

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
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QUALIFICATION BACHELOR PAPER

on the topic " RESEARCH OF INTERNATIONAL COMPETITIVENESS
OF UKRAINE "

Specialty 6.030503 "International Economics"

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ABSTRACT

on bachelor's degree qualification paper on the topic
« RESEARCH OF INTERNATIONAL COMPETITIVENESS
OF UKRAINE »

Student Vavilichev Mykola Dmytrovych
(full name)

The main content of the bachelor's degree qualification paper is presented on 48 pages, including references consisted of 41 used sources, which is placed on 4 pages. The paper contains 7 tables, 9 figures, as well as 4 apps that are presented on 15 pages.

Keywords: INTERNATIONAL COMPETITIVENESS, REGIONAL COMPETITIVENESS, COMPETITIVENESS INDICES, THE LEVEL OF DEVELOPMENT OF THE REGION

The purpose of the bachelor's degree qualification paper is to identify the competitive position of Ukraine in the international market according the main methodologies and to develop recommendations improving it based on the world and national practices.

The object of research is the trends of world economic development in the conditions of globalization. The subject of the research is theoretical and practical principles of identify the competitive position of Ukraine in the international market.

In the process of research depending on the goals and objectives, were used relevant methods of studying economic processes, including systematization and generalization, the comparative method, method of quantitative analysis, methods of induction and deduction etc.

The information base of the work is legislative and regulatory documents relating to the competitiveness of the State Statistics Service of Ukraine, annual reports of World Bank including Index of Ease of Doing Business, annual reports of Transparency International including Corruption Perception Index, annual reports of Heritage Foundation including Index of Economic Freedom, annual reports of World Economic Forum including The Global Competitiveness Index as well as cabinet

decrees and periodicals publications and scientific publications of domestic and foreign authors.

According to the results of the study the following conclusions are formulated:

1. As a result of determining the dependence of competitiveness on the state of the macroeconomic environment, factors of macroeconomic stability of the national economy were identified.
2. As a result of the study of the theoretical foundations of competitiveness of Ukraine and its regions, it was stated that the study of the competitiveness of the regions is very important in the context of the country's international competition policy, as the growth of the competitiveness of the Ukrainian economy will depend on a qualitative innovation policy that will stimulate the innovative activity of business entities in the regions of Ukraine.
3. As a result of determining the methodological foundations of international competitiveness, the most common global indices have been identified, namely the Global Competitiveness Index, KOF Index of Globalization, Ease of doing business Index, Index of Economic Freedom, Corruption Perceptions Index (CPI), Human Development Index (HDI), Press Freedom Index (PFI) etc.
4. As a result of the analysis of the competitiveness of the regions of Ukraine on the method of calculating the regional competitiveness index, the overall ranking of the regions of Ukraine has been formed as their contribution to the international competitive assessment of the country as a whole.
5. The position of Ukraine in international ratings is analyzed and ways of improving the competitiveness of the country in the global space are proposed.

The obtained results can be used in the process of development of the strategy of foreign economic development of Ukraine and the evaluation of the effectiveness of conducting policy in the field of improvement of the competitive position of Ukraine in the global space.

The year of qualifying paper fulfillment is 2019.

The year of paper defense is 2019.

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TASKS FOR BACHELOR'S DEGREE QUALIFICATION PAPER

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1. The theme of the paper is _____
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5. The subject of research is theoretical and practical principles of identify the competitive position of Ukraine in the international market.
6. The qualification paper is carried out on materials OTP Bank, Sumy Branch
7. Approximate qualifying bachelor's paper plan, terms for submitting chapters to the research advisor and the content of tasks for the accomplished purpose is as follows:

Chapter 1 Methodologies and factors for assessing the international competitiveness of the state – 6.05.2019
 (title, the deadline for submission)

Chapter 1 deals with exploring the dependence of competitiveness on the state of the macroeconomic environment, determine the geopolitical course of the country as factor for assessing the international competitiveness of the state; determining the theoretical principles of competitiveness of Ukraine and its regions; identifying the methodological foundations of the international competitiveness rating.

(the content of concrete tasks to the section to be performed by the student)

Chapter 2 Research of competitiveness of Ukraine in the world – 27.05.2019
 (title, the deadline for submission)

Chapter 2 deals with analyzing the competitiveness of regions of Ukraine within international competitiveness evaluation; analyzing Ukraine's position in international rankings and suggest ways to improve the competitiveness of the country in the global space.

(the content of concrete tasks to the chapter to be performed by the student)

8. Supervision on work:

Chapter	Full name and position of the advisor	Date, signature	
		task issued by	task accepted by
1	Troian M.Yu., Candidate of Economics, Associate Professor		
2	Troian M.Yu., Candidate of Economics, Associate Professor		

9. Date of issue of the task: « ____ » _____ 20 __

Research Advisor:

(signature)

(full name)

The tasks has been received:

(signature)

(full name)

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INTRODUCTION

Competitiveness of the country in the times of globalization and reconstruction of national economic departments with further integration their units into the global economy remains is a significant issue. Formation and implementation of effective competitive strategies by international companies and states with aim of gaining a higher competitive status is a priority task of the government for the further sustainable development of each country. The positions strengthening and expanding the levers of influence in the world – are priorities that can be achieved mostly due through economic growth. The competitiveness in general are certain advantages and opportunities as are expressed in ownership of certain properties by the subject, which make it possible to develop through appliance of innovations and create innovative approaches and achieve the highest position on the world market. If the subject does not have them, then it is not possible to enter long-term competition in the relevant market and achieve economic growth.

The importance of the subject of research is uncompromising because of the direct relation of economic development to the development of the state as a whole and its position in the modern world. Only the high competitiveness of the state economy, as on domestic and on the world markets, can guarantee the growth of economy in total and as a result increasing of standards of living for its citizens.

The current position of the state and dynamics of position changing by the key indicators established by international economic ratings characterize economic changes inside country. The independence of estimation allows to objectively assess the condition of the economy and use data for further analysis. The analysis of dynamics of indicators of international economic ratings enables to determine certain regularities, as well as problems in the certain sectors of country's economy. The ratings are useful for research. It allows to identify the prospects of the economy, which

makes it possible to detect common problems of the state. The definition of these aspects has a scientific value, practical interest and constant relevance.

The study of the theoretical foundations of economic competition, the structure of the international competitive environment, analysis of the preconditions for competitive advantages, as well as the problems of achieving the high competitiveness of certain countries, was investigated since the second half of the previous century and to the present by foreign scientists such as R. Vernon, G. Grouber, Ch. Johnson, A. Smitt, R. Solou, S. Ounter, E. Chamberlin, J. Shumpeter, F. Hayeka, E. Hechere and others. Also, this subject was studied by Ukrainian scientists B. Gubsky, D. Lukyanenko, O. Bilous and others. However, the American scientist M. Porter left the greatest impression in the history of the issue of international competition and the theory of global competitive advantages as well as the factors that determine the competitiveness on micro and macro-levels. But, at the same time, many aspects of this scientific problem remain inadequate and substantiated. There is a need for further study of theoretical and methodological issues of competitiveness in the global economy.

As national and as foreign scientists did not get a mutual idea of the "International competitiveness of the country" and its relation to a number of other interconnected factors such as competition, competitive advantages, competitive positions and competitive status. Some of them even claim that competing on the world market is achieving by corporations instead of countries, and competition between the states in the conditions of globalization, mostly disappears [1, p. 34-35]. Based on this affirmation it would seem that it is pointless to study the competitiveness of countries. But even in the face of growing regionalization, integration and globalization in the global economy, competitive struggle between countries not only does not disappear, but rather becomes more acute, acquiring changing of forms of its manifestation.

As Ukraine tries to be an active participant in international economic relations and seeks to build a competitive economic model, the analysis of the country's positions in international ratings is an extremely important task for achieving this goal. And In accordance with the current conditions of Ukrainian economy, it is necessary to

analyze dynamics of Ukraine's position changes in competitiveness in several international rankings and to make a comprehensive assessment. As the relevant Ukraine's places in the rating of world organizations are key indicators of its economy development.

The purpose of the bachelor's degree qualification paper is to identify the competitive position of Ukraine in the international market according the main methodologies and to develop recommendations improving it based on the world and national practices.

According to the purposes of the study the following tasks were set:

6. Explore the dependence of competitiveness on the state of the macroeconomic environment, determine the geopolitical course of the country as factor for assessing the international competitiveness of the state.
7. Determine the theoretical principles of competitiveness of Ukraine and its regions.
8. Identify the methodological foundations of the international competitiveness rating.
9. Analyze the competitiveness of regions of Ukraine within international competitiveness evaluation.
10. Analyze Ukraine's position in international rankings and suggest ways to improve the competitiveness of the country in the global space.

The object of research is the trends of world economic development in the conditions of globalization.

The subject of the research is theoretical and practical principles of identify the competitive position of Ukraine in the international market.

In the process of research depending on the goals and objectives, we used relevant methods of studying economic processes, including systematization and generalization, the comparative method, method of quantitative analysis, methods of induction and deduction etc.

The information base of the work is legislative and regulatory documents relating to the competitiveness of the State Statistics Service of Ukraine [7], annual

reports of World Bank including Index of Ease of Doing Business [31-40], annual reports of Transparency International including Corruption Perception Index [41], annual reports of Heritage Foundation including Index of Economic Freedom [20-29], annual reports of World Economic Forum including The Global Competitiveness Index [11-19] as well as cabinet decrees [6] and periodicals publications and scientific publications of domestic and foreign authors [1-5].

The obtained results can be used in the process of development of the strategy of foreign economic development of Ukraine and the evaluation of the effectiveness of conducting policy in the field of improvement of the competitive position of Ukraine in the global space.

1 METHODOLOGIES AND FACTORS FOR ASSESSING THE INTERNATIONAL COMPETITIVENESS OF THE STATE

1.1 Geopolitical course of the country, the dependence of competitiveness on the state of the macroeconomic environment

Stability of the macroeconomic environment is the key to national competitiveness. The state cannot effectively provide services if observed situation when state have to pay high interest on past debts. The budget deficit limits the ability of the state to respond to cycles of business activity and invest in measures aimed at raising competitiveness, as result the companies are not able to work efficiently if the level of inflation goes beyond the control.

Macroeconomic stability is based on the main macroeconomic indicators which can be divided into two groups “Economic” and “Financial” and represented on (figure 1.1).

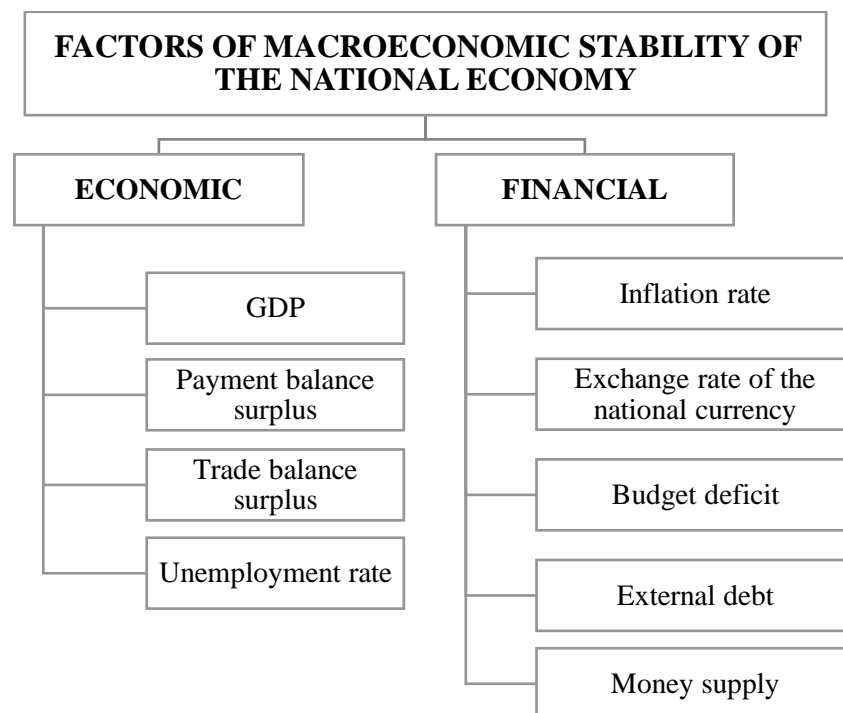


Figure 1.1 - Factors of macroeconomic stability of the national economy

*Source: compiled by the author

The growth of the state's debt is a consequence of the increase of the state budget deficit, on the one hand, and low nominal GDP growth on the other. The state budget is a reflection of the economic situation in the country; therefore, creation, adoption and implementation of this law is not only in the sphere of interests of the executive and legislative authorities, but also in the sphere of interests of business entities and the population.

