

ICPS
INEKO

Regional Business Environment in Ukraine

2016



Authors

Peter Klatik, INEKO

Peter Golias, INEKO

Vasyl Povoroznyk, ICPS

Angela Bochi, ICPS



Official Development Assistance of the Slovak Republic is an intrinsic instrument of the Slovak foreign policy, which to a large extent shapes Slovakia's relations with aid recipients and relevant international organizations. Having committed itself to the fulfillment of the Millennium Development Goals, Slovakia shares the responsibility for global development and poverty reduction endeavors in developing countries, aiming to promote their sustainable development.



Institute for Economic and Social Reforms

INEKO Institute is a non-governmental non-profit organization established in support of economic and social reforms which aim to remove barriers to the long-term positive development of the Slovak economy and society.

Mission

The Institute's mission is to support a rational and efficient economic and social reform process in the Slovak Republic (SR), through research, information development and dissemination, advice to senior government, political and self-governing officials, and promotion of the public discourse. It also focuses on those areas of social policy on the regional as well as the European level critical to the economic transformation of the SR. It draws on the best experience available from other transition countries and members of the European Union (EU) and the OECD.



The International Centre for Policy Studies (ICPS) is one of Ukraine's top independent think-tanks involved in the development and analysis of public policy.

Building on more than 20 years of experience, ICPS proposes the strategic vision of the country's development and transformation. It is based on implementation of the complex of cross-sectoral reforms and innovative developments in public governance and political competition.

Mission

Promotion of reforms, democratic principles of governance, and social transformations in Ukraine on the basis of European integration.

Regional Business Environment in Ukraine

2016

Authors

Peter Klatik, INEKO
Peter Golias, INEKO
Vasyl Povoroznyk, ICPS
Angela Bochi, ICPS

This study was created under the project "Transparent, financially healthy and competitive local governments in Ukraine" implemented with the financial support of the Official Development Assistance of the Slovak Republic - SlovakAid. The project is run by Slovak non-governmental non-profit organization INEKO and by Ukrainian think-tank ICPS.

Contents

Forword	5
---------	---

Chapter 1: Key results	7
-------------------------------	----------

Regional Business Environment Index	8
-------------------------------------	---

Analysis of subratings	10
------------------------	----

Chapter 2: Analyses and recommendations	25
--	-----------

Key problems of regional development	26
--------------------------------------	----

Recommendations for Ukraine	29
-----------------------------	----

Chapter 3: Methodology	31
-------------------------------	-----------

Formation of the indicators	32
-----------------------------	----

Overview of the indicators	37
----------------------------	----

Chapter 4: Region profiles	45
-----------------------------------	-----------

Explanatory notes	46
-------------------	----

List of regions	47
-----------------	----

Region profiles	48
-----------------	----

Chapter 5: Indicators	97
------------------------------	-----------

Explanatory notes	98
-------------------	----

List of indicators	99
--------------------	----

Indicators	100
------------	-----

Forword

The competitiveness of any country is formed at the regional level. The regional differences in Ukraine are viewed as one of its biggest challenges by Ukrainian government, expert society and also by World Bank, OECD and other international institutions. Meanwhile, expert discussions are often confined to the comparison of a limited set of statistical indicators like gross domestic product, investments, exports turnover and unemployment rate in the regions. Yet these factors are not sufficient to account for competitive shortcomings of districts and regions.

Socio-political events in Ukraine in 2014-2015 years have led to the significant changes in the socio-economic development of regions and have caused the need for clear directions delineation in further changes of the state regional policy.

The decline in production, the suspension of investment projects, the growing crisis in the social sphere, initiating decentralization of power, legislative regimentation of updated principles of the state regional policy, self-reliance growth of communities in shaping development prospects are the main features of modern Ukraine's development which is the basis for a thorough analysis and development of a number of proposals for improving the competitiveness of regions.

The situation is complicated by annexation of Crimea, the hostilities in the east of the country, the loss of control over a part of the Donetsk and Lugansk regions, the physical destruction of infrastructure and loss of production capacity, the gap of production capacity among enterprises in the south-eastern region accompanied by the loss of the Russian market, which was the main market sales for many businesses. These factors certainly negatively reflected on the competitiveness of all regions of Ukraine.

Thus, the negative dynamics of socio-economic development encourages manufacturers to search for new markets, to reveal internal development potential by local resources using, to change the production structure and to search for access to foreign markets. In these circumstances, there is the increasing role of cities as the catalysts for economic development and areas of production concentration and the majority of the population. This makes the regional configuration, the emergence of new centers of economic development, the population growth in cities. Such phenomena requires paying increased attention to issues of economic security of different areas, especially in small towns, which often depend on the activity of one or two enterprises and whose stopping is catastrophic for the existence of the city. Potential exhaustion of the extensive economic development, dominance of rent seeking economic agents' behavior, their marginal propensity to consume as opposed to propensity to save and invest in the real sector, the lack of institutional and structural deformation in the

economy lead to the loss of the country position in the world competitiveness rankings.

Thus it is necessary to identify the main benefits and threats to regional competitiveness as traditional industrial regions of Ukraine and the regions for which the industry is not the key engine of economic development.

There is an extremely urgent necessity of justification of the priorities and measures: implementation of structural models of innovation development; improving environmental and technological situation in the regions based on innovation; restructuring "old industrial" sectors with the experience of developed market countries in general and the countries of Central and Eastern Europe; improving intergovernmental relations; strengthening the role and responsibility of regional government in solving these problems.

This project is intended to provide local governments with an effective device for drawing up development programs and the removal of local barriers to business. It seeks to uncover the greatest barriers to business in economically backward regions, to provide guidelines to local government officials on how to eliminate the disadvantages and to further develop the advantages that they already have. The findings of the project should benefit the central government, which will thus be able to deploy public funding on the removal of barriers to the development of specific regions in a more targeted and efficient manner. Ultimately, business development can be expected in all regions of Ukraine, which will create new jobs, bring more competition in the labor market, higher wages for workers and better working conditions for all.

During its preparation, publicly available statistical data were used in combination with the information gathered from its own extensive survey among entrepreneurs from all 24 regions of Ukraine. Data collection took place during 2016. The analysis will offer to the reader a comparison of competitive advantages and barriers to business development in each individual region. Included are recommendations for individual regions on where local authorities and the central government channel their activities to contribute to the regional development and to balance the disparities within and among the regions. The overall assessment summarizes major recommendations whose implementation could be beneficial not only to a specific region, but also to entire Ukraine.

The publication is organized into five chapters, which will gradually guide the reader through individual parts of the analysis. Each chapter can be read independently, without the knowledge of theories, concepts or structures used in the previous chapters.

