1.17
4	Lowering tax rates and reducing the number of taxes	1.4	1.6	1.0	1.0	1.32
5	Removal of restrictions on the access to domestic and foreign markets	1.5	2.2	2.0	1.5	1.78
6	Improvement of the system for monitoring the compliance with contract terms	1.6	2.0	2.0	1,75	1.81
7	Introduction of equal conditions for activities of domestic and foreign investors	2.0	1.8	2.0	1.5	1.92
8	Improvement of the material infrastructure	1.8	2.4	1.5	2.25	1.97

## Information on the experts from the scientific community

Full name	Place of work	Position	Scientific status (degree)	The number of scientific papers	Work experience
Michal Varchola	Academic Community of Michal Baludiansky, Slovakia	President of the community	Dr. h. c. prof. h.c. Ing., Ph.D.	34	30
Inna Akhtyrskaya	Lodz University of Technology, Poland	Foreign Affairs Officer at Lodz University of technology	Ph.D.	17	9
Shyian Dmytro	Kharkiv National University of Economics	Head of the Department of Economics of Enterprise and Management	Dr.Sc., Prof.	32	24
Tripak Marian	Podilsky Special Educational-Rehabilitation Socio-Economic College	Director	Ph.D.	114	20
Kryvoruchko Oksana	Kharkiv National Automobile and Highway University	Head of the Department of Management	Dr.Sc., Prof.	210	27
Dmitriyev Illia	Kharkiv National Automobile and Highway University	Dean of the Faculty of Management and Business	Dr.Sc., Prof.	260	38
Kostenko Yuri	Kharkiv National Automobile and Highway University	Associate Professor of the Department of Accounting and Audit, Vice Dean of the Faculty of Management and Business	Ph.D.	75	31
Kurylko Mykola	Kharkiv National Automobile and Highway University	Head of the Department of Physical Education and Sports	Assoc. Prof.	48	46
Malikov Volodymyr	Kharkiv National Automobile and Highway University	Head of the Department of Accounting and Audit	Dr.Sc., Prof.	129	37
Shevchenko Inna	Kharkiv National Automobile and Highway University	Vice Head of the Department of Economy of Enterprise	Ph.D.	89	6
Shershenyuk Elena	Kharkiv National Automobile and Highway University	Head of the Department of Economic Theory and Law	Ph.D.	72	14
Shynkarenko Volodymyr	Kharkiv National Automobile and Highway University	Professor of the Department of Management	Dr.Sc., Prof..	315	55

**Information on the experts in strategic management and  
management of local and regional, as well as urban development**

Full name	Place of work	Position	Scientific status (degree)	The number of scientific papers	Work experience
Darmostuk Denys	Kyiv Regional Employment Center	Director	Ph.D.	17	18
Kovalenko Viktor	Department of Economics and International Relations of Kharkiv Regional State Administration	Director	Ph.D.	6	31
Antonova Svitlana	Gridin's Group LT	Lawyer		4	28
Gryshchenko Vira	Kharkiv National Automobile and Highway University	Dispatcher of the Faculty of Management and Business		17	44

**Information on the business experts**

Full name	Place of work	Position	Scientific status (degree)	The number of scientific papers	Work experience
Lysenko Olexandr	Vovchansk department for management of roads	Director			38
Lypovyy Ievhen	TOV Horavtotrans	Director			14
Streliani Mykhailo	PJSC "Kharkiv MTE 16363"	Director			43
Sundukov Serhiy	Private enterprise "Sundukov"	Businessman			17
Pryimak Vladyslav	The municipal enterprise "Saltovskoie tram depot"	Executive Director			12

The matrix of ranks (indicators of property status group)

Factors	Number of experts																					Sum of ranks	Deviation from the mean, Δ	Sum of squared deviation, S = ΣΔ²
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21			
Φ11	3	4	3	2	3	4	3	4	4	3	3	4	3	3	4	4	3	4	3	3	4	71	18,5	342,25
Φ12	2	2	1	3	2	1	2	1	2	2	1	2	2	2	2	1	2	1	2	2	2	37	-15,5	240,25
Φ13	4	3	4	4	4	3	4	3	3	4	4	3	4	4	3	3	4	3	4	4	3	75	22,5	506,25
Φ14	1	1	2	1	1	2	1	2	1	1	2	1	1	1	1	2	1	2	1	1	1	27	-25,5	650,25
Total	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	210		1739

The matrix of ranks (indicators of financial independence group)

Factors	Number of experts																					Sum of ranks	Deviation from the mean, Δ	Sum of squared deviation, S = ΣΔ²
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21			
Φ21	1	1	2	1	1	2	1	1	3	1	1	2	1	1	2	1	1	2	1	2	3	31	-42,83	1834,409
Φ22	6	6	5	6	6	5	5	5	5	6	6	5	6	6	5	6	6	5	5	5	5	115	41,17	1694,969
Φ23	4	3	4	4	5	3	4	3	6	4	3	4	4	5	3	4	5	3	4	3	6	84	10,17	103,4289
Φ24	5	5	6	5	4	6	6	6	4	5	5	6	5	4	6	5	4	6	6	2	4	105	31,17	971,5689
Φ25	2	2	1	3	2	1	2	2	2	2	2	1	3	2	1	3	2	1	2	6	2	44	-29,83	889,8289
Φ26	3	4	3	2	3	4	3	4	1	3	4	3	2	3	4	2	3	4	3	4	1	63	-10,83	117,2889
Total	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	21	442		5611,493



The matrix of ranks (indicators of the investee's profitability group)

Factors	Number of experts																		Sum of ranks	Deviation from the mean, Δ	Sum of squared deviation, $S = \sum \Delta^2$
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Φ51	4	3	4	3	4	3	3	3	3	3	3	4	3	3	4	3	3	3	2	3	3
Φ52	2	2	1	2	1	2	2	2	2	2	2	1	1	2	2	2	2	2	3	2	2
Φ53	1	1	2	1	2	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1
Φ54	5	5	5	5	5	5	4	5	5	5	5	5	5	4	5	5	5	4	5	5	5
Φ55	3	4	3	4	3	4	5	4	4	4	4	3	4	5	3	4	4	5	4	4	4
Total	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

The matrix of ranks (indicators of the investee's business activity group)

Factors	Number of experts																		Sum of ranks	Deviation from the mean, Δ	Sum of squared deviation, $S = \sum \Delta^2$
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Φ61	6	6	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	6	6	6
Φ62	2	2	1	2	1	2	2	2	2	2	2	1	1	2	2	2	2	2	2	2	2
Φ63	4	3	4	3	4	3	3	3	3	3	3	4	3	3	4	3	3	3	3	3	3
Φ64	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5
Φ65	7	7	6	8	7	8	7	7	7	7	8	7	7	7	7	8	7	6	8	8	7
Φ66	3	4	3	4	3	4	4	4	4	4	4	3	4	5	3	4	4	4	4	4	4
Φ67	8	8	8	7	8	7	8	8	8	8	7	8	8	8	8	7	8	8	7	7	8
Φ68	1	1	2	1	2	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1
Total	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36

**Results of the implementation of the hierarchy analysis method for  
the purpose of determining weighting coefficients for assessment of MTE IA**

IA component	Matrix element	Normalized vectors of matrixes								Weighting coefficient	Normalized vector of the IA component					Weighting coefficient
		1	2	3	4	5	6	7	8		0,14815	0,16279	0,14815	0,17333	0,18182	
Indicators of property status	1	0,08642	0,09302	0,08642	0,09333	0,10390	0,09262			0,09262	0,14815	0,16279	0,14815	0,17333	0,18182	0,162848
	2	0,06173	0,06977	0,06173	0,08000	0,07792	0,07023			0,07023						
Indicators of financial independence	3	0,11111	0,09302	0,11111	0,09333	0,10390	0,10249			0,10249	0,19753	0,19767	0,19753	0,17333	0,20779	0,194772
	4	0,08642	0,10465	0,08642	0,08000	0,10390	0,09228			0,09228						
Indicators of financial stability	5	0,06173	0,06977	0,06173	0,05333	0,05195	0,05970			0,05970	0,16049	0,15116	0,16049	0,14667	0,12987	0,149737
	6	0,09877	0,08140	0,09877	0,09333	0,07792	0,09004			0,09004						
Indicators of assets liquidity	7	0,06173	0,06977	0,06173	0,05333	0,05195	0,05970			0,05970	0,14815	0,16279	0,14815	0,16000	0,15584	0,154986
	8	0,08642	0,09302	0,08642	0,10667	0,10390	0,09529			0,09529						
Indicators of profitability	9	0,08642	0,06977	0,08642	0,08000	0,06494	0,07751			0,07751	0,18519	0,17442	0,18519	0,17333	0,16883	0,177391
	10	0,09877	0,10465	0,09877	0,09333	0,10390	0,09988			0,09988						
Indicators of business activity	11	0,07407	0,05814	0,07407	0,06667	0,06494	0,06758			0,06758	0,16049	0,15116	0,16049	0,17333	0,15584	0,160266
	12	0,08642	0,09302	0,08642	0,10667	0,09091	0,09269			0,09269						

**Automobile roads in Ukraine (Transport i zviazok Ukrainy za 2016 rik (2017)**

Year	Length of public roads, km	including roads with hard covering	
		km	%
2010	169496,2	165843,6	97,85
2011	169636,8	166024,6	97,87
2012	169693,9	166095,1	97,88
2013	169648,5	166084,9	97,90
2014	163027,6	159463,2	97,81
2015	163024	159447	97,81
2016	163033	159462,1	97,81



### Freight operations by transport modes in Ukraine, 2010-2016 (Transport i zviazok Ukrainy za 2016 rik (2017))

Year	Totally, ths tons	Including											
		rail transport: volume of transportation		sea transport		river transport		motor transport		air transport		pipeline transfer	
		ths tons	%	ths tons	%	ths tons	%	ths tons	%	ths tons	%	ths tons	%
2010	1765697,6	432897	24,52	4067,8	0,23	6989,5	0,40	1168218,8	66,16	87,9	0,005	153436,6	8,69
2011	1886628,2	469308,1	24,88	4145,6	0,22	5720,9	0,30	1252390,3	66,38	92,1	0,005	154971,2	8,21
2012	1853466,8	457454,5	24,68	3457,5	0,19	4294,7	0,23	1259697,7	67,96	122,6	0,007	128439,8	6,93
2013	1836677,9	443601,5	24,15	3428,1	0,19	2840,5	0,15	1260767,5	68,64	99,2	0,005	125941,1	6,86
2014	1623297,4	386276,5	23,80	2805,3	0,17	3144,8	0,19	1131312,7	69,69	78,6	0,005	99679,5	6,14
2015	1474346,5	349994,8	23,74	3292	0,22	3156	0,21	1020604	69,22	69,1	0,005	97232	6,59
2016	1542574,7	343433,5	22,26	3033	0,19	3642	0,24	1085663	70,38	74,3	0,005	106729	6,92

## Foreign direct investments in Ukraine, 2010-2016 (Statystychna informatsiya)

	Volume of direct investments, USD mln							as % of the total volume						
	2010	2011	2012	2013	2014	2015	2016	2010	2011	2012	2013	2014	2015	2016
Total volume of investments	45370,0	48197,6	51705,3	53704,0	40725,4	36154,5	37655,5	100	100	100	100	100	100	100
Cyprus	9620,5	12700,8	15907,7	17725,6	12769,4	10239,5	9691,6	21,20	26,35	30,77	33,01	31,35	28,32	25,74
Germany	5001,2	5329,8	4496,3	2908,4	2105,2	1598,2	1606,6	11,02	11,06	8,70	5,42	5,17	4,42	4,27
the Netherlands	11389,8	9323,8	8727,6	9007,5	6986,7	6184,7	5753,9	25,10	19,34	16,88	16,77	17,16	17,11	15,28
the Russian Federation	2692,7	2876,1	3040,5	3525,9	2338,9	3036,9	4349,8	5,93	5,97	5,88	6,57	5,74	8,40	11,55
Austria	1798,9	2317,5	2476,9	2314,0	1648,7	1559,8	1272,8	3,96	4,81	4,79	4,31	4,05	4,31	3,38
Great Britain	2234,1	2229,9	2536,4	2496,9	2768,2	2153,4	1790,3	4,92	4,63	4,91	4,65	6,80	5,96	4,75
Virgin Islands (GB)	1384,9	1580,2	1888,2	2275,9	1988,3	1715,0	1766,5	3,05	3,28	3,65	4,24	4,88	4,74	4,69
France	1381,1	2105,4	1993,1	1510,3	1520,5	1394,6	1305,4	3,04	4,37	3,85	2,81	3,73	3,86	3,47
Switzerland	852,7	939,3	1097,6	1351,0	1391,5	1390,8	1467,3	1,88	1,95	2,12	2,52	3,42	3,85	3,90
Italy	352,7	349,2	401,7	584,6	371,5	343,6	320,6	0,78	0,72	0,78	1,09	0,91	0,95	0,85
Belize	132,4	151,7	809,2	1026,6	652,5	535,1	523,4	0,29	0,31	1,57	1,91	1,60	1,48	1,39
the USA	1107,6	966,9	976,5	934,7	701,6	634,1	698,8	2,44	2,01	1,89	1,74	1,72	1,75	1,86
Poland	913,0	834,3	897,2	819,8	808,6	758,3	7604	2,01	1,73	1,74	1,53	1,99	2,10	2,02
Other countries	6508,4	6493	6456,4	7222,8	4673,8	4610,5	6348,1	14,35	13,47	12,49	13,45	11,48	12,75	16,86

**Performance indicators of enterprises in the motor transport sector of Ukraine,  
2010-2016 (Statystychna informatsiya)**

Year	The number of employees (regular and freelancers), ths pers	Payroll fund, UAH mln	Average monthly payment of employees, UAH	Volume of sold products (works and services), UAH mln
2010	824,3	2190989,4	2658	144960,3
2011	813,8	2499993,6	3072	193741,9
2012	826,2	2818994,4	3412	210643,8
2013	808,6	2902065,4	3589	204761,7
2014	731	2754408	3768	199327,3
2015	661,4	3017968,2	4653	295634
2016	659,9	3834019	5810	298641

**Financial results from activities of enterprises in the motor transport sector of  
Ukraine (Transport i zviazok Ukrainy za 2016 rik (2017))**

Year	Profit/loss from ordinary activities before taxation, UAH mln	Enterprises that received profit		Enterprises that incurred losses	
		as % of the total number of en- terprises	financial result	as % of the total number of en- terprises	financial result
2010	5058,9	54,6	10387,7	45,4	5328,8
2011	8741,4	63,4	15692,2	36,6	6950,8
2012	7524,9	61,8	13946,5	38,2	6421,6
2013	834,3	63,1	9429,9	36,9	8595,6
2014	-24214,0	62,6	1175,6	37,4	35969,6
2015	-13921,8	70,9	23093,7	29,1	37015,5
2016	12239,0	71,6	28371,1	28,4	16132,1

**Dynamics of financial results from activities of motor transport enterprises of  
Kharkiv region, 2010-2016 (Transport i zviazok Ukrainy za 2016 rik (2017))**

Year	The financial result (balance), UAH mln	Enterprises that received profit		Enterprises that incurred losses	
		as % of the total number of en- terprises	financial result	as % of the total number of en- terprises	financial result
2010	-69,1	48,2	422,7	51,8	491,8
2011	66,4	59,2	617,1	40,8	550,7
2012	-198,3	57,8	128,9	42,2	327,2
2013	-56,9	58,8	203,3	41,2	260,2
2014	-721,1	61,3	209,8	38,7	930,9
2015	-541,3	62,7	209,9	36,8	751,2
2016	-447,5	64,2	215,6	35,8	663,1

**Profitability of business operations of enterprises in the motor transport sector of  
Kharkiv region, 2010-2016 (Transport i zviazok Ukrainy za 2016 rik (2017))**

Year	Profit from business operations, UAH mln	Operating costs, UAH mln	Profitability ratio (loss ratio), %
2010	9287,0	166701,3	5,6
2011	13413,4	219821,4	6,1
2012	11862,3	218313,0	5,4
2013	7402,7	210732,6	3,5
2014	-8081,3	225417,4	-3,6
2015	3505,6	329718,6	1,1
2016	18864,1	376855,8	5,0

Data of financial statements for 2011, UAH ths (SMIDA, 2017)

Name of the MTE	Identity code	Symbolic designation	Equity	Non-current assets	Current assets	Current liabilities	Long-term liabilities	Deferred income	Current financial investments	Cash in national currency	Cash in foreign currency	Balance	Profit	Income
Truck Fleet № 2	1268414	MTE 1	133	1242	1500	2610		2743		70		2743	642	6108
OJSC KhMTE	1268727	MTE 2	-3573	2568	2390	2933	5598	4958				4958	-141	1642
PJSC MTE – 16363	1332106	MTE 3	10672	9823	9481	8120	811	19603		1823	16	19603	2069	51415
Private Valky MTE – 16341	3115135	MTE 4	-497	211	996	1035	669	1207		38		1207	-33	2561
PJSC Krasnogradsk MTE – 16345	3115175	MTE 5	336,4	384,5	1,1	49,2		385,6		1,1		385,6	-4,2	24,5
PJSC MTE – 16301	3115330	MTE 6	-5700	128,7	476	944	5359	604,7		1,1		604,7	-149,6	377,9
PJSC MTE – 16350	3115212	MTE 7	1243	1358,3	45,1	160,4		1403,4		7,4		1403,4	-189,7	658,7
PJSC MTE – 16365	3118943	MTE 8	3282	3345	173	263		3545		4		3545	-86	1342
PJSC MTE – 16329	3120259	MTE 9												
OJSC MTE – 16351	14084041	MTE 10	542	746	282	424	62	1028		3		1028	-111	1261
Private JSC Service station MTE 16327	31633079	MTE 11	820,4	1540,9	334,2	1054,7		1875,1		1,8		1875,1	41	104
PJSC KMTE 2006	4404958	MTE 12	713,8	783,9	136,4	206,5		920,3		9,1		920,3	-240,2	317,1
Private JSC MTE	5379027	MTE 13	1504,4	1496	46	37,6		1542		8,3		1542	36,9	100,3
Private JSC Kharkiv MTE 16368	21188108	MTE 14	448,1	177	290,6	19,5		467,6		70,9		467,6	0,1	597,7

Data of financial statements for 2012, UAH ths (SMIDA, 2017)

Name of the MTE	Identity code	Symbolic designation	Equity	Non-current assets	Current assets	Current liabilities	Long-term liabilities	Deferred income	Current financial investments	Cash in national currency	Cash in foreign currency	Balance	Profit	Income
Truck Fleet № 2	1268414	MTE 1	435	2060	1533	3159		3594		44		3594	-318	2802
OJSC KhMTE	1268727	MTE 2	-3639	2124	2364	2554	5573	4488		10		4488	-66	1397
PJSC MTE – 16363	1332106	MTE 3	13656	12627	12047	6988	4348	24992		485	58	24992	3252	60855
Private Valky MTE – 16341	3115135	MTE 4	-536	230	1560	1657	669	1790		46		1790	-39	3985
PJSC Krasnogradsk MTE – 16345	3115175	MTE 5	335,1	384,5	0,6	50		385,1		0,6		385,1	-1,3	38,2
PJSC MTE – 16301	3115330	MTE 6	-5873	142,3	270,3	925	5359	412,6		1,1		412,6	-173,2	391,6
PJSC MTE – 16350	3115212	MTE 7	1229,6	1202,8	42,6	15,8		1245,4		3,9		1245,4	-13,4	507,1
PJSC MTE – 16365	3118943	MTE 8	3201	3269	138	231		3432		16		3432	-81	1101
PJSC MTE – 16329	3120259	MTE 9	369	3582	2077	2539	2765	5673		53		5673	7	8285
OJSC MTE – 16351	14084041	MTE 10	262	605	518	462	399	1123				1123	-280	122
Private JSC Service station MTE 16327	31633079	MTE 11	871,7	1639,2	261,9	1029,4		1901,1		0,5		1901,1	51,3	709,5
PJSC KMTE 2006	4404958	MTE 12	482,8	628,8	34,5	180,5		663,3		2,6		663,3	-231	507,3
Private JSC MTE	5379027	MTE 13	1500,7	1477	48,6	24,9		1525,6		3,8		1525,6	-3,7	208,9
Private JSC Kharkiv MTE 16368	21188108	MTE 14	285,3	152,4	168,8	35,9		321,2		22,1		321,2	-162,8	486,3



Data of financial statements for 2013, UAH ths (SMIDA, 2017)

Name of the MTE	Identity code	Symbolic designation	Equity	Non-current assets	Current assets	Current liabilities	Long-term liabilities	Deferred income	Current financial investments	Cash in national currency	Cash in foreign currency	Balance	Profit	Income
Truck Fleet № 2	1268414	MTE 1	787	1747	2454	3415		4202		21		4202	352	6117
OJSC KhMTE	1268727	MTE 2	-2183,4	1274,4	1418,4	1532,4	3343,8	2692,8		6		2692,8	-39,6	838,2
PJSC MTE – 16363	1332106	MTE 3	11731	13772	13334		11959	27106				27106	395	68081
Private Valky MTE – 16341	3115135	MTE 4	-617	252	1993		2193	2245				2245	-81	4295
PJSC Krasnogradsk MTE – 16345	3115175	MTE 5	334	384			50	384				384	-2	
PJSC MTE – 16301	3115330	MTE 6	-5044	119	28		4986	147				147	95	139
PJSC MTE – 16350	3115212	MTE 7	1670	1059	619		8	1678				1678	441	634
PJSC MTE – 16365	3118943	MTE 8	3076	3193	137		279	3355				3355	-125	1023
PJSC MTE – 16329	3120259	MTE 9	369	3582	2091		2539	5673				5673	7	8285
OJSC MTE – 16351	14084041	MTE 10	93	510	71		133	581				581		611
Private JSC Service station MTE 16327	31633079	MTE 11	778	1566,3	249,2	1037,5		1815,5		27,1		1815,5	94	902,8
PJSC KMTE 2006	4404958	MTE 12	233	523	126		416	649				649	130	495
Private JSC MTE	5379027	MTE 13	1459,1	1458	67,6	66,5		1525,6		5,2		1525,6	-41,5	247,1
Private JSC Kharkiv MTE 16368	21188108	MTE 14	201,8	144,5	101	43,7		245,5		0,2		245,5	-108,9	415,1

Data of financial statements for 2014, UAH ths (SMIDA, 2017)

Name of the MTE	Identity code	Symbolic designation	Equity	Non-current assets	Current assets	Current liabilities	Long-term liabilities	Deferred income	Current financial investments	Cash in national currency	Cash in foreign currency	Balance	Profit	Income
Truck Fleet № 2	1268414	MTE 1	1050	1465	5797		6212	7262				7262	263	5255
OJSC KhMTE	1268727	MTE 2	-1310	764,64	851,04	919,44	2006,28	1615,68		3,6		1615,7	-23,76	502,92
PJSC MTE – 16363	1332106	MTE 3	14404	15267	15948		13889	31215				31215	2684	75551
Private Valky MTE – 16341	3115135	MTE 4	-734	559	494		1118	1053				1053	-117	4295
PJSC Krasnogradsk MTE – 16345	3115175	MTE 5	331	384			53	384				384	-3	-3
PJSC MTE – 16301	3115330	MTE 6	-5189	104	20		4909	124				124	-145	-145
PJSC MTE – 16350	3115212	MTE 7	1672	918	764		10	1682				1682	2	398
PJSC MTE – 16365	3118943	MTE 8	3062	3101	152		216	3278				3278	-14	946
PJSC MTE – 16329	3120259	MTE 9	286	4869	3036		4115	7905				7905	-83	13579
OJSC MTE – 16351	14084041	MTE 10	1446	424	1037		13	1461				1461	1353	84
Private JSC Service station MTE 16327	31633079	MTE 11	804	1847,4	42,8	1086,2		1890,2		8,2		1890,2	26	945,2
PJSC KMTE 2006	4404958	MTE 12	-25	445	47		517	492				492	-258	223
Private JSC MTE	5379027	MTE 13	1401	1439,1	42,1	80,2		1481,2		2,8		1481,2	-58,1	263,6
Private JSC Kharkiv MTE 16368	21188108	MTE 14	155,1	109,6	103,3	57,8		212,9		1,4		212,9	-44,9	501,6

Data of financial statements for 2015, UAH ths (SMIDA, 2017)

Name of the MTE	Identity code	Symbolic designation	Equity	Non-current assets	Current assets	Current liabilities	Long-term liabilities	Deferred income	Current financial investments	Cash in national currency	Cash in foreign currency	Balance	Profit	Income
Truck Fleet № 2	1268414	MTE 1	1151,9	1607,1	6359,3		6814,6	7966,4				7966,4	288,5	5764,7
OJSC KhMTE	1268727	MTE 2	-1437,1	838,8	933,6	1008,6	2200,9	1772,4		3,9		1772,4	-26,1	551,7
PJSC MTE – 16363	1332106	MTE 3	15801,2	16747,9	17495,0		15236,2	34242,9				34242,9	2944,3	82879,4
Private Valky MTE – 16341	3115135	MTE 4	-805,2	613,2	541,9		1226,4	1155,1				1155,1	-128,3	4711,6
PJSC Krasnogradsk MTE – 16345	3115175	MTE 5	363,1	421,2			58,1	421,2				421,2	-3,3	-3,3
PJSC MTE – 16301	3115330	MTE 6	-5692,3	114,1	21,9		5385,2	136,0				136,0	-159,1	-159,1
PJSC MTE – 16350	3115212	MTE 7	1834,2	1007,0	838,1		11,0	1845,2				1845,2	2,2	436,6
PJSC MTE – 16365	3118943	MTE 8	3359,0	3401,8	166,7		237,0	3596,0				3596,0	-15,4	1037,8
PJSC MTE – 16329	3120259	MTE 9	313,7	5341,3	3330,5		4514,2	8671,8				8671,8	-91,1	14896,2
OJSC MTE – 16351	14084041	MTE 10	1586,3	465,1	1137,6		14,3	1602,7				1602,7	1484,2	92,1
Private JSC Service station MTE 16327	31633079	MTE 11	882,0	2026,6	47,0	1191,6		2073,5		9,0		2073,5	28,5	1036,9
PJSC KMTE 2006	4404958	MTE 12	-27,4	488,2	51,6		567,1	539,7				539,7	-283,0	244,6
Private JSC MTE	5379027	MTE 13	1536,9	1578,7	46,2	88,0		1624,9		3,1		1624,9	-63,7	289,2
Private JSC Kharkiv MTE 16368	21188108	MTE 14	170,1	120,2	113,3	63,4		233,6		1,5		233,6	-49,3	550,3

Data of financial statements for 2016, UAH ths (SMIDA, 2017)

Name of the MTE	Identity code	Symbolic designation	Equity	Non-current assets	Current assets	Current liabilities	Long-term liabilities	Deferred income	Current financial investments	Cash in national currency	Cash in foreign currency	Balance	Profit	Income
Truck Fleet № 2	1268414	MTE 1	1154,0	1610,0	6370,9		6827,0	7980,9				7980,9	289,0	5775,2
OJSC KhMTE	1268727	MTE 2	-1439,7	840,3	935,3	1010,5	2204,9	1775,6		4,0		1775,7	-26,1	552,7
PJSC MTE – 16363	1332106	MTE 3	15830,0	16778,4	17526,9		15264,0	34305,3				34305,3	2949,7	83030,5
Private Valky MTE – 16341	3115135	MTE 4	-806,7	614,3	542,9		1228,7	1157,2				1157,2	-128,6	4720,2
PJSC Krasnogradsk MTE – 16345	3115175	MTE 5	363,8	422,0			58,2	422,0				422,0	-3,3	-3,3
PJSC MTE – 16301	3115330	MTE 6	-5702,7	114,3	22,0		5395,0	136,3				136,3	-159,4	-159,4
PJSC MTE – 16350	3115212	MTE 7	1837,5	1008,9	839,6		11,0	1848,5				1848,5	2,2	437,4
PJSC MTE – 16365	3118943	MTE 8	3365,1	3408,0	167,0		237,4	3602,5				3602,5	-15,4	1039,7
PJSC MTE – 16329	3120259	MTE 9	314,3	5351,0	3336,6		4522,4	8687,6				8687,6	-91,2	14923,3
OJSC MTE – 16351	14084041	MTE 10	1589,2	466,0	1139,7		14,3	1605,6				1605,6	1486,9	92,3
Private JSC Service station MTE 16327	31633079	MTE 11	883,6	2030,3	47,0	1193,7		2077,3		9,0		2077,3	28,6	1038,8
PJSC KMTE 2006	4404958	MTE 12	-27,5	489,1	51,7		568,2	540,7				540,7	-283,5	245,1
Private JSC MTE	5379027	MTE 13	1539,7	1581,6	46,3	88,1		1627,8		3,1		1627,8	-63,9	289,7
Private JSC Kharkiv MTE 16368	21188108	MTE 14	170,5	120,5	113,5	63,5		234,0		1,5		234,0	-49,3	551,3