Ideally, the balance of payments balance should be zero for a neutral representation. Therefore, for assessing the country's actions in the foreign economic arena, the value is estimated as the current account balance. If it is negative, can be observed a deficit of the balance of payments, and if positive - the surplus. With a surplus, the country raises requirements for foreign counterparties, and with a deficit - a commitment (to cover the deficit).

One of the key indicators of over-saturation of the country's economy the money supply, which does not correspond to real volumes of commodity circulation, is the rate of inflation. An increase in this indicator leads to a depreciation of the monetary unit and a gradual increase in prices.

Ukraine in terms of geographical location is an integral part of Europe. A clear desire of Ukrainians to join the European Union, the signing of the Association Agreement became the first step towards building a European society. However, the process of reforming socio-political and economic relations in Ukraine takes place at a very slow pace under the pressure of an authoritarian corrupt political system that dominated for decades in the state. The research and analysis of the level of competitiveness of Ukraine over the past decade will provide an opportunity to draw conclusions about the prospects of a full integration to the European Union, as well as to identify the "neck bottles" and the advantages of the domestic economy.

1.2 Competitiveness of the Regions of Ukraine

The competitiveness (in the scale of countries) is a set of properties inherent to the national economy, which determine the country's ability to compete with other countries on the world market. The level of competitiveness of the country is determined by different methods. Leading international organizations involved in ranking countries in terms of competitiveness. The concept has gained popularity in the last decades of the XX century. However, the conventional accepted measurement of the competitiveness of the country still does not exist [2]. The international competitiveness of the country is an ability of states to create such a national business environment in a free fair market in which domestic commodity producers can continuously develop their competitive advantages, occupy and form stable positions in certain segments of the world market, through using powerful economic potential that provides the economic growth of the economy on an innovative basis, developed a system of market relations, possessing significant intellectual capital and investment resources, flexible response to changing of world conditions and diversification of production, maximally advocating the realization of national interests for the sake of economic security and high living standards of the population [3, p. 16].

Recently, the study of the competitiveness of regions is very important in the context of state regional policy. The reasons are structural changes, which both as in developed countries and as in countries with economy which transform, are accompanied by a territorial concentration of economic activity. The experience of these countries denies the hypothesis of reducing regional disparities as a result of economic growth, and especially this applies to innovation processes. There is a regional "innovation paradox" that involves the need to increase the cost of innovation in depressed regions and a relatively lesser opportunity to attract budget and private sources of funding compared to economically developed regions. The main reason for this paradox lies not only in the less accessible sources of funding, but also in the nature

of national and regional innovation systems that determine the innovative competitiveness of the country and its regions.

The experience of highly developed countries such as the United States and the EU shows that the creation of a post-industrial society, increasing international competitiveness is possible only on an innovative basis, with the maximum use of innovative potential of regions, and taking into account the specifics of each of them. After all, the creation and implementation of fundamentally new products plays a decisive role in strengthening the competitive position of commodity producers in world markets [4].

The common factor of high competitiveness of subjects in the international economic relations is their susceptibility to innovations. That is, all competitive subjects which are leaders in the industry or market have innovative type of behavior and approaches. The same manifestation applied at the level of states and its regions. The most powerful economic potential enables the country and its companies' huge opportunities and stimulate to act successfully on world markets. However, the competitiveness of the country transforms into a dynamic process of constant changes and updates that give impetus to development, and additional competitive advantages. That is why, the growth of the competitiveness of the Ukrainian economy will depend on a qualitative innovation policy that would stimulate the innovative activity of business entities in the regions of Ukraine. In spite of significant developments in the theoretical base of research on innovation processes in the regions, Ukraine still faces many outstanding issues.

1.3 International ratings of competitiveness of countries

Since the competitive advantages of the economy for considered state in relation to other countries have established an important indicator of the level of economic development; the positions of industries, enterprises and regions as a whole on global

market become the fundamental prerequisites for reasons of economic growth. A key indicator of the condition of economy for the states is a rank in the international economic ratings. Leading world rankings define the position of the country in terms of competitiveness, investment attractiveness, corruption of institutions, economic freedom as well as economic potential.

Modern international statistics, using significant databases on world development, develop and continuously improvement of methods of calculating the international competitiveness of countries that reflect their potential and comparative advantages. This trend is followed in each international ranking that is considered in this paper. Thus, in the process of economic development of the society, as well as the development of personally rating organizations, as well as the requirements of modernity and sustainable development of science there is a change in the methodology of evaluation; Improving the objectivity of the assessment by expanding the range of indexes for evaluation, as well as through the transformation of the assessment scale of calculating. For example, in 2019, the most authoritative rating GCI, published by the World Economic Forum, changed the scale from 7 points form to 100 points. Such changes do not significantly affect the results of the analysis in this paper, as most world rankings provide a methodology for calculating the new indicators in the relations with previous data.

The determining indicators of the effectiveness of the economic policy of the state is its place in global rankings. In total, there are about ten international indexes. The most common are the Global Competitiveness Index, KOF Index of Globalization, Ease of doing business Index, Index of Economic Freedom, Corruption Perceptions Index (CPI), Human Development Index (HDI), Press Freedom Index (PFI) etc.

The Index of Economic Freedom compiled by The Heritage Foundation & the Wall Street Journal and emphasis 10 basic internal indexes (10 freedoms) in conducting its research, which helps to assess the level of economic freedom within the country in certain branches. There are: Business Freedom; Trade Freedom; Fiscal Freedom; Government Spending; Monetary Freedom; Investment Freedom; Financial Freedom;

Property Rights; Freedom from Corruption; Labor Freedom. On the basis of these indicators, the country gets an average index and takes its place in the ranking.

Recently were implemented 2 new indexes for assessment effectiveness and condition in the areas of Judicial Branch and Fiscal department. They are: Judicial Effectiveness Index and Fiscal Health Index. 12 recently updated indexes and its inheriting to the 4 groups are represented on (figure 1.2).

Rule of Law	Government Size	Regulatory Efficiency	Open Markets
<ul style="list-style-type: none"> • Property rights • Government integrity • Judicial effectiveness 	<ul style="list-style-type: none"> • Government spending • Tax burden • Fiscal health 	<ul style="list-style-type: none"> • Business freedom • Labor freedom • Monetary freedom 	<ul style="list-style-type: none"> • Trade freedom • Investment freedom • Financial freedom

Figure 1.2 – List of 12 indexes which consist 4 groups introduced by Heritage in Economic Freedom Rating

*Source: compiled by the author, based on the data from Economic Freedom Rating Reports [20-29]

The Corruption Perceptions Index has started its inception in 1995. Index published by Transparency International, measures the perceived levels of public sector corruption in 180 countries and territories. The index offers an annual snapshot of the relative degree of corruption by ranking countries and territories from all over the globe.

Drawing on 13 surveys of businesspeople and expert assessments, the index scores on a scale of zero (highly corrupt) to 100 (very clean). The Corruption Perceptions Index has become the leading global indicator of public sector corruption.

Index of Investment Attractiveness consists of three components: investor assessment of the previous period, forecasts for the future, assessment of the current situation. It is measured every six months since 2008 by European Business Association. The scale of score in range from zero to 5 (the best opportunities for investment). The mark three is considered neutral, indicators above three indicate positive changes.

The Ease of Doing Business Index is calculated by the World Bank Group. The rankings are determined by sorting the aggregate scores, each consisting of several indicators, giving equal weight to each topic. Economies are ranked on their ease of doing business, from 1–190. A high ease of doing business ranking means the regulatory environment is more conducive to the starting and operation of a local firm. Total Indicator displays country’s position in the rating (lower - better). As an Index of Economic freedom uses the same number of internal indexes – 10 indicators, but which are more specific in reveal to doing business activity. These indicators represented in (table 1.1).

Table 1.1 - Common indicators of Ease of Doing Business Index

10 Internal indicators of Ease of Doing Business Index	
Indicator	Basis for calculating value
1. Starting a business	Procedures, time, cost and minimum capital to open a new business
2. Dealing with construction permits	Procedures, time and cost to build a warehouse
3. Getting electricity	Procedures, time and cost required for a business to obtain a permanent electricity connection for a newly constructed warehouse
4. Registering property	Procedures, time and cost to register commercial real estate
5. Getting credit	Strength of legal rights index, depth of credit information index
6. Protecting investors	Indices on the extent of disclosure, extent of director liability and ease of shareholder suits
7. Paying taxes	Number of taxes paid, hours per year spent preparing tax returns and total tax payable as share of gross profit
8. Trading across borders	Number of documents, cost and time necessary to export and import
9. Enforcing contracts	Procedures, time and cost to enforce a debt contract
10. Resolving insolvency	The time, cost and recovery rate (%) under bankruptcy proceeding

*Source: compiled by the author, based on the data from Ease of Doing Business Report [30]

The Global Competitiveness Index. More attention in this work will be focused on The Global Competitiveness Index as it is the most complicated scientific research in the issue of competitiveness which is being conducted by the World Economic

Forum (WEF) in terms of the scale of the analysis, and which characterize the country's competitiveness in the most detailed way from the position of modern approach. Also, it is argued that this rating demonstrates the ability of national economies to achieve sustainable development on the basis of new knowledge and technologies. Due to this, it is also called the index of innovative susceptibility of countries.

The result of the research is the ranking of countries in the world in terms of economic competitiveness. The GCI has been calculated since 2004. The rating is updated and published annually. The Ranking of countries in the rating is based on 113 indicators that allow assessing the level of development of all structural subdivisions of country. These common indicators are the basis for the further formation of 12 key components (12 pillars), which determine the country's place in the world economy by the criterion of competitiveness. These are: Institutions; Infrastructure; ICT adoption; Macroeconomic stability; Health; Skills; Product market; Labour market; Financial system; Market size; Business dynamism; and Innovation capability. These indexes merged into 3 big groups: Common requirements; Performance enhancers; Innovation and factors of improvement (figure 1.3)

Common Requirements	Performance Enhancers	Innovation and Factors of Improvement
<ul style="list-style-type: none"> • Institutions • Infrastructure • Macroeconomic stability • Health 	<ul style="list-style-type: none"> • Product market • Labour market • Financial system • Skills • ICT adoption • Market size 	<ul style="list-style-type: none"> • Business dynamism • Innovation capability

Figure 1.3 – List of 12 pillars which consist 3 groups of indexes introduced for analyzing and representing data in the WEF Competitiveness Report

*Source: compiled by the author, based on the data from The Global Competitiveness Reports [11-19]

The indexes are evaluated on a scale of 1-7 points (the greater value of which is better). Since 2018 the graduate scale of assessment was transformed into 100-point

system. This index is one of the main indicators of competitiveness, as it takes into account the innovative potential of each country.

Thus, only through developing of new technologies and manufacturing of new types of goods can be achieved stable pace of economic growth and welfare of the population in the conditions of globalization of market-oriented economies.

2 RESEARCH OF COMPETITIVENESS OF UKRAINE IN THE WORLD

2.1 Analysis of issue of competitiveness of regions of Ukraine

The main problem that can be highlighted is lack of a calculation of the GDP and the indicator of the competitiveness for the certain region that wasn't solved for recent decade. But, during the study of this problem, it was found that, recently, the Government has improved the procedure for calculating through introducing modernized index, which aimed on definition of competitiveness of the regions. It was indeed huge progress in 2018, when this index, finally, was implemented and added to indexes of statistics. The decision of the necessity of introducing this index by the government was very important for Ukraine. This was a major step that allowed Ukraine to track the pace of regional development, as well as identify factors that are directly related to the development of the regions and the role of innovations in them.

To argue the importance of the innovation can be the fact that the factors that consist the procedures of calculation index are fully in line with the group of factors of the GCI index provided by WEF (World Economic Forum). There are 3 big groups, which are Common Requirements, Performance Enhancers, Innovation Potential (figure 2.1). This also will open possibilities for government to build own innovative development strategy for each region in the future.

The calculation of the regional competitiveness index is conducted annually starting from 2019 by the Ministry of Regional Development on the basis of available official statistics, information provided by the ministries, other central executive authorities, the National Bank, the Council of Ministers of the Autonomous Republic of Crimea, regional, Kyiv and Sevastopol city state administrations for (a list of indicators specified in Appendix B), in accordance with the Methodology for calculating the Regional Competitiveness Index. According to the calculation methodology, the competitiveness index of the region will be carried out in four stages:

1. Determining the level of development of the region;
2. The standardization of the indicators of competitiveness;

3. The calculation of the sub-indexes of the region's competitiveness by the groups of indicators taking into account weighting factors in accordance with the level of development of the region;

4. The calculation of the regional competitiveness index and the formation of a general ranking of the competitiveness of the regions [6].