Chapter 1 summarizes the main results of the analysis in a clear tabular and graphical form. Its Foreword introduction discusses the history and structure of the Regional Business

Environment Index, the conceptual framework and economic fundamentals underlying the creation of the index. The next part offers a brief summary of RBEI for individual regions, providing graphs, tables and descriptions. Because the index consists of a number of smaller components – four subindexes, where each subindex consists of two pillars, the subsequent part of the first chapter features these elements as well. The chapter first introduces the four subindexes, each accompanied by a map of Ukraine's regions with the given subindex and an appropriate table, then it provides a table containing all the previously mentioned data, and finally it displays maps of the regions of Ukraine for each of the pillars with a description of the conditions in individual regions.

Chapter 2 gives deeper understanding of the results of the analysis, which not only summarize the findings, but mainly serve as a set of recommendations. It begins with main barriers to business identified by the survey respondents. Next, it discusses these barriers in more detail, and offers suggestions for their elimination. The second part of the chapter outlines general recommendations to Ukraine for solving key problems to improve business conditions and reduce regional disparities.

Chapter 3 describes the methodology of the creation of RBEI. It begins with a detailed explanation of all the fundamentals on which the index is built. Then it presents a mathematical apparatus that transforms raw data gathered from surveys and statistical data obtained from institutions into indicators entering the index. The chapter concludes with an overview of all indicators, together with their detailed explanations, sources and significance within the overall index. The chapter is supplemented with graphs and tables that provide a specific view on some index properties.

Chapter 4 is the most extensive. A double-page spread gives a profile of each individual region, consisting of basic statistics about the region, assessment of the region based on the total RBEI score, subindex score and pillars score, the greatest competitive advantages and disadvantages and provides a short profile of the region and an overview of all the indicators entering the index. This overview can help to readily identify the strengths and weaknesses of the region in question.

Chapter 5 provides charts of all indicators. With the opposite approach to that in Chapter 4, where each region is accompanied by a review of all indicators with the scores achieved, this chapter lists all regions with the scores achieved for each indicator, sorted by the region with the highest value through to the region with the lowest value. Thus, for instance, the reader can easily identify the region with the highest level of corruption among private enterprises, or one with the most dynamic labor market.

The publication is accompanied by an intelligent internet site, which, in addition to automatic annual updating of the values of individual indicators, provides an interactive model. This allows setting up one's own weights of individual components of the index for every visitor, who may thus create their own map that will best reflect their preferences

and would represent their perception of the regional business environment, be it a potential investor seeking the most suitable location for their enterprise, a politician exploring various options for allocation of funds for local self-governments or a government representative willing to enhance the status of their region.

For further information about the project, detailed results and the interactive model please visit our website <http://competitiveness.icps.com.ua/>

We wish to thank all the institutions without which this publication would not be possible and which helped to add informative value and overall quality. Our gratitude especially goes to the Official Development Assistance of the Slovak Republic - SlovakAid, which financed the preparation and printing of the publication and the implementation of the project.

Chapter 1

Key results

Regional Business Environment Index

The system of administrative-territorial structure of Ukraine consists of the Autonomous Republic of Crimea (ARC), regions (oblasts), rayons, cities, city districts, settlements and villages. As of January 01, 2016, Ukraine counts 24 oblasts, 490 rayons, 460 cities (including 187 cities with special status, cities of republican, oblast importance), 111 city districts, 885 settlements of municipal type, 28385 villages.

In the course of events of February-March 2014 the Verkhovna Rada of the ARC unilaterally declared 'independence' of Crimea. Then based on the results of 'local referendum' Crimea acceded to the Russian Federation. Independence of Crimea, as well as its accession to Russia are not recognized by the international community and Ukraine. Therefore, the territory of the ARC (including the city of Sevastopol) currently has the status of the temporarily occupied territory as a result of military aggression of the Russian Federation.

Separate rayons, cities, settlements and villages of the Donetsk Oblast and Luhansk Oblast are also recognized temporarily occupied due to existence of unrecognized Donetst People's Republic self-proclaimed in May 2014 and unrecognized Luhansk People's Republic self-proclaimed in April 2014. The said territories have the special order of local government.

In Ukraine, at the regional level local governments - regional councils and regional executive authorities - regional administrations exercise their authority.

The Regional Council is the local government that represents the common interests of the territorial communities of villages, towns, cities, within the powers defined by the Constitution and the Laws of Ukraine "On local government in Ukraine". The Regional Council consists of deputies elected by the people of the corresponding area.

The functions of the Regional Councils' powers:

- the programs approval of socio-economic and cultural development of the region, target programs on other issues;
- the regional budgets approval, introducing changes in it, reports approval on its execution;
- distribution of funds transferred from the state budget in the form of grants, subsidies respectively between

Region	Population	Area	Population density	Unemployment	Average wage
Dnipro	3,254,884	31,923	102	8.0 %	4,366
Donetsk	4,265,145	26,517	161	11.0 %	4,980
Cherkasy	1,242,965	20,916	59	10.2 %	3,360
Chernihiv	1,044,975	31,903	33	11.2 %	3,295
Chernivtsi	909,893	8,096	112	9.0 %	3,050
Ivano-Frankivsk	1,382,352	13,927	99	8.1 %	3,402
Kharkiv	2,718,616	31,418	87	7.8 %	3,697
Kherson	1,062,356	28,461	37	9.9 %	3,123
Khmelnytsk	1,294,413	20,629	63	9.4 %	3,371
Kropyvnytsky	973,150	24,588	40	11.2 %	3,282
Kyiv	1,732,235	28,121	62	8.0 %	4,153
Luhansk	2,205,389	26,683	83	11.4 %	3,427
Lviv	2,534,174	21,831	116	8.6 %	3,646
Mykolaiv	1,158,207	24,585	47	9.1 %	3,984
Odesa	2,390,289	33,314	72	6.7 %	3,897
Poltava	1,438,948	28,750	50	11.5 %	3,783
Rivne	1,161,811	20,051	58	10.6 %	3,573
Sumy	1,113,256	23,832	47	9.5 %	3,449
Ternopil	1,065,709	13,824	77	11.3 %	2,994
Vinnnytsia	1,602,163	26,492	60	10.5 %	3,396
Volyn	1,042,668	20,144	52	9.9 %	3,291
Zakarpattia	1,259,158	12,753	99	9.2 %	3,381
Zaporizhia	1,753,642	27,183	65	8.4 %	4,200
Zhytomyr	1,247,549	29,827	42	11.5 %	3,271

district budgets, local budgets of regional centers, villages, towns and cities of regional importance;

- resolving issues on the sale, transfer to rent, concession or transfer on bail the communal property objects;
- resolving issues regarding the management of joint property objects of the territorial communities of villages, towns, cities, districts in cities that are managed by Regional Councils;
- granting consent on the transfer of state property objects into joint property of the territorial communities of villages, towns and making decisions on the transfer of the joint property objects of rights of territorial communities in villages, towns and cities that are managed by regional councils, into state property, and the acquisition of the state property objects;
- the rules approval for construction and improvement of settlements in the area.