## Indicators of property status, 2011-2016

Name of the MTE	Symbolic designation	2011		2012		2013		2014		2015		2016	
		$\Phi_{11}$	$\Phi_{12}$	$\Phi_{11}$	$\Phi_{12}$	$\Phi_{11}$	$\Phi_{12}$	$\Phi_{11}$	$\Phi_{12}$	$\Phi_{11}$	$\Phi_{12}$	$\Phi_{11}$	$\Phi_{12}$
Truck Fleet № 2	MTE 1	2743,00	0,27	3594,00	0,28	4202,00	0,29	7262,00	0,31	7530,69	0,32	7980,94	0,32
OJSC KhMTE	MTE 2	4958,00	0,54	4488,00	0,56	2692,80	0,59	1615,68	0,62	0,00	0,64	1775,65	0,64
PJSC MTE – 16363	MTE 3	19603,00	0,33	24992,00	0,35	27106,00	0,36	31215,00	0,38	32369,96	0,39	34305,29	0,40
Private Valky MTE – 16341	MTE 4	1207,00	0,43	1790,00	0,45	2245,00	0,47	1053,00	0,49	1091,96	0,50	1157,25	0,51
PJSC Krasnogradsk MTE – 16345	MTE 5	385,60	0,62	385,10	0,65	384,00	0,68	384,00	0,71	398,21	0,73	422,02	0,74
PJSC MTE – 16301	MTE 6	604,70	0,62	412,60	0,65	147,00	0,68	124,00	0,71	128,59	0,73	136,28	0,74
PJSC MTE – 16350	MTE 7	1403,40	0,71	1245,40	0,74	1678,00	0,77	1682,00	0,81	1744,23	0,83	1848,52	0,84
PJSC MTE – 16365	MTE 8	3545,00	0,59	3432,00	0,62	3355,00	0,65	3278,00	0,68	3399,29	0,70	3602,52	0,71
PJSC MTE – 16329	MTE 9	0,00	0,39	5673,00	0,40	5673,00	0,42	7905,00	0,44	8197,49	0,45	8687,60	0,46
OJSC MTE – 16351	MTE 10	1028,00	0,49	1123,00	0,51	581,00	0,53	1461,00	0,56	1515,06	0,58	1605,64	0,58
Private JSC Service station MTE 16327	MTE 11	1875,10	0,45	1901,10	0,47	1815,50	0,49	1890,20	0,52	1960,14	0,54	2077,33	0,54
PJSC KMTE 2006	MTE 12	920,30	0,47	663,30	0,49	649,00	0,51	492,00	0,54	510,20	0,56	540,71	0,56
Private JSC MTE	MTE 13	1542,00	0,57	1525,60	0,59	1525,60	0,62	1481,20	0,65	1536,00	0,67	1627,84	0,68
Private JSC Kharkiv MTE 16368	MTE 14	467,60	0,59	321,20	0,61	245,50	0,64	212,90	0,67	220,78	0,69	233,98	0,70

## Indicators of financial independence, 2011-2016

Name of the MTE	Symbolic designation	2011		2012		2013		2014		2015		2016	
		$\Phi_{21}$	$\Phi_{22}$	$\Phi_{21}$	$\Phi_{22}$	$\Phi_{21}$	$\Phi_{22}$	$\Phi_{21}$	$\Phi_{22}$	$\Phi_{21}$	$\Phi_{22}$	$\Phi_{21}$	$\Phi_{22}$
Truck Fleet № 2	MTE 1	0,05	4,02	0,12	15,52	0,19	9,68	0,14	12,83	0,14	13,21	0,15	13,34
OJSC KhMTE	MTE 2	-0,72	-3,78	-0,81	-3,47	-0,81	-3,47	-0,81	-3,47	-0,83	-3,57	-0,84	-3,61
PJSC MTE – 16363	MTE 3	0,55	2,67	0,55	2,66	0,43	3,33	0,46	3,13	0,47	3,22	0,48	3,26
Private Valky MTE – 16341	MTE 4	-0,41	-5,86	-0,30	-7,68	-0,27	-7,19	-0,70	-2,96	-0,72	-3,05	-0,73	-3,08
PJSC Krasnogradsk MTE – 16345	MTE 5	0,87	1,29	0,87	1,30	0,87	1,30	0,86	1,32	0,89	1,36	0,89	1,37
PJSC MTE – 16301	MTE 6	-9,43	-1,21	-1,42	-1,14	-3,43	-1,02	-4,15	-0,97	-4,27	-1,00	-4,32	-1,01
PJSC MTE – 16350	MTE 7	0,89	1,26	0,99	1,03	1,00	1,01	0,99	1,01	1,02	1,04	1,03	1,05
PJSC MTE – 16365	MTE 8	0,93	1,16	0,94	1,14	0,92	1,18	0,94	1,14	0,97	1,17	0,98	1,19
PJSC MTE – 16329	MTE 9			0,07	2,97	0,07	2,22	0,04	4,20	0,04	4,33	0,04	4,37
OJSC MTE – 16351	MTE 10	0,53	2,79	0,23	7,57	0,16	7,68	0,99	1,02	1,02	1,05	1,03	1,06
Private JSC Service station MTE 16327	MTE 11	0,44	3,57	0,46	3,36	0,43	3,67	0,43	3,70	0,44	3,81	0,45	3,85
PJSC KMTE 2006	MTE 12	0,78	1,58	0,73	1,75	0,36	4,57	-0,05	-4,03	-0,05	-4,15	-0,05	-4,19
Private JSC MTE	MTE 13	0,98	1,05	0,98	1,03	0,98	1,03	0,95	1,11	0,98	1,14	0,99	1,15
Private JSC Kharkiv MTE 16368	MTE 14	0,96	1,09	0,89	1,25	0,89	1,25	0,73	1,75	0,75	1,80	0,76	1,82

## Indicators of financial stability, 2011-2016

Name of the MTE	Symbolic designation	2011		2012		2013		2014		2015		2016	
		$\Phi_{31}$	$\Phi_{32}$	$\Phi_{31}$	$\Phi_{32}$	$\Phi_{31}$	$\Phi_{32}$	$\Phi_{31}$	$\Phi_{32}$	$\Phi_{31}$	$\Phi_{32}$	$\Phi_{31}$	$\Phi_{32}$
Truck Fleet № 2	MTE 1	-8,35	0,02	-3,74	0,06	-1,22	0,10	5,52	0,08	5,69	0,08	5,74	0,08
OJSC KhMTE	MTE 2	0,15	-0,26	0,05	-0,29	0,05	-0,29	0,05	-0,29	0,05	-0,30	0,05	-0,30
PJSC MTE – 16363	MTE 3	0,13	0,37	0,37	0,38	1,14	0,30	1,11	0,32	1,14	0,33	1,15	0,33
Private Vally MTE – 16341	MTE 4	0,08	-0,17	0,18	-0,13	-3,23	-0,14	-0,67	-0,34	-0,69	-0,35	-0,70	-0,35
PJSC Krasnogradsk MTE – 16345	MTE 5	-0,14	0,77	-0,15	0,77	0,00	0,77	0,00	0,76	0,00	0,78	0,00	0,79
PJSC MTE – 16301	MTE 6	0,08	-0,83	0,11	-0,88	-0,01	-0,98	0,00	-1,03	0,00	-1,06	0,00	-1,07
PJSC MTE – 16350	MTE 7	-0,09	0,79	0,02	0,97	0,37	0,99	0,46	0,99	0,47	1,02	0,48	1,03
PJSC MTE – 16365	MTE 8	-0,03	0,86	-0,03	0,87	0,04	0,85	0,05	0,88	0,05	0,91	0,05	0,92
PJSC MTE – 16329	MTE 9			-1,25	0,03	5,67	0,04	10,62	0,02	10,94	0,02	11,04	0,02
OJSC MTE – 16351	MTE 10	-0,26	0,36	0,21	0,13	0,76	0,13	0,72	0,98	0,74	1,01	0,75	1,02
Private JSC Service station MTE 16327	MTE 11	-0,88	0,28	-0,88	0,30	-1,01	0,27	-1,30	0,27	-1,34	0,28	-1,35	0,28
PJSC KMTE 2006	MTE 12	-0,10	0,63	-0,30	0,57	0,54	0,22	-1,88	-0,02	-1,94	-0,02	-1,96	-0,02
Private JSC MTE	MTE 13	0,01	0,95	0,02	0,97	0,02	0,97	-0,03	0,90	-0,03	0,93	-0,03	0,94
Private JSC Kharkiv MTE 16368	MTE 14	0,60	0,92	0,47	0,80	0,47	0,80	0,29	0,57	0,30	0,59	0,30	0,59

## Indicators of assets liquidity, 2011-2016

Name of the MTE	Symbolic designation	2011		2012		2013		2014		2015		2016	
		$\Phi_{41}$	$\Phi_{42}$	$\Phi_{41}$	$\Phi_{42}$	$\Phi_{41}$	$\Phi_{42}$	$\Phi_{41}$	$\Phi_{42}$	$\Phi_{41}$	$\Phi_{42}$	$\Phi_{41}$	$\Phi_{42}$
Truck Fleet № 2	MTE 1	0,03	-1110,00	0,01	-1626,00	0,01	-961,00		5797,00		5970,91		6028,88
OJSC KhMTE	MTE 2	0,00	-543,00	0,00	-190,00	0,00	-114,00	0,00	-68,40		-60,45		-51,14
PJSC MTE – 16363	MTE 3	0,23	1361,00	0,08	5059,00		13334,00		15948,00		16426,44		16585,92
Private Valky MTE – 16341	MTE 4	0,04	-39,00	0,03	-97,00		1993,00		494,00		508,82		513,76
PJSC Krasnogradsk MTE – 16345	MTE 5	0,02	-48,10	0,01	-49,40								
PJSC MTE – 16301	MTE 6	0,00	-468,00	0,00	-654,70		28,00		20,00		20,60		20,80
PJSC MTE – 16350	MTE 7	0,05	-115,30	0,25	26,80		619,00		764,00		786,92		794,56
PJSC MTE – 16365	MTE 8	0,02	-90,00	0,07	-93,00		137,00		152,00		156,56		158,08
PJSC MTE – 16329	MTE 9		0,00	0,02	-462,00		2091,00		3036,00		3127,08		3157,44
OJSC MTE – 16351	MTE 10	0,01	-142,00	0,00	56,00		71,00		1037,00		1068,11		1078,48
Private JSC Service station MTE 16327	MTE 11	0,00	-720,50	0,00	-767,50	0,03	-788,30	0,01	-1043,40	0,01	-1074,70	0,01	-1085,14
PJSC KMTE 2006	MTE 12	0,04	-70,10	0,01	-146,00		126,00		47,00		48,41		48,88
Private JSC MTE	MTE 13	0,22	8,40	0,15	23,70	0,08	1,10	0,03	-38,10	0,03	-39,24	0,03	-39,62
Private JSC Kharkiv MTE 16368	MTE 14	3,64	271,10	0,62	132,90	0,00	57,30	0,02	45,50	0,02	4,87	0,02	4,72



## Indicators of profitability, 2011-2016

Name of the MTE	Symbolic designation	2011		2012		2013		2014		2015		2016	
		$\Phi_{51}$	$\Phi_{52}$	$\Phi_{51}$	$\Phi_{52}$	$\Phi_{51}$	$\Phi_{52}$	$\Phi_{51}$	$\Phi_{52}$	$\Phi_{51}$	$\Phi_{52}$	$\Phi_{51}$	$\Phi_{52}$
Truck Fleet № 2	MTE 1	0,11	4,83	-0,11	-0,73	0,06	0,45	0,05	0,25	0,05	0,26	0,05	0,26
OJSC KhMTE	MTE 2	-0,09	0,04	-0,05	0,02	-0,05	0,02	-0,05	0,02	-0,05	0,02	-0,05	0,02
PJSC MTE – 16363	MTE 3	0,04	0,19	0,05	0,24	0,01	0,03	0,04	0,19	0,04	0,20	0,04	0,20
Private Vally MTE – 16341	MTE 4	-0,01	0,07	-0,01	0,07	-0,02	0,13	-0,03	0,16	-0,03	0,16	-0,03	0,17
PJSC Krasnogradsk MTE – 16345	MTE 5	-0,17	-0,01	-0,03	0,00		-0,01	1,00	-0,01	1,03	-0,01	1,04	-0,01
PJSC MTE – 16301	MTE 6	-0,40	0,03	-0,44	0,03	0,68	-0,02	1,00	0,03	1,03	0,03	1,04	0,03
PJSC MTE – 16350	MTE 7	-0,29	-0,15	-0,03	-0,01	0,70	0,26	0,01	0,00	0,01	0,00	0,01	0,00
PJSC MTE – 16365	MTE 8	-0,06	-0,03	-0,07	-0,03	-0,12	-0,04	-0,01	0,00	-0,01	0,00	-0,01	0,00
PJSC MTE – 16329	MTE 9			0,00	0,02	0,00	0,02	-0,01	-0,29	-0,01	-0,30	-0,01	-0,30
OJSC MTE – 16351	MTE 10	-0,09	-0,20	-2,30	-1,07	0,00	0,00	1,61	0,94	1,66	0,97	1,67	0,98
Private JSC Service station MTE 16327	MTE 11	0,39	0,05	0,07	0,06	0,10	0,12	0,03	0,03	0,03	0,03	0,03	0,03
PJSC KMTE 2006	MTE 12	-0,76	-0,34	-0,46	-0,48	0,26	0,56	-1,16	10,32	-1,19	10,63	-1,21	10,73
Private JSC MTE	MTE 13	0,37	0,02	-0,02	0,00	-0,17	-0,03	-0,22	-0,04	-0,23	-0,04	-0,23	-0,04
Private JSC Kharkiv MTE 16368	MTE 14	0,00	0,00	-0,33	-0,57	-0,26	-0,54	-0,09	-0,29	-0,09	-0,30	-0,09	-0,30

Indicators of business activity, 2011-2016

Name of the MTE	Symbolic designation	2011		2012		2013		2014		2015		2016	
		$\Phi_{61}$	$\Phi_{62}$	$\Phi_{61}$	$\Phi_{62}$	$\Phi_{61}$	$\Phi_{62}$	$\Phi_{61}$	$\Phi_{62}$	$\Phi_{61}$	$\Phi_{62}$	$\Phi_{61}$	$\Phi_{62}$
Truck Fleet № 2	MTE 1	2,23	45,92	0,78	6,44	1,46	7,77	0,72	5,00	0,74	5,15	0,75	5,20
OJSC KhMTE	MTE 2	0,33	-0,46	0,31	-0,38	0,31	-0,38	0,31	-0,38	0,32	-0,39	0,32	-0,40
PJSC MTE – 16363	MTE 3	2,62	4,82	2,43	4,46	2,51	5,80	2,42	5,25	2,49	5,41	2,52	5,46
Private Valky MTE – 16341	MTE 4	2,12	-5,15	2,23	-7,43	1,91	-6,96	4,08	-5,85	4,20	-6,03	4,24	-6,08
PJSC Krasnogradsk MTE – 16345	MTE 5	0,06	0,07	0,10	0,11	0,00	0,00	-0,01	-0,01	-0,01	-0,01	-0,01	-0,01
PJSC MTE – 16301	MTE 6	0,62	-0,07	0,95	-0,07	0,95	-0,03	-1,17	0,03	-1,21	0,03	-1,22	0,03
PJSC MTE – 16350	MTE 7	0,47	0,53	0,41	0,41	0,38	0,38	0,24	0,24	0,25	0,25	0,25	0,25
PJSC MTE – 16365	MTE 8	0,38	0,41	0,32	0,34	0,30	0,33	0,29	0,31	0,30	0,32	0,30	0,32
PJSC MTE – 16329	MTE 9			1,46	22,45	1,46	22,45	1,72	47,48	1,77	48,90	1,79	49,38
OJSC MTE – 16351	MTE 10	1,23	2,33	0,11	0,47	1,05	6,57	0,06	0,06	0,06	0,06	0,06	0,06
Private JSC Service station MTE 16327	MTE 11	0,06	0,13	0,37	0,81	0,50	1,16	0,50	1,18	0,52	1,22	0,52	1,23
PJSC KMTE 2006	MTE 12	0,34	0,44	0,76	1,05	0,76	2,12	0,45	-8,92	0,46	-9,19	0,47	-9,28
Private JSC MTE	MTE 13	0,07	0,07	0,14	0,14	0,16	0,17	0,18	0,19	0,19	0,20	0,19	0,20
Private JSC Kharkiv MTE 16368	MTE 14	1,28	1,33	1,51	1,70	1,69	2,06	2,36	3,23	2,43	3,33	2,45	3,36

**The list of the motor transport enterprises studied**

Name of the MTE	Code of Unified State Register of Enterprises and Organizations of Ukraine	Symbolic designation
Truck Fleet № 2	01268414	MTE1
OJSC KhMTE	01268727	MTE2
PJSC MTE – 16363	01332106	MTE 3
Private Valky MTE – 16341	03115135	MTE 4
PJSC Krasnogradsk MTE – 16345	03115175	MTE 5
PJSC MTE – 16301	03115330	MTE 6
PJSC MTE – 16350	03115212	MTE 7
PJSC MTE – 16365	03118943	MTE 8
PJSC MTE – 16329	03120259	MTE 9
OJSC MTE – 16351	14084041	MTE 10
Private JSC Service station MTE 16327	31633079	MTE 11
PJSC KMTE 2006	04404958	MTE 12
Private JSC MTE	05379027	MTE 13
Private JSC Kharkiv MTE 16368	21188108	MTE 14

**The integral index of investment attractiveness of motor transport enterprises**

Symbolic designation	2011	2012	2013	2014	2015	2016	Average value
MTE1	0,71	0,4	0,75	0,81	0,84	0,85	0,73
MTE2	0,39	0,29	0,28	0,28	0,28	0,27	0,30
MTE 3	1,1	1,25	1,19	0,98	0,97	0,98	1,08
MTE 4	0,54	0,23	0,19	0,4	0,50	0,52	0,40
MTE 5	0,56	0,72	0,7	0,89	0,81	0,85	0,76
MTE 6	-0,22	-0,1	0,34	0,02	0,01	0,01	0,01
MTE 7	0,65	1,05	1,28	0,83	0,91	0,94	0,94
MTE 8	0,73	0,8	0,71	0,73	0,74	0,76	0,75
MTE 9	0,28	1,09	1,09	1,1	1,12	1,12	0,97
MTE 10	0,61	-0,01	0,76	1,03	1,01	1,02	0,74
MTE 11	0,58	0,51	0,63	0,53	0,67	0,59	0,59
MTE 12	0,23	0,49	0,85	0,09	0,08	0,20	0,32
MTE 13	0,95	0,83	0,82	0,79	0,79	0,78	0,83
MTE 14	1,16	1,09	0,82	0,96	0,97	1,01	1,00

**Operating profitability of enterprises of the motor transport sector of  
Ukraine in 2011-2016, %**

Symbolic designation of the enterprise	2011	2012	2013	2014	2015	2016
MTE1	4,83	-0,73	0,45	0,25	0,32	0,31
MTE2	0,04	0,02	0,02	0,02	0,2	0,2
MTE3	0,19	0,24	0,03	0,19	0,14	0,27
MTE4	0,07	0,07	0,13	0,16	0,19	0,2
MTE5	-0,01	0	-0,01	-0,01	0	0,06
MTE6	0,03	0,03	-0,02	0,03	0,02	0,03
MTE7	-0,15	-0,01	0,26	0	0,1	0,15
MTE8	-0,03	-0,03	-0,04	0	0	0
MTE9		0,02	0,02	-0,29	-0,2	-0,07
MTE10	-0,2	-1,07	0	0,94	0,9	0,91
MTE11	0,05	0,06	0,12	0,03	0,12	0,1
MTE12	-0,34	-0,48	0,56	1,03	1	0,6
MTE13	0,02	0	-0,03	-0,04	0	0,1
MTE14	0	-0,57	-0,54	-0,29	0,1	0,22
Sector	6,3	1,9	2,3	-1,7	1,1	5,1

MYKOLAS ROMERIS UNIVERSITY

**Yaroslava Levchenko**

**ASSESSING AND ENSURING ENTERPRISE  
INVESTMENT ATTRACTIVENESS IN THE  
CONTEXT OF REGIONAL DEVELOPMENT**

Summary of Doctoral Dissertation  
Social Sciences, Economics (04 S)

Vilnius, 2018

This doctoral dissertation was prepared during the period 2014-2017 in Kharkiv National Automobile and Highway University (Ukraine) and during the period 2017-2018 at Mykolas Romeris University under the right to organise doctoral studies granted to Vytautas Magnus University together with ISM University of Management and Economics, Aleksandras Stulginskis University, Mykolas Romeris University and Šiauliai University by the order of the Minister of Education and Science of the Republic of Lithuania No. V-1019 dated on June 8, 2011.

The doctoral dissertation is defended externally.

**Scientific consultant:**

Prof. Dr. Asta Vasiliauskaitė (Mykolas Romeris University, Social Sciences, Economics, 04S)

The doctoral dissertation will be defended in the Council of Economic Science of Vytautas Magnus University, Aleksandras Stulginskis University, ISM University of Management and Economics, Mykolas Romeris University and Šiauliai University:

*Chairman:*

Prof. Dr. Valdonė Darškuvienė (ISM University of Management and Economics, Social Sciences, Economics, 04S)

*Members:*

Prof. Dr. Daiva Jurevičienė (Mykolas Romeris University, Social Sciences, Economics, 04S);

Assoc. Prof. Dr. Jekaterina Kartašova (Mykolas Romeris University, Social Sciences, Economics, 04S);

Prof. Dr. Kristina Levišauskaitė (Vytautas Magnus University, Social Sciences, Economics, 04S);

Prof. Dr. Tatjana Põlajeva (EuroAcademy, Estonia, Social Sciences, Economics, 04S).

The doctoral dissertation will be defended in the public session of the Council of Economic Science at Mykolas Romeris University, held at 11:00 on 22 June, 2018 at Mykolas Romeris University, Room II-230.

Address: Ateities g. 20, LT-08303 Vilnius, Lithuania.

The summary of the Doctoral Dissertation was sent on 22 May, 2018.

The Doctoral Dissertation is available at Martynas Mažvydas National Library of Lithuania (Gedimino ave. 51, Vilnius), Vytautas Magnus University library, ISM University of Management and Economics library, Lithuanian University of Agriculture (current Aleksandras Stulginskis University) library, Mykolas Romeris University library (Ateities str. 20, Vilnius) and Šiauliai University library.

## INTRODUCTION

### **Relevance of the research.**

Nowadays, a number of studies are being carried out to assess attractiveness of individual enterprises, regions and countries. To date, the investment attractiveness of an enterprise is determined not only by indicators of its economic activity but also by factors that influence the investment attractiveness of the city, region, sector, in which it operates. That is why, the interest of science, politics, business in investment attractiveness continues to grow and this happens, in particular, due to its impact on competitiveness and sustainable development of national economies. Therefore, it is necessary to conduct additional research in the field of assessment of enterprise investment attractiveness in the context of regional development, which constitutes the main objective of the thesis.

Research projects focusing on inflows of foreign direct investment into specific areas and investment attractiveness are conducted both by academic economists and world leading consulting companies. UNCTAD is an institution that deals with incentives for investors and foreign investment inflows into different world markets. The Polish publications presenting the issues of investment attractiveness include a collective publication "Investment Attractiveness of Polish Regions" (Godlewska-Majkowska, 2008). Some problems related to investment attractiveness are addressed in the work entitled "Investment Attractiveness of a Region" (The BPCC economic debate, 2017). The issues of investment attractiveness are also raised by such consulting companies as Ernst & Young (2009, 2008, 2007, 2006), KPMG (2009), Kearney (2009, 2007), what they were analysing. Some consulting companies, in particular, PriceWaterhouseCoopers, are interested in attractiveness of the Central and Eastern European market.

Increasing the investment attractiveness can help an enterprise to create competitive advantages, open opportunities for innovation, reduce operating risks and operating costs, and improve the enterprise's profitability.

The researchers speak about the importance of investment attractiveness of an individual enterprise as a constituent and main part of a region's and country's investment attractiveness. Competitiveness of an industrial sector as well as of the whole country depends on competitiveness of enterprises. It is the basis of the European Union's economy (European Commission, 2016). Fluctuations in the economic activity have forced business to change traditional methods of organization and management and to search for new tools, knowledge, resources and competencies in order to strengthen its position and ensure competitiveness of enterprises. It is not enough to pay attention only to the investment attractiveness of an enterprise. Its competitiveness depends on the sector and the region in which it operates (The BPCC economic debate, 2017).

In this regard, researchers pay special attention to a fairly new concept – investment attractiveness – and methods for its assessment.

### **Scientific problem and the level of its investigation**

In order to objectively reveal the level of the analysed problem, an investigation was performed with searching topical publications in scientific databases. The research of theo-



retical and methodological principles of assessment of IA was carried out in works by local and foreign scientists. It should be noted each author has his own point of view regarding the definition of this concept and offers his own vision of IA and methods for its assessment. And since discussions in the field of research of the theoretical and methodological principles of assessment of investment attractiveness assessment continue, this problem remains relevant.

The conducted research made it possible to draw the following conclusions and generalizations: Ukrainian and foreign scientists, who deal with the problems of investment attractiveness, perform their studies in three areas, namely investment attractiveness of a country, investment attractiveness of an industrial sector, region or territory, and investment attractiveness of an enterprise.

The most recent studies among the scientists of the first group are conducted by Birnleitner (2014), Škuflić, Rkman & Šokčević (2013), Serhieieva (2015), Kwang-Hoon Lee (2016), Dorożyński & Kuna-Marszałek (2016); Kazakhstan investment attractiveness – Ernst & Young's investor opinion survey (2011), Langalanga (2015), EY's attractiveness survey: India 2014. Enabling the prospects (2014), Dumon (2012), who conduct research on investment attractiveness of a country. All of them are sure and assert that since the concept of investment attractiveness of a country is a multifaceted concept, components of its integral index are investment attractiveness of regions and enterprises.

The researchers of the second group, who study the problems of investment attractiveness of a region, sector or territory, feel certain of the importance of the problem under study, since they singled out it as a component of the overall indicator of a country's investment attractiveness. They are also sure that investment attractiveness of enterprises operating on the territory of a region has a significant impact on the attractiveness of the region. Among these scientists are Snieska & Zykiene (2015), Dorożyński & Kuna-Marszałek (2016), Mustafakulov (2016, 2017), Snieska & Zykiene (2011), Litavniece (2014), Bruneckienė, Zykiene & Stankevičius (2016), Durdieva (2013), Saidi (2016), Symon-Nganga & Maruyama (2015), Damborsky & Rihova (2009), Mohammed Hamri, Zerouali Ouariti & Sadiqui (2014), Lapointe (2004), Nizielska (2012), Zakirova (2016), Sinkiene & Kromalcas (2010).

As for the researchers of the third group (Drábek & Merková (2015), Krupka & Bachinskiy (2014), Strokovich (2009), Mirkin (2006), Tsarev (2012), Anamari-Beatrice (2014), Mittala & Jhamb (2016), Rębiasz & Macioł (2014), Rolik (2012, 2013), Vetlugin (2006), Kolomits (2013), Kredisov (2013), who study the problems of investment attractiveness of an enterprise, consider their studies basic ones, since without increasing investment attractiveness of enterprises, it is impossible to increase the attractiveness of a region, sector, and country as a whole.

All the researchers who deal with the problem of investment attractiveness (scientists of all defined groups) are unanimously convinced that investment attractiveness, as an independent definition, an element of a complex system, is one of conditions for formation of an investment environment and needs be assessed. And since the enterprise is recognized as a fundamental link in the formation of the investment attractiveness of a country, region or territory, there arises the question of how to assess the investment attractiveness of an enterprise, and what factors should be taken into account at the same time? The issue of assessing

investment attractiveness is especially relevant when it comes to assessing a large number of applicants for investment. How to determine the most interesting enterprise for investment, which enterprise is the most investment-attractive, and how risky such investments are?