The level of development of the region is determined on the basis of the calculation of the ratio of the average value of the GRP (gross regional product) per capita over the past three years of the region concerned to the GRP per capita over the past three years in the country as a whole with the following formula:

$$V = \frac{\sum_{y=1}^3 GRP_y^{1c.r} / 3}{\sum_{y=1}^3 GRP_y^{1c.c} / 3}$$

where, $GRP_y^{1c.r}$ – value of Gross Regional Product per one capita that lives in the region;

$GRP_y^{1c.c}$ – value of Gross Regional Product per one capita in the country for each y-year.

y - year

According to the calculation results, are determined five levels of development of the region:

- level 1: $V \leq 50$ percent;
- Level 2: $50 \text{ percent} < V \leq 75$ percent;
- level 3: $75 \text{ percent} < V \leq 90$ percent;
- level 4: $90 \text{ percent} < V \leq 110$ percent;
- Level 5: $110 \text{ percent} < V$.

Full description of methodology is represented in (Appendix C).

Such an approach to assessment made it possible to assess the competitiveness of a region based on three groups of factors that influence it. These factors are fully consistent with the criteria for evaluating GCI. Thus, will be assigned to one of 5

established levels of development, based on receiving points for each criterion (table 2.1).

Table 2.1 – Weights for assessment of index of regional competitiveness

Weights (ω_{kl})			
Level of development of the region ($l, l = 1..5$)	Characteristics of stages of the region's development ($k, k=1..3$)		
	I Stage	II Stage	III Stage
	Common Requirements (k_1)	Performance Enhancers (k_2)	Innovative Potential (k_3)
Level 1	0,35	0,5	0,15
Level 2	0,3125	0,5	0,1875
Level 3	0,275	0,5	0,225
Level 4	0,2375	0,5	0,2625
Level 5	0,2	0,5	0,3

*source: [6] The decision of the Cabinet of Ministers of Ukraine from December 20, 2017, No. 1029

Where, ω_{kl} - weight coefficient applicable to the index referring to k-th characteristics of the stage of development of the region and l-st level of development of region, $k=1..3$; $l=1..5$.

This approach will allow country to make a qualitative analysis of each region and assess the potential for further development. Determine the advantages and disadvantages among institutions, infrastructure, labor market, commodity market, innovative accumulation and a number of other factors for building a system for the further innovative development of the regions.

As indicators of competitiveness under the new index not calculated and published yet, it is impossible to analyze the development of regions and their potential. Due to the lack of input data that, according to the methodology, will be provided by: State Statistics Service of Ukraine (ukrstat), Ministries of Economic Development, Education and Science, Regional Development and other State structures listed in (Appendix B), were decided to analyze by comparing the share of GDP of Ukraine

based on its regions before the beginning of a military conflict with the Russian Federation - for 2013 and during, taking 2018 as an indicator.

For this analysis data were taken from ukrstat (State Statistics Service of Ukraine) and compared results between two years. The GDP share and indexes of dynamics are represented in (table 2.2).

Table 2.2 - The impact on the change in real GDP in 2013 and 2018 by regions

Region	The impact on the change in real GDP in 2013 and 2018	GRP share of total GDP country in 2018
Kyiv city	0,34	23,4
Vinnitsa	0,24	3,1
Odessa	0,22	5,0
Kyiv	0,18	5,3
Zhytomyr	0,17	2,1
Khmelnitsky	0,13	2,1
Volyn	0,11	1,7
Ternopil	0,04	1,4
Kherson	0,02	1,6
Zaporizhzhya	-0,03	4,4
Rivne	-0,05	1,6
Sumy	-0,05	1,9
Mykolayiv	-0,05	2,3
Chernivtsi	-0,07	1,0
Chernihiv	-0,10	1,9
Transcarpathian	-0,10	1,8
Ivano-Frankivsk	-0,13	2,1
Kirovograd	-0,14	1,8
Lviv	-0,14	4,9
Cherkassy	-0,14	2,5
Kharkiv	-0,54	6,3
Poltava	-0,61	5,1
Dnipropetrovsk	-1,34	10,5
Lugansk	-2,63	1,0
Donetsk	-6,99	5,6

*source: compiled by the author, based on the data from State Statistics Service of Ukraine (ukrstat) [7]

The (figure 2.1) displays GDP share and its dynamics in the best way. Chart bars show GRP share of total GDP in country. And simple flat plot chart at the same time displaying dynamics and impact given the gap in years. In the formation of GDP, the Autonomous Republic of Crimea is not taken into account due to the temporary occupation.

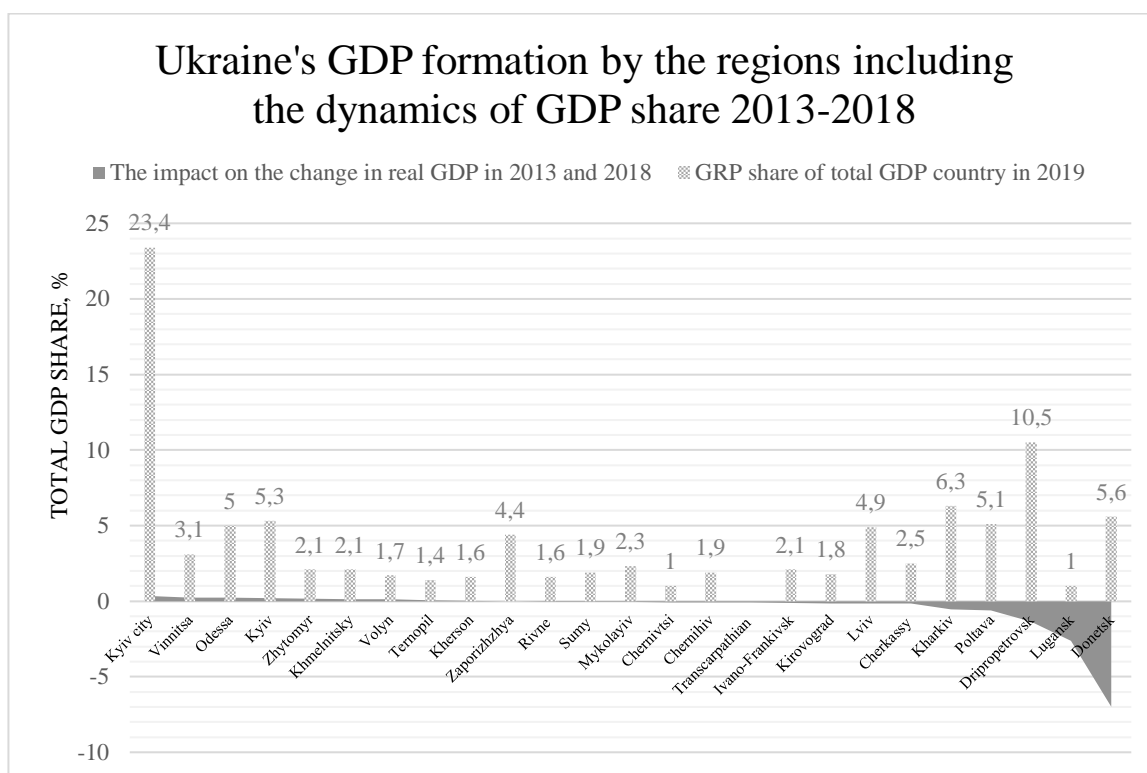


Figure 2.1 – Ukraine's GDP formation by the regions including the dynamics of GDP share 2013-2018

*source: compiled by the author, based on the data from State Statistics Service of Ukraine (ukrstat) [7]

It should be noted that the following regions: Kyiv city, Vinnitsa, Odessa, Kyiv, Zhytomyr, Khmelnytsky, Volyn, Ternopil, Kherson, turned out to be the most stable. These regions have demonstrated growth of GDP in the region since 2013. To the group which showed a stable result with a slight deterioration in performance can be attributed Zaporizhzhya, Rivne, Sumy, Mykolayiv, Chernivtsi. The GDP influence rate in these regions were in the range (-0,03:-0,07), which is within the normal range.

The others regions showed even lower results, it is worth noting the leaders of anti-rating as Kharkov, Poltava, Dnipropetrovsk, Donetsk and Lugansk regions. The

situation with the Donetsk and Luhansk regions is understandable in connection with the occupation of one third territory and military actions that blocked any economic development perspectives for these regions (pictures 2.2-2.3).



Figure 2.2 – Map of GDP share among Regions (actual on 2013)

*source: compiled by the author, based on the data from State Statistics Service of Ukraine (ukrstat) [7]

Despite this, the Donetsk region still makes an integral contribution to the country's GDP, taking into account the share of 5.6, while the GDP indicators of the Luhansk region dropped substantially to 1%. It can be argued that the regions with low GDP share, particularly low GDP per capita (it is problematic to calculate the value due to the lack of a population census both in the region and in the country as a whole. The conduct of a national population census was made more than 18 years ago, in 2001, according to the State Statistics Service of Ukraine, the population of Ukraine was 42 million 216 thousand inhabitants), and which at the same time demonstrate relatively

negative GDP growth rates can be considered as regions with economic issues and are going to become subsidized regions for the country.



Figure 2.3 – Map of GDP share among Regions (actual on 2018)

*source: compiled by the author, based on the data from State Statistics Service of Ukraine (ukrstat) [7]

It is necessary to analyze the components which form the Economy in these regions. The general tasks for the further and following researches are identify the causes of low indicators, the competitive advantages of these regions and implement a further regional development strategy, which will include the ways of minimization of number of subsidized regions in the country through analyzing the level of competitiveness of regions based of a updated regional competitive index.

The assessment due to this methodology let to evaluate the contribution of each region in total GDP of country, and as result affect positions of competitiveness on world market, which formed in the world rating of economic competitiveness. During the analysis it was revealed that over the past 5 years in connection with the military

events in the east of the country, the indicators of efficiency of Lugansk and Donetsk regions have been significantly down. In order to improve the economic efficiency of the regions, it is necessary to execute a qualitative audit in accordance with those factors that influence the competitiveness of the region and are used by international ratings. It is possible to achieve significant increase of regions' competitiveness only under the condition of development of the scientific and educational branch, revealing the specialization of the region, the use of potentially important resources in the process of production of an innovative product. In the event that the region is not saturated with natural resources inadvertently concentrate on the development of services, and the improvement of staff qualifications.

Improving the investment climate is an important component for achieving high competitiveness, as at present, due to a weak economy, the country is not in a position to finance the development of each region in full, therefore attracting foreign capital, together with investments and innovations, should be a priority task of the international policy of the country. Also, the improvement of competitiveness among regions is possible under the conditions of an effective management of region through implementing of National Innovation System (NIS) [5], which is formed individually in each country which uses innovative infrastructure. researches and scientific works, education and training, the production of competitive products and services, developed and effective institutions. The determining role in this system belongs definitely to regional development. Regional innovation strategy is a necessary tool for the successful development of the domestic economy, and especially effective for regions with high innovation potential.

2.2 Analysis of country positions in International Ratings

Taking into account indicators of not one, but several ratings, allows to make some conclusions about the position of the country's economy on the world market. The analysis of the dynamics of the main components of the global competitiveness index of Ukraine during 2010-2018 in the certain world ratings selected for research of the country competitiveness is presented in (table 2.3).