Regional State Administration (RSA) is the local authority of the state executive power that included into the executive power system of Ukraine. Through regional

administrations acting on a territorial basis, the highest state authorities of the executive power of Ukraine (the President, the Government, ministries and other central executive authorities) can carry out its functions in public administration at the regional level. RSA also implements the powers delegated by the relevant Regional Council.

The following issues are within the authority of RSA: socio-economic development of the region; budget, finance and accounting; property management, privatization, promotion of business development and implementation of state regulatory policy; industry, agriculture, construction, transport and communications; land use, natural resources and environmental protection; foreign economic activity; social security, employment, labor and wages and so on.

In practice there are a number of issues relating to the delimitation of competences of regional state administrations and regional councils. In particular, their competence is not properly demarcated, which creates conditions for the possibility of some intervention in the affairs of others and occurrence of conflict situations. Most RSA powers are adjacent jurisdiction that means that authorities have the power in one area of social life but have different competence. For example, in the education sector, local governments manage those educational institutions that belong to local communities but local administrations manage state institutions. However, local administrations, in addition, are implementing public policy in the education sector, performing state programs and take measures to preserve the network of educational institutions. In the determination of neighboring competence in the legislation the kind of powers rather than the volume of powers are indicated.

The Regional Business Environment Index (RBEI) reflects the overall quality of business conditions in the districts. Its creation was motivated by a lack of tools that would enable effective comparisons between individual districts. It presents an output of a complex model and is calculated for each district separately based on available statistical data and data obtained from the affective survey among managers of firms. The values for each district fall within the range of [1; 6], where 1 reflects the worst and 6 expresses the best possible conditions for entrepreneurship. RBEI consists of 103 mutually independent indicators, which assess different aspects of business conditions. Each of these indicators, like the entire RBEI, falls within the range of [1; 6] allowing a comparison of districts in the given area.

All 103 indicators are further classified into eight pillars, which combine indicators into larger logical units. The pillars represent the 8 main areas of business environment. These areas in turn fall under four subsequent regional business environment sub-indices, two pillars per each subindex. RBEI comes as a result of their merger.

Subindex I: Economic activity

1st pillar: Economic environment
2nd pillar: Economic output

Subindex II: Public administration and legislation

3rd pillar: Legislation
4th pillar: Public administration

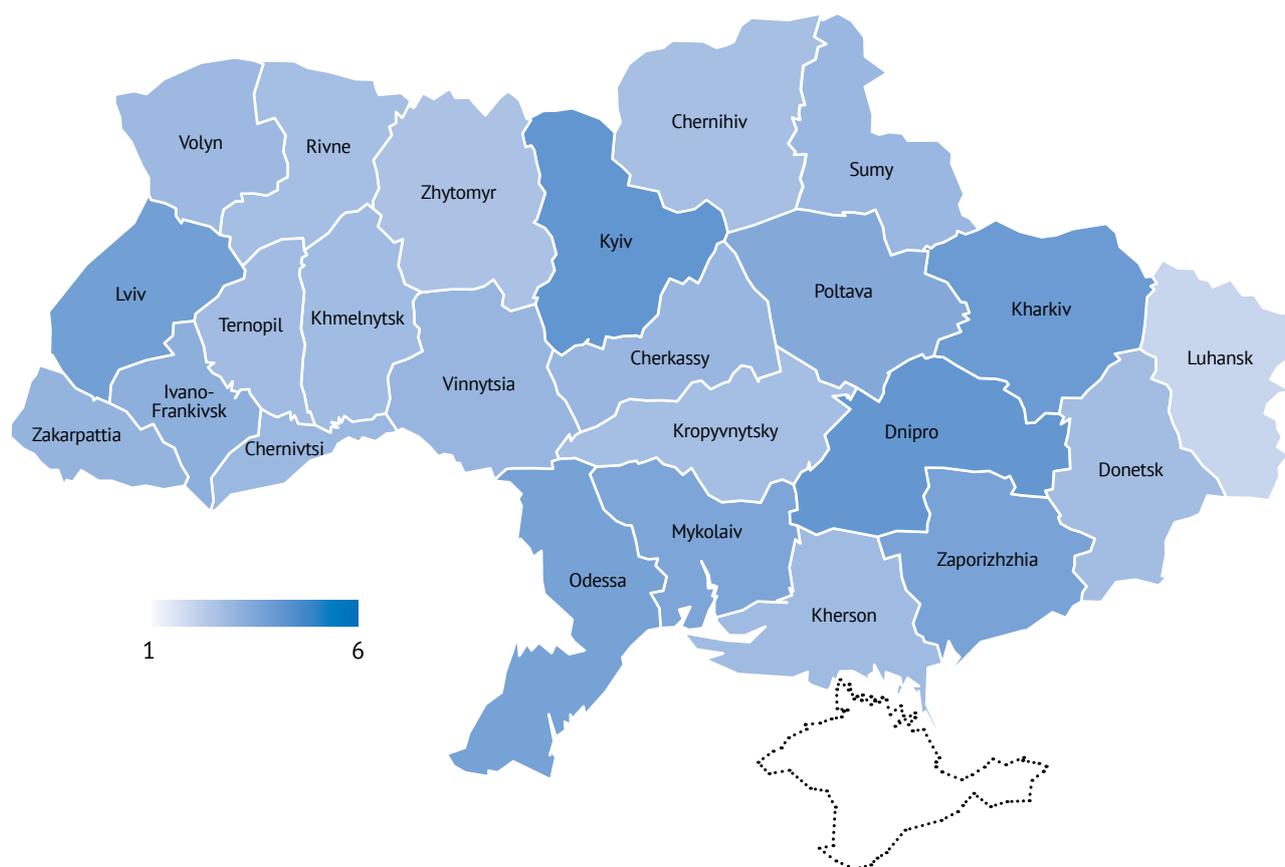
Subindex III: Technology and infrastructure

5th pillar: Infrastructure
6th pillar: Technology

Subindex IV: Education and human resources

7th pillar: Human resources
8th pillar: Education

Regional Business Environment Index map



Kyiv region is a leader of the regional business environment Index. It ranks the first place in the “Economic activity” and “Technology and Infrastructure” subindexes. In the ranking of “Public administration and Legislation” and “Education and human resources” subindexes the Kyiv region takes the 4th place respectively. Kiev region is significantly ahead of the average value of the country in all RIDS components except “Education” pillar (18th place out of 24). Dnipropetrovsk region took the second place and it lags behind of only 0,2 points. The region leads such subindexes as “Economic activity” and “Public administration and Legislation”. The region is ahead of the average value of the country for all RBEI components.