The answer to this question can be found in the works of scientists who offer different models and methods for assessing enterprise investment attractiveness. Models for assessment of investment attractiveness at the micro level are presented in such scientific works as “Model for quantifying the components of the innovation strategy” (Rolik, 2013), “Model for business activity assessment” (Nizielska, 2012), “Assessment model on the basis of forecast estimates” (Rębiasz & Macioł, 2014), Method for integral assessment of investment attractiveness of enterprises and organizations” of Agency on Prevention of Bankruptcy of Enterprises and Organizations (ABEO), which was developed on the initiative of the administration of Agency on Prevention of Bankruptcy of Enterprises and Organizations (ABEO) and registered in the Ministry of Justice of Ukraine (ABEO, 1998). All these methods for assessing the enterprise investment attractiveness offer a comprehensive approach, taking into account the enterprise’s performance indicators, risk and regional affiliation. As a result of assessing the investment attractiveness of the enterprise, it’s possible to obtain a number of performance indicators for further comparison and compilation of the final conclusion. None of the methods provides for obtaining one universal value, according to which it was possible to unequivocally answer the question of which enterprise is more investment attractive, which one is less attractive and to what extent?

Snieska & Zykiene (2015) determined that for investors the provision of business support services is an important factor. In the scientific literature this aspect is neither defined nor clarified (Snieska & Zykiene, 2015). Such researchers as Otairua, Umarb, Zawawib, Sodangic & Hammad (2014), Pribadi & Pangeran (2010), Anamari-Beatrice (2014), Yang, Long & Li (2017), Liu, Gao, Cheah & Luo (2016), Wang & Liu (2015), Cedrick & Long (2017), Kurniawan, Mudjanarkoa & Ogunlana (2015), Kurniawan, Ogunlana & Motawa (2014), Hucknall (2010), Siemiatycki (2009), Kaka & Al-sharif (2010), Zeneli (2016) offer systems for ensuring interaction between the state and a private investor within the framework of public-private partnership (PPP). Since self-increasing of the enterprise IA becomes problematic under crisis conditions in the country, such authors as Mankiw (2014), Cedricks & Longs (2017), Yang, Long & Wenbo Li (2017), Liu, Gao, Cheah, & Luo (2016), Wang & Liu (2015), Kurniawan, Mudjanarko & Ogunlana (2015), Zeneli (2016) and Burkov & Novikov (2007) proposed mechanisms and models for ensuring provision of incentives for investors within the framework of PPP.

Summarizing, it can be stated that the question of enterprise IA assesment is important, relevant and new from the point of view of scientific investigations and practical application, however

- enterprise IA needs further research;
- factors influancing IA are not analysed thoroughly enough;
- methodologies and models for assessing enterprise IA require scientific improvements;
- provision of effective functioning of the system for ensuring enterprise investment attractiveness requires new proposals.

In general, assessment of enterprise investment attractiveness requires improvement and consideration in the context of regional development. Deficiency of researches on assessing enterprise IA, disagreements on the assessment methods used motivate further investigation. Researchers analyzing the influence of various factors on enterprise IA concentrated on different aspects. They assessed the IA of an enterprise, a region, and city having obtained a large number of resultive indicators, but no one proposed a universal model for assessment of enterprise investment attractiveness in the context of regional development which determines the influence of the factor of interaction with the state and the mechanism of such interaction. It left a gap concerning assessment of enterprise investment attractiveness in the context of regional development. Furthermore, there is still a lack of complex methodology for assessment of enterprise investment attractiveness in the context of regional development.

**The scientific problem** is how to assess and ensure enterprise investment attractiveness in the context of regional development.

**The object of the scientific research** is methods and models for assessing and ensuring enterprise investment attractiveness in the context of regional development.

**The aim of the scientific research** is to develop the model for assessing and ensuring enterprise investment attractiveness in the context of regional development and to test it in Kharkov region.

**The objectives of the scientific research are**

1. to clarify the conceptual apparatus of the main structural components of investment attractiveness, namely to analyze the approaches of scientists to the understanding of the concept of investment attractiveness, determine its content;
2. to study in detail the factors influencing investment attractiveness as well as the indicators that form these factors, to determine among them the most significant factors, to systematize the obtained results for assessing enterprise investment attractiveness in the context of regional development;
3. using the experience of developed European countries, to determine the role of PPP in ensuring enterprise investment attractiveness in the context of regional development;
4. based on the existing models for assessment of investment attractiveness and by analyzing the existing approaches to IA assessment, to determine their advantages and disadvantages, develop a model for assessment of enterprise investment attractiveness in the context of regional development;
5. with the aim of ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism, to propose for implementation a model for ensuring enterprise investment attractiveness in the context of regional development;
6. to test the proposed model for ensuring enterprise investment attractiveness in the context of regional development based on motor transport enterprises of Kharkiv region;
7. to test the proposed model for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism based on motor transport enterprises of Kharkiv region.

### **Relationship with academic programs, plans, themes**

The research topic is relevant to the topic of a scientific and research work of Department of Economy and Entrepreneurship of Kharkiv National Automobile and Highway University (KNAHU) “Prospects for entrepreneurship development in Ukraine” (state registration number 0114U003909) and “The priority directions and prospects of management of business development” (state registration number 0115U004774), in which the author was engaged as a collaborator. Within the frame of the research theoretical aspects of development of entrepreneurship were substantiated, theoretical and methodological approaches to assessment of enterprise investment attractiveness in the context of regional development were considered.

### **The methods of the research**

To solve the problem raised in the dissertation, there applied the following scientific research methods:

- critical analysis, abstract-logical method and generalization of scientific experience – at improving the principles for assessing investment attractiveness;
- analysis, synthesis and comparison – at systematizing factors of influence of the external and internal environment on enterprise IA, determining objectives of the system for ensuring enterprise IA, generalizing methods for assessment of enterprise IA;
- economic and mathematical modeling and factor analysis, optimization method – at developing a model for assessment of enterprise IA;
- the mathematical method of studying optimal strategies – at developing a model for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism;
- mathematical and statistical analysis of research results conducted by employing the software of statistical data processing, SPSS (v21.0) and Microsoft Excel (2010).

**Data and their sources.** The research is based on historical data from 2011 to 2016 (6 years). The theoretical sources used in the research on assessment of enterprise investment attractiveness include the books, articles, scientific works on investment attractiveness and competitiveness, direct foreign investment, and influence of public-private partnership (PPP) on investment attractiveness, as well as the methodology for multidimensional comparative analyses.

To determine the collective opinion of specialists on the importance of factors influencing investment attractiveness, the questionnaire-based survey was chosen. It was carried out during the International conferences “Problems and perspectives of business development” in KNAHU in 2017. The participants of the conference were specialists in the field of economy, entrepreneurship and management from Ukraine, Slovakia and Poland.

Also theoretical, methodological and information base of the research is fundamental principles of the theory of investment and market economy, works by local and foreign scientists on problems of enterprise IA, normative and legal acts concerning the regulation of investment activity, official statistical data of the State Statistics Service of Ukraine, and the Central Statistical Office in Kharkiv region, reports and other informational materials.

### **The novelty of the scientific research**

1. The concept of investment attractiveness has been considered in the context of regional development. In the existing definitions of investment attractiveness the most commonly encountered concepts are favorable investment environment, status and opportunities, investment capacity, investment favorability, investment security, investment potential, general characteristics of advantages and disadvantages, stability of an enterprise, investment incentives, competitiveness, good conditions for establishing business activity. There is no generally accepted definition of IA. In different societies it is perceived mainly as conditions of functioning determined by a set of quantitative and qualitative indicators. In other words, it is a competition between similar enterprises, sectors. *In the dissertation investment attractiveness is defined as a complex concept consisting of a set of factors that determine it and influence the final results of investing.*
2. To solve the problem of assessing enterprise investment attractiveness, *the whole set of factors that are most significant for and have a decisive influence on investment attractiveness have been determined.* After sifting and systematizing the factors that influence investment attractiveness, *the most significant among them were identified. Internal and external factors of enterprise IA that determine integral assessment were selected.* These indicators of enterprise IA were analysed and estimated in the dissertation and combined into an integral set of indicators used for assessment of investment attractiveness. Based on this, an assumption of investment attractiveness assessment in the context of regional development has been put forward.
3. To determine the significance of the selected factors, i.e., the strength of their influence on the investment attractiveness of an enterprise, the assessment is carried out based on an expert survey of specialists working in this field. *To determine the collective opinion of specialists on the importance of the factors, the method of questionnaire survey was used and the model for assessment of enterprise investment attractiveness has been developed.*
4. *Enterprise investment attractiveness in the context of regional development is defined as the concept combining the elements of enterprise investment attractiveness, factors influencing sector-region attractiveness, evaluating the sustainability of an enterprise in the sector, and ensuring effective interaction between the state and a private investor.*
5. *PPP has been defined as a mechanism influencing and ensuring enterprise investment attractiveness in the context of regional development.*
6. *The model and algorithm for assessment of enterprise investment attractiveness in the context of regional development has been developed* and can be used as a tool for assessment of investment attractiveness in the context of regional development.

### **The structure of the dissertation**

This dissertation consists of three sections. The approaches to the understanding of the concept of investment attractiveness, determination of its content, the factors influencing investment attractiveness and determination among them the most significant ones, the role of PPP in assessment of enterprise investment attractiveness in the context of regional

development are discussed in *Section 1*. In *Section 2* the existing models and approaches for assessment of investment attractiveness (IA), their advantages and disadvantages are analyzed; a model for assessment of enterprise investment attractiveness in the context of regional development and a mathematical model based on the theory of games for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism are developed. *Section 3* of the dissertation work contains the testing of the proposed models employed for the empirical research. The IA assessment was carried out based on Ukrainian motor transport enterprises, the mathematical model of the mechanism for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism was tested at enterprises of Kharkiv region.

### **Limitations of the research**

The set of factors determining the investment attractiveness of an enterprise depends on the sector in which the enterprise operates. Therefore, the set of factors proposed in this dissertation is not universal and requires further discussions.

The model proposed by the author does not take into account the factors at the state level, as it is oriented to the internal assessment of the investment attractiveness of an enterprise.

This empirical study was carried out at enterprises of the motor transport sector, and the author realizes that results of a similar research in other sectors may differ, which is the basis for further discussions.

The research was conducted in one region of Ukraine – Kharkiv region. But regions with similar characteristics exist in countries with emerging economies, indicators forming a model for assessing the investment attractiveness of an enterprise in the context of regional development may be different and specific for such regions, but they can be adapted, and the model can be implemented in other regions. There are a lot of such regions and the task of science is to support all of them in their development and European integration.

### **Practical value of the research results.**

The theoretical and practical propositions of the dissertation work have been developed into methodological guidelines and practical recommendations, which can be used in ensuring enterprise IA as a mechanism for self-assessment of enterprise investment attractiveness in the context of regional development and to increase investors' interest and confidence in Kharkiv region as well as to receive benefits from investing. For the purpose of further development, the author's idea concerning the model for ensuring effective interaction between the state and a private investor was taken into consideration and recommended for adoption by the Department of Economics and International Relations of Kharkiv Regional State Administration (adoption deed №03-46/2352 of 03.06.2015).

### **The contents of the dissertation.**

The dissertation consists of introduction, three sections, conclusions and recommendations, references and annexes. The dissertation volume is 300 pages (180 pages aside from annexes); it contains 19 figures, 19 tables, 15 annexes; 304 sources of scientific literature in Ukrainian, Russian and English were used as references.

### **The publication of the research results.**

The research results have been presented at scientific conferences in Ukraine and abroad and published in recognized Ukrainian and foreign scientific journals.

## **REVIEW OF THE DISSERTATION CONTENTS**

### **1. ENTERPRISE INVESTMENT ATTRACTIVENESS IN THE CONTEXT OF REGIONAL DEVELOPMENT**

#### **1.1. Development of investment attractiveness concept**

In this subsection, the development of the concept of investment attractiveness is reviewed and was disclosed that there is no generally accepted definition of IA. In different societies it is perceived mainly as conditions of functioning, which are determined by a set of quantitative and qualitative indicators. In other words, it is competition between similar enterprises, industrial sectors. Based on the carried out analysis of the development of the concept of investment attractiveness, in the dissertation investment attractiveness is defined as a complex concept consisting of a set of factors that determine it and influence the final results of investing. An assumption of development a model for investment attractiveness assessment in the context of regional development is put forward.

#### **1.2. Factors influencing investment attractiveness**

In this subsection, factors influencing investment attractiveness are analysed and the most significant among them are identified. The factors of IA that are determined as integration of the internal and external ones are considered. The author defined sectoral and regional factors as external ones. The indicators of enterprise IA are analysed and estimated in the thesis and combined into one integral set of indicators used for the assessment of investment attractiveness. The investment attractiveness of the enterprise is influenced by factors that do not depend on its activities. It was disclosed that assessment of enterprise IA is depending the regions' and sectors' factors - the bases of the enterprise investment attractiveness. It is established that the investment attractiveness of an enterprise have to be considered in the context of regional development.

#### **1.3. External environment of enterprise investment attractiveness in the context of regional development**

In this part of the work, different approaches and methods of interaction between the state and a private investor are studied. This need arose as a result of the proposed system of investment attractiveness in the context of regional development. The results of the research showed that PPP is the most effective method of such interaction. PPP was determined as a special form of business organization and a form of investment activity. The need for compensatory payments for the purpose of attracting and encouraging an investor (Caoa, Dub

& Hansen, 2017) creates the need to develop a methodology for ensuring effective interaction between the state and an investor on terms of mutually beneficial relations.

#### **1.4. Ensuring of enterprise investment attractiveness in the context of regional development**

In this subsection, the system for ensuring enterprise investment attractiveness in the context of regional development is developed. This development is a result of the definition of enterprise IA as a component and at the same time an independent part of investment activity as a whole. Market components and the strength of their influence on the results of investment determine possibilities for effective implementation of enterprise investment activity (Khobt, 2005). On the basis of the realization of these functions, the author proposed a system for ensuring enterprise investment attractiveness in the context of regional development, which, in contrast to the existing ones, includes such important stages as - assessment of enterprise IA; assessment of regional IA; assessment of sectors' IA; public-private partnership (interaction between the state and a private investor). Enterprise investment attractiveness in the context of regional development is defined as the unit combining the elements of enterprise investment attractiveness, elements of sector and region attractiveness, sustainability of an enterprise in the sector and ensuring effective interaction between the state and a private investor.

## **2. METHODOLOGY FOR ASSESSMENT OF ENTERPRISE INVESTMENT ATTRACTIVENESS IN THE CONTEXT OF REGIONAL DEVELOPMENT**

### **2.1. Overview of existing models for assessment of enterprise investment attractiveness**

In this section, there analysed the models for assessment of investment enterprise attractiveness existing in the scientific literature, namely, "Model for quantifying the components of the innovation strategy" (Rolik, 2013), "Model for business activity assessment" (Nizielska, 2012), "Assessment model on the basis of forecast estimates" (Rębiasz & Macioł, 2014), Method for integral assessment of investment attractiveness of enterprises and organizations" of Agency on Prevention of Bankruptcy of Enterprises and Organizations (ABEO). It should be noted that the development of models for assessing investment attractiveness helps develop science. When the result is presented quantitatively, it becomes easy to understand. Especially simple is the perception of the result obtained by an integral evaluation.

Accomplished analysis has allowed fundamental principles to separate which it is purposeful to entertain in evaluation investment attractiveness.

The analysis made it possible to identify the main factors and their indicators, with the help of which the investment attractiveness of the enterprise in the context of regional development was assessed. They are: internal factors - property status, financial independence, financial stability, assets liquidity, profitability, business activity, sustainability; external factors - attractiveness of the region and attractiveness of the sector.



The accomplished analysis of the models proved that assessment of enterprise IA in the context of regional development is a quite complex process. The majority of the mentioned methods for assessment of investment attractiveness are built on determination and analysis of economic indicators by certain directions. Each of the mentioned directions contains a few indicators that substantially influence and comprehensively represent the area of an enterprise's activity. The biggest problem of combining the indexes of the factors for determining a single integral index of enterprise investment attractiveness in the context of regional development has been proposed to solve. Since at the present moment there is no methodological approach to assessing enterprise IA in the context of regional development that involves all the determined factors, the author proposed to develop a fundamentally new methodological approach to assessing enterprise investment attractiveness in the context of regional development.

## **2.2. The model for assessment of enterprise investment attractiveness**

The model for assessment of enterprise investment attractiveness in the context of regional development, which was developed in this dissertation, is composed of two structural parts: internal and external ones. Enterprise investment attractiveness is defined as the unit combining the internal, sectoral and regional factors. All three elements of enterprise IA should be used together.

Disagreements in the degree of importance of some indicators of enterprise performance in relation to others had called for conducting a procedure for determining the weight of groups of these indicators.

Let us consider each step of the procedure of determination of the model for enterprise IA assessment:

1. Collecting data on enterprise financial and economic activities. At this stage collection of information on the actual state of the enterprise and evaluation of the existing state of IA is carried out.
2. Forming a database for assessment of enterprise IA. At this stage the calculation of indicators of investment attractiveness of enterprises and organizations is carried out on the basis of the proposed by the author internal components of IA. An important condition is that the increase in each of the indicators should suggest the positive dynamics.
3. Distributing the indicators by groups. As it was discovered, the investment attractiveness is largely determined by the influence of a combination of microenvironment factors. To this end, it is proposed to identify those factors for each group, have the greatest impact on the investment attractiveness of the enterprise. To this end, it is proposed to distribute the above factors to the main and secondary ones. The main ones include factors that have a decisive impact on investment attractiveness. The division of factors into the main and secondary occurs in accordance with their significance, or force of influence. The selection of these indicators is proposed on the basis of a questionnaire-based survey conducted among specialists in the industry, in the next stages.

4. Normalization of data. The need for data to be normalized is conditioned by the nature of the indicators used, because they differ greatly in absolute values (some indicators are qualitative, and some quantitative or single indicators are measured in thousands and others in hundredths). Normalization of data allows to bring all the numerical values of variables used to the same area of their change, so that it becomes possible to bring them together in one model.
5. Determination of weighing coefficients for each factor influencing the IA and determination of weighing coefficients for each group of factors influencing the IA. The aim of this stage of building a model for evaluation of investment attractiveness is to calculate the weighing coefficients, which are to reflect the contribution of each component of investment attractiveness. Determination of such coefficients was performed using the hierarchy analysis method. Unlike commonly used ranking by the expert method, it provides a more reliable and objective results.
6. On the basis of the determination of weighing coefficients, it becomes possible to form a model for IA evaluation. With regard to the obtained specific weighing coefficients for six main components of enterprise IA, the integral index of enterprise IA has the following form:

$$I_{IA} = 0,162848 * K_{GI} + 0,194772 * K_{GII} + 0,149737 * K_{GIII} + 0,154986 * K_{GIV} + 0,177391 * K_{GV} + 0,160266 * K_{GVI} \quad (1)$$

where  $I_{IA}$  - integral index of enterprise IA;

$K_{GI}$  – Group I (coefficient of property status);

$K_{GII}$  – Group II (coefficient of financial independence);

$K_{GIII}$  – Group III (coefficient of financial stability);

$K_{GIV}$  – Group IV (coefficient of assets liquidity);

$K_{GV}$  – Group V (coefficient of profitability);

$K_{GVI}$  – Group VI (coefficient of business activity).

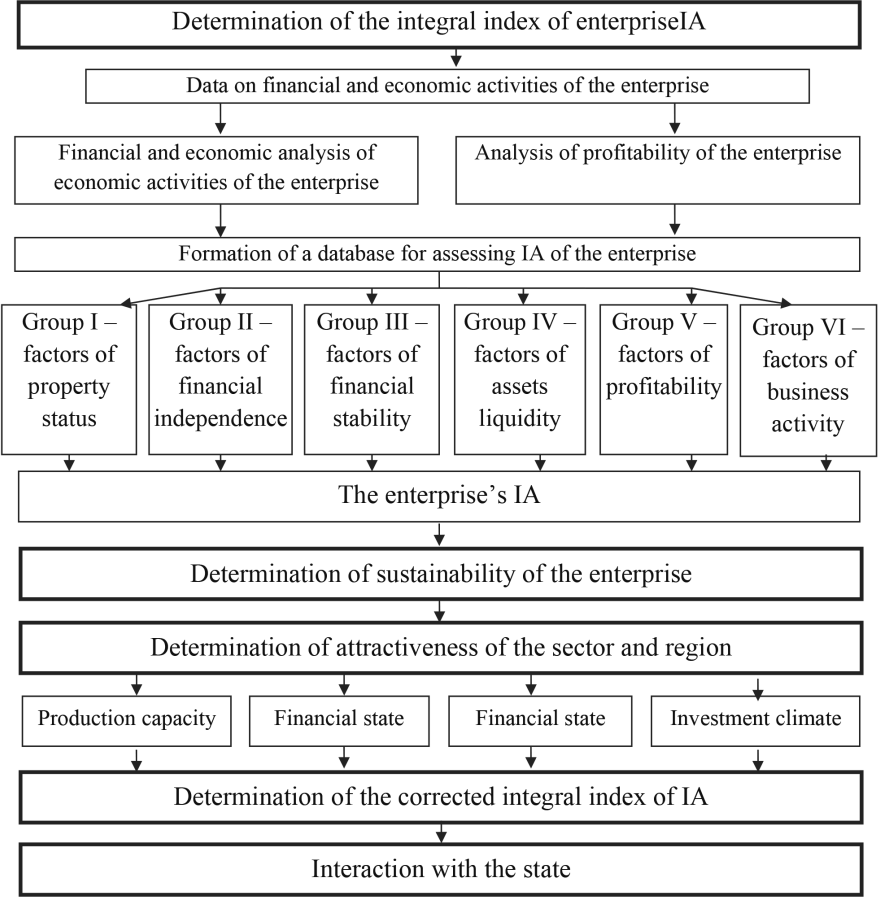
Using the developed model, it is possible to solve the biggest problem is to aggregate information directions and indexes, to define the universal integral index of enterprise investment attractiveness. And since this indicator characterizes the financial condition of the enterprise (internal factors are used in the calculation), it is the basis for assessing the investment attractiveness of the enterprise in the context of regional development.

### **2.3. Assessment of enterprise investment attractiveness in the context of regional development**

In this section the methodological approach to assessment of enterprise IA in the context of regional development is proposed (Fig. 1).

The proposed in the work the assessment model of enterprise IA in the context of regional development takes into account the dynamics of the initial data involved in

the formation of the index of enterprise IA. It is the proposed methodological approach based on dynamics of the studied investment processes at the level of individual enterprises. To ensure the investment attractiveness of enterprise in the context of regional development, in the opinion of the author, it is necessary to pay attention to the most important factor - interaction with the state, which will be done in the next subsection of this dissertation.



**Figure 1.** The assessment model of enterprise IA in the context of regional development (author's develop)

#### **2.4. The method for ensuring the interaction between the state and a private investor within the framework of the PPP mechanism in the context of regional development**

People respond to incentives and honesty (Mankiw, 2014). The positive externalities and public-private partnership mechanisms are considerable incentives in the projects (Cedricks & Longs, 2017). For the purpose of ensuring the development of mechanisms for implementation of the state investment policy, it was proposed to introduce a model for ensuring the interaction between the state and a private investor. A mathematical model for ensuring effective interaction between the state and a private investor as a part of the PPP mechanism was developed.

Since all steps for assessing the investment attractiveness of the enterprise in the context of regional development are described in detail by the author in this dissertation, it was logical to present a general algorithm for assessment the investment attractiveness of the enterprise in the context of regional development.

The presented algorithm is a sequence of actions to assess the investment attractiveness of an enterprise in the context of regional development. It includes three steps in the implementation of such an assessment, namely:

1. assessment of the investment attractiveness of the enterprise, based on the internal indicators of the enterprise (see subsection 2.2);
2. assessment of the investment attractiveness of the sector, the region and the enterprise in this sector and region, as well, assessing the sustainability of the enterprise in this sector (see subsection 2.3);
3. determination of the number of enterprises-candidates for participating in social programs of development of enterprises and region, and the determination of the total effect for enterprises-participants and separately each enterprise (see subsection 2.4). To prove the effectiveness of the model proposed by the author for assessment the investment attractiveness of the enterprise in the context of regional development, it is necessary to test it. Testing will be carried out on the example of motor transport enterprises of the Kharkov region. Before starting the testing, the author puts forward the following hypotheses: the model is applicable to enterprises of any sector and any region; using the model of ensuring effective interaction between the state and a private investor within the framework of PPP mechanism in the context of regional development; it is possible to accurately assess the effect for all participants and separately for each. And since interaction with the state acts as a factor influencing the investment attractiveness of an enterprise in the context of regional development, it is possible to increase this attractiveness with the help of such a model.

### **3. TESTING THE PROPOSED MODEL FOR ASSESSMENT OF ENTERPRISE INVESTMENT ATTRACTIVENESS IN THE CONTEXT OF KHARKIV REGION OF UKRAINE**

#### **3.1. Results of assessment of investment attractiveness of the motor transport sector and Kharkiv region**

Based on the study of the investment attractiveness of the sector and the region, it can be concluded that the motor transport sector has a low level of attractiveness, and the Kharkov region is attractive to the potential investor. Therefore, according to the matrix of investment attractiveness at the macro level (Grineva, 2013) the correction factor will be 1. This value will be used for assessment of investment attractiveness of the enterprise in the context of regional development.

#### **3.2. Assessment of enterprise investment attractiveness in the context of regional development**

The investment attractiveness of enterprises of the Kharkov region allow to divide the enterprises under study into three groups: 1 group - the most attractive for investment, requiring the least amount of investment infusions; Group 2 - enterprises with average investment attractiveness; Group 3 - enterprises with low investment attractiveness, requiring significant investment. The sustainability of the enterprises of the Kharkov region make it possible to divide the enterprises under study into three groups: 1 group - the least risky for investment (the risk indicator is of minimal importance); Group 2 - enterprises with an average level of risk; Group 3 - enterprises with a high level of risk (risk index, among the study group, the highest).

#### **3.3. Application of the model for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism in the context of regional development**

For the purpose of ensuring the development of mechanisms of the state investment policy the author proposed to use the model of state interaction with a private investor within the framework of the PPP mechanism in the context of regional development. When calculating the optimal strategy for participating enterprises, two parameters are used: efficiency and priority. In the calculations, the author suggests using the sustainability of a participating enterprise in this sector under the efficiency parameter. This indicator for economic essence characterizes the efficiency of the enterprise in a particular sector (in this case in the motor transport sector), as it is calculated on the basis of the profitability of the enterprise and the profitability of the sector. Under the priority parameter, the author suggests using the indicator of the enterprise investment attractiveness in the context of regional development. This integral indicator consists of a set of internal and external indicators and, in its essence, determines the most attractive enterprise for investment.

The logic is this: the higher the index of the enterprise investment attractiveness in the context of regional development, the greater its priority.

Based on the calculations, the optimal strategy was determined for each of the applicants for investment, among which the winners were selected for investment and the optimal strategy for each winner was calculated. The model of state interaction with a private investor within the framework of the PPP mechanism has a unique feature – the enterprise having some funds for implementation of the investment project can be both a candidate for receiving investments and an investor. In the case of success the enterprise develops at its own expense and gets from the state benefits provided by the optimal strategy of participation of investors in financing investment projects.

## CONCLUSIONS AND RECOMMENDATIONS

The analysed specificity of enterprise investment attractiveness in the context of regional development and the methodological aspects of its integral assessment reflect a constantly growing interest of world academic economists, practitioners, and politicians in the topic under investigation and prove its relevance, timeliness and novelty. The conducted investigation of enterprise investment attractiveness in the context of regional development and methods for its assessment permits formulating the following research findings:

1. The carried out theoretical analysis revealed the uncertainty and multiplicity of enterprise investment attractiveness and its system. By analyzing different theoretical approaches to the concept of IA, its structure, and patterns of the process of its formation it has been found that
  - a) the concept of enterprise investment attractiveness is an evolving and multifaceted system covering not only activities of enterprises, but also the external conditions of the region, the sector and the country as a whole;
  - b) enterprise IA is a concept created by society, and, therefore, is a change in social relations and conditions in which there are certain subjects of society that influence its development.

Generally, improvement of enterprise investment attractiveness occurs at two levels: internal and external one. With reference to the analysis of the development and structure of the concept of enterprise investment attractiveness, in the dissertation enterprise investment attractiveness is defined as a complex concept consisting of a set of factors that determine it and influence the final results of investing.

2. The analysis of the factors influencing enterprise IA demonstrate a multiple approach to this issue. On the one hand, scientists are encouraged to focus on microenvironment factors, since they are subject to strong influence of the management apparatus and, based on the indicators of these factors, it is possible to accurately determine the current state of an enterprise, make a forecast of its activities and track the change. On the other hand, scientists argue that any enterprise, even the most stable one, is subject to influence of external factors. It is also found that the most powerful external factors that influence enterprise IA are territorial (regional) and sectoral ones. Therefore, the author proposed to assess enterprise IA in the context of regional development.