Table 2.3 – Assessment of competitive positions of Ukraine in world ratings

World Ratings		Ukraine's position in the rating									
		2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Value range (best-worst)
The Global Competitiveness Index (GCI)	Position	89	82 ↑7	73 ↑9	84 ↓ 11	76 ↑8	79 ↓3	85 ↓6	83 ↑2	- n/a	1-140
	Overall Score	3,90	4,00 ↑0.10	4,14 ↑0.04	4,05 ↓ 0,09	4,14 ↑0.09	4,03 ↓ 0,11	4,00 ↓ 0,03	4,11 ↑0.11	- n/a	7-0
Index of Economic Freedom	Position	162	164 ↓ 2	163 ↑1	161 ↑2	155 ↑6	162 ↓ 7	166 ↓ 5	150 ↑16	147 ↑3	1-186
	Overall Score	46,4	45,8 ↓ 0,6	46,1 ↑0,3	46,3 ↑0,2	49,3 ↑3,0	46,9 ↓2,4	46,8 ↓0,1	48,1 ↑1,3	51,9 ↑3,8	100-0
Ease of doing business Index	Position	147	149 ↓ 2	152 ↓ 3	137 ↑15	112 ↑25	96 ↑16	80 ↑13	76 ↑7	71 ↑5	1-190
	Overall Score	- n/a	- n/a	- n/a	- n/a	61.3	61.52 ↑0,22	63.90 ↑0,38	65.75 ↑1,90	68.2 ↑0,94	100-0
Index of Investment Attractiveness	Overall Score Good >3	2,57	3,28 ↑0,71	2,18 ↓1,1	2,12 ↓0,06	1,87 ↓0,25	2,57 ↑0,7	2,88 ↑0,31	3,09 ↑0,17	3,1 ↑0,01	5-0
Corruption perceptions index (CPI)	Position	- n/a	- n/a	- n/a	- n/a	- n/a	- n/a	130 n/a	120 ↑10	- n/a	1-180
	Overall Score	- n/a	26,0 n/a	25,0 ↓1,0	26,0 ↑1,0	27,0 ↑1,0	29,0 ↑2,0	30,0 ↑1,0	32,0 ↑2,0	- n/a	100-0

*source: compiled by author, the data used from several sources provided by World Ratings Reports [11-19, 20-29, 31-40, 41]

Thereby, based on the dynamics of changes in positions in the ratings can be concluded that competitiveness of Ukraine for the period of 2010-2018 has not undergone dramatic shifts in total. Due to analysis of the dynamics of country position changes in the rating it can be assumed that the highest place in the GCI rating were achieved in 2012-2013. The record score was achieved in 2006-2007 (69th place), after that, unfortunately, Ukraine began to gradually lose its position dropping to 89th place until 2010 (the anti-record in the history of Ukrainian economy growth since XXI century).

Thus, it was decided to conduct an analysis of the country's competitiveness from 2010 (year of decline which become a start point for research) to the present. An analysis of positions over the past decade will allow assessing the prospects for the development of the Ukrainian economy, as well as tracing the dynamics as positive or negative changes and their causation in the issues of macroeconomic stability, development of state institutions, economic freedoms, business opportunities, the state of the financial system and investment attractiveness, which basically forms a general assessment of state competitiveness.

The dynamics of the Global Competitiveness Index allows to argue that Ukraine's position is fluctuating due to crisis situations. Indeed, in the period 2012 (peak of growth), the situation has been improved, however further post-crisis syndrome has led to a decrease in the competitiveness and dumped the state's positions to the 84th place. Only due to one year of crisis Ukraine crossed all accumulated achievements previously. In 2014, the situation improved and country got success to rise in the rating (76th place). However, Ukraine continues to lose its position from 2014 to 2016 (2016 - 85th place).

The only one index that reflects constant growth and has not affected through essential impact of the economic crises is the Ease of doing business Index that since 2013 demonstrates a rapid growth of the country in the world ranking, rising to as much as 59 positions in total, almost in two times improved scores of past years. Such a shift for Ukraine is a litmus testament for the correctness of reforms. The year 2014 was the most productive in this respect, when Ukraine implemented as many as 8 reforms and

get the leadership positions closing the top three among all countries in terms of the number of succeeded reforms which were realized. The full lists of implemented reforms by the country is represented in (table 2.4).

Table 2.4 – Business Reforms implemented by Ukraine in 2014-2019

Business Reforms implemented by Ukraine in 2014 (8 reforms)	
Starting a Business	Starting a business become easier through eliminating the requirement for registration due to the statistics authority and through eliminating the cost for registration procedure.
Dealing with Construction Permits	Simplification of dealing with construction permits through introducing a risk-based approval system, eliminating requirements for certain approvals and technical conditions and simplifying the process for registering real estate ownership rights.
Getting Electricity	Getting electricity becomes easier through streamlining the process for obtaining a new connection.
Registering Property	Transferring property becomes easier by streamlining procedures and revamping the property registration system.
Getting Credit	Improved access to credit information through collecting data on firms from financial institutions
Paying Taxes	Paying taxes becomes easier for companies through simplifying tax returns and further improving its electronic filing system.
Trading across Borders	Trading across borders becomes easier through releasing customs declarations faster and reducing the number of physical inspections.
Resolving Insolvency	Resolving insolvency becomes easier through strengthening the rights of secured creditors, introducing new rehabilitation procedures and mechanisms, which makes easier to invalidate suspect transactions and shortening the statutory periods for several steps of the insolvency process.
Business Reforms implemented by Ukraine in 2015 (1 reform)	
Paying taxes	Paying taxes became easier for companies by introducing an electronic system for filing and paying labor taxes. But it also increased the environmental tax.
Business Reforms implemented by Ukraine in 2016 (1 reform)	
Starting a Business	Starting a business has improved through reducing the time required for VAT registration and by eliminating additional business registration fees.

*source: compiled by author, the data used from Ease of doing business Report [30]

Continuation of table 2.4 – Business Reforms implemented by Ukraine in 2014-2019

Business Reforms implemented by Ukraine in 2017 (2 reforms)	
Protecting Minority Investors	Strengthened minority investor protections by requiring interested director or shareholder to be excluded from the vote, introducing remedies in cases where related-party transactions are harmful to the company and also clarifying ownership and control structures.
Enforcing Contracts	Enforcing contracts becomes easier through introducing a system that allows actors to pay court fees directly in electronic form
Business Reforms implemented by Ukraine in 2018 (3 reforms)	
Dealing with Construction Permits	Dealing with construction permits becomes easier through reducing fees.
Protecting Minority Investors	Strengthened minority investors protections by requiring detailed immediate public disclosure of related-party transactions.
Paying taxes	paying taxes becomes easier by reducing the rate for the unified social contribution tax.
Business Reforms implemented by Ukraine in 2019 (4 reforms: 3 first makes doing business easier, last one makes it more difficult)	
Protecting Minority Investors	Strengthened minority investor protections by increasing the requirements for the disclosure in annual reports of related-party transactions.
Trading across Borders	Trading across borders becomes easier through declining from verification requirement on auto parts from the State Service of Export Control.
Enforcing Contracts	Enforcing contracts becomes easier through implementing a simplified procedure for small claims and pre-trial conferences as part of the case management techniques used in all commercial courts.
Dealing with Construction Permits	Construction permitting more costly by increasing the contribution fee to the city social and engineering-transport infrastructure. On the other hand, Ukraine made dealing with construction permits easier by eliminating a requirement that investors obtain clearance from the State Service of Ukraine for Emergency Situations.

However, the most acute issues for foreign investors in Ukraine are still the registration of property, international trade and solving the issues of preventing insolvency and bankruptcy as well as protecting investors.

Assessment of Corruption perceptions. The factors that most affected the deterioration of the situation are corruption, political instability, inflation, and the ineffectiveness of state policy. As regards the Corruption perceptions index, there is a slow growth of the country's position. The country still does not manage fully to eliminate corruption in public authorities. Therefore, it can be argued that no significant progress has been made on this issue.

It should be noted that the level of corruption in the country plays a key role in the context of building confidence in the state authorities, a positive investment climate, and a country's image among foreign investors.

Corruption thrives where weak democratic practices exist. Combined with a lack of political will to combat corruption in the public sector, countries across the region are undermining the political rights of their citizens. As a result, people are unable to speak out, demonstrate or associate with organizations or activist groups – at least not without fear of consequences. At the same time, corruption locks these countries in a vicious cycle where the ruling politicians have no real incentive to allow for democratization and strengthening of independent institutions. Corruption blocks stimulation development of the country's economy because investors not ready to risk investing in a country where there is a risk of capital protection, control and further withdrawal by the promised rules in the world.

According to CPI report, since 2013, the country has improved its performance by 6 positions due to the enforcement of anti-corruption reforms launched in 2014 remains incomplete. Unfortunately, it does not bring sky-rocket results. Even the transparency international underline that four years since anti-corruption legal and institutional frameworks were introduced in Ukraine, progress is very slow. The newly established anti-corruption bodies have not succeeded in bringing to account any corrupt high-level official, even though a number of proceedings have been initiated.

To assess a progress in the issue of corruption - it is necessary to compare indicators with the most closely countries of Europe and Eurasia. Ukraine took 120th rank among 180 countries with index of 32 in 2018 leaving well below the average global score of 43 (table 2.5). At the same time such countries as Georgia, Lithuania,

Latvia, Czech Republic and Poland score from 58 to 60 points for this index. It would also be rational to compare Ukraine not only with the countries of the European Union and countries applicants for entry into the EU, but also with countries from the same geographical region Eastern Europe & Central Asia.

The average score in the region is 35. The leader of region is Georgia with 58 points, at the same time Ukraine takes only 11 position and located below the middle part of the ranking group with 32 points.

Table 2.5 – Positions of countries of Eastern Europe & Central Asia region by CPI index in 2018

Positions of countries of Eastern Europe & Central Asia region by CPI index in 2018				
Rank in region	Country	CPI Score 2018	Rank 2018	CPI Score 2017
11	Ukraine	32	120	30 ↑2
Top scorers				
1	Georgia	58	41	56 ↑2
2	Montenegro	45	67	46 ↓1
3	Belarus	44	70	44 =0
Middle scorers				
3	Turkey	41	78	40 ↑1
4	Serbia	39	87	41 ↓2
5	Bosnia and Herzegovina	38	89	38 =0
6	Kosovo	37	93	39 ↓2
7	Macedonia	37	93	35 ↑2
8	Albania	36	99	38 ↓2
9	Armenia	35	105	35 =0
10	Moldova	33	117	31 ↑2
11	Ukraine	32	120	30 ↑2
12	Kazakhstan	31	124	31 =0
13	Kyrgyzstan	29	132	29 =0

Continuation of table 2.5 – Positions of countries of Eastern Europe & Central Asia region by CPI index in 2018

14	Russia	28	138	29 ↓1
15	Tajikistan	25	152	21 ↑4
Bottom scorers				
16	Azerbaijan	25	152	31 ↓6
17	Uzbekistan	23	158	22 ↑1
18	Turkmenistan	20	161	19 ↑1

*source: compiled by author, the data used from Corruption perceptions Index Report [41]

Corruption has always been one of the most serious problem of Ukraine. A year after the Revolution in 2014-2015, Ukraine remained the most corrupt country in Europe.

The dynamics displays that Ukraine has for 6 years demonstrates steady progress in corruption, but its pace is very slow. Especially considering the number of newly-established anti-corruption authorities and the effectiveness of their work, corruption remains one of the key issues inherent in post-Soviet countries.

Assessment of Economic Freedom. In 2016, Ukraine ranked 166 among 180 countries and was recognized as a country with suppressed economy. Thus, Ukraine led the anti-rating among 44 countries of Europe. In this period Total score of Ukraine was lower than the average in the world and according to with the classification proposed by the World Bank, distinguish 5 main groups, which are: Free (100-80 scores); Mostly free (79.9-70); Moderately free (69.9-60); Mostly unfree (59.9-50); and Repressed (49.9-40). Ukraine became a part of a group of countries with an "unfree economy". The next year, managed to make a small breakthrough, rising straight to 16 positions, but even this increasing did not allow the country to move to another higher group in the ranking "Moderately free". The problem of low scores of economic freedoms remains very acute for Ukraine. To make a significant boost in the Economy Ukraine have to demonstrate dynamics of 2017 from year to year and strength its positions.

Also, to this group included post-Soviet countries as Belarus, Russia, Uzbekistan, Turkmenistan.

The graphs that represented on (figure 2.4) show that such countries as Poland and Georgia consistently demonstrate results above the world average, which Ukraine has not reached over 10 years. Today, Ukraine is closer than ever to get as close as possible to the average score. It is also worth noting that the world average grew by 1.2, which indicates that the growth of indicators of economic freedoms were improved by the majority of the world.