The lowest position in the overall ranking belongs to Luhansk region. It takes the last place in all subindexes, and most RBEI components. Of the 103 indicators included in the RBEI calculation Lugansk region leads only in 3 indicators: two of them are based on statistical data (population density and the average age of the unemployed), and one is based on a survey of companies (assessment of local taxes).

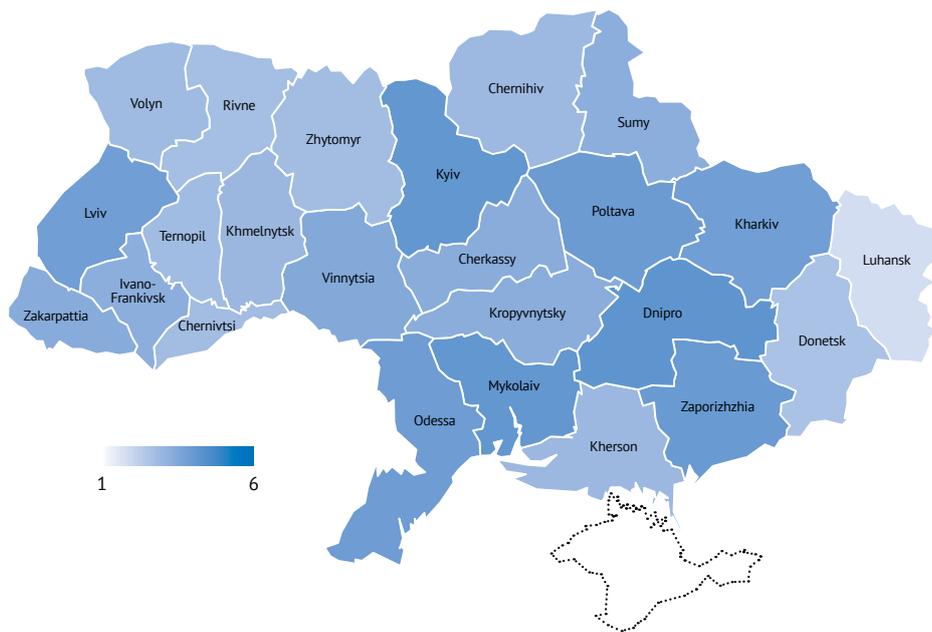
It can be distinguished three regions when analyzing RBEI geographical map. In south-eastern Ukraine there are focused industrialized region which occupy high positions in the overall ranking. It is about Dnipropetrovsk, Kharkiv, Zaporizhzhya, Odessa and Mykolayiv region. There are two leaders in the north-central regions of Ukraine - Kyiv (1st place) region and Poltava region (8th place). In western Ukraine there is one region that is far ahead of others – it is Lviv (4th) region. The rest of the western regions received point that are lower the average value of the country.

	Region	Score
1	Kyiv	3.88
2	Dnipro	3.86
3	Kharkiv	3.76
4	Lviv	3.67
5	Odessa	3.59
6	Zaporizhzhia	3.57
7	Mykolaiv	3.50
8	Poltava	3.42
-	Country average	3.30
9	Ivano-Frankivsk	3.30
10	Zakarpattia	3.20
11	Vinnytsia	3.16
12	Cherkassy	3.13
13	Sumy	3.13
14	Chernivtsi	3.11
15	Volyn	3.08
16	Kherson	3.03
17	Ternopil	3.03
18	Khmelnysk	3.02
19	Donetsk	3.00
20	Rivne	2.97
21	Kropyvnytsky	2.96
22	Chernihiv	2.96
23	Zhytomyr	2.89
24	Luhansk	2.48

Region	Subindex I								Subindex II					
	RBEI		1st pillar		2nd pillar		Public administration and legislation		3rd pillar		4th pillar			
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score		
Dnipro	2	3.86	1	3.92	6	4.04	4	3.84	1	2.66	6	2.78	3	2.58
Donetsk	19	3.00	23	2.90	2	3.22	23	2.63	22	2.23	24	2.18	18	2.26
Cherkassy	12	3.13	11	3.35	9	3.12	10	3.50	21	2.26	17	2.47	22	2.12
Chernihiv	22	2.96	17	3.07	22	2.85	16	3.22	6	2.58	1	2.93	12	2.35
Chernivtsi	14	3.11	20	3.01	10	3.32	22	2.80	24	2.14	23	2.21	24	2.10
Ivano-Frankivsk	9	3.30	13	3.31	19	3.07	12	3.48	14	2.45	11	2.62	13	2.34
Kharkiv	3	3.76	8	3.68	35	4.04	14	3.44	3	2.62	4	2.81	5	2.50
Kherson	16	3.03	16	3.09	28	3.11	19	3.07	17	2.37	14	2.54	17	2.26
Khmelnysk	18	3.02	15	3.11	29	2.90	15	3.25	19	2.32	19	2.45	19	2.23
Kirovograd	21	2.96	12	3.34	14	3.11	11	3.50	11	2.50	8	2.71	11	2.36
Kyiv	1	3.88	2	3.87	17	3.73	2	3.97	4	2.62	2	2.88	8	2.45
Luhansk	24	2.48	24	2.29	12	2.62	24	2.01	23	2.21	22	2.37	23	2.11
Lviv	4	3.67	7	3.68	24	3.65	6	3.71	5	2.59	7	2.77	6	2.47
Mykolaiv	7	3.50	3	3.86	13	3.70	3	3.96	13	2.47	20	2.43	4	2.50
Odessa	5	3.59	6	3.72	18	3.79	7	3.68	20	2.28	17	2.47	21	2.16
Poltava	8	3.42	5	3.75	21	3.24	1	4.08	16	2.39	13	2.57	16	2.27
Rivne	20	2.97	22	2.96	27	2.87	20	3.02	10	2.52	5	2.80	14	2.34
Sumy	13	3.13	14	3.31	30	3.08	13	3.46	12	2.48	12	2.59	9	2.40
Ternopil	17	3.03	19	3.02	1	2.86	18	3.12	15	2.45	10	2.67	15	2.30
Vinnitsia	11	3.16	9	3.43	7	3.15	8	3.62	8	2.57	21	2.43	2	2.67
Volyn	15	3.08	18	3.04	33	2.88	17	3.14	7	2.57	3	2.83	10	2.40
Zakarpattia	10	3.20	10	3.38	32	3.20	9	3.50	9	2.56	9	2.70	7	2.47
Zaporizhzhia	6	3.57	4	3.78	25	3.81	5	3.76	2	2.65	15	2.54	1	2.73
Zhytomyr	23	2.89	21	3.00	4	2.97	21	3.01	18	2.33	16	2.50	20	2.22