3. Moreover, it is identified that one of the most important factors influencing investment attractiveness is interaction with the state. PPP is recognized as the most effective mechanism for ensuring effective interaction between the state and a private investor. The positive influence of PPP on ensuring enterprise investment attractiveness in the context of regional development is determined. A method for ensuring effective interaction between the state and a private investor as a part of the mechanism of PPP is proposed for the purpose of increasing the investment attractiveness of not only an enterprise but a region as well. Theoretical studies of enterprise investment attractiveness in the context of regional development have shown the importance of mutual support between the state and private business. After analysing the theoretical aspects of enterprise investment attractiveness in the context of regional development, the assumptions of assessment of enterprise investment attractiveness was put forward by the author. Therefore, a procedure for assessing enterprise investment attractiveness in the context of regional development and developing a model for assessing enterprise investment attractiveness in the context of regional development was proposed for implementation.
4. It is found that some researchers proposed to assess enterprise IA on the basis of internal factors, others on the basis of internal and external ones, and there is a lack of a single integral indicator that could give an unambiguous answer about enterprise IA in the context of regional development. The analysis of the proposed in the scientific literature models and methods for IA assessment, selection of factors and their integration into a single assessment system has allowed to characterize features that will be applied in assessment of enterprise investment attractiveness in the context of regional development. The methodological justification of the model for assessment of enterprise investment attractiveness in the context of regional development and the grouping of their constituents ensure the assessment accuracy. In the dissertation it is established and argued that, for assessment of enterprise investment attractiveness in the context of regional development, a system approach to the integrity, functionality and applicability of assessment methods is essential. The model for assessment of enterprise investment attractiveness in the context of regional development is seen as a system of processes, consisting of a) elements of enterprise investment attractiveness with the determination of weighting coefficients for each indicator; b) factors influencing sector-region attractiveness; c) evaluating sustainability of an enterprise in the sector by identifying market risk; d) ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism in the context of regional development for calculating the optimal strategy for participating enterprises. These sequential actions have resulted in the main outcome – assessment of enterprise investment attractiveness in the context of regional development. The model reflects the influence of individual elements of enterprise investment attractiveness on different factors. The model is easily modifiable depending on the economic entity, or sector, what ensures the model's functionality and adaptability.

5. The studies have shown that a stable and balanced development of any state requires diversification and innovative transformation of its production and provision of these processes with investment resources. And in connection with this there arose the problem of transition from classical forms of investment relations to a new level of relations between the investor and the the recipient of investments. With the aim of ensuring a mechanism for effective interaction of the state with a private investor in the context of regional development, as a key factor influencing enterprise IA, a model for ensuring effective interaction between the state and a private investor within the framework of PPP in the context of regional development has been developed.
6. The testing of the proposed model for assessment of enterprise enterprise in the context of regional development, based on motor transport enterprises of Kharkiv region, showed its functionality and efficiency. The conducted assessment of enterprise IA in the context of regional development allowed to determine the IA of the enterprises under study, divide these enterprises into three groups. The grouping made it possible to identify the most-, medium- and least- investment-attractive enterprises.
7. The testing of the proposed model for ensuring enterprise IA in the context of regional development within the framework of the PPP mechanism based on motor transport enterprises of Kharkiv region has confirmed the author's opinion about the possibility of an accurate assessment of the effect from its application for all participants and for each individual one. And since interaction with the state acts as a factor influencing enterprise investment attractiveness in the context of regional development, this model can enhance the attractiveness.

The model for ensuring effective interaction between the state and a private investor within the framework of the PPP mechanism, which takes into consideration the amount of the share of budget financing, is recommended by the Department of Economics and International Relations in Kharkiv region to be introduced by corresponding bodies of state government (adoption deed №03-46/2352 of 03.06.2015). The main purpose of this development is to increase the investors' interest and confidence in Kharkiv region as well as to receive benefits from investing.

Although this research was carefully prepared, the author is still aware of its limitations and shortcomings.

First of all, the set of factors influencing the investment attractiveness of an enterprise depends on the sector in which the enterprise operates. Therefore, the set of factors proposed in this dissertation is not final and requires further discussions.

Secondly, the model proposed by the author does not take into account the factors at the state level, as it is oriented to assessment of enterprise investment attractiveness in the context of regional development.

Thirdly, this study was carried out at enterprises of the motor transport sector, and the author realizes that results of a similar research in other sectors may differ, which is the basis for further discussions.

Fourthly, the research was conducted in one region of Ukraine – Kharkiv region. But regions with similar characteristics exist in countries with emerging economies. There



are a lot of such regions and the task of science is to support all of them in their development and European integration.

The research results will benefit the fellow researchers and will help to develop scientific discussions related to raising and ensuring enterprise investment attractiveness in the context of regional development.

## REFERENCES

1. 2014 European Semester: Country Reports (2014). Available at: [https://ec.europa.eu/info/publications/2014-european-semester-country-reports\\_en](https://ec.europa.eu/info/publications/2014-european-semester-country-reports_en)
2. 2015 European Semester: Country Reports (2015). Available at: [https://ec.europa.eu/info/publications/2015-european-semester-country-reports\\_en](https://ec.europa.eu/info/publications/2015-european-semester-country-reports_en)
3. 2016 European Semester: Country Reports (2016). Available at: [https://ec.europa.eu/info/publications/2016-european-semester-country-reports\\_en](https://ec.europa.eu/info/publications/2016-european-semester-country-reports_en)
4. Abid, F., Bahloul, S. (2011). Selected MENA countries' attractiveness to G7 investors. *Economic Modelling*, 28 (5), 2197–2207. doi: 10.1016/j.econmod.2011.06.013
5. Almarri, K. (2017). Perceptions of the attractive factors for adopting public-private partnerships in the UAE. *International Journal of Construction Management*, 1–8. doi: 10.1080/15623599.2017.1382082
6. Alonso, J. M., Clifton, J., Díaz-Fuentes, D. (2017). The impact of government outsourcing on public spending: Evidence from European Union countries. *Journal of Policy Modeling*, 39 (2), 333–348. doi: 10.1016/j.jpolmod.2017.01.007
7. Anamari-Beatrice, S. (2014). Real Options a Solution for Evaluating Public Private Partnerships. *Procedia Economics and Finance*, 15, 583–586. doi: 10.1016/s2212-5671(14)00516-4
8. Andrash, O. A. (2012). Upravlinnia investytsiynoiu pryvablyvistiu pidpriemstv hotelnoho hospodarstva. Simferopol, 179.
9. Assaf, A., Cvelbar, K. L. (2011). Privatization, market competition, international attractiveness, management tenure and hotel performance: Evidence from Slovenia. *International Journal of Hospitality Management*, 30 (2), 391–397. doi: 10.1016/j.ijhm.2010.03.012
10. Beyer, J. (2002). "Please invest in our country" – how successful were the tax incentives for foreign investment in transition countries? *Communist and Post-Communist Studies*, 35 (2), 191–211. doi: 10.1016/s0967-067x(02)00007-7
11. Birnleitner, H. (2014). Attractiveness of Countries for Foreign Direct Investments from the Macro-Economic Perspective. *Proceedings of FIKUSZ '14 Symposium for Young Researchers*. Austria, 29–40. Available at: <https://kgk.uni-obuda.hu/sites/default/files/03-Helmut-Birnleitner.pdf>
12. Bojic, I., Belyi, A., Ratti, C., Sobolevsky, S. (2016). Scaling of foreign attractiveness for countries and states. *Applied Geography*, 73, 47–52. doi: 10.1016/j.apgeog.2016.06.006
13. Bonaparte, Y., Kumar, A., Page, J. K. (2017). Political climate, optimism, and investment decisions. *Journal of Financial Markets*, 34, 69–94. doi: 10.1016/j.finmar.2017.05.002

14. Bruneckienė, J., Zykienė, I., Stankevičius, V. (2016). Critical analysis of city attractiveness factors in Lithuania – Poland cross-border regions: the viewpoints of businessmen and youth. *Journal of Geography, Politics and Society*, 6 (2), 45–58.
15. Bruno, R. Estrin, S., Campos, N. (2016). A meta-regression analysis of the Micro and Macro Evidence on the Growth Effect of Foreign Direct Investment. Paper presented at Academy of International Business 2016. Florida.
16. Bufoni, A. L., Oliveira, L. B., Rosa, L. P. (2015). The financial attractiveness assessment of large waste management projects registered as clean development mechanism. *Waste Management*, 43, 497–508. doi: 10.1016/j.wasman.2015.06.030
17. Cao, L., Du, Y., Hansen, J. Ø. (2017). Foreign institutional investors and dividend policy: Evidence from China. *International Business Review*, 26 (5), 816–827. doi: 10.1016/j.ibusrev.2017.02.001
18. Cedrick, B. Z. E., Long, P. W. (2017). Investment Motivation in Renewable Energy: A PPP Approach. *Energy Procedia*, 115, 229–238. doi: 10.1016/j.egypro.2017.05.021
19. Clarke, G. R. G., Cull, R., Kisunko, G. (2012). External finance and firm survival in the aftermath of the crisis: Evidence from Eastern Europe and Central Asia. *Journal of Comparative Economics*, 40 (3), 372–392. doi: 10.1016/j.jce.2012.01.003
20. Damborský, M. (2010). Localization of enterprise activities. Available at: <https://vskp.vse.cz/eid/28197>
21. Dierkes, M., Erner, C., Zeisberger, S. (2010). Investment horizon and the attractiveness of investment strategies: A behavioral approach. *Journal of Banking & Finance*, 34 (5), 1032–1046. doi: 10.1016/j.jbankfin.2009.11.003
22. Dolega, L., Pavlis, M., Singleton, A. (2016). Estimating attractiveness, hierarchy and catchment area extents for a national set of retail centre agglomerations. *Journal of Retailing and Consumer Services*, 28, 78–90. doi: 10.1016/j.jretconser.2015.08.013
23. Dorożyński, T., Kuna-Marszałek, A. (2016). Investments Attractiveness. The Case Of The Visegrad Group Countries. *Comparative Economic Research*, 19 (1). doi: 10.1515/cer-2016-0007
24. Driffield, N., Love, J., Lancheros, S., Temouri, Y. (2013). How attractive is the UK for future manufacturing foreign direct investment? London: HM Government Office for Science.
25. Dumon, M. (2012). Top 6 Factors That Drive Investment In China. <http://www.investopedia.com/articles/economics/09/factors-drive-investment-in-china.asp>
26. Efremov, V., Kotenkova, S., Davletshin, E. (2015). Evaluation of the Potential for Integration of Capital in the Investment Attractive Regions of the Russian Federation. *Procedia Economics and Finance*, 32, 264–270. doi: 10.1016/s2212-5671(15)01390-8
27. Elshof, H., Haartsen, T., van Wissen, L. J. G., Mulder, C. H. (2017). The influence of village attractiveness on flows of movers in a declining rural region. *Journal of Rural Studies*, 56, 39–52. doi: 10.1016/j.jrurstud.2017.07.004
28. Erkan, A., Fainshmidt, S., Judge, W. Q. (2016). Variance decomposition of the country, industry, firm, and firm-year effects on dividend policy. *International Business Review*, 25 (6), 1309–1320. doi: 10.1016/j.ibusrev.2016.04.003

29. Ershova, N. (2017). Investment climate in Russia and challenges for foreign business: The case of Japanese companies. *Journal of Eurasian Studies*, 8 (2), 151–160. doi: 10.1016/j.euras.2017.03.001
30. EY's attractiveness survey. India 2014. Enabling the prospects (2014). Available at: <http://www.iberglobal.com/Archivos/EY-attractiveness-survey-India-2014.pdf>
31. Fankhauser, S., Lavric, L. (2003). The investment climate for climate investment: Joint Implementation in transition countries. *Climate Policy*, 3 (4), 417–434. doi: 10.1016/s1469-3062(03)00050-0
32. Farkhutdinov, I. Z., Wystorobets, E. A. (2014). Drang Nach Osten: The Ukraine – Is it Possible to Save the Eurasian Space? *Evraziyskiy yuridicheskiy zhurnal*, 2 (69), 14–27.
33. Favara, G., Morellec, E., Schroth, E., Valt, P. (2017). Debt enforcement, investment, and risk taking across countries. *Journal of Financial Economics*, 123 (1), 22–41. doi: 10.1016/j.jfineco.2016.09.002
34. Feldstein, M. (2017). Why is growth better in the United States than in other industrial countries? *Journal of Policy Modeling*, 39 (4), 655–659. doi: 10.1016/j.jpolmod.2017.05.011
35. Foreign Minister on how France is boosting its investment attractiveness (2016). Available at: <https://ie.ambafrance.org/Foreign-Minister-on-how-France-is-boosting-its-investment-attractiveness>
36. Gallyamova, D. K. (2015). Development of the Countries with a Transition Economy. *Procedia Economics and Finance*, 24, 251–255. doi: 10.1016/s2212-5671(15)00656-5
37. Gerrard, M. B. (2011). What are public-private partnerships, and how do they differ from privatizations? *Finance & Development*, 38 (3). Available at: <http://www.imf.org/external/pubs/ft/fandd/2001/09/gerrard.htm>
38. Glick, R., Rose, A. (2015). Currency Unions and Trade: A Post-EMU Mea Culpa. NBER Working Paper No. 21535. doi: 10.3386/w21535
39. Godlewska-Majkowska, H. (Ed.) (2008). Atrakcyjność inwestycyjna polskich regionów. W poszukiwaniu nowych miar. SGH, Warszawa, 189–194.
40. Groh, A. P., von Liechtenstein, H. (2009). How attractive is central Eastern Europe for risk capital investors? *Journal of International Money and Finance*, 28 (4), 625–647. doi: 10.1016/j.jimonfin.2009.01.006
41. Gursoy, F. (2012). Changing of the Investment Climate of Georgia after the War. *Procedia – Social and Behavioral Sciences*, 62, 1303–1307. doi: 10.1016/j.sbspro.2012.09.223
42. Hildebrandt, A., Nowicki, M., Susmarski, P., Tarkowski, M., Wandałowski, M. (2014). The investment attractiveness of the regions and the sub-regions of Poland. Gdansk, 69. Available at: [http://www.kas.de/wf/doc/kas\\_39941-1522-1-30.pdf?150203124155](http://www.kas.de/wf/doc/kas_39941-1522-1-30.pdf?150203124155)
43. Hucknall, A. (2010). The Value of Financial Model Audit. Paper presented at Financial Modelling for PPP/PFI Conference (SMI). London.
44. Iloie, R. E. (2015). Connections between FDI, Corruption Index and Country Risk Assessments in Central and Eastern Europe. *Procedia Economics and Finance*, 32, 626–633. doi: 10.1016/s2212-5671(15)01442-2

45. Jara, J. J. (2017). Determinants of country competitiveness in attracting mining investments: An empirical analysis. *Resources Policy*, 52, 65–71. doi: 10.1016/j.resourpol.2017.01.016
46. Jung, M. (2006). Host country attractiveness for CDM non-sink projects. *Energy Policy*, 34 (15), 2173–2184. doi: 10.1016/j.enpol.2005.03.014
47. Kaka, A., Alsharif, F. (2009). Financial Modelling of PPP Projects. *Policy, Finance & Management for Public-Private Partnerships*, 212–228. doi: 10.1002/9781444301427.ch12
48. Karadjova, V. (2012). Country Risk – Conditions and Trends in Macedonia, Proposals for Reduction in Conditions of Unstable Environment. *Procedia – Social and Behavioral Sciences*, 44, 470–481. doi: 10.1016/j.sbspro.2012.05.052
49. Kazakhstan investment attractiveness – Ernst & Young's investor opinion survey (2011). Available at: <https://www.mpo.cz/assets/dokumenty/43916/49303/577174/priloha001.pdf>
50. Kazakov, N. P., Pshenin, V. N. (2015). Ekspertnoe otsenivanie ekologicheskoy bezopasnosti rekreatsionnogo rayona na osnove metoda analiza ierarhiy. *Vestnik INZ-HEKONa*, 3 (8), 86–90.
51. Khneyzer, C. (2016). The territorial attractiveness factors for the service of development in Lebanon: the case of Akkar. Available at: <http://www.theses.fr/2016GREAE005>
52. Kireeva, V., Galiakhmetov, L. (2015). The Assessment of the Intellectual Capital as a Factor of Investment Attractiveness of the Region. *Procedia Economics and Finance*, 27, 240–247. doi: 10.1016/s2212-5671(15)00997-1
53. Kolomyts, O. (2013). Metody prognozirovaniya izmeneniya investitsionnoy privlekatel'nosti i investitsionnoy aktivnosti munitsipal'nogo obrazovaniya. *Kontsept*, 08. Available at: <http://e-koncept.ru/2013/13158.htm>
54. Komori, Y. (2011). *International Relations II: The Politics of International Economic Relations*. Michigan State University James Madison College.
55. Koops, L. (2017). Creating public value: Optimizing cooperation Between public and private Partners in infrastructure Projects. doi: 10.4233/uuid:53c3c8cb-ff74-49c9-9e7d-e826a60fba6
56. Kordos, M., Vojtovic, S. (2016). Transnational Corporations in the Global World Economic Environment. *Procedia – Social and Behavioral Sciences*, 230, 150–158. doi: 10.1016/j.sbspro.2016.09.019
57. Korobkov, D. V. (2012). Investytsiyna pryvablyvist pidpriemstv enerhetychnoi haluzi. *Kharkiv*, 23.
58. Krupka, Y. D., Bachinskiy, V. (2014). Estimation of investment attractiveness for enterprises in Ukraine. *The Małopolska School of Economics in Tarnów Research Papers Collection*, 25 (2), 117–125.
59. Kupiec, L.; Kopczuk, A., Proniewski, W. (Eds.) (2005). Atrakcyjność regionu a sposób rozprzestrzeniania się innowacji i rozwoju społeczno-gospodarczego. In: *Atrakcyjność inwestycyjna regionu*. Wydawnictwo Wyższej Szkoły Finansów i Zarządzania. Białystok.

60. Kurniawan, F., Mudjanarko, S. W., Ogunlana, S. (2015). Best Practice for Financial Models of PPP Projects. *Procedia Engineering*, 125, 124–132. doi: 10.1016/j.proeng.2015.11.019
61. Lee, K.-H. (2016). The conceptualization of country attractiveness: a review of research. *International Review of Administrative Sciences*, 82 (4), 807–826. doi: 10.1177/0020852314566002
62. Lerner, J., Schoar, A., Sokolinski, S., Wilson, K. (2018). The globalization of angel investments: Evidence across countries. *Journal of Financial Economics*, 127 (1), 1–20. doi: 10.1016/j.jfineco.2017.05.012
63. Litavniec, L. (2014). Risk management in provision of city attractiveness. *Journal of Positive Management*, 5 (3), 3. doi: 10.12775/jpm.2014.016
64. Liu, J., Gao, R., Cheah, C. Y. J., Luo, J. (2016). Incentive mechanism for inhibiting investors' opportunistic behavior in PPP projects. *International Journal of Project Management*, 34 (7), 1102–1111. doi: 10.1016/j.ijproman.2016.05.013
65. Makarov, V. V., Gorbachev, V. L., Arshinov, A. M.; Makarov, V. V. (Ed.) (2002). *Investitsionnaya privlekatel'nost' i informatsionnaya politika predpriyatiya*. Sankt-Peterburg: Izd-vo SPbGUEF, 105.
66. Malovycho, A. S. (2011). Vplyv ryzyk-menedzhmentu na investytsiynu pryvablyvist pidpriemstva. *Donetsk*, 21.
67. Metodika otsenki investitsionnoy privlekatel'nosti predpriyatiya. Available at: [http://uchebnikonline.com/investirovania/investuvannya\\_-\\_grinova\\_vm/metodika\\_ot-sinki\\_investitsiynoyi\\_privablyvosti\\_pidpriemstva.htm](http://uchebnikonline.com/investirovania/investuvannya_-_grinova_vm/metodika_ot-sinki_investitsiynoyi_privablyvosti_pidpriemstva.htm)
68. Metody otsinky investytsiynoi pryvablyvosti. Available at: <http://books.br.com.ua/28943>
69. Metodyka intehranoi otsinky investytsiynoi pryvablyvosti pidpriemstv i orhanizatsiy: Zatverdzhena Nakazom Ahentstva z pytan zapobihannia bankrutstvu pidpriemstv ta orhanizatsiy vid 23 liutoho 1998 r. (1998). *Verkhovna Rada Ukrainy*, No. 22. Available at: <http://zakon3.rada.gov.ua/laws/show/z0214-98>
70. Meyer, K. E. (2015). Context in Management Research in Emerging Economies. *Management and Organization Review*, 11 (03), 369–377. doi: 10.1017/mor.2015.36
71. Meyer, K. E., Sinani, E. (2009). When and where does foreign direct investment generate positive spillovers? A meta-analysis. *Journal of International Business Studies*, 40 (7), 1075–1094. doi: 10.1057/jibs.2008.111
72. Mirkin, Ja. M. (2009). *Nauchno-informacionnye materialy po teme: Chastno-gosudarstvennoe partnerstvo v vysshem obrazovanii i nauchnoi sfere: mekhanizmy upravleniya imushchestvom, privilecheniya finansirovaniya, upravleniya soderzhaniem obrazovaniya i nauchnoi deyatel'nosti*. Moscow, 105. Available at: [http://www.mirkin.ru/\\_docs/\\_budgetfin/\\_obrprog/3\\_1.pdf](http://www.mirkin.ru/_docs/_budgetfin/_obrprog/3_1.pdf)
73. Mirkin, Ya. M., Mirkin, V. Ya. (2006). *Anglo-russkiy tolkovyy slovar' po bankovskomu delu, investitsiyam i finansovym rynkam. Svyshe 10000 terminov*. Moscow: Al'pina Biznes Buks, 424.
74. Mittal, A., Jhamb, D. (2016). Determinants of Shopping Mall Attractiveness: The Indian Context. *Procedia Economics and Finance*, 37, 386–390. doi: 10.1016/s2212-5671(16)30141-1

75. Mota, J., Moreira, A. C. (2015). The importance of non-financial determinants on public-private partnerships in Europe. *International Journal of Project Management*, 33 (7), 1563–1575. doi: 10.1016/j.ijproman.2015.04.005
76. Musson, A. (2012). Is sustainable development an attractive factor for territories? Available at: <http://www.dart-europe.eu/full.php?id=738143>
77. Mustafakulov, S. (2017). Investment Attractiveness of Regions: Methodic Aspects of the Definition and Classification of Impacting Factors. *European Scientific Journal*, 13 (10). doi: 10.19044/esj.2017.v13n10p433
78. Mustafakulov, Sh. I. (2016). Regional capacity: Comparative analysis of theoretical and methodological approaches. *Journal of Economy and Innovative technologies*, 5. Available at: [http://www.iqtisodiyot.uz/sites/default/files/maqolalar/37\\_Sh\\_Mustafakulov.pdf](http://www.iqtisodiyot.uz/sites/default/files/maqolalar/37_Sh_Mustafakulov.pdf)
79. Nizielska, A. (2012). The criteria, instruments, and determinants of investment attractiveness of Silesia: experts opinions. *Journal of economics & management*, 8, 53–70.
80. Ohotina, A., Lavrinenko, O. (2015). Education of Employees and Investment Climate of the Region: The View of the Heads of Enterprises. *Procedia – Social and Behavioral Sciences*, 174, 3873–3877. doi: 10.1016/j.sbspro.2015.01.1127
81. Otairu, A., Umar, A. A., Zawawi, N. A. W. A., Sodangi, M., Hammad, D. B. (2014). Slow Adoption of PPPs in Developing Countries: Survey of Nigerian Construction Professionals. *Procedia Engineering*, 77, 188–195. doi: 10.1016/j.proeng.2014.07.014
82. Percoco, M. (2014). Quality of institutions and private participation in transport infrastructure investment: Evidence from developing countries. *Transportation Research Part A: Policy and Practice*, 70, 50–58. doi: 10.1016/j.tra.2014.10.004
83. Pocius, V., Stungurienė, S., Paškevičius, A. (2014). The Factors of the Attractiveness of the Capital Market of Lithuania. *Procedia – Social and Behavioral Sciences*, 110, 1052–1062. doi: 10.1016/j.sbspro.2013.12.952
84. Popovici, O. (2017). International competitiveness versus location attractiveness for FDI. A theoretical approach. *Annals – Economy Series*, 1, 199–205.
85. Popovici, O. C., Călin, A. C. (2012). Attractiveness of Public Policies for FDI in Central and Eastern European Countries. *The Annals of the University of Oradea. Economic Sciences*, XXI (1), 61–67.
86. Popovici, O. C., Călin, A. C. (2012). Competitiveness as Determinant of Foreign Direct Investments in Central and Eastern European Countries. *Revista Economica. Journal of Economic-Financial Theory and Practice*, 658–666.
87. Porter, M (2015). Competitive strategy. *Methodology of analysis of industries and competitors*. Alpina publ., 454.
88. Porter, M. E., Kramer, M. R. (2006). Strategy and Society: The Link Between Competitive Advantage and Corporate Social Responsibility. *Harvard Business Review*, 78–92.
89. Pribadi, K., Pangeran, M. H. (2010). Assessing Readiness of Public Sector Risk Management for PPP in Infrastructure Development in Indonesia. *Second International Conference on Construction in Developing Countries (ICCIDC-II): “Advancing and Integrating Construction Education, Research & Practice”*. Cairo, 217–280.