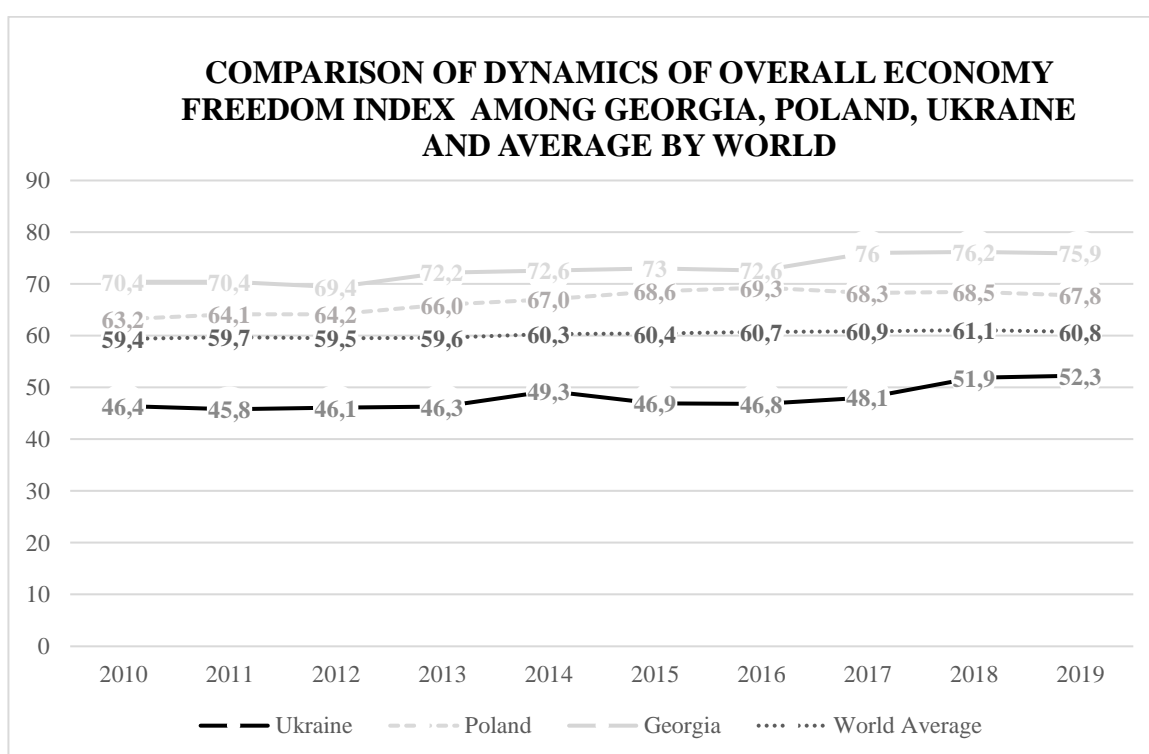


Figure 2.4 – Comparison of dynamics of overall index of economy freedom among Georgia, Poland, Ukraine and Average value by world

*source: compiled by author, the data used from several resources [20-29]

During last 10 years Ukraine has managed to increase own score by 5.9, which is 4 times more than the world average growth.

In general, taking into account the smooth growth since 2016 and the general dynamics of the index of both Ukraine and the world average score, it can be argued that Ukraine will be able to achieve the global trend indicators by 2025-2026, provided

that there is no escalation of the political situation in the country and cumulate of already achieved indicators of freedoms (from business, trade, labor to investment, financial structures and many others).



Figure 2.5 – Scores of Ukraine by 10 key indexes and 2 additional introduced for Assessment of economic freedoms

*source: compiled by author, the data used from several resources [20-29]

Both Indexes of Judicial Effectiveness and Fiscal health were added recently by Heritage in 2017 and had no data up to 2016. Specially, for countries from the group of “mostly-unfree economies” by overall score were not possible to analyze data on indicators due to the lack of accountability mechanisms and transparency in these areas. But due to successful reforms Ukraine has got an assessment by these both indicators and has got from 22.6 to 31.5 and from 67,9 to 82.6 points for this indicator since 2017 (figure 2.6 and 2.7). It is necessary to compare score and progress in these indicators with economies on which Ukraine oriented, particularly such countries as Poland and Georgia. Thus, Poland, which has got from 58.0 to 44.0 points for index of Judicial Effectiveness and from 76.1 to 86.4 for state of Fiscal Health during recent 3

years (2017-2019); And, Georgia, which has got from 66,5 to 54,6 for first index and from 87,2 to 85,8 respectively.

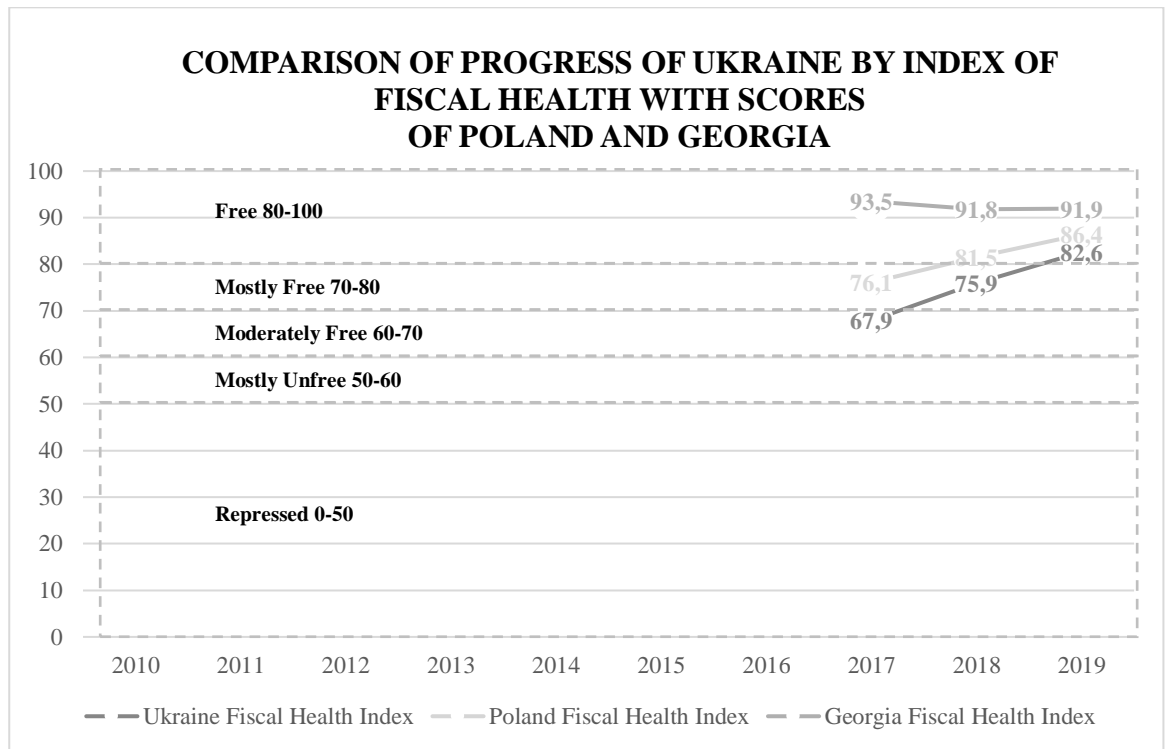


Figure 2.4 – Comparison of progress of Ukraine by Index of fiscal health with scores of Poland and Georgia

*source: compiled by author, the data used from several resources [20-29]

Ukraine demonstrates high results by index of Fiscal Health and positive dynamics, which similar with Poland progress and even higher. The score less low than has Poland, but it doesn't prevent steady consolidation in the higher group of "free economies" with score of 86,4. Thus, Ukraine managed to make a breakthrough and emigrate from the group below the middle level "Moderately Unfree" to the upper group.

The effectiveness of Judicial authorities rated very low (figure 2.5). The reasons for this assessment are the lack of independence and constant pressure from the authorities to which the courts are subject, the high level of objectivity and corruption of judges, as well as the long duration of the consideration of lawsuits and the conduct

of trials. Despite this, Ukraine demonstrates a positive trend in contrast to the countries with which the indicator is compared.

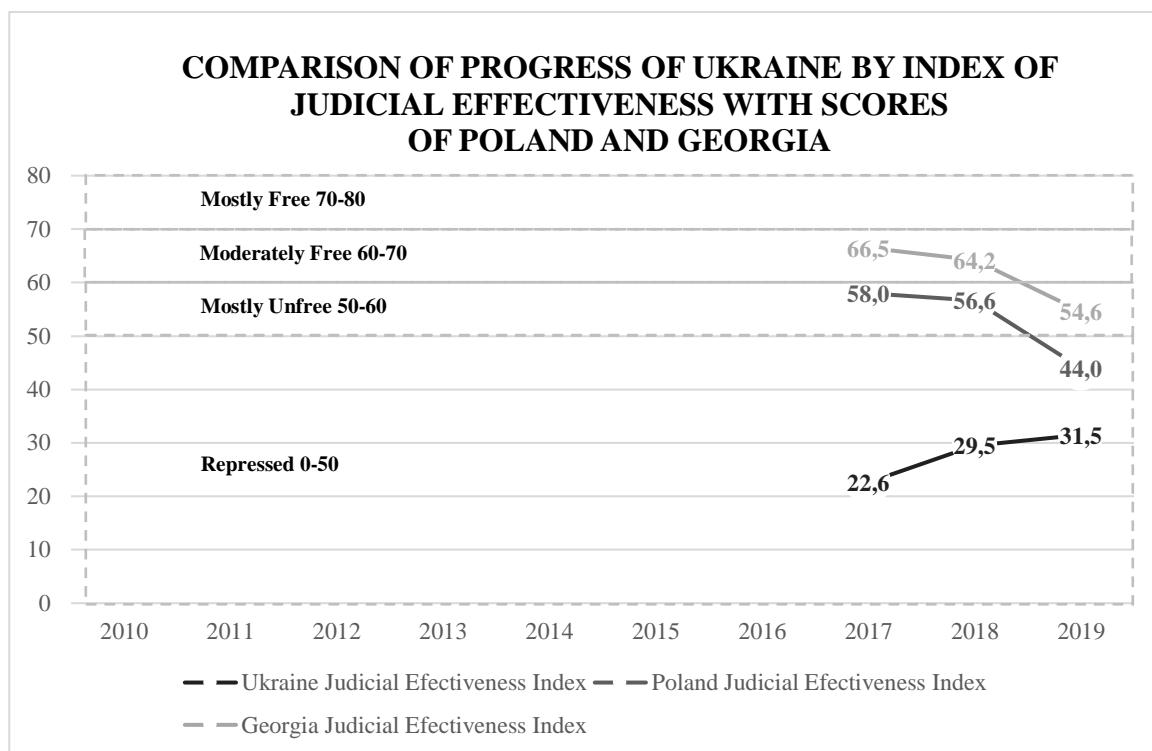


Figure 2.5 – Comparison of progress of Ukraine by Index of Judicial Effectiveness with scores of Poland and Georgia

*source: compiled by author, the data used from several resources [20-29]

A low score for this index significantly affects the overall score in the rating for the worse and does not allow Ukraine to get indicators above the world average (appendix D). Reforming this area is the key task of the authorities for the next 5 years. The low level of trust in the courts also slows down the indicators of investment attractiveness, because the state cannot guarantee the protection of investment portfolios of investors and the transparency of resolving disputes in ship structures.

Global Competitiveness Index Assessment. The World Economic Forum (WEF) defines competitiveness as a "set of institutions, policies and production factors that shape the productivity of the country". The summary data on indicators for the period 2014-2018 years are presented in (table 2.6).

Table 2.6 – Scores of Ukraine in Global Competitiveness Index in 2014-2018

Global Competitiveness Index (GCI)	2014-2015	2015-2016	2016-2017	2017-2018	Range
	4,14	4,03	4,00	4,11	0-7
Common Requirements	4,36	4,08	4,03	4,18	
Institutions	2,98	3,07	3,05	3,21	
Infrastructure	4,16	4,07	3,93	3,95	
Macroeconomic stability	4,14	3,12	3,17	3,52	
Health and Education	6,14	6,06	5,95	6,02	
Performance Enhancers	4,11	4,09	4,04	4,09	
Product market	3,99	4,02	3,98	4,04	
Labour market	4,12	4,33	4,23	4,01	
Financial system	3,54	3,18	2,95	3,11	
Skills	4,93	5,03	5,08	5,09	
ICT adoption	3,50	3,45	3,58	3,83	
Market size	4,58	4,54	4,40	4,49	
Innovation and Factors of Improvement	3,41	3,55	3,53	3,55	
Business dynamism	3,66	3,70	3,62	3,72	
Innovation capability	3,16	3,41	3,44	3,37	

*source: compiled by author, the data used from several resources [15-19]

Nowadays, Ukraine places 83th position by the Global Index Competitiveness in 2018 among 138 countries.

According to the WEF reports, the most problematic is the quality of institutions in Ukraine (110th place in the rating).

The institutional environment affect impact on methods of advantages distribution, on economic benefits and costs related to the implementation of strategy and development programs. Institutions are involved in making investment decisions

and decisions related to the organization of production. The quality of institutions is directly related to the investment climate. Thus, such investors as are land owners, shareholders, owners of intellectual property will not invest if they don't get the appropriate guarantees provided by the institutional authorities [10, p. 13–14].

The factors that directly affect the improvement of the institutional environment in Ukraine include, in particular, the ethical behavior of companies, the protection of property rights, transparency in the adoption of state decisions, the independence of the judiciary, the efficiency of the use of the state budget, protection of intellectual property rights, public trust in politicians, etc.

The term "institution" refers to the establishment and order established in society. The "institute" is thus considered as consolidating such rules and ordinances that fixed in laws and legal norms. Institutes in a democratic society - always institutions. The state is a secondary subject of policy, which arises or is determined by law. The democratic state is a mechanism which transforms institutions into institutes [10].