Region	Subindex III								Subindex IV					
	RBEI		Technology and infrastructure		5th pillar		6th pillar		Education and human resources		7th pillar		8th pillar	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Dnipro	2	3.85	2	4.32	4	3.88	1	4.61	3	3.99	4	4.04	4	3.88
Donetsk	19	2.99	6	3.67	3	3.90	11	3.50	20	2.90	19	2.94	21	2.82
Cherkassy	12	3.15	11	3.44	6	3.69	13	3.29	19	3.00	17	2.98	16	3.02
Chernihiv	21	2.97	18	3.17	19	3.17	17	3.17	22	2.79	22	2.81	23	2.74
Chernivtsi	14	3.14	12	3.35	5	3.72	18	3.12	8	3.48	13	3.18	2	4.06
Ivano-Frankivsk	9	3.32	8	3.64	8	3.57	9	3.68	9	3.37	9	3.31	6	3.48
Kharkiv	3	3.77	3	4.13	7	3.58	3	4.45	1	4.07	3	4.10	3	4.01
Kherson	17	3.04	13	3.32	23	2.78	10	3.64	18	3.01	15	3.05	19	2.92
Khmelnysk	18	3.04	21	3.06	12	3.31	23	2.90	12	3.23	14	3.16	10	3.37
Kirovograd	22	2.97	23	3.01	22	2.83	19	3.11	23	2.68	23	2.65	22	2.75
Kyiv	1	3.90	1	4.52	1	4.44	2	4.57	4	3.87	2	4.33	18	2.95
Luhansk	24	2.48	24	2.98	21	3.05	22	2.93	24	2.40	24	2.41	24	2.37
Lviv	4	3.68	4	4.05	2	3.99	5	4.09	5	3.79	6	3.53	1	4.32
Mykolaiv	7	3.50	10	3.51	20	3.09	8	3.76	6	3.57	5	3.83	15	3.05
Odessa	5	3.60	9	3.63	10	3.41	7	3.79	2	4.04	1	4.35	9	3.42
Poltava	8	3.44	7	3.65	18	3.24	6	3.89	10	3.31	8	3.42	14	3.10
Rivne	20	2.98	22	3.04	15	3.28	24	2.89	16	3.13	18	2.98	8	3.43
Sumy	13	3.14	19	3.17	24	2.67	12	3.46	14	3.20	10	3.30	17	3.00
Ternopil	16	3.05	17	3.19	9	3.43	20	3.04	15	3.17	20	2.86	5	3.79
Vinnitsia	11	3.18	16	3.22	13	3.29	16	3.17	17	3.04	16	2.99	13	3.15
Volyn	15	3.10	15	3.22	16	3.27	15	3.19	11	3.24	11	3.20	11	3.31
Zakarpattia	10	3.22	14	3.26	11	3.37	14	3.20	13	3.22	12	3.19	12	3.26
Zaporizhzhia	6	3.56	5	3.85	14	3.29	4	4.18	7	3.49	7	3.51	7	3.46
Zhytomyr	23	2.91	20	3.10	17	3.27	21	3.00	21	2.84	21	2.84	20	2.86

Subindex I: Economic activity



Region	Score
1 Dnipro	3.92
2 Kyiv	3.87
3 Mykolaiv	3.86
4 Zaporizhia	3.78
5 Poltava	3.75
6 Odessa	3.72
7 Lviv	3.68
8 Kharkiv	3.68
9 Vinnytsia	3.43
- Country average	3.39
10 Zakarpattia	3.38
11 Cherkassy	3.35
12 Kropyvnytsky	3.34
13 Ivano-Frankivsk	3.31
14 Sumy	3.31
15 Khmelnytsk	3.11
16 Kherson	3.09
17 Chernihiv	3.07
18 Volyn	3.04
19 Ternopil	3.02
20 Chernivtsi	3.01
21 Zhytomyr	3.00
22 Rivne	2.96
23 Donetsk	2.90
24 Luhansk	2.29

“Economic activity” subindex combines two pillars - “Economic environment” and “Economic output” and provides a comprehensive assessment of the conditions and directly results obtained in the regions of Ukraine.

“Economic environment” pillar is formed mainly by the responses received in the companies` survey. 12 indicators of 17 that form this pillar are derived from the survey. “Economic output” pillar is based on statistical indicators. Of the 13 indicators included in its calculations, only three of them are obtained from companies` survey.

The regions of south-eastern Ukraine - Kharkiv, Dnipropetrovsk, Zaporizhia, Mykolaiv and Odessa received the highest points in this subindex. It is conditioned by the factor that the industrial power, inherited from Soviet times, are concentrated in the southeast part of Ukraine. Two eastern regions took the worse position due to the conflict in Donbas. By 2014 they traditionally demonstrated a high level of economic activity. It is primarily about the Donetsk region and to a lesser extent about the Lugansk, which in previous years has lagged behind Donetsk. These two regions most affected by the destruction of infrastructure and industrial facilities, as well as the gap established by decades of industrial ties. Also it is important to note such negative factor as the trade war with Russia, which has resulted in hundreds of companies focused on the Russian market, the lost traditional markets its products.

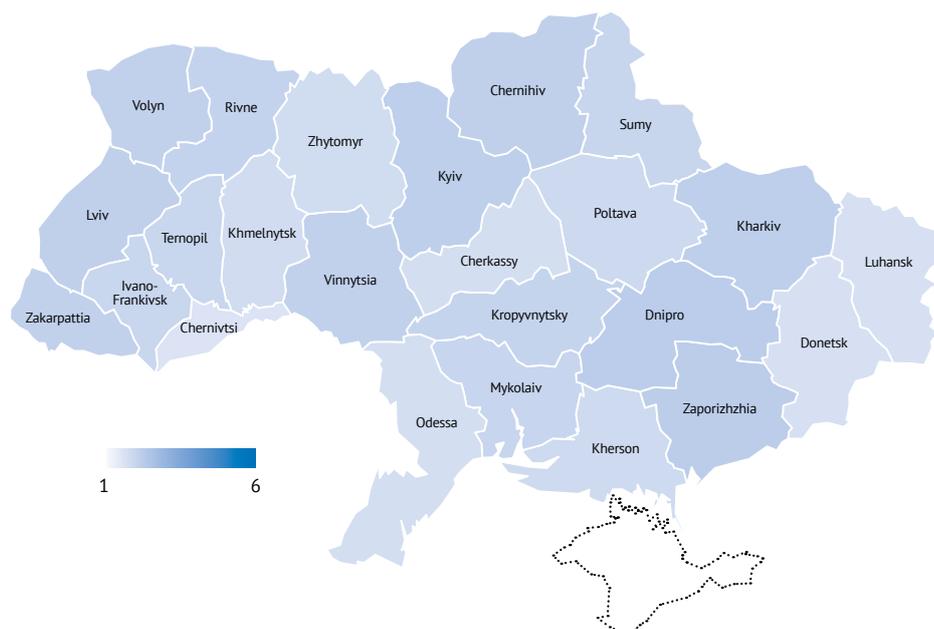
The central part of Ukraine is the second in economic activity, but here are three regions - Kiev, Poltava and Vinnitsa, where there is a high level of economic activity, which is ahead of the average value in Ukraine. The western part of Ukraine lags behind other parts of the country and it can also be explained by the historical legacy and geographical conditions, including lack of natural resources needed for

the development of heavy industry. Since independence in western Ukraine it is failed to create favorable conditions for industrial development. The exceptions are some companies that produce high-tech products for the European market. However, the western regions have high tourism potential. Also, these areas do not use the full benefits of cross-border cooperation with Western neighbors.