90. Puciato, D. (2016). Attractiveness of municipalities in South-Western Poland as determinants for hotel chain investments. *Tourism Management*, 57, 245–255. doi: 10.1016/j.tourman.2016.06.019
91. Ramírez-Alesón, M., Fleta-Asín, J. (2016). Is the Importance of Location Factors Different Depending on the Degree of Development of the Country? *Journal of International Management*, 22 (1), 29–43. doi: 10.1016/j.intman.2015.10.002
92. Rębiasz, B., Macioł, A. (2014). Hybrid Data in the Multiobjective Evaluation of Investments. *Procedia Computer Science*, 35, 624–633. doi: 10.1016/j.procs.2014.08.144
93. Rolik, Y. A. (2012). Complex estimation of industrial enterprise's innovation strategy. *Proceeding of International Scientific Conferense MK-2012-6, Innovation in the industrial sector*. Kazan, 1, 247–251.
94. Rolik, Y. A. (2013). A Complex Approach to Evaluating the Innovation Strategy of a Company to Determine its Investment Attractiveness. *Procedia – Social and Behavioral Sciences*, 99, 562–571. doi: 10.1016/j.sbspro.2013.10.526
95. Sanjo, Y. (2012). Country risk, country size, and tax competition for foreign direct investment. *International Review of Economics & Finance*, 21 (1), 292–301. doi: 10.1016/j.iref.2011.08.002
96. Serhieieva, O. (2015). Investment climate in Ukraine: Reality and perspectives. *Socio-Economic Problems and the State*, 13 (2), 254–260. Available at: <http://sepd.tntu.edu.ua/images/stories/pdf/2015/15sorrapp.pdf>
97. Sharma, R. (2016). Taxing and Subsidizing Foreign Investors (2016). *Economics Faculty Working Papers*, 50. Available at: [http://commons.colgate.edu/econ\\_facschol/50](http://commons.colgate.edu/econ_facschol/50)
98. Sharpe W., Alexander G., Bailey J. (1998). *Investments*. Boston: Prentice Hall, 962.
99. Shome, S. (2013). India's urbanization and business attractiveness by 2020. *Cities*, 31, 412–416. doi: 10.1016/j.cities.2012.06.015
100. Siemiatycki, M. (2009). Delivering Transportation Infrastructure Through Public-Private Partnerships: Planning Concerns. *Journal of the American Planning Association*, 76 (1), 43–58. doi: 10.1080/01944360903329295
101. Sinkiene, J., Kromalcas, S. (2010). Concept, Directions and Practice of City, Attractiveness Improvement. *Viesoji politika ir administravimas – Public Policy and Administration*, 31, 147–154.
102. Škuflić, L., Rkman, P., Šokčević, S. (2013). Evaluation of the FDI Attractiveness of the European Countries Using Promethee Method. *Croatian Operational Research Review (CRORR)*, 4, 258–269.
103. Smit, A. J. (2010). The competitive advantage of nations: is Porter's Diamond Framework a new theory that explains the international competitiveness of countries? *Southern African Business Review*, 14 (1), 105–130.
104. Snieska, V., Zykiene, I. (2011). Fizinės infrastruktūros įtaka regioniniam patrauklumui. *Economics and Management = Ekonomika ir vadyba*, 6, 465–471.
105. Snieska, V., Zykiene, I. (2014). The Role of Infrastructure in the Future City: Theoretical Perspective. *Procedia – Social and Behavioral Sciences*, 156, 247–251. doi: 10.1016/j.sbspro.2014.11.183

106. Snieska, V., Zykiene, I. (2015). City Attractiveness for Investment: Characteristics and Underlying Factors. *Procedia – Social and Behavioral Sciences*, 213, 48–54. doi: 10.1016/j.sbspro.2015.11.402
107. Staroverova, E. (2010). Organizatsionno-ekonomicheskie instrumenty povysheniya investitsionnoy privlekatel'nosti predpriyatiya. Vladimir, 183.
108. Strokovich, H. V. (2009). Vybir stratehiyi investuvannia pidpriemstv. Kharkiv, 17.
109. Sultanova, B. (2016). Sovremennye problemy byudzheta i byudzhnogo planirovaniya. M. Ryskulbekov atyndagy Kyrgyz ekonomikalyk universiteti, 1 (35), 389–397.
110. Temeljotov, S. A., Bjoerberg, S., Boge, K., Larssen, A. K. (2015). Increasing attractiveness by LCC facility management orientation. *IFAC-PapersOnLine*, 48 (3), 149–154. doi: 10.1016/j.ifacol.2015.06.073
111. The BPCC economic debate on the investment attractiveness of Podkarpacie in Rzeszow. Available at: <http://bpcc.org.pl/en/event-coverages/the-bpcc-economic-debate-on-the-investment-attractiveness-of-podkarpacie-in-rzeszow>
112. The investment attractiveness of the regions of Poland. The report of the annual research project carried out by the team of GIME in cooperation with the Konrad Adenauer Foundation (2014). Gdansk, 69.
113. Topsahalova, F. M.-G., Lepshokova, R. R., Koychueva, D. A. (2009). Sovremennoe sostoyanie i otsenka effektivnosti ispol'zovaniya investitsionnykh resursov v agrarnom sektore. Moscow: Izdatel'stvo "Akademiya Estestvoznaniya", 216.
114. Udalykh, O. O. (2006). Upravlinnia investytsiynoiu diyalnistiu promyslovoho pidpriemstva. Kyiv: Tsentr navch. l-ry, 292.
115. Ukraine-Private Infrastructure Projects – The World Bank & PPIAF. Available at: [http://ppi.worldbank.org/explore/ppi\\_exploreCountry.aspx?countryId=97#](http://ppi.worldbank.org/explore/ppi_exploreCountry.aspx?countryId=97#)
116. Valinurova, L. S. (2011). Innovatsionnoe razvitie regionov. Metodologicheskie osnovy i perspektivnye napravleniya. Moscow: Paleotip, 200. Available at: <http://www.iprbookshop.ru/10217.html>
117. Vetlugin, S. Yu. (2006). Mezhdunarodnye reytingi, vliyayushchie na otsenku investitsionnoy privlekatel'nosti ekonomiki. *Problemy sovremennoy ekonomiki*, 1, 9–17.
118. Vilisov, M. V. (2006). Gosudarstvenno-chastnoe partnerstvo: politiko-pravovoi aspekt. *Vlast'*, 7, 4–6.
119. Wang, H., Liang, P., Li, H., Yang, R. (2016). Financing Sources, R&D Investment and Enterprise Risk. *Procedia Computer Science*, 91, 122–130. doi: 10.1016/j.procs.2016.07.049
120. Wang, Y., Liu, J. (2015). Evaluation of the excess revenue sharing ratio in PPP projects using principal–agent models. *International Journal of Project Management*, 33 (6), 1317–1324. doi: 10.1016/j.ijproman.2015.03.002
121. Yakupova, N. M., Levachkova, S. J., Iskhakova, G. M., Kadochnikova, E. I., Lelyuk, A. V. (2017). Integral Assessment of the Enterprise Investment Attractiveness: Testing the Hypothesis of Non-Conformity to Investor's Interests. *Journal of Engineering and Applied Sciences*, 12, 4927–4930.



122. Yang, T., Long, R., Li, W. (2017). Suggestion on Tax Policy for Promoting the PPP Projects of Charging Infrastructure in China. *Journal of Cleaner Production*. doi: 10.1016/j.jclepro.2017.10.197
123. Yoo, D., Reimann, F. (2017). Internationalization of Developing Country Firms into Developed Countries: The Role of Host Country Knowledge-Based Assets and IPR Protection in FDI Location Choice. *Journal of International Management*, 23 (3), 242–254. doi: 10.1016/j.intman.2017.04.001
124. Zakirova, E. R. (2016). The economic content of the term “investment attractiveness.” *Proceedings of the Voronezh State University of Engineering Technologies*, 2, 327–333. doi: 10.20914/2310-1202-2016-2-327-333

## PUBLICATIONS

### **Publications referred in other international databases**

1. Dmitriyev, I., Levchenko, I. (2017). The investment attractiveness of enterprises of Ukrainian motor transport industry. *Review of Finance*, 6 (2), 1378–1386. [Scopus, Thompson Reuters, Journal Citation Report]
2. Dmitriyev, I., Shevchenko, I., Levchenko, I. (2017). Theoretical, methodological and applied aspects of managing investment attractiveness of automobile enterprises (on the example of Ukraine). *Oxford Economic Papers*, 4 (2), 1137–1145. [Scopus, Thompson Reuters, Journal Citation Report]
3. Dmytriiev, I. A., Levchenko, I. (2017). Otsiniuvannia investytsiynoi pryvablyvosti pidpriemstva ta upravlinnia yii pokaznykamy. Aktualni problemy ekonomiky, 5 (191), 89–99. [EBSCOhost, EconLit, ABI/Inform (by ProQuest), Erih Plus (Норвегія)]
4. Grinko, A., Bochulia, T., Grynko, P., Yasinetska, I., Levchenko, I. (2017). Formation of the concept of intellectualization information provision for managing an enterprise. *Eastern-European Journal of Enterprise Technologies*, 5 (3 (89)), 4–14. doi: 10.15587/1729-4061.2017.111859 [Scopus, Ulrich's Periodicals Directory, OpenAIRE, Bielefeld Academic Search Engine (BASE), WorldCat, Directory of Open Access Journals (DOAJ), EBSCO, ResearchBib, American Chemical Society, Directory Indexing of International Research Journals, Directory of Research Journals Indexing (DRJI), CrossRef, Open Academic Journals Index (OAJI), Sherpa/Romeo]
5. Levchenko, I. (2015). Evaluation the investment attractiveness of motor transport enterprises // *Economics, management, law: problems of science and practice*, 112–117. [PIHJ Science Index, Thompson Reuters, IndexCopernicus]
6. Levchenko, I. (2015). Factors of influence are on level of investment attractiveness of motor transport enterprises. *Ikonomichekite perspektivi v globalnata kriza*, 142–146. [PIHJ Science Index, Thompson Reuters, IndexCopernicus]
7. Levchenko, I. (2015). Formuvannia systemy upravlinnia investytsiinoiu pryvablyvistiu avtotransportnykh pidpriemstv. *Nauka moloda*, 23, 20–27. [IndexCopernicus]

8. Levchenko, I. (2015). Mekhanizm informatsiynoho zabezpechennia systemy upravlinnia investytsiynoiu pryvablyvisti ATP. Problemy i perspektyvy rozvytku pidpriemnytstva, 2, 46–50. [IndexCopernicus]
9. Levchenko, I. (2015). Methodology of estimation of level of investment attractiveness of motor transport enterprises. Economics, Management, Law: current state and perspectives of development, 116–120. [PIHII Science Index, Thompson Reuters, IndexCopernicus]
10. Levchenko, I. (2015). Optyimizatsiya rivnia investytsiynoi pryvablyvosti avtotransportnykh pidpriemstv. Zbirnyk naukovykh prats Cherkaskoho derzhavnoho tekhnolohichnoho universytetu. Seriya: Ekonomichni nauky, 39 (2), 150–155. [PIHII Science Index, IndexCopernicus, Google Scholar]
11. Levchenko, I. (2015). Orhanizatsiine zabezpechennia upravlinnia investytsiynoiu pryvablyvisti avtotransportnykh pidpriemstv. Problemy i perspektyvy rozvytku pidpriemnytstva, 3 (10), 103–107. [IndexCopernicus]
12. Levchenko, I. (2015). Pryiniattia upravlinskoho rishennia optyimizatsyi rivnia investytsiynoi pryvablyvosti ATP. Zbirnyk naukovykh prats Cherkaskoho derzhavnoho tekhnolohichnoho universytetu. Seriya: Ekonomichni nauky, 40 (2), 89–96. [PIHII Science Index, IndexCopernicus, Google Scholar]
13. Levchenko, I. (2016). Management of investment attractiveness of motor transport enterprises (on the example of Ukraine). Problemy i perspektyvy rozvytku pidpriemnytstva, 3 (14), 104–109. [IndexCopernicus]
14. Levchenko, I. (2016). The analysis of the motor transport sector investment in Ukraine and Lithuania. Perspective directions of scientific researches, 125–129. [PIHII Science Index, Thompson Reuters, IndexCopernicus]
15. Levchenko, I. (2016). Transport sector development in Lithuania and Ukraine. Problems of development modern science: theory and practice. EDEX, Madrid, España, 115–120. [PIHII Science Index, Thompson Reuters, IndexCopernicus]
16. Levchenko, I. (2017). A model of investment attractiveness evaluation of motor transport enterprises. Economics, management, law: challenges and prospects, 74–77. [PIHII Science Index, Thompson Reuters, IndexCopernicus]
17. Levchenko, I., Tripak, M. M. (2010). Analiz konkurentnosti transportnoi haluzi Ukrainy ta praktychni rekomendatsyi shchodo yii polipshennia. Nauka moloda, 14, 57–59. [IndexCopernicus]

#### **Publications referred in the proceedings of international conferences**

1. Antonova, L., Levchenko, I. (2016). Gridin's group It company: novatorstvo, kachestvo, bezopasnost'. Vol. 3. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: KhNADU, 92–94.
2. Antonova, L., Levchenko, I. (2016). Investments – the main element of the investment activities. Vol. 1. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: KhNADU, 157–160.

3. Dmytriyev, I. A., Levchenko, I. (2016). Rozvytok transportnoi haluzi Polshchi ta Ukrainy: spilne ta vidminne. Vol. 2. "Naynovite nauchni postizheniya – 2016": nauchnye trudy pomaterialam mezhdunarodnoy nauchno-prakticheskoy konferentsii. B'lgariya: "Byal GRAD-BG" OOD, 25–33.
4. Levchenko, I. (2010). Pidvyshchennia efektyvnosti upravlinnia investytsiynoiu diyalnistiu na pidpriemstvakh avtotransportnoi haluzi. Problemy i perspektyvy rozvytku pidpriemnytstva: zbirnyk materialiv mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: FOP Pavlov M. Yu., 129–130.
5. Levchenko, I. (2015). Investytsyi yak osnovnyi element investytsiynoi diialnosti pidpriemstva. Ekonomika i upravlinnia v umovakh hlobalizatsyi: zbirnyk materialiv IV Mizhnarodnoi naukovo-praktychnoi Internet-konferentsyi. Kryvyi Rih: DonNUET, 41–44.
6. Levchenko, I. (2015). Metodyka otsinky rivnia investytsiynoi pryvablyvosti ATP. Ekonomika pidpriemstva: suchasni problemy teoryi ta praktyky: Materialy chetvertoi mizhnar. nauk.-prakt. konf. Odessa: Atlant, 110–113.
7. Levchenko, I. (2015). Priorytetni metody otsinky rivnia investytsiynoi pryvablyvosti ATP. Finansovi aspekty rozvytku derzhavy, rehioniv ta subiektiv hospodariuvannia: suchasnyi stan ta perspektyvy: Materialy I mizhnar. nauk.-prakt. konf. Odessa, 11–13.
8. Levchenko, I. (2016). Formuvannia systemy upravlinnia investytsiynoiu pryvablyvistiu ATP. Vol. 1. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy Kh Mizhnarodnoi naukovo-praktychnoi konferentsii. Kharkiv: KhNADU, 229–231.
9. Levchenko, I. (2017). Derzhavno-pryvatne partnerstvo, yak zaporuka rozvytku pidpriemstv Ukrainy. Economy. Zarzadzanie. Teoretyczne I praktyczne aspekty rozwoju wspolczesnej nauki. Warszawa: Wydawca "Diamond trading tour", 62–65.
10. Puksas, A., Levchenko, I. (2016). Razvitie transportnoy otrasli v Litve i Ukraine. Vol. 2. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: KhNADU, 203–205.
11. Puksas, A., Levchenko, I. (2016). Upravlenie investitsionnoy privlekatel'nost'yu predpriyatiy avtotransportnoy otrasli. Vol. 3. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: KhNADU, 272–275.

#### **Publications referred in the periodicals, one time collections of publications, etc.**

1. Huzhva, K. O., Levchenko, I. (2017). Rozvytok transportnoi haluzi Polshchi ta Ukrainy: spilne ta vidminne. Problemy rozvytku ekonomiky pidpriemstva: pohliad molodi: Materialy X Mizhnarodnoi studentskoi naukovo konferentsyi. Kharkiv, 187–189.
2. Tsapko, V. O., Levchenko, I. (2017). Otsinka investytsiynoi pryvablyvosti avtotransportnoi haluzi Kharkivskoho rehionu. Ekonomichni perspektyvy, 2 (9), 133–137.

## INFORMATION ABOUT THE AUTHOR OF THE DISSERTATION

	<ul style="list-style-type: none"> <li>• <b>Name</b> <u>Levchenko Yaroslava Sergiivna</u></li> <li>• <b>Date of Birth</b> <u>25 May 1984</u></li> <li>• <b>Place of Birth</b> <u>the town of Kamianka, Cherkasy region, Ukraine</u></li> <li>• <b>Nationality</b> <u>Ukrainian</u></li> <li>• <b>Gender</b> <u>female</u></li> <li>• <b>Marital Status</b> <u>married</u></li> <li>• <b>Children</b> <u>daughter (6 year old)</u></li> <li>• <b>Education</b> <u>Kharkiv National Automobile and Highway University (Master's degree)</u></li> <li>• <b>Address</b> <u>30, vul.Heroiv Pratsi, kv. 121, Kharkiv, 61146, Ukraine</u></li> </ul> <p><b>Total work experience</b> <u>11 years</u></p> <p><b>Work experience at the current place of employment</b> <u>8 years</u></p>
Employment History	<ul style="list-style-type: none"> <li>• Doctoral studies at Mykolas Romeris University, School of Economics and Business – January 2017 – January 2018;</li> <li>• Kharkiv National Automobile and Highway University. Competitor for Candidate degree at Department of Economy of Enterprises of Kharkiv National Automobile and Highway University (studying problems of investment attractiveness of motor transport enterprises). – December 2010-April 2012; October 2014 – May – 2016;</li> <li>• maternity leave – April 2012- October 2014;</li> <li>• Assistant at Department of Economy of Enterprises of Kharkiv National Automobile and Highway University – December 2009-April 2012;</li> <li>• carrying out entrepreneurial activity in organization of international motor freight transportation and continuing the research work as a Competitor at Department of Economy of Enterprises of Kharkiv National Automobile and Highway University – July 2006-November 2009.</li> </ul>
Education	Kharkiv National Automobile and Highway University, Master's degree in "Management of Motor Transport Organizations" (2001-2006), diploma with honors.
Certificates, Adoption Deeds	The research developments were recognized to be practically significant for the adoption by business entities involved in providing motor transport services and recommended for implementation by relevant state authorities of the Department of Economics and International Relations of Kharkiv Regional State Administration (Adoption Deed № 03-46 / 2352 from 06.03.2015).
Publications	The results of the scientific research have been published in a number of professional editions of Ukraine, as well as collections of scientific articles in Australia, Bulgaria and Germany. (Appendix 1)
Language, Skills	Russian, Ukrainian (native), Polish (basic), English (fluent)
Awards	<ul style="list-style-type: none"> <li>• Badge of Honour "High Achiever of KhNAHU" from 10 June 2005 (Minutes №10/1085);</li> <li>• Diploma of the scientific articles competition among young scientists "Be Profi with 4profi!" (2015);</li> <li>• Diplomas and certificates of numerous scientific conferences;</li> <li>• Honorary Diploma of Kharkiv Regional State Administration (application from 15.01.2016 ) for conscientious work, outstanding achievements in the education and upbringing youth, personal contribution to the training of highly qualified specialists</li> </ul>
Other skills	driving license
Additional inf.	hobby: sports, music

MYKOLO ROMERIO UNIVERSITETAS

**Yaroslava Levchenko**

**ĮMONĖS INVESTICINIO PATRAUKLUMO  
VERTINIMAS IR UŽTIKRINIMAS REGIONINIO  
VYSTYMOSI KONTEKSTE**

Daktaro disertacijos santrauka  
Socialiniai mokslai, ekonomika (04S)

Vilnius, 2018

Mokslo daktaro disertacija rengta 2014–2017 metais Charkovo nacionaliniame automobilių ir kelių universitete (Ukrainos Respublika) ir 2017–2018 metais Mykolo Romerio universitete pagal Vytauto Didžiojo universitetui su ISM Vadybos ir ekonomikos universitetu, Aleksandro Stulginskio universitetu, Mykolo Romerio universitetu ir Šiaulių universitetu 2011 m. birželio 8 d. Lietuvos Respublikos švietimo ir mokslo ministro įsakymu Nr. V-1019 suteiktą doktorantūros teisę.

Disertacija ginama eksternu.

**Mokslinė konsultantė:**

Prof. dr. Asta Vasiliauskaitė (Mykolo Romerio universitetas, socialiniai mokslai, ekonomika, 04S)

Mokslo daktaro disertacija ginama Vytauto Didžiojo universiteto, ISM Vadybos ir ekonomikos universiteto, Aleksandro Stulginskio universiteto, Mykolo Romerio universiteto ir Šiaulių universiteto ekonomikos mokslo krypties taryboje:

*Pirmininkė:*

prof. dr. Valdonė Daršukvienė (ISM Vadybos ir ekonomikos universitetas, socialiniai mokslai, ekonomika, 04 S).

*Nariai:*

prof. dr. Daiva Jurevičienė (Mykolo Romerio universitetas, socialiniai mokslai, ekonomika, 04 S);  
doc. dr. Jekaterina Kartašova (Mykolo Romerio universitetas, socialiniai mokslai, ekonomika, 04 S);

prof. dr. Kristina Levišauskaitė (Vytauto Didžiojo universitetas, socialiniai mokslai, ekonomika, 04 S);

prof. dr. Tatjana Pölajeva (EuroAcademy, Estijos Respublika, socialiniai mokslai, ekonomika, 04 S).

Disertacija bus ginama viešame Ekonomikos mokslo krypties tarybos posėdyje 2018 m. birželio 22 d. 11 val. Mykolo Romerio universiteto II-230 auditorijoje.

Adresas: Ateities g. 20, 08303 Vilnius, Lietuva.

Disertacijos santrauka išsiųsta 2018 m. gegužės 22 d.

Su disertacija galima susipažinti Lietuvos nacionalinėje Martyno Mažvydo bibliotekoje, Aleksandro Stulginskio universiteto, ISM Vadybos ir ekonomikos universiteto, Mykolo Romerio universiteto, Šiaulių universiteto ir Vytauto Didžiojo universiteto bibliotekose.

## REZIUMĖ

### **Temos aktualumas**

Tyrėjai vykdo įvairius tyrimus, siekdami įvertinti atskirų įmonių, regionų ir šalių ekonominio vystymo perspektyvumą. Dėl investuotojų dėmesio tarpusavyje kovoja ne tik šalys, bet ir regionai, miestai ir atskiros įmonės. Tyrėjai teigia, kad įmonės investicinį patrauklumą (IP) nustato ne tik jos ekonominės veiklos rodikliai, bet ir veiklos sritys (miesto, regiono, sektoriaus) IP veiksniai. Todėl stiprėja mokslo, politikos, verslo susidomėjimas IP, ir tai dalinai vyksta dėl investicijų įtakos nacionalinių ekonomikų konkurencingumui ir stabiliam vystymuisi. Taigi įmonės IP vertinimo tyrimai regioninio vystymosi kontekste yra aktuali mokslinių tyrimų kryptis, tai ir yra pagrindinis disertacijos tikslas.

Tiesioginių užsienio investicijų konkrečiose srityse pritraukimo galimybių tyrinėjimo projektus vysto ir akademiniai ekonomistai, ir pirmaujančios pasaulinės konsultavimo kompanijos. Aktualios su IP susijusios problemos nagrinėjamos darbe „Regiono investavimo patrauklumas“ (The BPCC economic debate, 2017). IP klausimus taip pat gvildena tokios konsultavimo kompanijos, kaip Ernst & Young (2009, 2008, 2007, 2006), KPMG (2009), kai kurios. Konsultavimo kompanijos, pvz., PriceWaterhouseCoopers, domisi Europos centro ir rytų rinkomis.

IP padidinimas gali padėti įmonei sukurti konkurencinius pranašumus, atverti galimybes naujovėms, mažinti operacines rizikas ir operacines išlaidas, o taip pat didinti įmonės pelningumą.

Tyrinėtojai pabrėžia atskiros įmonės IP kaip regiono ir šalies IP sudedamosios ir pagrindinės dalies svarbą. Atskiro sektoriaus, taip pat ir visos šalies konkurencingumas priklauso nuo įmonių konkurencingumo. Tai Europos Sąjungos ekonomikos pagrindas (European Commission, 2016). Ekonominio aktyvumo svyravimai privertė verslą pakeisti tradicinius organizavimo bei valdymo metodus ir ieškoti naujų instrumentų, žinių, išteklių ir kompetencijų, siekiant sustiprinti savo pozicijas ir užtikrinti įmonių konkuravimo galimybes. Atkreipti dėmesį tik į įmonės IP jau nebepakanka. Jos galimybė konkuruoti taip pat priklauso nuo sektoriaus ir regiono, kuriame įmonė dirba (The BPCC economic debate, 2017).

Dėl to tyrinėtojai kreipia ypatingą dėmesį į pakankamai naują sampratą – investicinį patrauklumą ir jo įvertinimo metodus.

### **Mokslinė problema ir jos ištirtumo lygis.**

Siekiant objektyviai nustatyti analizuojamos problemos svarbą, padaryta aktualių mokslinių straipnių paieška. IP teoriniai ir metodologiniai principai buvo tiriami pagal vietinių ir užsienio mokslininkų darbus. Reikia pažymėti, kad daugelis autorių turi gana individualų požiūrį į šios sampratos apibrėžimą ir siūlo vis naujus IP vertinimo metodus. Todėl diskusijos apie IP vertinimo teorinius ir metodologinius principus tęsiasi, ir ši problema tebelieka aktuali.

Atlikta mokslinių publikacijų analizė leido tyrėjus, nagrinėjančius IP vertinimo klausimus, sugrupuoti į tris grupes.

Pirmoje mokslininkų grupėje reikia paminėti pačius paskutinius tyrimus: Birnleitner (2014), Škuflić, Rkman & Šokčević (2013), Serhieieva (2015), Kwang-Hoon Lee (2016),

Dorożyński & Kuna-Marszałek (2016); Kazakhstan investment attractiveness – Ernst & Young's investor opinion survey (2011), Langalanga (2015), EY's attractiveness survey: India 2014. Enabling the prospects (2014), Dumon (2012), kuriuose tiriamos šalies IP problemos. Visi jie vieningai įsitikinę ir tvirtina, kadangi šalies IP samprata yra daugiaspektė, regionų ir įmonių IP yra jos integralinio rodiklio sudedamoji dalis.

Antrojoje grupėje tyrinėtojai nagrinėja regiono, sektoriaus ar teritorijos IP, jie įsitikinę tiriamos problemos svarba, nes išskyrė ją kaip bendro šalies IP sudedamąją dalį. Jie taip pat įsitikinę, kad veikiančių regiono teritorijoje įmonių IP daro žymią įtaką regiono patrauklumui. Šių mokslininkų tarpe - Snieska & Zykiene (2015), Dorożyński & Kuna-Marszałek (2016), Mustafakulov (2016, 2017), Snieska & Zykiene (2011), Litavniece (2014), Brunec-kienė, Zykienė & Stankevičius (2016), Durdieva (2013), Saidi (2016), Symon-Nganga & Maruyama (2015), Damborsky & Rihova (2009), Mohammed Hamri, Zerouali Ouariti & Sadiqui (2014), Lapointe (2004), Nizielska (2012), Zakirova (2016), Sinkiene & Kromalcas (2010).

Na o trečios grupės tyrinėtojai (Drábek & Merková (2015), Krupka & Bachinskiy (2014), Stokovich (2009), Mirkin (2006), Tsarev (2012), Anamari-Beatrice (2014), Mittala & Jhamb (2016), Rębiasz & Macioł (2014), Rolik (2012, 2013), Vetlugin (2006), Kolomits (2013), Kredisov (2013), nagrinėjantys įmonės IP problemas, teigia, kad nepadidinus įmonės IP neįmanoma padidinti regiono, sektoriaus ir šalies IP.

Verta pabrėžti, kad visi IP problemą nagrinėjantys mokslininkai yra vieningi tame, kad jei IP yra savistovi kategorija ir sudėtingos investicinės aplinkos formavimo sistemos dalis, ją privalu įvertinti. O, kadangi įmonė pripažinta pagrindine grandimi, formuojant šalies, regiono ar teritorijos IP, iškyla klausimas: kaip įvertinti įmonės IP ir kokie veiksniai turi būti analizuojami. IP įvertinimo klausimas ypač svarbus, kai reikia įvertinti daugelį pretendentų investicijoms. Kokia įmonė labiausiai patraukli investavimui ir kiek rizikingas toks investavimas? Kaip užtikrinti įmonės IP?

Atsakymus į šiuos klausimus siekiama rasti įvairių mokslininkų, siūlančių įvairius įmonės IP įvertinimo modelius ir metodus, darbuose. IP vertinimo mikrolygyje modeliai pateikti tokiuose moksliniuose darbuose, kaip "Model for quantifying the components of the innovation strategy" (Rolik, 2013), "Model for business activity assessment" (Nizielska, 2012), "Assessment model on the basis of forecast estimates" (Rębiasz & Macioł, 2014), "Method for integral assessment of investment attractiveness of enterprises and organizations" of Agency on Prevention of Bankruptcy of Enterprises and Organizations (ABEO) of Agency on Prevention of Bankruptcy of Enterprises and Organizations (ABEO) and registered in the Ministry of Justice of Ukraine (ABEO, 1998). Visi šie įmonės IP vertinimo metodai siūlo kompleksinį koncepcijos traktavimą, įskaitantį efektyvumo, rizikos ir įmonės regioninio priklausymo rodiklius. Atlikus įmonės IP vertinimą galima gauti eilę efektyvumo rodiklių, toliau juos palyginti ir padaryti galutinę išvadą. Nė vienas metodas nenumato gauti vieną universalią reikšmę, pagal kurią toliau galima būtų tiksliai atsakyti į klausimą: kokia įmonė ir kiek labiau patraukli investuotojui?

Snieska & Zykiene (2015) nustatė, kad investuotojui svarbiu veiksniu yra paramos paslaugų verslui veiksnys. Mokslinėje literatūroje šis aspektas kitų tyrėjų buvo menkai nagrinėtas (Snieska & Zykiene, 2015). Tokie tyrinėtojai kaip Otairua, Umarb, Zawawib, Sodan-



gic & Hammad (2014), Pribadi & Pangeran (2010), Anamari-Beatrice (2014), Yang, Long & Li (2017), Liu, Gao, Cheah & Luo (2016), Wang & Liu (2015), Cedrick & Long (2017), Kurniawan, Mudjanarkoa & Ogunlana (2015), Kurniawan, Ogunlana & Motawa (2014), Hucknall (2010), Siemiatycki (2009), Kaka & Al-sharif (2010), Zeneli (2016) siūlo sistemas, skirtas užtikrinti sąveiką tarp valstybės ir privataus investuotojo valstybinės-privačios partnerystės (VPP) rėmuose. Kadangi kilus krizei šalyje įmonės IP savistovus vystymasis tampa probleminiu, tokie autoriai, kaip Mankiw (2014), Cedricks & Longs (2017), Yang, Long & Wenbo Li (2017), Liu, Gao, Cheah, & Luo (2016), Wang & Liu (2015), Kurniawan, Mudjanarko & Ogunlana (2015), Zeneli (2016) ir Burkov & Novikov (2007) pasiūlė VPP rėmuose mechanizmus ir modelius kurie padėtų užtikrinti investuotojų skatinimą.

Apibendrinus galima tvirtinti, kad IP vertinimo klausimas mokslinių tyrimų ir praktinio panaudojimo požiūriu yra svarbus, aktualus ir naujas, nes

- IP įtakojantys įmonės veiksniai yra nepakankamai išanalizuoti;
- įmonės IP vertinimo metodologija bei modeliai reikalauja mokslinio tobulinimo;
- įmonės IP užtikrinimui būtini nauji pasiūlymai.