The market of goods and services (73th place) and the financial market (117th place), the level of technological readiness of the country (93st place), the situation of providing macroeconomic stability (131th place), which is directly on the market. affected by the situation is also ineffective and underdeveloped.

Ukraine has significant innovative potential (58th place), worthy of higher education and training (46rd place). This becomes an important competitive advantage of the state, since the presence of highly scientific base can guarantee successful economic development in the modern world and become a prerequisite for the formation of a competitive market and stimulate to implementing of the integration processes of Ukraine.

In 2014, the situation also has improved (76th place), but Ukraine continues to lose positions (2016 - 85th place) because of political changes in the country as well as military actions. In 2018, Ukraine succeeded in taking the 83rd place, rising to 2 steps – it is insignificant but still shift towards improving competitiveness.

CONCLUSIONS

The geographic location of the country and a sufficiently developed scientific base is a key potential for further economic development. In order to achieve a competitive position, it is very important for Ukraine today to provide the stability of the macroeconomic environment, which can only be achieved by reducing inflation to the level of European countries and increasing the inflow of foreign currency. Nor should be forget the risks caused by both external and internal factors that can completely ruin Ukraine's course on economic growth. The main threats caused by this are the instability of the political situation in the country, the emigration of the working-age population, the loss of confidence among foreign partners, the depreciation of the national currency, the threat of a full-scale military invasion of the country of the aggressor, the global crisis.

1. During the research were confirmed that "Competitiveness status of the country" depends on many factors, such as human development, political and economic stability and even lack of statistics. A country can achieve high competitiveness only when the competitive positions of its subjects in international markets will grow and will get position by score above the average world overall, and the internal environment will remain attractive to investors.

2. High competitiveness and economic growth are caused by factors that stimulate the rapid expansion of new technologies. The structure of the interaction of science, education, financing, state policy and industry contributes most to this. It is innovative accumulation that is based on a stable system of transfer of new knowledges, technologies, products, which are the basic factors in the development of the economic sector. Additional competitive advantages can also be obtained through internal specialization, standardization, minimizing the costs of introducing innovations. Due to the high competition in the world, which is primarily influenced by the innovation indicator - Ukraine needs to significantly increase funding for research and innovation. At the same time, it is very important to expand Ukrainian

presence in world markets, cooperate with world organizations and to strive to the level of economic development of such countries as Georgia and Poland.

3. Competitiveness of the state is also formed due to the right policy of regional development. Therefore, for the optimal use of the potential of regions, it is necessary to develop the National Innovation System. Such steps will increase revenues to local budgets, ensure the attraction and conservation of highly skilled personnel, improve the competitiveness of the country's economy in the world. The effectiveness of such systems requires not only high costs for scientific and educational activities, but also the reform of state institutions. The analysis of the development of the regions of Ukraine, as well as the country's position in the world economic rankings, allowed to assess the state of the Ukrainian economy and its competitiveness on the world market.

4. By the indicator of the macroeconomic environment Ukraine only slightly improved its low position. Thus, the first priority for Ukraine is to achieve macroeconomic stability. It is precisely because of the unstable political situation that the country fails to maximize the achievements of the economy from year to year. For these reasons that in the past 10 years the GDP growth was negative at -2.1%. Only in the last 5 years Ukraine could compensate the impact of political and financial crises in past and demonstrated GDP growth of 2.7% during this period.

5. The analysis of the dynamics of the change in indicators allowed to determine the causes and causal relationships that slowed down economic development. Were managed to identify the weak and strong sides of the country's economy, dependence on external factors. A number of reforms that have been considered that have improved the conditions for doing business in the country. This analysis makes it possible to get assumptions about the non-compliance at the current stage of the level of development of the national economy and social environment with European standards. In recent years, Ukraine has lost its position on some indicators of the Global Competitiveness Index, Index of Economic Freedom, which negatively impacted Ukraine's global image. In spite of this, over the past year Ukraine has managed to improve its position in almost all indicators. Ukraine needs immediate reform of all spheres of economic and social life. The problem will be resolved, in particular, by the resumption of a state

institution that would take care of the problem of forming strategic spatial programs of sustainable development and nationally-oriented foreign economic connections that should have a predominantly global character. Collaboration with the IMF, the Security Council, the EBRD and other international organizations will help to realize the large projects of transport-logistic infrastructure.

Summarizing the results of the research, can be concluded that the effectiveness of reforms in Ukraine is not only a guarantee of improvement of the world's image of the state, but also of strategic issues of economic growth and improvement of competitive advantages in the world. The pace of institutional reform and economic development should be significantly accelerated. The newly introduced assessment of the competitiveness of the regions will allow Ukraine to make a qualitative audit of its regions, to determine the areas of specialization for each region, the condition and effectiveness of the main criteria on which the country's competitiveness growth in the world arena is based. But at the same time, it is sad to argue that according to the strategy of economic development, Ukraine still will not be able to achieve the planned result - the exit in the first forty countries of Europe in the ranking of the competitiveness of the economy in 2020. But it's very important for Ukraine to continue the changes that were launched in 2014. The transition from raw material economy to economy, which involves the development and creation of innovative products - the key task of the state. Achieving such a transformation is possible only with the support of the scientific sphere of activity, development of the regions of the country, cooperation with international organizations and the gradual adaptation of standards to the level of European and world.

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APPENDICES

Appendix A
Paper Summary
SUMMARY

Vavilichev M.D. Research of international competitiveness of Ukraine. - Bachelor's qualification paper. Sumy State University, Sumy, 2019.

The final paper is devoted to identifying the competitive position of Ukraine in the international market according the main methodologies and developing recommendations to improve it based on the world and national practices. The factors of macroeconomic stability of the national economy were identified. The analysis of the competitiveness of the regions of Ukraine was conducted. The position of Ukraine in international ratings is analyzed and ways of improving the competitiveness of the country in the global space are proposed.

Keywords: international competitiveness, regional competitiveness, competitiveness indices, the level of development of the region

АНОТАЦІЯ

Вавілічев М.Д. Дослідження міжнародної конкурентоспроможності України. – кваліфікаційна робота бакалавра. Сумський Державний Університет, Суми, 2019.

Підсумкова робота присвячена визначенню конкурентної позиції України на міжнародному ринку згідно основних методологій та розроблених рекомендацій щодо їх вдосконалення на основі світової та національної практик. Визначено фактори макроекономічної стабільності національної економіки. Проведено аналіз конкурентоспроможності регіонів України. Проаналізовано позицію України в міжнародних рейтингах та запропоновано шляхи підвищення конкурентоспроможності країни в глобальному просторі.

Ключові слова: міжнародна конкурентоспроможність, регіональна конкурентоспроможність, індекси конкурентоспроможності, рівень економічного розвитку регіону

Appendix B

Indicators used in calculation of regional competitiveness index

до Порядку проведення розрахунку індексу
конкурентоспроможності регіонів

ПОКАЗНИКИ ТА НАПРЯМИ ДОСЛІДЖЕНЬ, що застосовуються для розрахунку індексів конкурентоспроможності регіонів

Table B.1 – List of indicators used in calculation of regional competitiveness index

Група показників	Найменування показника/ напрямку дослідження	Відповідальний за подання даних
Базові вимоги		
Економічна стабільність	темп зростання (зниження) обсягу валового регіонального продукту, відсотків	Держстат
	прибутки прибуткових підприємств (до оподаткування), тис. гривень	-“-
	доходи місцевих бюджетів (без трансфертів), тис. гривень	Мінфін
	загальна площа житлових будівель, прийнятих в експлуатацію, тис. кв. метрів	Держстат
	індекс споживчих цін, відсотків до грудня попереднього року	-“-
Інфраструктура	щільність автомобільних доріг загального користування з твердим покриттям, кілометрів на 1000 кв. кілометрів	Укравтодор Рада міністрів Автономної Республіки Крим, обласні та Севастопольська міська держадміністрації

Continuation of appendix B

Continuation of table B.1 – List of indicators used in calculation of regional competitiveness index

	пасажирооборот автомобільного транспорту (автобусів), млн. пасажиро-кілометрів	Держстат
	вантажоборот автомобільного транспорту, млн. тонно-кілометрів	-“-
	якість та доступність транспортної інфраструктури*	Мінрегіон
Охорона здоров'я	середня очікувана тривалість життя при народженні, років	Держстат
	коефіцієнт смертності у віці 0-17 років, на 1000 осіб відповідного віку	-“-
	коефіцієнт смертності від хвороб системи кровообігу, на 100 тис. осіб наявного населення	Держстат
	коефіцієнт смертності від новоутворень, на 100 тис. осіб наявного населення	-“-
	якість та доступність послуг сфери охорони здоров'я*	Мінрегіон
Якість дошкільної, позашкільної, загальної середньої освіти	частка випускників загальноосвітніх навчальних закладів, які отримали за результатами зовнішнього незалежного оцінювання з української мови 160 балів і вище, відсотків до загальної кількості учнів, що проходили тестування з української мови	МОН
	частка випускників загальноосвітніх навчальних закладів, які отримали за результатами зовнішнього незалежного оцінювання з математики 160 балів і вище, відсотків до загальної кількості учнів, що проходили тестування з математики	-“-

Continuation of appendix B

Continuation of table B.1 – List of indicators used in calculation of regional competitiveness index

	частка випускників загальноосвітніх навчальних закладів, які отримали за результатами зовнішнього незалежного оцінювання з іноземної мови 160 балів і вище, відсотків до загальної кількості учнів, що проходили тестування з іноземної мови	-“-
	частка випускників шкіл звітного року з атестатом про повну загальну середню освіту, відсотків до загальної чисельності осіб, прийнятих на початковий рівень навчання до вищих навчальних закладів III-IV рівня акредитації	Держстат
	частка загальноосвітніх навчальних закладів денної форми навчання сільської місцевості, що використовують у навчально-виховному процесі комп'ютерну техніку, підключену до Інтернету, відсотків до загальної кількості таких закладів	МОН
	кількість дітей з особливими освітніми потребами, охоплених інклюзивним навчанням, відсотків до загальної кількості дітей, які того потребують	МОН
	питома вага учнів, охоплених позашкільною освітою у загальноосвітніх навчальних закладах сфери освіти, відсотків до загальної кількості дітей шкільного віку	-“-
	якість та доступність дошкільної освіти*	Мінрегіон
	якість та доступність позашкільної та загальної середньої освіти*	-“-

Continuation of appendix B

Continuation of table B.1 – List of indicators used in calculation of regional competitiveness index

Підсилювачі ефективності		
Якість вищої освіти та професійної підготовки	кількість випускників вищих навчальних закладів I-IV рівня акредитації, відсотків до загальної кількості населення у віці 25-70 років	Держстат
	кількість осіб із здобутою професійно-технічною освітою, відсотків до загальної кількості економічно активного населення	МОН
	якість та доступність вищої та професійно-технічної освіти*	Мінрегіон
	відповідність рівня знань та кваліфікацій випускників вищих навчальних закладів та професійно-технічних навчальних закладів вимогам роботодавців*	-“-
Ефективність ринку праці	рівень зайнятості населення у віці 15-70 років, відсотків до всього населення відповідного віку	Держстат
	рівень безробіття населення у віці 15-70 років (за методологією Міжнародної організації праці), відсотків до економічно активного населення відповідного віку	-“-
	рівень довготривалого безробіття для населення працездатного віку, відсотків до економічно активного населення працездатного віку	-“-
	рівень безробіття жінок, відсотків до кількості економічно активних жінок	-“-
	населення працездатного віку, яке працювало за межами регіону, у відсотках до всього зайнятого населення працездатного віку	Держстат
	продуктивність праці, гривень на одного зайнятого	Мінекономрозвитку

	неформальна зайнятість населення, відсотків до кількості зайнятого населення	Держстат
Розмір ринку	обсяг експорту товарів у розрахунку на одну особу населення, доларів США	-“-
	оборот роздрібної торгівлі, млн. гривень	-“-
	доходи населення, тис. гривень	-“-
	рівень ділової активності та конкуренції в регіоні*	Мінрегіон
	рівень купівельної спроможності населення*	-“-
Інноваційний потенціал		
Технологічна готовність	частка домогосподарств, які мають доступ до Інтернету вдома, відсотків до загальної кількості домогосподарств	Держстат
	кількість придбаних та переданих підприємствами нових технологій (технічних досягнень) в Україні та за її межами, одиниць**	-“-
	обсяг прямих іноземних інвестицій (акціонерного капіталу) наростаючим підсумком з початку інвестування, млн. доларів США	-“-
	обсяг фінансування внутрішніх витрат на виконання наукових досліджень і розробок за рахунок власних коштів організацій, млн. гривень	-“-
	доступність новітніх технологій*	Мінрегіон
Належні умови для ведення бізнесу	кількість суб'єктів підприємницької діяльності, одиниць	Держстат
	вимоги банків за довгостроковими кредитами, наданими в економіку регіону, відсотків до попереднього року	Національний банк (за згодою)

Continuation of appendix B

Continuation of table B.1 – List of indicators used in calculation of regional competitiveness index

	рівень розвитку інфраструктури підтримки підприємництва*	Мінрегіон
	легкість ведення бізнесу*	-“-
Інновації	кількість інноваційно-активних малих та середніх підприємств, одиниць**	Держстат
	кількість працівників, задіяних у виконанні наукових досліджень і розробок, осіб	-“-
	частка реалізованої продукції, яка була новою для ринку, відсотків до загального обсягу реалізованої продукції (товарів, послуг) підприємствами з технологічними інноваціями**	-“-
	кількість патентів на винахід (корисну модель), виданих юридичним та фізичним особам протягом звітного року, одиниць	Мінекономрозвитку
	співпраця підприємств з вищими навчальними закладами у сфері науково-дослідних розробок*	Мінрегіон
	створення і розвиток високотехнологічних виробництв підприємств*	-“-

* Показники за напрямками досліджень отримуються за результатами проведення інтерактивного та/або анкетного опитувань.