This territorial division implies that Ukraine needs to improve its economic environment, especially in its western and northern part.

It is necessary for south-eastern Ukraine to modernize the industrial base and create conditions for reorientation of sales to international markets.

Subindex II: Public administration and legislation



Region	Score
1 Dnipro	2.66
2 Zaporizhia	2.65
3 Kharkiv	2.62
4 Kyiv	2.62
5 Lviv	2.59
6 Chernihiv	2.58
7 Volyn	2.57
8 Vinnytsia	2.57
9 Zakarpattia	2.56
10 Rivne	2.52
11 Kropyvnytsky	2.50
12 Sumy	2.48
13 Mykolaiv	2.47
- Country average	2.45
14 Ivano-Frankivsk	2.45
15 Ternopil	2.45
16 Poltava	2.39
17 Kherson	2.37
18 Zhytomyr	2.33
19 Khmelnytsk	2.32
20 Odessa	2.28
21 Cherkassy	2.26
22 Donetsk	2.23
23 Luhansk	2.21
24 Chernivtsi	2.14

“Public administration and legislation” subindex is formed by two pillars - “Legislation” and “Public Administration”. The aim of subindex is to assess the quality of management of local authorities and their impact on business environment, and assess the quality of legislative conditions for business development in the regions. Due to the inability to carry out this assessment by using statistical data, all the individual indicators that included in the calculation of the pillars were derived from survey companies.

In particular, the “Legislation” pillar is the lowest among all the pillars. It consists of only three indicators that are derived from companies` surveys.

The “Public Administration” pillar includes 11 indicators. All values are derived from companies` surveys.

The difference between the highest and the lowest points of the subindex is minimal. This indicates that there are no significant regional differences in its assessment. Therefore, unlike the “Economic activity” subindex regional differences appear less clear in the geographical section. Consequently it is not possible to distinguish separate sub-regions on the map of Ukraine. Dnipropetrovsk region became the winner in this subindex. Zaporizhia region lags behind of only 0.01, followed by Kharkiv region. Kyiv region is RBEL winner of the overall ranking. It occupies the fourth position in the present index. The five leaders also include a western region - Lviv region.

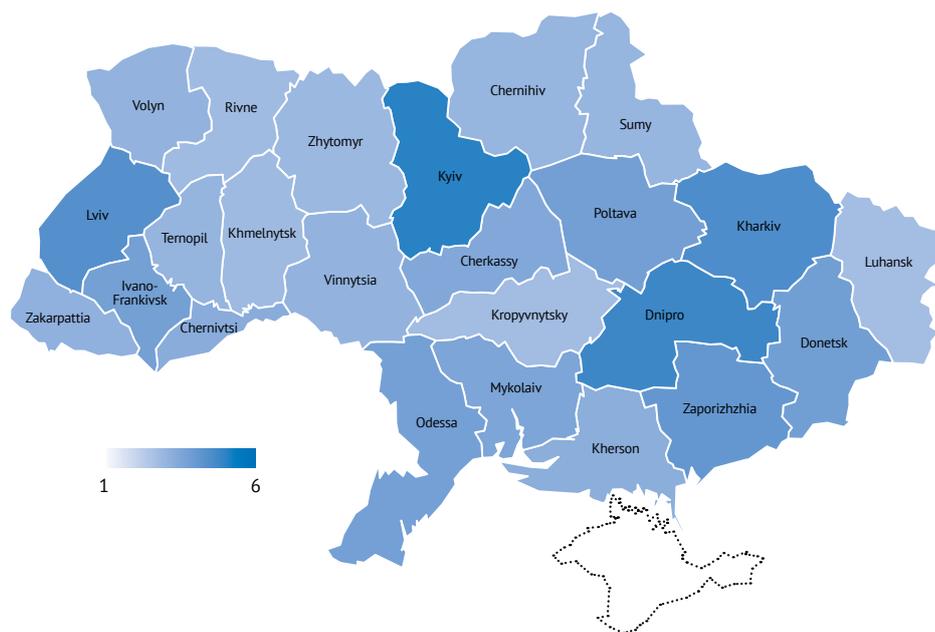
Chernivtsi, Luhansk and Donetsk regions are three outsiders. Entrepreneurs rated quality as worst of local authorities and their impact on creating a favorable business environment in these regions.

The level of points obtained Subindex II, is the lowest among all four subindexes. This indicates that the indicators included

in the “Public administration and legislation” subindex are the factors which have the most negative impact on the regions` competitiveness in Ukraine.

State and regional policy should be directed at creating a general framework conditions for business and the significant improvement of the local authorities in the context of a favorable business environment in the region.

Subindex III: Technology and infrastructure



Region	Score
1 Kyiv	4.52
2 Dnipro	4.32
3 Kharkiv	4.13
4 Lviv	4.05
5 Zaporizhia	3.85
6 Donetsk	3.67
7 Poltava	3.65
8 Ivano-Frankivsk	3.64
9 Odessa	3.63
- Country average	3.60
10 Mykolaiv	3.51
11 Cherkassy	3.44
12 Chernivtsi	3.35
13 Kherson	3.32
14 Zakarpattia	3.26
15 Volyn	3.22
16 Vinnytsia	3.22
17 Ternopil	3.19
18 Chernihiv	3.17
19 Sumy	3.17
20 Zhytomyr	3.10
21 Khmelnytsk	3.06
22 Rivne	3.04
23 Kropyvnytsky	3.01
24 Luhansk	2.98

“Technology and Infrastructure” subindex includes two pillars - “Technology” and “Infrastructure”.

This subindex will help to assess the level of technological potential of the regions and the quality of infrastructure. Both factors are important prerequisites for proper economic development, for attracting investments and formation of competitive advantage.

The “Technology” pillar includes 15 individual indicators, nine of which are based on statistics, and six are based on a companies` survey. “Infrastructure” pillar includes 12 individual indicators, of which seven are statistics, and five received from poll. Geographic divisions, formed on the basis of the present subscript areas are largely coincide with the geographical features that formed the basis for calculating the “Economic activity” subindex.