Visumoje reikia tobulinti įmonės IP vertinimą ir apskaitą regioninio vystymosi kontekste. Įmonės IP vertinimo tyrimų stoka, nesutarimas dėl naudojamų vertinimo metodų skatina tolesnius tyrimus. Įmonės IP įtakojančių veiksnių tyrinėtojai koncentruoja dėmesį į skirtingų klausimų gvildenimą. Įvertinę įmonės, regiono ir miesto IP jie gavo daugelį rezultatyvinių rodiklių. Bet nė vienas iš jų regioninio vystymosi kontekste nepasiūlė universalus įmonės IP vertinimo modelio, nustatančio visų sąveikos veiksnių įtaką, ir tokios sąveikos mechanizmo. Tai spraga vertinant įmonės IP regioninio vystymosi kontekste. Be to, regioninio vystymosi kontekste vis dar nėra vientisos įmonės IP vertinimo metodologijos.

**Mokslinė problema** – kaip įvertinti ir užtikrinti įmonės IP regioninio vystymosi kontekste.

**Mokslinio tyrimo objektas** – įmonės IP vertinimo ir užtikrinimo metodai ir modeliai regioninio vystymosi kontekste.

**Mokslinio tyrimo tikslas** – parengti įmonės IP vertinimo ir užtikrinimo metodą regioninio vystymosi kontekste ir patikrinti jo veiksmingumą Charkovo apskrityje.

#### **Mokslinio tyrimo uždaviniai:**

1. Identifikuoti pagrindines IP vertinimo struktūrines dalis turinį, išanalizuoti mokslininkų požiūrius į IP sampratą, nustatyti jos turinį;
2. Išnagrinėti IP įtakojančius veiksnius ir juos charakterizuojančius rodiklius, nustatyti reikšmingiausius veiksnius, bei juos indikuojančius rodiklius, susisteminus gautus rezultatus atrinkti rodiklius, tinkamus įvertinti įmonės IP regioninio vystymosi kontekste;
3. Remiantis išsivysčiusių Europos šalių patyrimu nustatyti VPP vaidmenį užtikrinant įmonės IP regioninio vystymosi kontekste;
4. Remiantis turimais įmonės IP vertinimo modeliais, empirinių IP vertinimo rezultatų analize, bei naudotų metodų pranašumų ir trūkumų nustatymu parengti įmonės IP vertinimo regioninio vystymosi kontekste modelį;

5. Siekiant užtikrinti efektyvų valstybės ir privataus investuotojo sąveiką, panaudojant viešojo ir privataus sektorių partnerystės (VPSP) mechanizmą, pasiūlyti įmonės IP regioninio vystymosi kontekste užtikrinimo modelį;
6. Patikrinti pasiūlyto įmonės IP vertinimo regioninio vystymosi kontekste modelio veikimą automobilinio transporto įmonių Charkovo apskrityje atžvilgiu.
7. Patikrinti pasiūlyto įmonės IP, panaudojant VPSP mechanizmą regioninio vystymosi kontekste, užtikrinimo modelio veikimą automobilinio transporto įmonių Charkovo apskrityje atžvilgiu.

### **Santykis su akademinėmis programomis, planais, temomis**

Tyrimo tema yra autoriaus bendraautorinio Charkovo nacionalinio automobilių, kelių universiteto (KNAHU) Ekonomikos ir verslininkystės katedros mokslinio tyrinėjimo darbo tema „Verslininkystės vystymosi Ukrainoje perspektyvos“ (valstybinis registravimo numeris 0114U003909) ir «Komerčinės veiklos vystymosi valdymo prioritetinės kryptys ir valdymo perspektyvos (valstybinis registravimo numeris 0115U004774). Atlikdama tyrimus autorė pagrindė teorinius verslininkystės vystymosi aspektus, išgildeno teorinius ir metodologinius požiūrius į įmonės IP vertinimą regioninio vystymosi kontekste.

### **Tyrimo metodai**

Iškeltos disertacijoje problemos sprendimui buvo panaudoti tokie mokslinio tyrimo metodai:

- kritinė analizė, abstraktus-loginis metodas ir mokslinio tyrimo apibendrinimas – tobulinant IP apibrėžimus ir principus;
- analizė, sintezė ir palyginimas – atrenkant išorinius ir vidinius aplinkos veiksnius, veikiančius IP nustatant įmonės IP užtikrinimo tikslus, apibendrinant įmonės IP vertinimo metodus;
- ekonominis - matematinis modeliavimas ir faktorinė analizė bei optimizavimo metodas - parengiant įmonės IP vertinimo modelį;
- optimalių strategijų tyrimo matematinis metodas - parengiant efektyvios valstybės ir privataus investuotojo sąveikos VPSP rėmuose užtikrinimo modelį;
- tyrimo rezultatų matematinė ir statistinė analizė, panaudojant statistinių duomenų apdorojimo programinę įrangą, SPSS (v21.0) ir Microsoft Excel (2010).

### **Duomenys ir jų šaltiniai**

Tyrimai atlikti naudojant laikotarpio nuo 2011 iki 2016 metų (6 metai) duomenis. Įmonės IP vertinimo ir užtikrinimo tyrime panaudoti teoriniai šaltiniai – tai knygos, straipsniai, moksliniai darbai IP ir gebėjimo konkuruoti tema, tiesioginių užsienio investicijų ir VPSP įtakos IP tema, o taip pat daugialypės palyginamosios analizės metodologijos tema.

Specialistų kolektyvinei nuomonei apie įtakojančius IP veiksnius nustatyti panaudota anketinė apklausa įvykdyta 2017 metais KNAHU tarptautinės konferencijos metu. Konferencijoje tema „Komerčinės veiklos vystymo problemos ir perspektyvos“ dalyvavo ekonomikos, verslininkystės ir valdymo specialistai iš Ukrainos, Slovakijos ir Lenkijos.

Tyrimo, metodologija grįsta investavimo ir rinkos ekonomikos pagrindiniais principais, teoriniais vietinių ir užsienio mokslininkų darbais verslininkystės klausimais, investavimo veiklą reguliuojančių normatyvinių ir teisinių aktų nuostatomis. Empirinio tyrimo metu buvo naudojami Ukrainos Valstybinės statistikos tarnybos ir Centrinės statistikos valdybos Charkovo apskrityje oficialūs statistiniai duomenys, finansinės ataskaitos ir kita informacinė medžiaga.

### **Mokslinio tyrimo naujumas**

1. Įmonės IP samprata atskleista regioninio vystymosi kontekste. Esamuose IP apibrėžimuose dažniausiai sutinkamos sampratos, - tai palanki investicinė aplinka, statusai ir galimybės, investavimo potencialas, investavimo saugumas, bendri pranašumų ir trūkumų apibūdinimai, įmonės stabilumas, investavimo akstinai, gebėjimas konkuruoti, geros sąlygos dalykiniam aktyvumui ir pan. siejamos daugiausia tik su pasirinktos grupės veiksniais ir stokoja holistinio požiūrio Kompleksiškumą atskleidžiančio įmonės IP apibrėžimo nėra. Įvairiuose šaltiniuose IP samprata apibrėžiama kaip funkcionavimo sąlygos, nustatomos kokybinių ir kiekybinių rodiklių rinkinio. Disertacijoje IP apibrėžta kaip kompleksinė samprata, sudaryta iš įmonės konkurencingumą charakterizuojančių bei galutinius investavimo rezultatus įtakančių veiksmų rinkinio.
2. Įmonės IP vertinimo problemos sprendimui buvo nustatytas labiausiai reikšmingų ir darančių IP lemiamą įtaką veiksmų kompleksas. Atrinkus ir sisteminus įtakančius IP veiksmus buvo nustatyti labiausiai reikšmingi. Buvo atrinkti vidiniai ir išoriniai veiksniai, nustatantys holistinį įmonės IP vertinimą. Šie įmonės IP rodikliai buvo išanalizuoti, įvertinti apibendrinti IP vertinimo rodiklių rinkinyje. Naudojant sudarytą rodiklių rinkinį buvo parengtas bandomasis investavimo patrauklumo vertinimo modelis regioninio vystymosi kontekste.
3. Siekiant nustatyti atrinktų veiksmų reikšmingumą, įmonės IP, vertinimas daromas dirbančių šioje srityje specialistų ekspertinės apklausos pagrindu. Kolektyvinėi specialistų nuomonei dėl veiksmų reikšmingumo nustatyti buvo panaudotas anketinės apklausos metodas ir parengtas įmonės IP vertinimo modelis.
4. Įmonės IP regioninio vystymosi kontekste apibrėžiamas kaip bendra visuma, vieni-janti įmonės IP elementus, šakos ir regiono patrauklumo elementus, įmonės ir šakos stabilumą ir efektyvios valstybės ir privataus investuotojo sąveikos užtikrinimą.
5. VPSP apibrėžtas kaip įtakojančias ir užtikrinantis įmonės IP regioninio vystymosi kontekste mechanizmas.
6. Parengtas įmonės IP regioninio vystymosi kontekste modelis ir vertinimo algoritmas, kurie gali būti panaudoti kaip IP regioninio vystymosi kontekste vertinimo instrumentai.

### **Disertacijos struktūra**

Šią disertaciją sudaro trys skyriai. IP sampratos traktavimai, nustatantys jos turinį, įtakančių IP ir labiausiai reikšmingų veiksmų nustatymas, VPSP vaidmuo vertinant įmonės IP regioninio vystymosi kontekste aptarti pirmajame skyriuje. Antrajame sky-

riuje išanalizuoti esami įmonės IP modeliai ir vertinimo traktavimai, jų pranašumai ir trūkumai. Parengtas įmonės IP vertinimo regioninio vystymosi kontekste modelis ir efektyvios valstybės ir privataus investuotojo sąveikos VPSP mechanizmo rėmuose užtikrinimo matematinis modelis. Trečiame disertacinio darbo skyriuje pateikti pasiūlytų empirinio tyrimo modelių išbandymo rezultatai. IP vertinimas padarytas Ukrainos automobilių transporto įmonių pavyzdžiu, efektyvios valstybės ir privataus investuotojo sąveikos VPSP rėmuose užtikrinimo matematinis modelis buvo patikrintas Charkovo apskrities įmonių dėka.

### **Tyrimo apribojimai**

Įmonės IP nustatančių veiksnių rinkinys priklauso nuo įmonės darbo sektoriaus. Todėl pasiūlytų šioje disertacijoje veiksnių rinkinys nėra universalus ir reikalauja tolesnio aptarimo.

Autorės pasiūlytas modelis neįskaito valstybinio lygio veiksnių, nes jis orientuotas į vidinį įmonės IP vertinimą.

Šis empirinis tyrimas padarytas autotransporto sektoriaus įmonėse, autorė supranta, kad tyrimo rezultatai kituose sektoriuose gali skirtis, ir tai yra pagrindas tolesniems aptarimams.

Tyrimas padarytas vieno Ukrainos regiono - Charkovo apskrities teritorijoje. Tokie regionai yra besivystančiose šalyse. Sudarantys įmonės IP regioninio vystymosi kontekste vertinimo modelį rodikliai tokiuose regionuose gali būti įvairūs, bet juos galima pritaikyti, o modelis gali būti panaudotas kituose regionuose. Tokių regionų apstu ir mokslo užduotis – palaikyti jų vystymąsi ir europinės integracijos link.

### **Praktinė tyrimo rezultatų vertė**

Disertacinio darbo teorinių ir praktinių nuostatų pagrindu parengtos metodologinės ir praktinės rekomendacijos, kurias galima panaudoti kaip įmonės IP regioninio vystymosi kontekste savarankiško vertinimo, investuotojo pasitikėjimo ir suinteresuotumo gauti investicines naudas stiprinimo mechanizmą. Siekiant tolesnio vystymosi Charkovo apskrities valstybinės administracijos Ekonomikos ir tarptautinių santykių departamentas oficialiai pritarė ir rekomendavo įdiegti autoriaus idėją apie efektyvios valstybės ir privataus investuotojo sąveikos užtikrinimo modelį (2015-06-03 d. aktas apie įdiegimą Nr. 03-46 / 2352).

### **Disertacijos turinys**

Disertaciją sudaro įvadas, trys dalys, išvados ir rekomendacijos, literatūros šaltinių nuorodos ir priedai. Disertacijos apimtis 300 puslapių (180 puslapių, be priedų); 19 iliustracijų, 19 lentelių, 15 priedų; Nuorodose pateiktas 304 panaudotų mokslinės literatūros šaltinių ukrainiečių, rusų ir anglų kalbomis sąrašas.

### **Tyrimų rezultatų paskelbimas**

Tyrimų rezultatai buvo pristatyti mokslinėse konferencijose Ukrainoje ir užsienyje ir paskelbti autoritetinguose moksliniuose žurnaluose.

## DISERTACIJOS TURINIO APŽVALGA

### 1. ĮMONĖS INVESTICINIS PATRAUKLUMAS REGIONINIO VYSTYMOSI KONTEKSTE

#### 1.1. Investicinio patrauklumo samprata

Šiame poskyryje išnagrinėta IP sampratos formavimosi raida ir nustatyta, kad visuotinai pripažinto įmonės IP apibrėžimo nėra. Įvairios publikacijose tai apibūdinama kaip Įmonės funkcionavimo sąlygos, nusakomos kiekybinių ir kokybinių rodiklių rinkiniu. Kitaip tariant, tai analogiškų įmonių, pramonės sektorių gebėjimas konkuruoti tarpusavyje dėl investuotojų dėmesio. Remiantis padaryta IP sąvokos vystymosi analize disertacijoje IP apibrėžta kaip sudėtinga sąvoka, kurią sudaro ją apibrėžiantys ir galutinius investavimo rezultatus galintys paveikti veiksniai.

#### 1.2. Investicinį patrauklumą įtakojantys veiksniai

Šiame poskyryje analizuojami IP įtakojantys veiksniai ir išskiriami labiausiai reikšmingi. Disertacijoje įmonės IP rodikliai išanalizuoti, įvertinti ir apjungti į vieną vientisą rodiklių rinkinį, naudojamą IP vertinti. Autorė apibrėžia šakinius ir regioninius veiksnius kaip išorinius. Nustatyta, kad jie įmonės IP įtakoja nepriklausomi nuo jos veiklos tipo. Buvo išaiškinta, kad įmonės IP vertinimas priklauso nuo regiono ir sektoriaus IP veiksmų. Nustatyta, kad įmonės IP būtina vertinti regioninio vystymosi kontekste.

#### 1.3. Įmonės investicinio patrauklumo išorinė aplinka regioninio vystymosi kontekste

Šioje darbo dalyje tiriami įvairūs valstybės ir privataus investuotojo sąveikos traktavimai ir metodai. Ši būtinybė kilo dėl pasiūlytos įmonės IP vertinimo regioninio vystymosi kontekste koncepcijos struktūros. Tyrimo rezultatai parodė, kad VPSP yra efektyviausias tokios sąveikos mechanizmas. VPSP apibrėžiama kaip ypatinga komercinės veiklos organizavimo ir investavimo veiklos forma. Kompensacinių išmokų investuotojui pritraukti ir paskatinti būtinumas (Caoa, Dub & Hansen, 2017) sąlygoja poreikį parengti efektyvios valstybės ir privataus investuotojo sąveikos užtikrinimo metodologiją.

#### 1.4. Įmonės investicinio patrauklumo užtikrinimas regioninio vystymosi kontekste

Šiame poskyryje parengtas įmonių IP užtikrinimo regioninio vystymosi kontekste modelis. Rinkos struktūra ir jos įtakos investavimo rezultatams jėga lemia efektyvios įmonių investavimo veiklos galimybes (Khobt, 2005). Autorės pasiūlytame įmonės IP regioninio vystymosi kontekste užtikrinimo modelyje yra tokie svarbūs etapai, kaip - įmonės IP vertinimas; regiono IP vertinimas; sektoriaus IP vertinimas; VPSP įgyvendinimo galimybių vertinimas (valstybės ir privataus investuotojo sąveika). Papildžius jau esamus įmonės IP vertinimo modelius šiais vertinimo etapais, įmonės IP regioninio vystymosi kontekste koncepcija apibrėžiama kaip vieninga visuma, apimanti įmonės, sektoriaus ir regiono IP

elementus, įmonės šakinių stabilumą ir efektyvios valstybės ir privataus investuotojo sąveikos užtikrinimą.

## **2. ĮMONĖS INVESTICINIO PATRAUKLUMO VERTINIMO METODOLOGIJA REGIONINIO VYSTYMOSI KONTEKSTE**

### **2.1. Esamų įmonės investicinio patrauklumo vertinimo modelių apžvalga**

Šiame poskyryje buvo išanalizuoti mokslinėje literatūroje aprašyti įmonės IP vertinimo modeliai. Kuriant naująjį modelį detalai buvo išnagrinėti modeliai pristatyti šiose publikacijose: “Model for quantifying the components of the innovation strategy” (Rolik, 2013), “Model for business activity assessment” (Nizielska, 2012), “Assessment model on the basis of forecast estimates” (Rębiasz & Macioł, 2014), Method for integral assessment of investment attractiveness of enterprises and organizations” of Agency on Prevention of Bankruptcy of Enterprises and Organizations (ABEO) of Agency on Prevention of Bankruptcy of Enterprises and Organizations (ABEO) and registered in the Ministry of Justice of Ukraine (ABEO, 1998). Sukurtas įmonės IP vertinimo modelis yra indėlis į ekonomikos mokslo vystymą, nes sudaryta galimybė apibrėžti įmonės IP rodiklį kiekybiškai. Kiekybinė šios koncepcijos išraiška yra gerai suprantama analitikams, be to, gali būti sėkmingai integruojama ir kituose tyrimuose.

Atlikta analizė padėjo atskleisti pagrindinius tikslinius įmonės IP vertinimo principus, pagrindinius veiksnius ir jų rodiklius vertinant įmonės IP regioninio vystymosi kontekste. Modelių analizė parodė, kad įmonės IP regioninio vystymosi kontekste vertinimas yra gana sudėtingas procesas. Dauguma paminėtų IP vertinimo metodų remiasi tam tikrų krypčių ekonominių rodiklių nustatymu ir analize. Kiekviena iš nurodytų krypčių charakterizuojama keliais indikatoriais, kurie turi svarbią įtaką ir visapusiškai apibūdina įmonės veiklos sferą. Siekiant nustatyti vieningą integralinį įmonės IP regioninio vystymosi kontekste rodiklį siūloma išspręsti didžiausią veiksnių rodiklių apibendrinimo problemą. Kadangi šiuo metu nėra metodologinio įmonės IP regioninio vystymosi kontekste vertinimo traktavimo, kuriame būtų integruojami visi nustatyti rodikliai ir veiksniai, autorė pasiūlė parengti principingai naują metodologinį įmonės IP regioninio vystymosi kontekste vertinimo modelį.

### **2.2. Įmonės investicinio patrauklumo vertinimo modelis**

Įmonės IP apibrėžiama kaip vieninga vidinių, šakinių bei regioninių veiksnių visuma. Visų trijų grupių įmonės IP elementus būtina panaudoti kartu.

Atskirų įmonių veiklos efektyvumo rodiklių svarbos laipsnio prieštaravimams reikalavo šių rodiklių grupių svarumo nustatymo procedūros.

Apsvarstykite kiekvieną įmonės IP vertinimo modelio parengimo procedūros punktą:

1. Duomenų apie ūkinę finansinę įmonės veiklą kaupimas. Šiame etape kaupiama informacija apie faktinį įmonės būvį ir esamo IP būvio vertinimą.
2. Duomenų bazės formavimas IP vertinti. Šiame etape įmonės IP rodiklių apskaičiavimas vyksta remiantis autorės pasiūlytais vidiniais įmonės IP rodikliais. Svarbi sąlyga yra tai, kad kiekvieno rodiklio reikšmės padidėjimas turi turėti teigiamą dinamiką.

3. Rodiklių grupavimas. Buvo nustatyta, kad įmonės IP daugumoje atvejų nustato mikroaplinkos veiksnių derinio įtaka. Todėl buvo pasiūlyta nustatyti tuos veiksnius, kurie labiausiai įtakoja įmonės IP, t.y. suskirstyti nurodytus veiksnius į pagrindinius ir antraeilius. Pagrindiniai veiksniai lemiamai įtakoja IP. Veiksniai grupuojami atsižvelgiant į jų reikšmę arba įtakojimo jėgą. Rodiklių atrinkimas vykdomas remiantis šakos specialistų anketine apklausa.
4. Duomenų normalizavimas. Šio etapo būtinumas sąlygotas naudojamų indikatorių pobūdžiu, nes jie žymiai skiriasi savo absoliutinėmis reikšmėmis (atskiri rodikliai kokybiniai, kiti kiekybiniai arba atskiri rodikliai matuojami tūkstančiais, o kiti - šimtais). Duomenų normalizavimas įgalina visas skaitmenines kintamųjų reikšmes suvesti į vieną ir tą pačią jų kitimo sritį, kas leistų suvienyti jas viename modelyje.
5. Svarumo koeficientų kiekvienam įtakojančiam įmonės IP veiksmui ir veiksnių grupei nustatymas. Šio IP vertinimo modelio konstravimo etapo tikslas – svarumo koeficientų, atspindinčių kiekvieno jų įnašą į IP, apskaičiavimas. Tokių koeficientų nustatymas atliktas hierarchinės analizės metodo pagalba. Skirtingai nuo įprastinio rango nustatymo ekspertiniu metodu jis pateikia patikimesnius ir objektyvesnius rezultatus.
6. Nustatytų svarumo koeficientų dėka galima suformuoti įmonės IP vertinimo modelį. Gavus konkrečius svarumo koeficientus šešerioms pagrindinėms įmonės IP grupėms, įmonės IP integralinis indeksas atrodoys taip:

$$I_{IIA} = 0,162848 * K_{GI} + 0,194772 * K_{GII} + 0,149737 * K_{GIII} + 0,154986 * K_{GIV} + 0,177391 * K_{GV} + 0,160266 * K_{GVI}, (1)$$

čia  $I_{IIA}$  - įmonės IP integralinis indeksas;

$K_{GI}$  - I grupė (turtinė būklė);

$K_{GII}$  - II grupė (finansinis nepriklausomumas);

$K_{GIII}$  - III grupė (finansinis stabilumas);

$K_{GIV}$  - IV grupė (aktyvų likvidumas);

$K_{GV}$  - V grupė (rentabilumas);

$K_{GVI}$  - VI grupė (dalykinis aktyvumas).

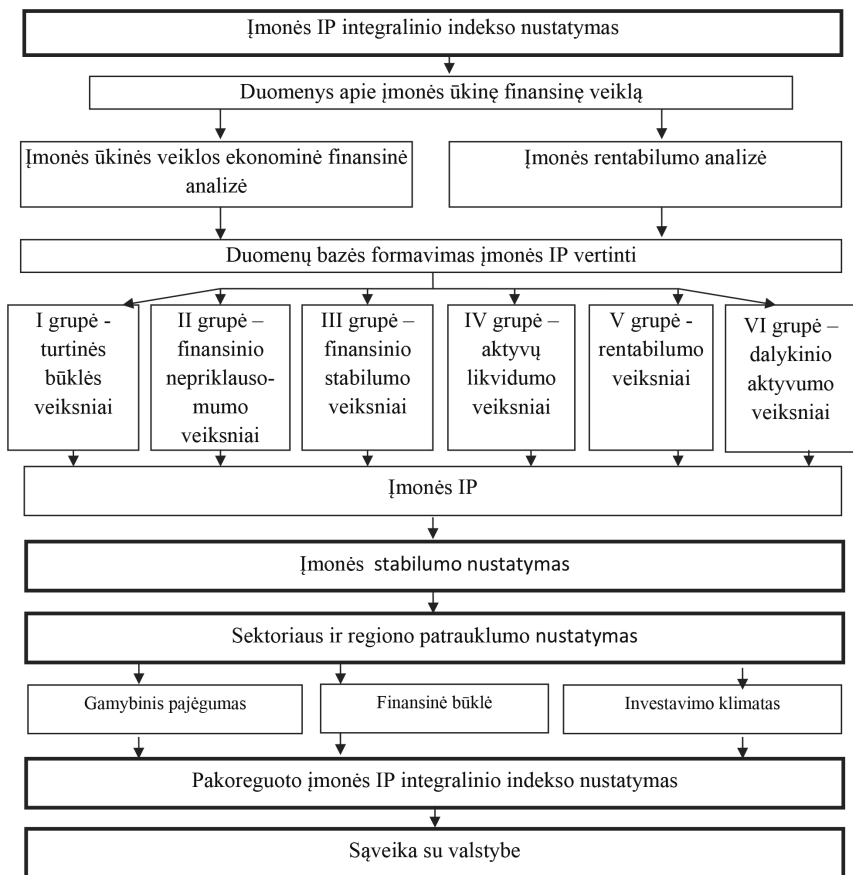
Naudojant parengtą modelį galima išspręsti didžiausią problemą – suvienyti rodiklius ir nustatyti universalų integralinį monės IP indeksą. O kadangi šis rodiklis apibūdina įmonės finansinę būklę (panaudojami vidiniai apskaičiavimai), jis tampa pagrindu įmonės IP vertinti regioninio vystymosi kontekste.

### 2.3. Įmonės investicinio patrauklumo vertinimas regioninio vystymosi kontekste

Šiame poskyryje parengtas metodologinis įmonės IP vertinimo traktavimas regioninio vystymosi kontekste. Įmonės IP vertinimo regioninio vystymosi kontekste modelio struktūra pavaizduota 1 pav.

Darbe pasiūlytas įmonės IP vertinimo modelis regioninio vystymosi kontekste atsižvelgia į susietų su įmonės IP indekso formavimo pradinių duomenų dinamiką. Siūlomas metodologinis traktavimas, pagrįstas tiriamų investavimo procesų dinamika atskirų įmonių

lygyje. Siekiant užtikrinti įmonės IP regioninio vystymosi kontekste, autorės nuomone, būtina atkreipti dėmesį į ypač svarbų veiksnį, t.y., sąveikos su valstybe pobūdį. Tai padaryta šios disertacijos sekančiame poskyryje.



**1 pav.** Įmonės IP vertinimo modelis regioninio vystymosi kontekste (parengta autoriaus)

## 2.4. Valstybės ir privataus investuotojo sąveikos užtikrinimo metodas, panaudojant VPSP mechanizmą regioninio vystymosi kontekste

Žmonės reaguoja į akstinus ir sąžiningumą (Mankiw, 2014). Teigiami išoriniai efektai ir valstybinės-privačios partnerystės mechanizmai tai svarbios paskatos (Cedricks & Longs, 2017) veikti investuotojams. Siekiant parengti valstybinės investicijų politikos realizavimo mechanizmus buvo pasiūlyta panaudoti valstybės ir privataus investuotojo sąveikos užtikrinimo modelį. Disertacijoje pristatomas parengtas matematinis efektyvios valstybės ir privataus investuotojo sąveikos užtikrinimo, panaudojant VPSP mechanizmą, modelis.



Kadangi visus įmonės IP vertinimo etapus regioninio vystymosi kontekste autorė smulkiai aprašė šioje disertacijoje, buvo logiška pristatyti bendrą įmonės IP regioninio vystymosi kontekste vertinimo algoritmą. Pateiktas algoritmas tai tam tikra veiksmų seka vertinant įmonės IP regioninio vystymosi kontekste. Jis apima tris tokio vertinimo etapus, t. y.:

1. įmonės IP vertinimas remiantis įmonės vidiniais rodikliais (žr. Poskyrį 2.2.);
2. sektoriaus, regiono IP vertinimas ir įmonės stabilumo šiame sektoriuje vertinimas (žr. Poskyrį 2.3.);
3. įmonių - kandidačių dalyvauti socialinėse įmonių ir regionų vystymo programose atrinkimas, o taip pat bendro dalyvavimo šiose programose efekto įmonėms-dalyvėms ir atskirai kiekvienai įmonei nustatymas (žr. Poskyrį 2.4.).

Siekiant įrodyti autorės pasiūlyto įmonės IP regioninio vystymosi kontekste vertinimo modelio efektyvumą, būtina jį išbandyti empiriškai. Empirinis tyrimas buvo atliktas Charkovo apskrities autotransporto įmonėse. Prieš pradėdant tyrimą autorė iškėlė tokias hipotezes:

1. modelių galima pritaikyti bet kokio sektoriaus ir regiono įmonėms;
2. efektyvios valstybės ir privataus investuotojo sąveikos (panaudojant VPSP mechanizmą) regioninio vystymosi kontekste modelio dėka galima tiksliai įvertinti dalyvavimo vystymo programose efektą visiems dalyviams ir kiekvienam atskirai. O kadangi sąveikos su valstybe veiksnyis įtakoja įmonės IP regioninio vystymosi kontekste, šio modelio pagalba galima padidinti įmonės konkurencingumą.