** Показник розраховується один раз на два роки.

Methodology of calculation of regional competitiveness index

ЗАТВЕРДЖЕНО
постановою Кабінету Міністрів України
від 20 грудня 2017 р. № 1029

МЕТОДИКА **проведення розрахунку індексу конкурентоспроможності** **регіонів**

1. Ця Методика застосовується для розрахунку індексу конкурентоспроможності регіонів.

2. Розрахунок індексу конкурентоспроможності регіонів проводиться Мінрегіоном за переліком показників, визначених у додатку 1 до Порядку проведення розрахунку індексу конкурентоспроможності регіонів, відповідно до характеристик стадій розвитку регіону (базові вимоги, підсилювачі ефективності, інноваційний потенціал) та групами показників, сформованих в межах зазначених характеристик.

3. Розрахунок індексу конкурентоспроможності регіону проводиться у чотири етапи:

перший - визначення рівня розвитку регіону;

другий - стандартизація значень показників конкурентоспроможності;

третій - розрахунок субіндексів конкурентоспроможності регіону за групами показників з урахуванням вагових коефіцієнтів відповідно до рівня розвитку регіону;

четвертий - розрахунок індексу конкурентоспроможності регіону та формування загального рейтингу конкурентоспроможності регіонів.

4. Рівень розвитку регіону визначається на основі розрахунку відношення середньоарифметичного значення показника валового регіонального продукту на одну особу за останні три роки відповідного регіону до середньоарифметичного значення показника валового регіонального продукту на одну особу за останні три роки в цілому у країні (V, відсотків) за такою формулою:

$$V = \frac{\sum_{r=1}^3 \text{ВРП}_{r}^{\text{oc.P}} / 3}{\sum_{r=1}^3 \text{ВРП}_{r}^{\text{oc.K}} / 3} \times 100 \%$$

де $\text{ВРП}_{r}^{\text{oc.P}}$ - значення показника валового регіонального продукту на одну особу відповідного регіону за r-й рік;

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$ВРП_r^{oc.K}$ - значення показника валового регіонального продукту на одну особу у країні за r-й рік;

r - рік, r = 1..3 (використовуються наявні дані за останні три роки, що передують звітному).

За результатами розрахунку визначаються п'ять рівнів розвитку регіону:

рівень 1: $V \leq 50$ відсотків;

рівень 2: $50 \text{ відсотків} < V \leq 75$ відсотків;

рівень 3: $75 \text{ відсотків} < V \leq 90$ відсотків;

рівень 4: $90 \text{ відсотків} < V \leq 110$ відсотків;

рівень 5: $110 \text{ відсотків} < V$.

5. Стандартизація значень показників конкурентоспроможності проводиться з метою приведення абсолютних та відносних показників у відповідність з єдиною системою вимірювання. Розрахунок проводиться за такими формулами:

$$I_{\text{Абс}} = \frac{A_r/A_k}{H_r/H_k}; \quad I_{\text{Відн}} = \frac{B_r}{B_k},$$

де $I_{\text{Абс}}$, $I_{\text{Відн}}$ - стандартизовані значення, розраховані на основі використання абсолютних та відносних показників, частка одиниці;

A_r , A_k - значення абсолютного показника для регіону та країни в цілому відповідно;

B_r , B_k - значення відносного показника для регіону та країни в цілому відповідно;

H_r , H_k - середня чисельність постійного населення регіону та країни за відповідний рік в цілому відповідно, тис. осіб.

У разі коли збільшення значення показника призводить до зниження конкурентоспроможності регіонів, стандартизовані значення таких показників (дестимуляторів) визначають з використанням обернених співвідношень за такими формулами:

$$I_{\text{Абс}(д)} = \frac{H_r/H_k}{A_r/A_k}; \quad I_{\text{Відн}(д)} = \frac{B_k}{B_r},$$

де $I_{\text{Абс}(д)}$, $I_{\text{Відн}(д)}$ - стандартизовані значення, розраховані на основі використання абсолютних та відносних показників для показників, збільшення значень яких знижує конкурентоспроможність регіонів (дестимуляторів), частка одиниці.

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6. Розрахунок субіндексів конкурентоспроможності регіону за групами показників з урахуванням вагових коефіцієнтів відповідно до рівня розвитку регіону здійснюється за такою формулою:

$$IKP_{kli} = \frac{1}{n} \sum_{j=1}^n I_{ij} \times \omega_{kl}$$

де IKP_{kli} - субіндекс конкурентоспроможності регіону, що перебуває на k -й стадії та l -му рівні розвитку, за i -ю групою показників, частка одиниці; $i = 1..m$;

n - кількість показників у i -й групі;

I_{ij} - j -й показник i -ї групи, частка одиниці; $j=1..n$; $i=1..m$;

ω_{kl} - ваговий коефіцієнт, що застосовується до показника, який відноситься до k -ї характеристики стадії розвитку регіону та l -го рівня розвитку регіону, $k=1..3$; $l=1..5$.

Вагові коефіцієнти (ω_{kl})

рівень розвитку регіону ($l, l=1..5$)	характеристики стадій розвитку регіону ($k, k=1..3$)		
	I стадія	II стадія	III стадія
	базові вимоги (k_1)	підсилювачі ефективності (k_2)	інноваційний потенціал (k_3)
рівень 1	0,35	0,5	0,15
рівень 2	0,3125	0,5	0,1875
рівень 3	0,275	0,5	0,225
рівень 4	0,2375	0,5	0,2625
рівень 5	0,2	0,5	0,3

7. Для розрахунку інтегрального індексу конкурентоспроможності регіону та формування загального рейтингу конкурентоспроможності регіонів використовується метод RADAR, що передбачає порівняння площі багатокутника, який побудований за значеннями субіндексів конкурентоспроможності регіону за групами показників конкурентоспроможності з урахуванням вагових коефіцієнтів, з площею багатокутника, побудованого за максимальними значеннями субіндексів конкурентоспроможності регіонів за групами показників конкурентоспроможності з урахуванням вагових коефіцієнтів.

Осі, на яких відкладаються вершини багатокутників, мають стійку послідовність, яка не змінюється та відповідає послідовності груп показників, визначеній у [додатку 1](#) до Порядку проведення розрахунку індексу конкурентоспроможності регіонів.

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Площі багатокутників визначаються як суми площ трикутників, що їх утворюють, за такою формулою:

$$S_p = \frac{1}{2} \times \sin \frac{360}{m} (IKP_{k1} \times IKP_{k2} + IKP_{k2} \times IKP_{k3} + IKP_{k3} \times IKP_{k4} + \dots + IKP_{km} \times IKP_{k1}),$$

де IKP_{k1} , IKP_{k2} ... IKP_{km} - значення субіндексів конкурентоспроможності регіону за i -ми групами показників конкурентоспроможності з урахуванням вагових коефіцієнтів, частка одиниці;

m - кількість груп показників конкурентоспроможності та (або) вісей радара, одиниць.

Індекс конкурентоспроможності регіону визначається шляхом ділення площі його багатокутника на площу багатокутника уявного регіону з максимальними значеннями субіндексів конкурентоспроможності за групами за такою формулою:

$$IKP^r = \frac{IKP_{k1} \times IKP_{k2} + IKP_{k2} \times IKP_{k3} + IKP_{k3} \times IKP_{k4} + \dots + IKP_{km} \times IKP_{k1}}{IKP_{k1}^{max} \times IKP_{k2}^{max} + IKP_{k2}^{max} \times IKP_{k3}^{max} + IKP_{k3}^{max} \times IKP_{k4}^{max} + \dots + IKP_{km}^{max} \times IKP_{k1}^{max}} \times 100,$$

або $IKP^r = \frac{S_p}{S_{max}} \times 100,$

де IKP^r - індекс конкурентоспроможності регіону;

IKP_{kli}^{max} - максимальне значення субіндексу конкурентоспроможності регіону за i -ю групою показників конкурентоспроможності з урахуванням вагових коефіцієнтів, частка одиниці; $i = 1..m$;

S_p - площа радара регіону;

S_{max} - площа радара уявного регіону з максимальними значеннями субіндексів за групами показників конкурентоспроможності з урахуванням вагових коефіцієнтів.

Найкращий індекс конкурентоспроможності має той регіон, який має найбільш близьку до максимальної площу багатокутника.

Appendix D

Dynamics in the indicators of Ukraine in the ranking of Economic freedom from 2010 to 2019