This is due to the fact that a higher level of development and implementation of technology and best level of infrastructure development are observed in industrialized regions of Ukraine and demonstrate the best indicators of economic activity.

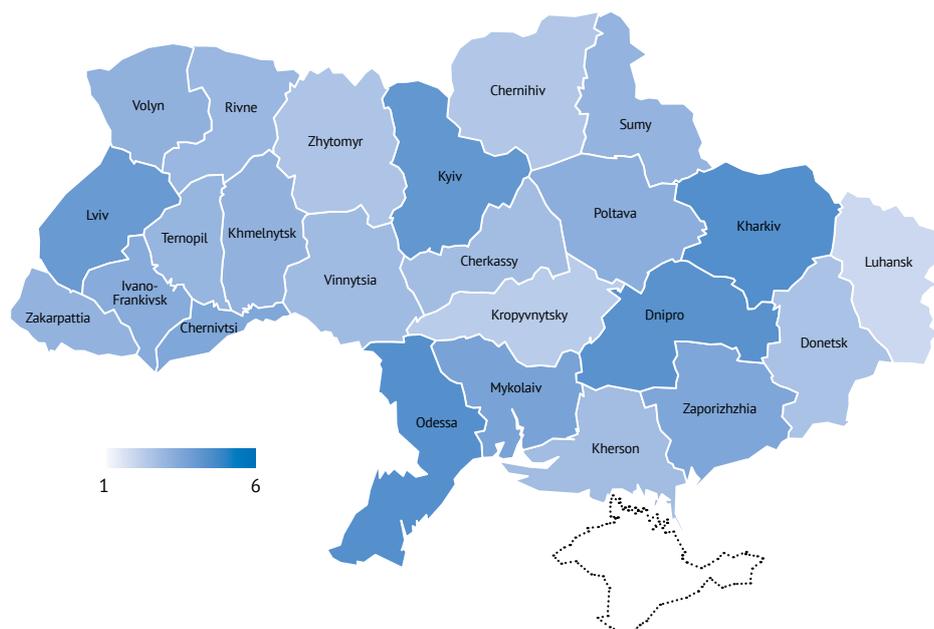
Thus it is possible to distinguish three zones on the map of Ukraine, which are characterized by different levels of infrastructure and technology.

The most successful in this area is subindex, located in the north-central part of Ukraine. Dnipropetrovsk region (2nd place) is the leader in the region. It is followed by Kharkiv, Zaporizhia, Donetsk and Odessa regions. Their points are ahead of the average value in the country. Another zone is the central Ukraine. Kiev region has gained the highest position and it is actually the leader in this subindex. Also good results are shown by Poltava (7th place) and Poltava (11th) region.

The third zone covers the western part of Ukraine. Lviv region (4th place) leads among other regions of the western region. It is followed by Ivano-Frankivsk (8th place), Chernivtsi (12th place), Zakarpattia (14th place) and Volyn (15th place) areas.

Analysis of the “Technology and Infrastructure” subindex demonstrates the urgent need to attract investment and create conditions for the introduction of new technologies and modernization of existing infrastructure in the regions. Problems related to quality infrastructure are major competitive disadvantages of all regions of Ukraine, as survey evidenced.

Subindex IV: Education and human resources



Region	Score
1 Kharkiv	4.07
2 Odessa	4.04
3 Dnipro	3.99
4 Kyiv	3.87
5 Lviv	3.79
6 Mykolaiv	3.57
7 Zaporizhia	3.49
8 Chernivtsi	3.48
9 Ivano-Frankivsk	3.37
- Country average	3.35
10 Poltava	3.31
11 Volyn	3.24
12 Khmelnytsk	3.23
13 Zakarpattia	3.22
14 Sumy	3.20
15 Ternopil	3.17
16 Rivne	3.13
17 Vinnytsia	3.04
18 Kherson	3.01
19 Cherkassy	3.00
20 Donetsk	2.90
21 Zhytomyr	2.84
22 Chernihiv	2.79
23 Kropyvnytsky	2.68
24 Luhansk	2.40

“Education and human resources” subindex is formed by “Education” and “Human Resources” pillars. This subindex helps to assess the quality of the labor market in the region, the availability of labor and its quality parameters and the educational system in the regions of Ukraine. Analysis of the results of the subindex also helps to assess how the education system meets the relevant requirements of the labor market.

“Education” pillar consists of 16 individual indicators, of which 6 are statistical, and 10 are evaluation. “Human Resources” pillar also includes 16 indicators, of which 7 are statistical, and 9 are based on the companies’ survey.

As is the case with the “Economic activity” subindex the geographical cross-section of subindex results generally reveals three zones on the map of Ukraine. The most successful are also formed from the regions of south-eastern Ukraine - Kharkiv, Odessa, Mykolayiv and Dnipropetrovsk regions. But another zone of the success level is in the western part of Ukraine, in general, a little ahead of the regions from the north-central Ukraine. Regions of this zone have shown positive results, unlike the “Economic activity” subindex.

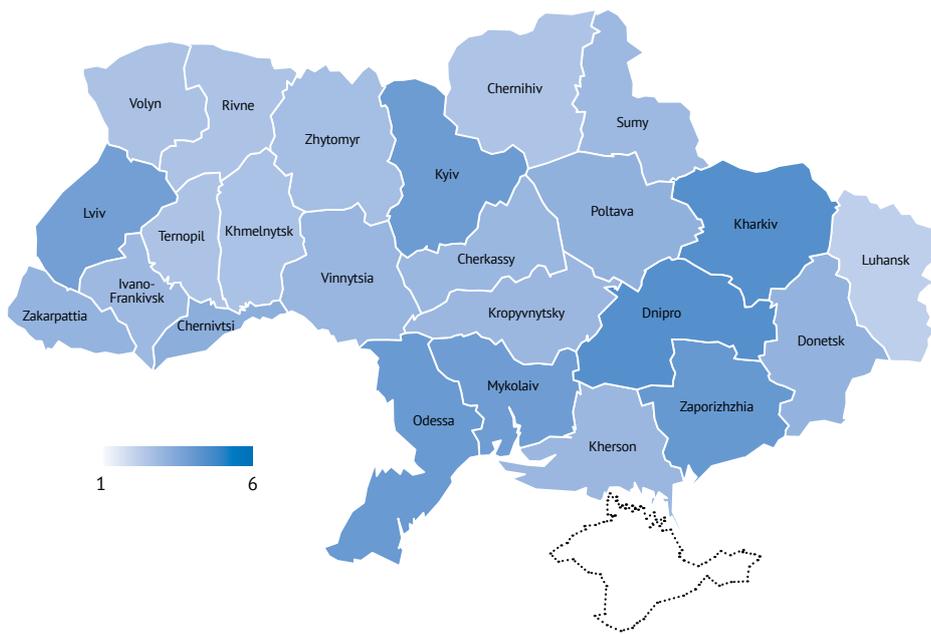
To the west zone includes the Lviv, Ivano-Frankivsk, Chernivtsi regions, which points are ahead of the average value of the country, and Volyn and Zakarpattia, with slightly lower indicators than the average value of the country.