### **3. PASIŪLYTO ĮMONĖS INVESTICINIO PATRAUKLUMO VERTINIMO MODELIO EMPIRINIS TYRIMAS CHARKOVO APSKRITIES (UKRAINA) KONTEKSTE**

#### **3.1. Autotransporto sektoriaus Charkovo apskrityje investicinio patrauklumo vertinimo rezultatai**

Pagal Charkovo regiono autotransporto sektoriaus IP vertinimo rezultatus galima padaryti išvadą apie žemą sektoriaus patrauklumo lygį, tačiau Charkovo sritis yra patraukli potencialiam investuotojui. Todėl remiantis investavimo patrauklumo matrica mikrolygyje (Grineva, 2013), pataisos koeficientas buvo prilygintas 1. Ši reikšmė buvo naudojama vertinant įmonės IP regioninio vystymosi kontekste.

#### **3.2. Įmonės investicinio patrauklumo vertinimas regioninio vystymosi kontekste**

Charkovo apskrities įmonių IP apskaičiavimas leido paskirstyti tiriamas įmones į tris grupes: 1-a grupė – labiausiai patrauklios investavimui įmonės, mažiausiai reikalaujančios investicinių įplaukų; 2-a grupė – vidutinio IP įmonės; 3-a grupė – žemo IP įmonės, reikalaujančios žymių investicinių įplaukų. Charkovo apskrities įmonių stabilumo apskaičiavimas taip pat leidžia įmones sugrupuoti pagal investicijų rizikingumą lygį. Šiame tyrimo etape įmonės taip pat buvo suskirstytos į tris grupes: -1-a grupė – mažiausiai rizikingos investavimui (minimalus rizikos rodiklis); 2-a grupė vidutinio rizikos lygio įmonės; 3-a grupė – aukšto rizikos lygio įmonės (tarp ištirtų įmonių jų rizikos indeksas aukščiausias).

### 3.3. Efektyvios valstybės ir privataus investuotojo sąveikos, panaudojant VPSP mechanizmą regioninio vystymosi kontekste, modelio panaudojimas

Siekiant užtikrinti valstybinės investicinės politikos mechanizmų vystymą autorė pasiūlė panaudoti valstybės ir privataus investuotojo sąveikos, panaudojant VPSP mechanizmą regioninio vystymosi kontekste, modelį. Apskaičiuojant optimalią strategiją VPSP projektuose dalyvaujančioms įmonėms, panaudoti du parametrai: efektyvumas ir pirmumas. Apskaičiavimuose autorė siūlo panaudoti konkrečios įmonės stabilumo rodiklį tam tikrame sektoriuje pagal efektyvumo parametą. Šis rodiklis pagal savo ekonominę esmę apibūdina įmonės efektyvumą konkrečiame (šiuo atveju autotransporto) sektoriuje, nes apskaičiuojamas remiantis įmonės ir sektoriaus rentabilumu. Atitinkamai pirmumo parametrai nustatyti autorė siūlo panaudoti įmonės IP regioninio vystymosi kontekste rodiklį. Ši integralų rodiklį sudaro vidinių ir išorinių indikatorių rinkinys ir pagal savo esmę parodo labiausiai investavimui patrauklią įmonę. Juo aukštesnė įmonės IP regioninio vystymosi kontekste rodiklio reikšmė, tuo aukštesnis jos prioritetas bus nustatytas.

Atlikus empirinį tyrimą, buvo nustatyta optimali dalyvavimo investiciniuose projektuose strategija kiekvienam pretendentui ir nustatyti potencialūs nugalėtojai projektams vykdyti. Valstybės ir privataus investuotojo sąveikos, panaudojant VPSP mechanizmą, modelis turi unikalią savybę – turinti tam tikras lėšas investavimo projektui realizuoti įmonė gali būti ir kandidatu gauti investicijas iš išorinių investuotojų. Sėkmės atveju įmonė vystosi išnaudodama savo potencialą ir gauna iš valstybės strategiškai svarbias lėšas.

## IŠVADOS

Atskleistos įmonės IP regioninio vystymosi kontekste vertinimo ypatybės ir šio integralinio vertinimo metodologiniai aspektai demonstruoja pastoviai stiprėjantį pasaulio akademinių ekonomistų, praktikų ir politikų susidomėjimą tyrimo tema ir įrodo jos aktualumą, savalaikiškumą ir naujumą. Įmonės IP regioninio vystymosi kontekste koncepcijos ir šiam tikslui taikomų vertinimo metodų tyrimas leidžia suformuluoti tokias išvadas:

1. Teorinė analizė atskleidė, kad įmonės IP koncepcija nėra visapusiškai atskleista ir pilnai apibrėžta. Problema pasižymi daugialypiškumu. Analizuojant įvairius teorinius IP sampratos, jos struktūros ir jos formavimo proceso struktūros traktavimus, buvo nustatyta, kad a) įmonės IP samprata – tai besivystanti ir daugiapusiška sistema, apimanči ne tik įmonių veiklą, bet ir regiono, sektoriaus bei šalies visuminės išorinės sąlygas; b) įmonės IP – yra visuomenės sukurta samprata, taigi, tai yra tam tikrų įtakančių visuomenės vystymąsi subjektų egzistavimo sąlygų ir visuomeninių santykių kitimo modelis. Apibendrinus įmonės IP sampratos vystymosi ir struktūros analizę, disertacijoje įmonės IP apibrėžiama kaip sudėtinga samprata, kurią sudaro ją apibrėžiančių ir įtakančių galutinius investavimo rezultatus veiksnių rinkinys.
2. Įtakančių įmonės IP veiksnių analizė atskleidė daugialypį šio klausimo traktavimą. Mokslininkai siūlo koncentruoti dėmesį į mikroaplinkos veiksnius, nes juos stipriai veikia įmonės valdymo sprendimai ir, remiantis šių veiksnių rodikliais, galima tiksliai apibrėžti esamą įmonės būvį, padaryti jos veiklos prognozę ir numatyti

pokyčius. Kita vertus, moklininkai teigia, kad bet kuri įmonė, netgi pati stabiliausia, yra įtakojama išorinių veiksnių. Taip pat buvo nustatyta, kad labiausiai įmonės IP įtakojantys veiksniai yra teritoriniai (regioniniai) ir šakiniai veiksniai. Todėl autorė pasiūlė įmonės IP vertinti regioninio vystymosi kontekste.

3. Vienu svarbiausių IP veiksnių yra sąveikos su valstybe pobūdis. VPSP pripažinta labiausiai efektyviu valstybės sąveikos su privačiu investuotoju metodu. Nustatyta teigiama VPSP įtaka įmonės IP užtikrinant regioninio vystymosi kontekste. Siekiant padidinti ne tik įmonės, bet ir regiono IP, pasiūlytas efektyvios valstybės ir privataus investuotojo sąveikos, panaudojant VPSP mechanizmą, užtikrinimo metodas. Įmonių IP regioninio vystymosi kontekste teoriniai tyrimai pademonstravo valstybės ir privačios komercinės veiklos savitarpio palaikymo svarbą. Išanalizavusi teorinius įmonės IP sampratos aspektus, autorė pasiūlė įmonės IP regioninio vystymosi kontekste vertinimo koncepciją, sudarė įmonės IP regioninio vystymosi kontekste vertinimo procedūrą ir parengė modelį jai realizuoti.
4. Apibendrinus tyrimų rezultatus atskleista, kad vieni mokslininkai siūlo vertinti įmonės IP remiantis vidiniais veiksniais, kiti – vidiniais ir išoriniais, nustatyta, kad nėra bendro integralinio rodiklio, galinčio duoti tikslų atsakymą apie įmonės IP regioninio vystymosi kontekste. Šulomų mokslinėje literatūroje IP vertinimo modelių ir metodų, veiksnių atrankos ir jų integravimo į bendrą vertinimo sistemą analizė leido apibūdinti įmonės IP regioninio vystymosi kontekste vertinimo ypatybes. Autorė sudaryto įmonės IP regioninio vystymosi kontekste vertinimo modelio metodologinis pagrindimas ir jo sudėtinųjų dalių grupavimas leis užtikrinti vertinimo tikslumą. Disertaciniame darbe atskleista ir patvirtinta, kad, norint vertinti įmonės IP regioninio vystymosi kontekste, būtinas sisteminis vertinimo metodų vientisumo, funkcionalumo ir pritaikomumo traktavimas. Įmonės IP regioninio vystymosi kontekste vertinimo modelis traktuojamas kaip procesų sistema, sudaryta iš: a) įmonės IP elementų su kiekvienam indikatoriumi nustatytais svarumo koeficientais; b) sektoriaus ir regiono patrauklumo vertinimo elementų; c) įmonės stabilumo sektoriuje vertinimo elementų; d) efektyvios valstybės ir privataus investuotojo sąveikos regioninio vystymosi kontekste, panaudojant VPSP mechanizmą, užtikrinimo, siekiant paruošti projektuose dalyvaujančių įmonių optimalią strategiją, elementų. Šie nuoseklūs veiksmai sudarė prielaidas sukurti įmonės IP regioninio vystymosi kontekste vertinimo modelį. Modelyje atskleista atskirų įmonės IP elementų įtaka įvairiems veiksniais. Modelis lengvai modifikuojamas priklausomai nuo ekonominio subjekto ar sektoriaus, tai užtikrina modelio funkcionalumą ir pritaikomumą.
5. Tyrimai parodė, kad bet kurios valstybės stabiliam ir subalansuotam vystymuisi būtinos sąlygos yra gamybos diversifikavimas, modernizavimas ir transformavimas, bei investicinių išteklių užtikrinimas šių procesų įgyvendinimui. Dėl to iš kilo poreikis klasikines investicinių santykių formas transformuoti į naują investuotojo ir investicijų vartotojo santykių lygį. Siekiant tobulinti valstybės ir privataus investuotojo sąveiką regioninio vystymosi kontekste, kaip lemiamą įmonės IP veiksnį, buvo parengtas efektyvios valstybės ir privataus investuotojo sąveikos, panaudojant VPSP mechanizmą, regioninio vystymosi kontekste užtikrinimo modelis.

6. Pasiūlyto įmonės IP regioninio vystymosi kontekste vertinimo modelio testavimas Charkovo apskrities automobilinio transporto įmonių bazėje patvirtino jo funkcionalumą ir veiksmingumą. Atliktas įmonės IP regioninio vystymosi kontekste vertinimas leido, apskaičiavus tiriamų įmonių IP, suskirstyti jas į tris grupes, nustatyti labiausiai, vidutiniškai ir mažiausiai investavimui patrauklias įmones.
7. Pasiūlyto įmonės IP regioninio vystymosi kontekste, panaudojant VPSP mechanizmą, užtikrinimo modelio testavimas Charkovo apskrities automobilinio transporto įmonių bazėje patvirtino autorės iškeltą hipotezę apie tikslaus efekto įvertinimo visiems projekto dalyviams ir kiekvienam dalyviui atskirai galimybę. Be to, kadangi sąveika su valstybe yra svarbus įmonės investavimo patrauklumo regioninio vystymosi kontekste veiksnys, modelio pagalba galima padidinti šį patrauklumą.

Efektyvios valstybės ir privataus investuotojo sąveikos regioninio vystymosi kontekste, panaudojant VPSP mechanizmą, užtikrinimo modelį, atsižvelgiant į biudžetinio finansavimo dalį, Charkovo apskrities valstybinės administracijos Ekonomikos ir tarptautinių santykių departamentas rekomendavo atitinkamiems valstybinio valdymo organams (2015-06-03 d. aktas dėl įdiegimo Nr. 03-46 / 2352) diegti praktinėje veikloje. Pagrindinis šio darbo tikslas - padidinti investuotojų susidomėjimą ir pasitikėjimą Charkovo apskritimi ir gauti investicinę naudą.

Atliktų tyrimų rezultatai bus naudingi kolegoms tyrinėtojams ir paskatins mokslines diskusijas apie įmonės IP regioninio vystymosi kontekste didinimą ir užtikrinimą.

## LITERATŪROS ŠALTINIAI

1. 2014 European Semester: Country Reports (2014). Available at: [https://ec.europa.eu/info/publications/2014-european-semester-country-reports\\_en](https://ec.europa.eu/info/publications/2014-european-semester-country-reports_en)
2. 2015 European Semester: Country Reports (2015). Available at: [https://ec.europa.eu/info/publications/2015-european-semester-country-reports\\_en](https://ec.europa.eu/info/publications/2015-european-semester-country-reports_en)
3. 2016 European Semester: Country Reports (2016). Available at: [https://ec.europa.eu/info/publications/2016-european-semester-country-reports\\_en](https://ec.europa.eu/info/publications/2016-european-semester-country-reports_en)
4. Abid, F., Bahloul, S. (2011). Selected MENA countries' attractiveness to G7 investors. *Economic Modelling*, 28 (5), 2197–2207. doi: 10.1016/j.econmod.2011.06.013
5. Almarri, K. (2017). Perceptions of the attractive factors for adopting public–private partnerships in the UAE. *International Journal of Construction Management*, 1–8. doi: 10.1080/15623599.2017.1382082
6. Alonso, J. M., Clifton, J., Díaz-Fuentes, D. (2017). The impact of government outsourcing on public spending: Evidence from European Union countries. *Journal of Policy Modeling*, 39 (2), 333–348. doi: 10.1016/j.jpolmod.2017.01.007
7. Anamari-Beatrice, S. (2014). Real Options a Solution for Evaluating Public Private Partnerships. *Procedia Economics and Finance*, 15, 583–586. doi: 10.1016/s2212-5671(14)00516-4
8. Andrash, O. A. (2012). Upravlinnia investytsiynoiu pryvablyvistiu pidpriumstv hotelnoho hospodarstva. *Simferopol*, 179.
9. Assaf, A., Cvelbar, K. L. (2011). Privatization, market competition, international attractiveness, management tenure and hotel performance: Evidence from Slovenia.

International Journal of Hospitality Management, 30 (2), 391–397. doi: 10.1016/j.ijhm.2010.03.012

10. Beyer, J. (2002). "Please invest in our country" – how successful were the tax incentives for foreign investment in transition countries? *Communist and Post-Communist Studies*, 35 (2), 191–211. doi: 10.1016/s0967-067x(02)00007-7
11. Birnleitner, H. (2014). Attractiveness of Countries for Foreign Direct Investments from the Macro-Economic Perspective. Proceedings of FIKUSZ '14 Symposium for Young Researchers. Austria, 29–40. Available at: <https://kgk.uni-obuda.hu/sites/default/files/03-Helmut-Birnleitner.pdf>
12. Bojic, I., Belyi, A., Ratti, C., Sobolevsky, S. (2016). Scaling of foreign attractiveness for countries and states. *Applied Geography*, 73, 47–52. doi: 10.1016/j.apgeog.2016.06.006
13. Bonaparte, Y., Kumar, A., Page, J. K. (2017). Political climate, optimism, and investment decisions. *Journal of Financial Markets*, 34, 69–94. doi: 10.1016/j.finmar.2017.05.002
14. Bruneckienė, J., Zykienė, I., Stankevičius, V. (2016). Critical analysis of city attractiveness factors in Lithuania – Poland cross-border regions: the viewpoints of businessmen and youth. *Journal of Geography, Politics and Society*, 6 (2), 45–58.
15. Bruno, R. Estrin, S., Campos, N. (2016). A meta-regression analysis of the Micro and Macro Evidence on the Growth Effect of Foreign Direct Investment. Paper presented at Academy of International Business 2016. Florida.
16. Bufoni, A. L., Oliveira, L. B., Rosa, L. P. (2015). The financial attractiveness assessment of large waste management projects registered as clean development mechanism. *Waste Management*, 43, 497–508. doi: 10.1016/j.wasman.2015.06.030
17. Cao, L., Du, Y., Hansen, J. Ø. (2017). Foreign institutional investors and dividend policy: Evidence from China. *International Business Review*, 26 (5), 816–827. doi: 10.1016/j.ibusrev.2017.02.001
18. Cedrick, B. Z. E., Long, P. W. (2017). Investment Motivation in Renewable Energy: A PPP Approach. *Energy Procedia*, 115, 229–238. doi: 10.1016/j.egypro.2017.05.021
19. Clarke, G. R. G., Cull, R., Kisunko, G. (2012). External finance and firm survival in the aftermath of the crisis: Evidence from Eastern Europe and Central Asia. *Journal of Comparative Economics*, 40 (3), 372–392. doi: 10.1016/j.jce.2012.01.003
20. Damborský, M. (2010). Localization of enterprise activities. Available at: <https://vskp.vse.cz/eid/28197>
21. Dierkes, M., Erner, C., Zeisberger, S. (2010). Investment horizon and the attractiveness of investment strategies: A behavioral approach. *Journal of Banking & Finance*, 34 (5), 1032–1046. doi: 10.1016/j.jbankfin.2009.11.003
22. Dolega, L., Pavlis, M., Singleton, A. (2016). Estimating attractiveness, hierarchy and catchment area extents for a national set of retail centre agglomerations. *Journal of Retailing and Consumer Services*, 28, 78–90. doi: 10.1016/j.jretconser.2015.08.013
23. Dorożyński, T., Kuna-Marszałek, A. (2016). Investments Attractiveness. The Case Of The Visegrad Group Countries. *Comparative Economic Research*, 19 (1). doi: 10.1515/cer-2016-0007
24. Driffield, N., Love, J., Lancheros, S., Temouri, Y. (2013). How attractive is the UK for future manufacturing foreign direct investment? London: HM Government Office for Science.

25. Dumon, M. (2012). Top 6 Factors That Drive Investment In China. <http://www.investopedia.com/articles/economics/09/factors-drive-investment-in-china.asp>
26. Efremov, V., Kotenkova, S., Davletshin, E. (2015). Evaluation of the Potential for Integration of Capital in the Investment Attractive Regions of the Russian Federation. *Procedia Economics and Finance*, 32, 264–270. doi: 10.1016/s2212-5671(15)01390-8
27. Elshof, H., Haartsen, T., van Wissen, L. J. G., Mulder, C. H. (2017). The influence of village attractiveness on flows of movers in a declining rural region. *Journal of Rural Studies*, 56, 39–52. doi: 10.1016/j.jrurstud.2017.07.004
28. Erkan, A., Fainshmidt, S., Judge, W. Q. (2016). Variance decomposition of the country, industry, firm, and firm-year effects on dividend policy. *International Business Review*, 25 (6), 1309–1320. doi: 10.1016/j.ibusrev.2016.04.003
29. Ershova, N. (2017). Investment climate in Russia and challenges for foreign business: The case of Japanese companies. *Journal of Eurasian Studies*, 8 (2), 151–160. doi: 10.1016/j.euras.2017.03.001
30. EY's attractiveness survey. India 2014. Enabling the prospects (2014). Available at: <http://www.iberglobal.com/Archivos/EY-attractiveness-survey-India-2014.pdf>
31. Fankhauser, S., Lavric, L. (2003). The investment climate for climate investment: Joint Implementation in transition countries. *Climate Policy*, 3 (4), 417–434. doi: 10.1016/s1469-3062(03)00050-0
32. Farkhutdinov, I. Z., Wystorobets, E. A. (2014). Drang Nach Osten: The Ukraine – Is it Possible to Save the Eurasian Space? *Evraziyskiy yuridicheskiy zhurnal*, 2 (69), 14–27.
33. Favara, G., Morellec, E., Schroth, E., Valta, P. (2017). Debt enforcement, investment, and risk taking across countries. *Journal of Financial Economics*, 123 (1), 22–41. doi: 10.1016/j.jfineco.2016.09.002
34. Feldstein, M. (2017). Why is growth better in the United States than in other industrial countries? *Journal of Policy Modeling*, 39 (4), 655–659. doi: 10.1016/j.jpolmod.2017.05.011
35. Foreign Minister on how France is boosting its investment attractiveness (2016). Available at: <https://ie.ambafrance.org/Foreign-Minister-on-how-France-is-boosting-its-investment-attractiveness>
36. Gallyamova, D. K. (2015). Development of the Countries with a Transition Economy. *Procedia Economics and Finance*, 24, 251–255. doi: 10.1016/s2212-5671(15)00656-5
37. Gerrard, M. B. (2011). What are public-private partnerships, and how do they differ from privatizations? *Finance & Development*, 38 (3). Available at: <http://www.imf.org/external/pubs/ft/fandd/2001/09/gerrard.htm>
38. Glick, R., Rose, A. (2015). Currency Unions and Trade: A Post-EMU Mea Culpa. NBER Working Paper No. 21535. doi: 10.3386/w21535
39. Godlewska-Majkowska, H. (Ed.) (2008). Atrakcyjność inwestycyjna polskich regionów. W poszukiwaniu nowych miar. SGH, Warszawa.
40. Groh, A. P., von Liechtenstein, H. (2009). How attractive is central Eastern Europe for risk capital investors? *Journal of International Money and Finance*, 28 (4), 625–647. doi: 10.1016/j.jimonfin.2009.01.006

41. Gursoy, F. (2012). Changing of the Investment Climate of Georgia after the War. *Procedia – Social and Behavioral Sciences*, 62, 1303–1307. doi: 10.1016/j.sbspro.2012.09.223
42. Hildebrandt, A., Nowicki, M., Susmarski, P., Tarkowski, M., Wandałowski, M. (2014). The investment attractiveness of the regions and the sub-regions of Poland. Gdansk, 69. Available at: [http://www.kas.de/wf/doc/kas\\_39941-1522-1-30.pdf?150203124155](http://www.kas.de/wf/doc/kas_39941-1522-1-30.pdf?150203124155)
43. Hucknall, A. (2010). The Value of Financial Model Audit. Paper presented at Financial Modelling for PPP/PFI Conference (SMI). London.
44. Iloie, R. E. (2015). Connections between FDI, Corruption Index and Country Risk Assessments in Central and Eastern Europe. *Procedia Economics and Finance*, 32, 626–633. doi: 10.1016/s2212-5671(15)01442-2
45. Jara, J. J. (2017). Determinants of country competitiveness in attracting mining investments: An empirical analysis. *Resources Policy*, 52, 65–71. doi: 10.1016/j.resourpol.2017.01.016
46. Jung, M. (2006). Host country attractiveness for CDM non-sink projects. *Energy Policy*, 34 (15), 2173–2184. doi: 10.1016/j.enpol.2005.03.014
47. Kaka, A., Alsharif, F. (2009). Financial Modelling of PPP Projects. *Policy, Finance & Management for Public-Private Partnerships*, 212–228. doi: 10.1002/9781444301427.ch12
48. Karadjova, V. (2012). Country Risk – Conditions and Trends in Macedonia, Proposals for Reduction in Conditions of Unstable Environment. *Procedia – Social and Behavioral Sciences*, 44, 470–481. doi: 10.1016/j.sbspro.2012.05.052
49. Kazakhstan investment attractiveness – Ernst & Young’s investor opinion survey (2011). Available at: <https://www.mpo.cz/assets/dokumenty/43916/49303/577174/priloha001.pdf>
50. Kazakov, N. P., Pshenin, V. N. (2015). Ekspertnoe otsenivanie ekologicheskoy bezopasnosti rekreatsionnogo rayona na osnove metoda analiza ierarhiy. *Vestnik INZ-HEKONa*, 3 (8), 86–90.
51. Khneyzer, C. (2016). The territorial attractiveness factors for the service of development in Lebanon: the case of Akkar. Available at: <http://www.theses.fr/2016GREAE005>
52. Kireeva, V., Galiakhmetov, L. (2015). The Assessment of the Intellectual Capital as a Factor of Investment Attractiveness of the Region. *Procedia Economics and Finance*, 27, 240–247. doi: 10.1016/s2212-5671(15)00997-1
53. Kolomyts, O. (2013). Metody prognozirovaniya izmeneniya investitsionnoy privlekatel’nosti i investitsionnoy aktivnosti munitsipal’nogo obrazovaniya. *Kontsept*, 08. Available at: <http://e-koncept.ru/2013/13158.htm>
54. Komori, Y. (2011). *International Relations II: The Politics of International Economic Relations*. Michigan State University James Madison College.
55. Koops, L. (2017). Creating public value: Optimizing cooperation Between public and private Partners in infrastructure Projects. doi: 10.4233/uuid:53c3c8cb-f7f4-49c9-9e7d-e826a60fba6
56. Kordos, M., Vojtovic, S. (2016). Transnational Corporations in the Global World Economic Environment. *Procedia – Social and Behavioral Sciences*, 230, 150–158. doi: 10.1016/j.sbspro.2016.09.019

57. Korobkov, D. V. (2012). Investytsiyna pryvablyvist pidpriemstv enerhetychnoi haluzi. Kharkiv, 23.
58. Krupka, Y. D., Bachinskiy, V. (2014). Estimation of investment attractiveness for enterprises in Ukraine. The Małopolska School of Economics in Tarnów Research Papers Collection, 25 (2), 117–125.
59. Kupiec, L.; Kopczuk, A., Proniewski, W. (Eds.) (2005). Atrakcyjność regionu a sposób rozprzestrzeniania się innowacji i rozwoju społeczno-gospodarczego. In: Atrakcyjność inwestycyjna regionu. Wydawnictwo Wyższej Szkoły Finansów i Zarządzania. Białystok.
60. Kurniawan, F., Mudjanarko, S. W., Ogunlana, S. (2015). Best Practice for Financial Models of PPP Projects. *Procedia Engineering*, 125, 124–132. doi: 10.1016/j.proeng.2015.11.019
61. Lee, K.-H. (2016). The conceptualization of country attractiveness: a review of research. *International Review of Administrative Sciences*, 82 (4), 807–826. doi: 10.1177/0020852314566002
62. Lerner, J., Schoar, A., Sokolinski, S., Wilson, K. (2018). The globalization of angel investments: Evidence across countries. *Journal of Financial Economics*, 127 (1), 1–20. doi: 10.1016/j.jfineco.2017.05.012
63. Litavniece, L. (2014). Risk management in provision of city attractiveness. *Journal of Positive Management*, 5 (3), 3. doi: 10.12775/jpm.2014.016
64. Liu, J., Gao, R., Cheah, C. Y. J., Luo, J. (2016). Incentive mechanism for inhibiting investors' opportunistic behavior in PPP projects. *International Journal of Project Management*, 34 (7), 1102–1111. doi: 10.1016/j.ijproman.2016.05.013
65. Makarov, V. V., Gorbachev, V. L., Arshinov, A. M.; Makarov, V. V. (Ed.) (2002). *Investitsionnaya privilekatel'nost' i informatsionnaya politika predpriyatiya*. Sankt-Peterburg: Izd-vo SPbGUEF, 105.
66. Malovychko, A. S. (2011). Vplyv ryzyk-menedzhmentu na investytsiynu pryvablyvist pidpriemstva. Donetsk, 21.
67. Metodika otsenki investitsionnoy privilekatel'nosti predpriyatiya. Available at: [http://uchebnikionline.com/investirovania/investuvannya\\_-\\_grinova\\_vm/metodika\\_ot-sinki\\_investitsiynoyi\\_privablivosti\\_pidpriemstva.htm](http://uchebnikionline.com/investirovania/investuvannya_-_grinova_vm/metodika_ot-sinki_investitsiynoyi_privablivosti_pidpriemstva.htm)
68. Metody otsinky investytsiynoi pryvablyvosti. Available at: <http://books.br.com.ua/28943>
69. Metodyka intehranoi otsinky investytsiynoi pryvablyvosti pidpriemstv i orhanizatsyi: Zatverdzhena Nakazom Ahentstva z pytan zapobihannia bankrutstvu pidpriemstv ta orhanizatsyi vid 23 liutoho 1998 r. (1998). Verkhovna Rada Ukrainy, No. 22. Available at: <http://zakon3.rada.gov.ua/laws/show/z0214-98>
70. Meyer, K. E. (2015). Context in Management Research in Emerging Economies. *Management and Organization Review*, 11 (03), 369–377. doi: 10.1017/mor.2015.36
71. Meyer, K. E., Sinani, E. (2009). When and where does foreign direct investment generate positive spillovers? A meta-analysis. *Journal of International Business Studies*, 40 (7), 1075–1094. doi: 10.1057/jibs.2008.111
72. Mirkin, Ja. M. (2009). Nauchno-informacionnye materialy po teme: Chastno-gosudarstvennoe partnerstvo v vysshem obrazovanii i nauchnoi sfere: mehanizmy up-



ravleniya imushhestvom, privilecheniya finansirovaniya, upravleniya soderzhaniem obrazovaniya i nauchnoi deyatel'nosti. Moscow, 105. Available at: [http://www.mirkin.ru/\\_docs/\\_budgetfin/\\_obrprog/3\\_1.pdf](http://www.mirkin.ru/_docs/_budgetfin/_obrprog/3_1.pdf)

73. Mirkin, Ya. M., Mirkin, V. Ya. (2006). *Anglo-russkiy tolkovyy slovar' po bankovskomu delu, investitsiyam i finansovym rynkam. Svyshe 10000 terminov.* Moscow: Al'pina Biznes Buks, 424.
74. Mittal, A., Jhamb, D. (2016). Determinants of Shopping Mall Attractiveness: The Indian Context. *Procedia Economics and Finance*, 37, 386–390. doi: 10.1016/s2212-5671(16)30141-1
75. Mota, J., Moreira, A. C. (2015). The importance of non-financial determinants on public–private partnerships in Europe. *International Journal of Project Management*, 33 (7), 1563–1575. doi: 10.1016/j.ijproman.2015.04.005
76. Musson, A. (2012). Is sustainable development an attractive factor for territories? Available at: <http://www.dart-europe.eu/full.php?id=738143>
77. Mustafakulov, S. (2017). Investment Attractiveness of Regions: Methodic Aspects of the Definition and Classification of Impacting Factors. *European Scientific Journal*, 13 (10). doi: 10.19044/esj.2017.v13n10p433
78. Mustafakulov, Sh. I. (2016). Regional capacity: Comparative analysis of theoretical and methodological approaches. *Journal of Economy and Innovative technologies*, 5. Available at: [http://www.iqtisodiyot.uz/sites/default/files/maqolalar/37\\_Sh\\_Mustafakulov.pdf](http://www.iqtisodiyot.uz/sites/default/files/maqolalar/37_Sh_Mustafakulov.pdf)
79. Nizielska, A. (2012). The criteria, instruments, and determinants of investment attractiveness of Silesia: experts opinions. *Journal of economics & management*, 8, 53–70.
80. Ohotina, A., Lavrinenko, O. (2015). Education of Employees and Investment Climate of the Region: The View of the Heads of Enterprises. *Procedia – Social and Behavioral Sciences*, 174, 3873–3877. doi: 10.1016/j.sbspro.2015.01.1127
81. Otairu, A., Umar, A. A., Zawawi, N. A. W. A., Sodangi, M., Hammad, D. B. (2014). Slow Adoption of PPPs in Developing Countries: Survey of Nigerian Construction Professionals. *Procedia Engineering*, 77, 188–195. doi: 10.1016/j.proeng.2014.07.014
82. Percoco, M. (2014). Quality of institutions and private participation in transport infrastructure investment: Evidence from developing countries. *Transportation Research Part A: Policy and Practice*, 70, 50–58. doi: 10.1016/j.tra.2014.10.004
83. Pocius, V., Stungurienė, S., Paškevičius, A. (2014). The Factors of the Attractiveness of the Capital Market of Lithuania. *Procedia – Social and Behavioral Sciences*, 110, 1052–1062. doi: 10.1016/j.sbspro.2013.12.952
84. Popovici, O. (2017). International competitiveness versus location attractiveness for FDI. A theoretical approach. *Annals – Economy Series*, 1, 199–205.
85. Popovici, O. C., Călin, A. C. (2012). Attractiveness of Public Policies for FDI in Central and Eastern European Countries. *The Annals of the University of Oradea. Economic Sciences*, XXI (1), 61–67.
86. Popovici, O. C., Călin, A. C. (2012). Competitiveness as Determinant of Foreign Direct Investments in Central and Eastern European Countries. *Revista Economica. Journal of Economic-Financial Theory and Practice*, 658–666.