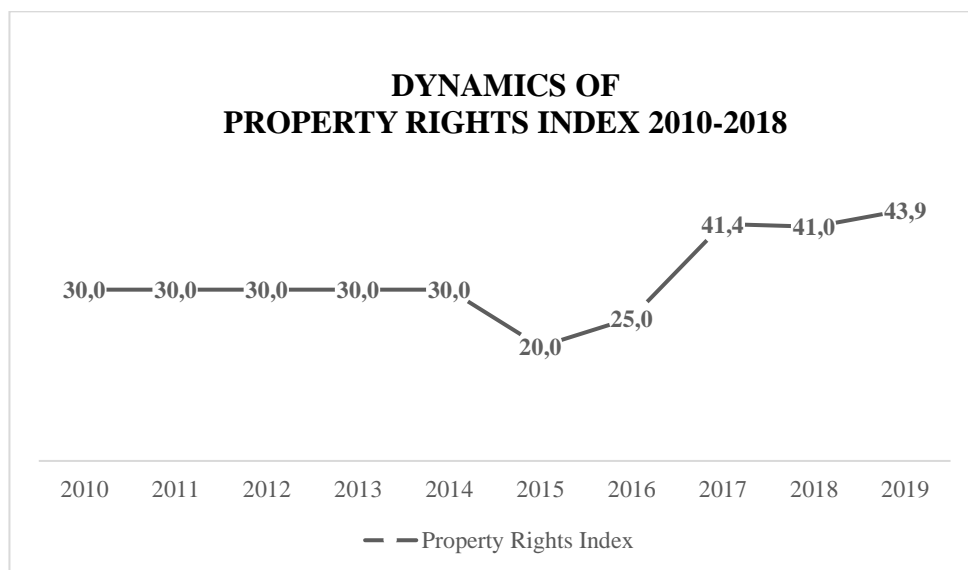


Figure D.1 - Dynamics of Property Rights Index for Ukraine in 2010-2019

*source: Heritage.org / Index of Economic freedom

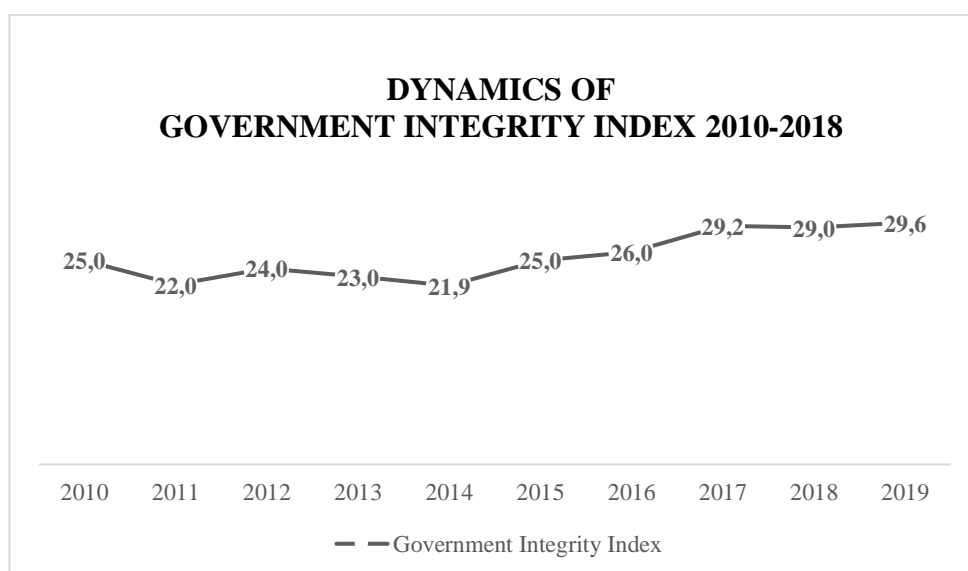


Figure D.2 - Dynamics of Government Integrity Index for Ukraine in 2010-2019

*source: Heritage.org / Index of Economic freedom

Continuation of appendix D

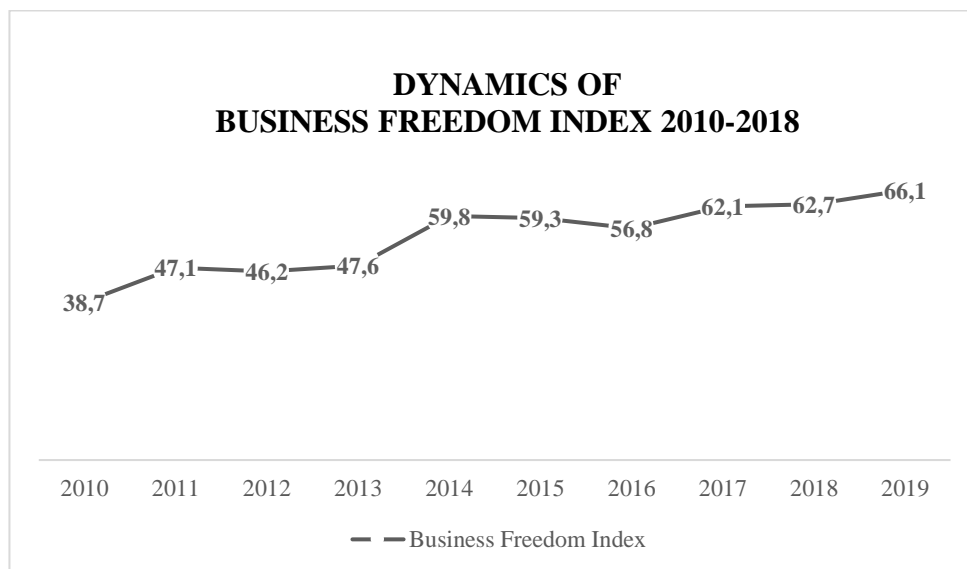


Figure D.3 - Dynamics of Business Freedom Index for Ukraine in 2010-2019

*source: Heritage.org / Index of Economic freedom

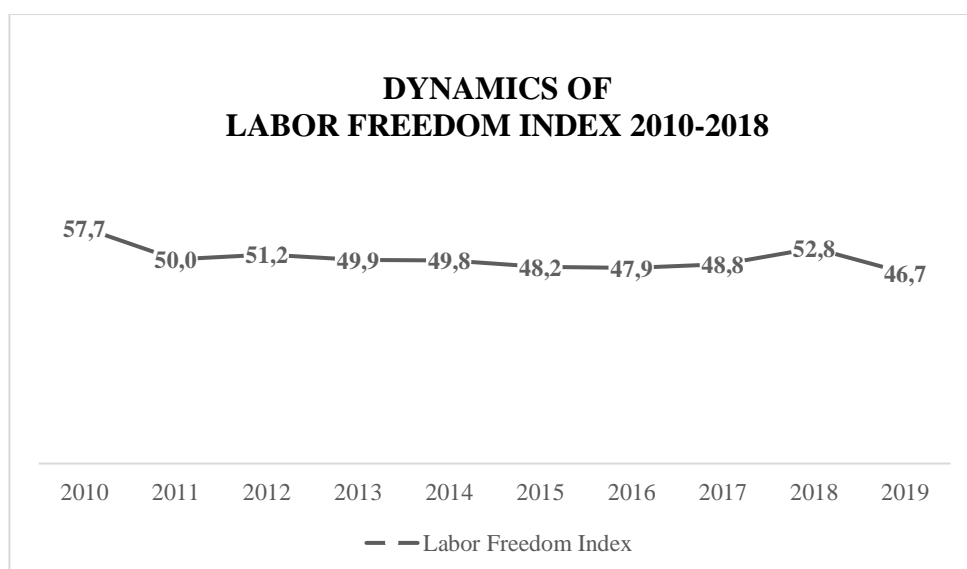


Figure D.4 - Dynamics of Labor Freedom Index for Ukraine in 2010-2019

*source: Heritage.org / Index of Economic freedom

Continuation of appendix D

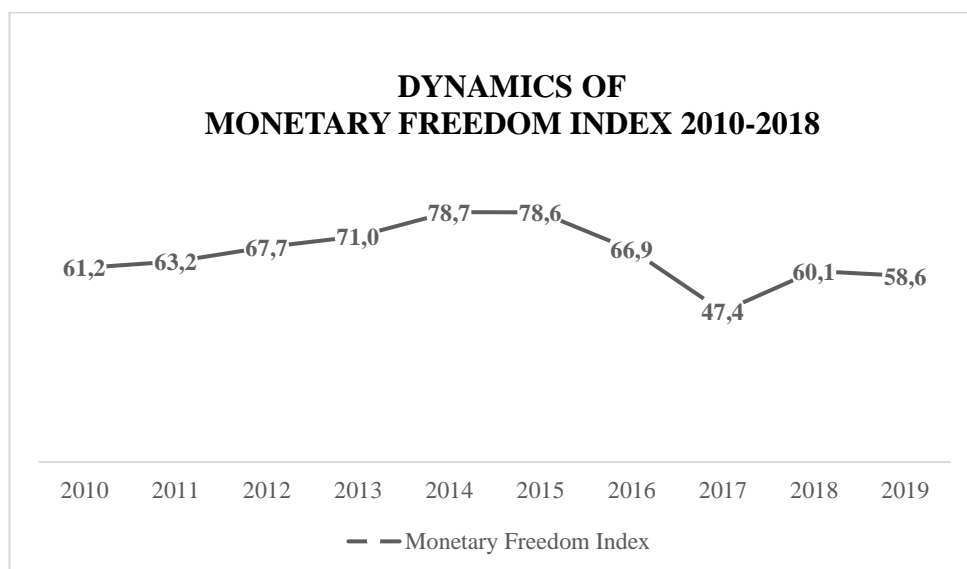


Figure D.5 - Dynamics of Monetary Freedom Index for Ukraine in 2010-2019

*source: Heritage.org / Index of Economic freedom

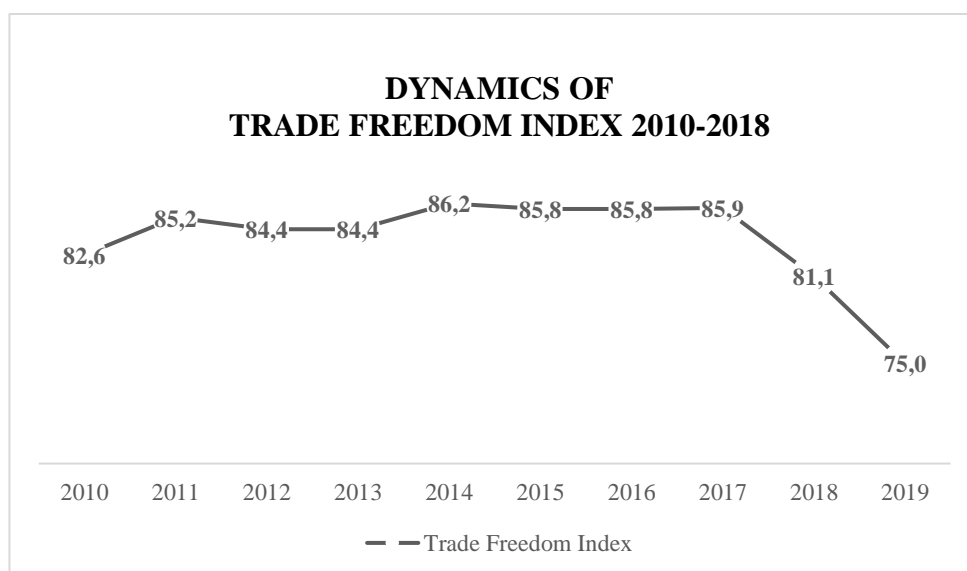


Figure D.6 - Dynamics of Trade Freedom Index for Ukraine in 2010-2019

*source: Heritage.org / Index of Economic freedom

Continuation of appendix D

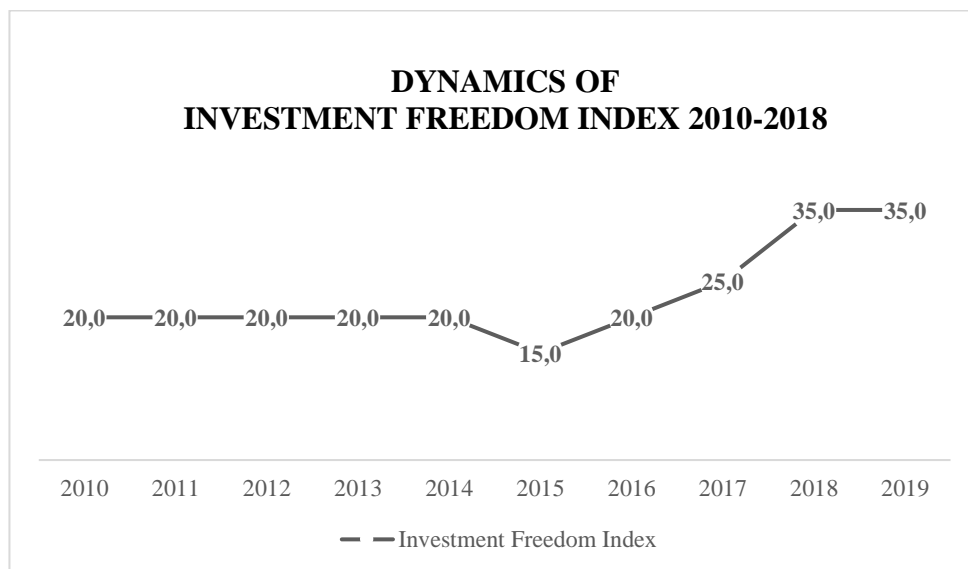


Figure D.7 - Dynamics of Investment Freedom Index for Ukraine in 2010-2019

*source: Heritage.org / Index of Economic freedom

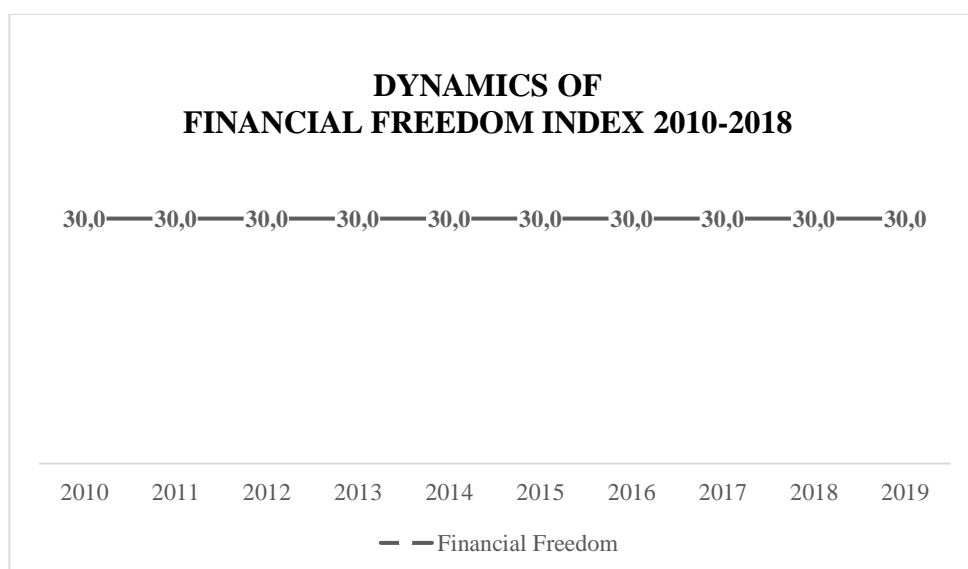


Figure D.8 - Dynamics of Financial Freedom Index for Ukraine in 2010-2019

*source: Heritage.org / Index of Economic freedom