87. Porter, M (2015). *Competitive strategy. Methodology of analysis of industries and competitors*. Alpina publ., 454.
88. Porter, M. E., Kramer, M. R. (2006). *Strategy and Society: The Link Between Competitive Advantage and Corporate Social Responsibility*. Harvard Business Review, 78–92.
89. Pribadi, K., Pangeran, M. H. (2010). *Assessing Readiness of Public Sector Risk Management for PPP in Infrastructure Development in Indonesia*. Second International Conference on Construction in Developing Countries (ICCIDC-II): “Advancing and Integrating Construction Education, Research & Practice”. Cairo, 217–280.
90. Puciato, D. (2016). *Attractiveness of municipalities in South-Western Poland as determinants for hotel chain investments*. Tourism Management, 57, 245–255. doi: 10.1016/j.tourman.2016.06.019
91. Ramírez-Alesón, M., Fleta-Asín, J. (2016). *Is the Importance of Location Factors Different Depending on the Degree of Development of the Country?* Journal of International Management, 22 (1), 29–43. doi: 10.1016/j.intman.2015.10.002
92. Rebasz, B., Macioł, A. (2014). *Hybrid Data in the Multiobjective Evaluation of Investments*. Procedia Computer Science, 35, 624–633. doi: 10.1016/j.procs.2014.08.144
93. Rolik, Y. A. (2012). *Complex estimation of industrial enterprise’s innovation strategy*. Proceeding of International Scientific Conferense MK-2012-6, Innovation in the industrial sector. Kazan, 1, 247–251.
94. Rolik, Y. A. (2013). *A Complex Approach to Evaluating the Innovation Strategy of a Company to Determine its Investment Attractiveness*. Procedia – Social and Behavioral Sciences, 99, 562–571. doi: 10.1016/j.sbspro.2013.10.526
95. Sanjo, Y. (2012). *Country risk, country size, and tax competition for foreign direct investment*. International Review of Economics & Finance, 21 (1), 292–301. doi: 10.1016/j.iref.2011.08.002
96. Serhieieva, O. (2015). *Investment climate in Ukraine: Reality and perspectives*. Socio-Economic Problems and the State, 13 (2), 254–260. Available at: <http://sepd.tntu.edu.ua/images/stories/pdf/2015/15sorrap.pdf>
97. Sharma, R. (2016). *Taxing and Subsidizing Foreign Investors (2016)*. Economics Faculty Working Papers, 50. Available at: [http://commons.colgate.edu/econ\\_facschol/50](http://commons.colgate.edu/econ_facschol/50)
98. Sharpe W., Alexander G., Bailey J. (1998). *Investments*. Boston: Prentice Hall, 962.
99. Shome, S. (2013). *India’s urbanization and business attractiveness by 2020*. Cities, 31, 412–416. doi: 10.1016/j.cities.2012.06.015
100. Siemiatycki, M. (2009). *Delivering Transportation Infrastructure Through Public-Private Partnerships: Planning Concerns*. Journal of the American Planning Association, 76 (1), 43–58. doi: 10.1080/01944360903329295
101. Sinkiene, J., Kromalcas, S. (2010). *Concept, Directions and Practice of City, Attractiveness Improvement*. Viesoji politika ir administravimas – Public Policy and Administration, 31, 147–154.
102. Škuflić, L., Rkman, P., Šokčević, S. (2013). *Evaluation of the FDI Attractiveness of the European Countries Using Promethee Method*. Croatian Operational Research Review (CRORR), 4, 258–269.

103. Smit, A. J. (2010). The competitive advantage of nations: is Porter's Diamond Framework a new theory that explains the international competitiveness of countries? *Southern African Business Review*, 14 (1), 105–130.
104. Snieska, V., Zykiene, I. (2011). Fizinės infrastruktūros įtaka regioniniam patrauklumui. *Economics and Management = Ekonomika ir vadyba*, 6, 465–471.
105. Snieska, V., Zykiene, I. (2014). The Role of Infrastructure in the Future City: Theoretical Perspective. *Procedia – Social and Behavioral Sciences*, 156, 247–251. doi: 10.1016/j.sbspro.2014.11.183
106. Snieska, V., Zykiene, I. (2015). City Attractiveness for Investment: Characteristics and Underlying Factors. *Procedia – Social and Behavioral Sciences*, 213, 48–54. doi: 10.1016/j.sbspro.2015.11.402
107. Staroverova, E. (2010). Organizatsionno-ekonomicheskie instrumenty povysheniya investitsionnoy privlekatel'nosti predpriyatiya. *Vladimir*, 183.
108. Strokovich, H. V. (2009). Vybir stratehi investuvannia pidpriyemstv. *Kharkiv*, 17.
109. Sultanova, B. (2016). Sovremennyye problemy byudzheta i byudzhetnogo planirovaniya. *M. Ryskulbekov atyndagy Kyrgyz ekonomikalyk universiteti*, 1 (35), 389–397.
110. Temeljotov, S. A., Bjoerberg, S., Boge, K., Larssen, A. K. (2015). Increasing attractiveness by LCC facility management orientation. *IFAC-PapersOnLine*, 48 (3), 149–154. doi: 10.1016/j.ifacol.2015.06.073
111. The BPCC economic debate on the investment attractiveness of Podkarpacie in Rzeszow. Available at: <http://bpcc.org.pl/en/event-coverages/the-bpcc-economic-debate-on-the-investment-attractiveness-of-podkarpacie-in-rzeszow>
112. The investment attractiveness of the regions of Poland. The report of the annual research project carried out by the team of GIME in cooperation with the Konrad Adenauer Foundation (2014). *Gdansk*, 69.
113. Topsahalova, F. M.-G., Lepshokova, R. R., Koychueva, D. A. (2009). Sovremennoe sostoyanie i otsenka effektivnosti ispol'zovaniya investitsionnykh resursov v agrarnom sektore. *Moscow: Izdatel'stvo "Akademiya Estestvoznaniya"*, 216.
114. Udalykh, O. O. (2006). Upravlinnia investytsiynoiu diyalnistiu promyslovoho pidpriyemstva. *Kyiv: Tsentr navch. l-ry*, 292.
115. Ukraine-Private Infrastructure Projects – The World Bank & PPIAF. Available at: [http://ppi.worldbank.org/explore/ppi\\_exploreCountry.aspx?countryId=97#](http://ppi.worldbank.org/explore/ppi_exploreCountry.aspx?countryId=97#)
116. Valinurova, L. S. (2011). Innovatsionnoe razvitie regionov. Metodologicheskie osnovy i perspektivnye napravleniya. *Moscow: Paleotip*, 200. Available at: <http://www.iprbookshop.ru/10217.html>
117. Vetlugin, S. Yu. (2006). Mezhdunarodnye reytingi, vliyayushchie na otsenku investitsionnoy privlekatel'nosti ekonomiki. *Problemy sovremennoy ekonomiki*, 1, 9–17.
118. Vilisov, M. V. (2006). Gosudarstvenno-chastnoe partnerstvo: politiko-pravovoi aspekt. *Vlast'*, 7, 4–6.
119. Wang, H., Liang, P., Li, H., Yang, R. (2016). Financing Sources, R&D Investment and Enterprise Risk. *Procedia Computer Science*, 91, 122–130. doi: 10.1016/j.procs.2016.07.049

120. Wang, Y., Liu, J. (2015). Evaluation of the excess revenue sharing ratio in PPP projects using principal-agent models. *International Journal of Project Management*, 33 (6), 1317–1324. doi: 10.1016/j.ijproman.2015.03.002
121. Yakupova, N. M., Levachkova, S. J., Iskhakova, G. M., Kadochnikova, E. I., Lelyuk, A. V. (2017). Integral Assessment of the Enterprise Investment Attractiveness: Testing the Hypothesis of Non-Conformity to Investor's Interests. *Journal of Engineering and Applied Sciences*, 12, 4927–4930.
122. Yang, T., Long, R., Li, W. (2017). Suggestion on Tax Policy for Promoting the PPP Projects of Charging Infrastructure in China. *Journal of Cleaner Production*. doi: 10.1016/j.jclepro.2017.10.197
123. Yoo, D., Reimann, F. (2017). Internationalization of Developing Country Firms into Developed Countries: The Role of Host Country Knowledge-Based Assets and IPR Protection in FDI Location Choice. *Journal of International Management*, 23 (3), 242–254. doi: 10.1016/j.intman.2017.04.001
124. Zakirova, E. R. (2016). The economic content of the term “investment attractiveness.” *Proceedings of the Voronezh State University of Engineering Technologies*, 2, 327–333. doi: 10.20914/2310-1202-2016-2-327-333

## PUBLIKACIJOS

### **Straipsniai skelbiami tema disertacija**

1. Dmitriyev, I., Levchenko, I. (2017). The investment attractiveness of enterprises of Ukrainian motor transport industry. *Review of Finance*, 6 (2), 1378–1386. [Scopus, Thompson Reuters, Journal Citation Report]
2. Dmitriyev, I., Shevchenko, I., Levchenko, I. (2017). Theoretical, methodological and applied aspects of managing investment attractiveness of automobile enterprises (on the example of Ukraine). *Oxford Economic Papers*, 4 (2), 1137–1145. [Scopus, Thompson Reuters, Journal Citation Report]
3. Dmytriiev, I. A., Levchenko, I. (2017). Otsiniuvannia investytsiynoi pryvablyvosti pidpriemstva ta upravlinnia yii pokaznykamy. *Aktualni problemy ekonomiky*, 5 (191), 89–99. [EBSCOhost, EconLit, ABI/Inform (by ProQuest), Erih Plus (Норвегія)]
4. Grinko, A., Bochulia, T., Grynko, P., Yasinetska, I., Levchenko, I. (2017). Formation of the concept of intellectualization information provision for managing an enterprise. *Eastern-European Journal of Enterprise Technologies*, 5 (3 (89)), 4–14. doi: 10.15587/1729-4061.2017.111859 [Scopus, Ulrich's Periodicals Directory, OpenAIRE, Bielefeld Academic Search Engine (BASE), WorldCat, Directory of Open Access Journals (DOAJ), EBSCO, ResearchBib, American Chemical Society, Directory Indexing of International Research Journals, Directory of Research Journals Indexing (DRJI), CrossRef, Open Academic Journals Index (OAJI), Sherpa/Romeo]
5. Levchenko, I. (2015). Evaluation the investment attractiveness of motor transport enterprises // *Economics, management, law: problems of science and practice*, 112–117. [PIHL Science Index, Thompson Reuters, IndexCopernicus]

6. Levchenko, I. (2015). Factors of influence are on level of investment attractiveness of motor transport enterprises. *Ikonomicheskite perspektivi v globalnata kriza*, 142–146. [PIHL Science Index, Thompson Reuters, IndexCopernicus]
7. Levchenko, I. (2015). Formuvannia systemy upravlinnia investytsiinoiu pryvablyvistiu avtotransportnykh pidpriemstv. *Nauka moloda*, 23, 20–27. [IndexCopernicus]
8. Levchenko, I. (2015). Mekhanizm informatsiynoho zabezpechennia systemy upravlinnia investytsiinoiu pryvablyvistiu ATP. *Problemy i perspektyvy rozvytku pidpriemnytstva*, 2, 46–50. [IndexCopernicus]
9. Levchenko, I. (2015). Methodology of estimation of level of investment attractiveness of motor transport enterprises. *Economics, Management, Law: current state and perspectives of development*, 116–120. [PIHL Science Index, Thompson Reuters, IndexCopernicus]
10. Levchenko, I. (2015). Optyimizatsiya rivnia investytsiinoiu pryvablyvosti avtotransportnykh pidpriemstv. *Zbirnyk naukovykh prats Cherkaskoho derzhavnoho tekhnolohichnoho universytetu. Seriya: Ekonomichni nauky*, 39 (2), 150–155. [PIHL Science Index, IndexCopernicus, Google Scholar]
11. Levchenko, I. (2015). Orhanizatsiine zabezpechennia upravlinnia investytsiinoiu pryvablyvistiu avtotransportnykh pidpriemstv. *Problemy i perspektyvy rozvytku pidpriemnytstva*, 3 (10), 103–107. [IndexCopernicus]
12. Levchenko, I. (2015). Pryiniattia upravlinskoho rishennia optyimizatsyi rivnia investytsiinoiu pryvablyvosti ATP. *Zbirnyk naukovykh prats Cherkaskoho derzhavnoho tekhnolohichnoho universytetu. Seriya: Ekonomichni nauky*, 40 (2), 89–96. [PIHL Science Index, IndexCopernicus, Google Scholar]
13. Levchenko, I. (2016). Management of investment attractiveness of motor transport enterprises (on the example of Ukraine). *Problemy i perspektyvy rozvytku pidpriemnytstva*, 3 (14), 104–109. [IndexCopernicus]
14. Levchenko, I. (2016). The analysis of the motor transport sector investment in Ukraine and Lithuania. *Perspective directions of scientific researches*, 125–129. [PIHL Science Index, Thompson Reuters, IndexCopernicus]
15. Levchenko, I. (2016). Transport sector development in Lithuania and Ukraine. *Problems of development modern science: theory and practice. EDEX, Madrid, España*, 115–120. [PIHL Science Index, Thompson Reuters, IndexCopernicus]
16. Levchenko, I. (2017). A model of investment attractiveness evaluation of motor transport enterprises. *Economics, management, law: challenges and prospects*, 74–77. [PIHL Science Index, Thompson Reuters, IndexCopernicus]
17. Levchenko, I., Tripak, M. M. (2010). Analiz konkurentnosti transportnoi haluzi Ukrainy ta praktychni rekomendatsyi shchodo yii polipshennia. *Nauka moloda*, 14, 57–59. [IndexCopernicus]

### **Tarptautinių konferencijų darbe nurodytos publikacijos**


1. Antonova, L., Levchenko, I. (2016). Gridin's group lt company: novatorstvo, kachestvo, bezopasnost'. Vol. 3. *Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi*. Kharkiv: KhNADU, 92–94.

2. Antonova, L., Levchenko, I. (2016). Investments – the main element of the investment activities. Vol. 1. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: KhNADU, 157–160.
3. Dmytriyev, I. A., Levchenko, I. (2016). Rozvytok transportnoi haluzi Polshchi ta Ukrainy: spilne ta vidminne. Vol. 2. “Naynovite nauchni postizheniya – 2016”: nauchnye trudy pomaterialam mezhdunarodnoy nauchno-prakticheskoy konferentsii. B’lgariya: “Byal GRAD-BG” OOD, 25–33.
4. Levchenko, I. (2010). Pidvyshchennia efektyvnosti upravlinnia investytsiynoiu diyalnistiu na pidpriemstvakh avtotransportnoi haluzi. Problemy i perspektyvy rozvytku pidpriemnytstva: zbirnyk materialiv mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: FOP Pavlov M.Yu., 129–130.
5. Levchenko, I. (2015). Investytsyi yak osnovnyi element investytsiynoi diialnosti pidpriemstva. Ekonomika i upravlinnia v umovakh hlobalizatsyi: zbirnyk materialiv IV Mizhnarodnoi naukovo-praktychnoi Internet-konferentsyi. Kryvyi Rih: DonNUET, 41–44.
6. Levchenko, I. (2015). Metodyka otsinky rinvia investytsiynoi pryvablyvosti ATP. Ekonomika pidpriemstva: suchasni problemy teoryi ta praktyky: Materialy chetvertoi mizhnar. nauk.-prakt. konf. Odessa: Atlant, 110–113.
7. Levchenko, I. (2015). Priorytetni metody otsinky rinvia investytsiynoi pryvablyvosti ATP. Finansovi aspekty rozvytku derzhavy, rehioniv ta subiektiv hospodariuvannia: suchasnyi stan ta perspektyvy: Materialy I mizhnar. nauk.-prakt. konf. Odessa, 11–13.
8. Levchenko, I. (2016). Formuvannia systemy upravlinnia investytsiynoiu pryvablyvistiu ATP. Vol. 1. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy Kh Mizhnarodnoi naukovo-praktychnoi konferentsii. Kharkiv: KhNADU, 229–231.
9. Levchenko, I. (2017). Derzhavno-pryvatne partnerstvo, yak zaporuka rozvytku pidpriemstv Ukrainy. Economy. Zarzadzanie. Teoretyczne I praktyczne aspekty rozwoju wspolczesnej nauki. Warszawa: Wydawca “Diamond trading tour”, 62–65.
10. Puksas, A., Levchenko, I. (2016). Razvitie transportnoy otrasli v Litve i Ukraine. Vol. 2. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: KhNADU, 203–205.
11. Puksas, A., Levchenko, I. (2016). Upravlenie investitsionnoy privilekatel’nost’yu predpriyatii avtotransportnoy otrasli. Vol. 3. Problemy ta perspektyvy rozvytku pidpriemnytstva: Materialy X Mizhnarodnoi naukovo-praktychnoi konferentsyi. Kharkiv: KhNADU, 272–275.

#### **Periodikoje nurodytos publikacijos, vienkartinės leidinių rinkiniai ir kt.**

1. Huzhva, K. O., Levchenko, I. (2017). Rozvytok transportnoi haluzi Polshchi ta Ukrainy: spilne ta vidminne. Problemy rozvytku ekonomiky pidpriemstva: pohliad molodi: Materialy X Mizhnarodnoi studentskoi naukovo konferentsyi. Kharkiv, 187–189.
2. Tsapko, V. O., Levchenko, I. (2017). Otsinka investytsiynoi pryvablyvosti avtotransportnoi haluzi Kharkivskoho rehionu. Ekonomichni perspektyvy, 2 (9), 133–137.

## INFORMACIJA APIE DISERTACIJOS AUTORIUS

	<ul style="list-style-type: none"> <li>• P.v.t. <u>Levčenko Jaroslava Sergejevna</u></li> <li>• <b>Gimimo metai, mėnuo, diena gimimo vieta</b> <u>1984 m. gegužės 25 d. m. Kamenka, Čerkasų sritis, Ukraina</u></li> <li>• <b>Tautybė</b> <u>ukrainietė</u></li> <li>• <b>Šeiminė padėtis</b> <u>ištekęs</u></li> <li>• <b>Vaikai</b> <u>du (6 metai)</u></li> <li>• <b>Išsilavinimas</b> <u>Charkovas nacionalinis automobilių ir greitkelių universitetas (magistro laipsnis)</u></li> <li>• <b>Namų adresas</b> <u>Gerojev Truda g. 30-121, 61146, m. Charkovas</u></li> </ul> <p><b>Bendras darbo stažas</b> <u>11 metų</u>  <b>Darbo stažas šiame kolektyve</b> <u>8 metai</u></p>
Darbo patirtis	<p>Charkovo nacionalinis automobilių ir kelių universitetas:</p> <ul style="list-style-type: none"> <li>• valdymo ir verslo fakulteto įmonės ekonomikos katedros aspirantė (tiria transporto įmonių investicinio patrauklumo problemas) – šiuo metu;</li> <li>• atostogos vaiko priežiūrai nuo 2012 m. balandžio mėn. iki 2014 m. lapkričio mėn.</li> <li>• valdymo ir verslo fakulteto įmonės ekonomikos katedros asistentė – nuo 2009 m. gruodžio mėn. iki 2012 m. balandžio mėn.;</li> <li>• vykdė verslinę tarptautinių automobilių krovininių pervežimo organizavimo veiklą ir tęsė mokslinį darbą kaip pretendentė į mokslinį laipsnį Charkovo NAKU valdymo ir verslo fakulteto įmonės ekonomikos katedroje nuo 2006 m. liepos mėn. iki 2009 m. lapkričio mėn.</li> </ul>
Išsilavinimas	<p>Charkovo nacionalinis automobilių ir kelių universitetas</p> <ul style="list-style-type: none"> <li>• specialybė „Automobilinio transporto organizacijų vadyba“, vadybos magistro kvalifikacija (2001-2006 m.)</li> <li>• diplomas su pagyrimu</li> </ul>
Sertifikatai, pažymos apie įdiegimą	<p>Disertacinio darbo rezultatai pripažinti turinčiais praktinę diegimo reikšmę verslo subjektams, kurie yra susiję su transporto paslaugų teikimo darbu, ir Charkovo srities valstybinės administracijos Ekonomikos ir tarptautinių ryšių departamento rekomenduoti įdiegimui (2015-03-06 pažyma Nr.03-46/2352).</p>
Publikacijos	<p>Mokslinių tyrimų rezultatai paskelbti daugelyje specializuotų leidinių Ukrainoje, o taip pat Australijos, Bulgarijos, Vokietijos, Indijos, Ispanijos mokslinių publikacijų rinkiniuose.</p>
Kalbų mokėjimas	<p>Rusų k., ukrainiečių k., lenkų k. (bazinis lygis), anglų k. (laisvai)</p>
Apdovanojimai	<ul style="list-style-type: none"> <li>• Garbės ženklas „KNAHU pirmūnas“ 2005 m. birželio 10 d. (protokolas Nr.10/1085);</li> <li>• Jaunųjų mokslininkų mokslinių straipsnių konkurso „PROFI with 4profi“ nugalėtoja (2015 m.);</li> <li>• Kaip aktyvi mokslinių konferencijų dalyvė, ne kartą tapo laureate ir prizininke, tai patvirtina daugybė diplomų ir raštų;</li> <li>• už sąžiningą darbą, didelius pasiekimus jaunimo švietimo ir ugdymo srityje, asmeninį indėlį į aukštos kvalifikacijos specialistų parengimą rekomenduota apdovanoti Charkovo srities valstybinės administracijos Garbės raštu (2016-01-15 d. prašymas)</li> </ul>
Kita	<p>Pomėgiai - sportas, grojimas pianinu, vokalas</p>

Levchenko, Yaroslava

ASSESSING AND ENSURING ENTERPRISE INVESTMENT ATTRACTIVENESS IN THE CONTEXT OF REGIONAL DEVELOPMENT: daktaro disertacija. – Vilnius: Mykolo Romerio universitetas, 2018. p. 216

Bibliogr. 105-123 p.

ISBN 978-9955-19-910-6 (internete)

ISBN 978-9955-19-911-3 (spausdintinis)

*Nowadays, a number of studies are being carried out to assess attractiveness of individual enterprises, regions and countries. Increasing the investment attractiveness can help to create competitive advantages, open opportunities for innovation, reduce operating risks and operating costs, and improve the profitability. All the researchers who deal with the problem of investment attractiveness are unanimously convinced that investment attractiveness, as an independent definition, an element of a complex system, is one of conditions for formation of an investment environment and needs to be assessed. And since the enterprise is recognized as a fundamental link in the formation of the investment attractiveness of a country, region or territory, there rises the questions of how to assess and how to ensure the investment attractiveness of an enterprise? To answer these questions the conceptual apparatus of the main structural components of investment attractiveness was clarified, the factors influencing investment attractiveness were studied in detail, the role of PPP in ensuring enterprise investment attractiveness was determined, a model for assessment of enterprise investment attractiveness was developed, a model for ensuring enterprise investment attractiveness in the context of regional development within the framework of the PPP mechanism was proposed.*

*Šiuo metu vyksta eilė tyrimų atskirų įmonių, regionų ir šalių patrauklumui įvertinti. Investavimo patrauklumo (IP) padidinimas gali padėti kurti konkurentinius pranašumus, atverti galimybes naujovėms, mažinti operacines rizikas ir operacines išlaidas, o taip pat kelti rentabilumą. Visi tyrinėtojai, nagrinėjantys IP problematiką, vieningi tame, kad IP kaip savistovus apibrėžimas, sudėtingos sistemos elementas šalia kitų veiksnų sąlygoja investavimo aplinkos formavimą ir jį privalu įvertinti. O, kadangi įmonė pripažinta pagrindine grandimi, formuojant šalies, regiono ar teritorijos IP, iškyla klausimai, kaip įvertinti ir užtikrinti įmonės IP? Siekiant atsakyti į šiuos klausimus buvo patikslintas pagrindinių IP struktūrinių sudedamųjų dalių conceptualinis aparatas, smulkiai išanalizuoti įtakojantys IP veiksniai, nustatytas valstybinės-privačios partnerystės (VPP), užtikrinant įmonės IP, vaidmuo, parengtas įmonės IP vertinimo modelis, o, panaudojant VPP mechanizmą, pasiūlytas įmonės IP užtikrinimo regioninio vystymosi kontekste modelis.*



Yaroslava Levchenko

**ASSESSING AND ENSURING ENTERPRISE INVESTMENT ATTRACTIVENESS IN  
THE CONTEXT OF REGIONAL DEVELOPMENT**

Daktaro disertacija  
Socialiniai mokslai, ekonomika (04 S)

ISBN 978-9955-19-910-6 (internete)  
ISBN 978-9955-19-911-3 (spausdintas)

Maketavo Karolis Simaitis

Mykolo Romerio universitetas  
Ateities g. 20, Vilnius  
Puslapis internete [www.mruni.eu](http://www.mruni.eu)  
El. paštas [roffice@mruni.eu](mailto:roffice@mruni.eu)  
Tiražas 20 egz. Užsakymo Nr. 17908

Parengė spaudai UAB „Baltic Printing House“  
Svajonės g. 40, LT-94101, Klaipėda  
[www.balticprinting.com](http://www.balticprinting.com)

Spausdino UAB „Baltijos kopija“  
Kareivių g. 13B, Vilnius  
[www.kopija.lt](http://www.kopija.lt)  
El. paštas [info@kopija.lt](mailto:info@kopija.lt)

ISBN 978-9955-19-910-6



9 789955 199106