Good results in the north-central zone are shown by Kyiv and Poltava regions. However, such regions from the north as Chernihiv and Zhytomyr are in the lower position ranking.

Deuce outsiders are presented by Kirovograd and Lugansk regions.

The weak link between the quality of education and labor market needs was highlighted by most employers as a factor, which is a competitive disadvantage in their area. An urgent task for the national and regional levels is the search for effective mechanisms for cooperation between education and the labor market and their quality improved.

1st pillar: Economic environment



Region	Score
1 Kharkiv	4.04
2 Dnipro	4.04
3 Zaporizhia	3.81
4 Odessa	3.79
5 Kyiv	3.73
6 Mykolaiv	3.70
7 Lviv	3.65
- Country average	3.45
8 Chernivtsi	3.32
9 Poltava	3.24
10 Donetsk	3.22
11 Zakarpattia	3.20
12 Vinnytsia	3.15
13 Cherkassy	3.12
14 Kherson	3.11
15 Kropyvnytsky	3.11
16 Sumy	3.08
17 Ivano-Frankivsk	3.07
18 Zhytomyr	2.97
19 Khmelnytsk	2.90
20 Volyn	2.88
21 Rivne	2.87
22 Ternopil	2.86
23 Chernihiv	2.85
24 Luhansk	2.62

The Economic environment pillar is part of the economic activity subindex. It shows essential conditions for developing economic activities in different districts. The pillar has 17 indicators, of which 5 follow statistical pattern and 12 draw on entrepreneurs' opinions. Statistical indicators are selected from fixed data such as population density, urbanization or agricultural land area. Other statistical indicators are proportional, ruling out bias. They assess the share of the economically active population, the rate of social benefits and representation of foreign companies.

The economic environment pillar gives much greater weight to the local entrepreneurs' views. It takes into account the convenience of geographical location of the district and the impact of natural conditions on doing business. The respondents answered questions about the past, current and future conditions for business. They assessed competition levels in services and industry, availability of funds and input materials, the reliability of trading partners, and the adverse affect of the local informal economy. Also included were their views on the development prospects of the district, including the development of tourism.

Looking at the assessment map one can notice the division of Ukraine into three areas – east-southern, central and western. Five regions, which took first places, are forming a kind of zone in the southeast part of Ukraine. The highest number of points for this pillars at once two regions have received - Dnipropetrovsk and Kharkiv. Dnipropetrovsk region leads in 4 indicators included in the calculation of the component, particularly qualitative changes in the business environment in recent years in this area were the most highly appreciated. Kharkiv region also took first places in 4 indicators, particularly in assessing the level of competition in industry and services. Zaporizhia region ranked third place, receiving championship on two indicators. Also, Mykolaiv

and Odessa regions are the leaders in the southeastern zone. Key advantages For Mykolaiv oblast were the high level of competition in the services sector, the relatively low level of corruption among companies, a large number of companies operating in the region. The high level of competition in the services sector, favorable geographic location and high potential for tourism development have allowed the Odessa region take 4th place in this pillar.

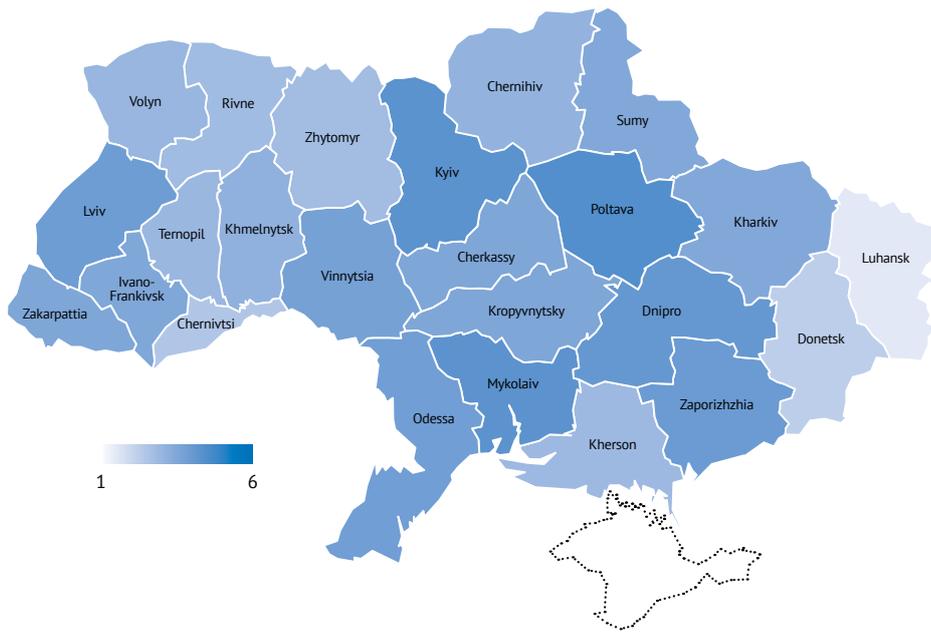
Kyiv region stands out in the central-northern part of Ukraine - it took the 5th place, inferior to the Odessa region just in 0.04 points. The relatively high rate in this part of Ukraine are also received by Poltava (9th place) and Vinnitsa (12th place) regions, but their indicators inferior to the average for the country.

In western Ukraine leaders are Lviv (7th place) and Chernivtsi region (8th place). The high point of Lviv region is caused by high tourist potential, positive changes in the business environment in recent years and the high level of competition in the services sector. Chernivtsi region received a relatively high score due to high tourism potential, favorable business environment and reliable business partners.

Lugansk region is an absolute outsider in the "Economic environment" pillar and this region is located in the east of Ukraine. The only advantages of the region are the high population density and the high level of urban residents. In the rest of the indicators included in the pillar calculation this region has the lowest rates.

Adverse business conditions are one of the biggest problems concerning all regions of Ukraine. Particularly topical issues are the quality of regulatory policy and the protection of fair economic competitions. The policy at both the national and regional levels should be aimed to resolving these issues.

2nd pillar: Economic output



Region	Score
1 Poltava	4.08
2 Kyiv	3.97
3 Mykolaiv	3.96
4 Dnipro	3.84
5 Zaporizhia	3.76
6 Lviv	3.71
7 Odessa	3.68
8 Vinnytsia	3.62
9 Zakarpattia	3.50
10 Cherkassy	3.50
11 Kropyvnytsky	3.50
12 Ivano-Frankivsk	3.48
13 Sumy	3.46
14 Kharkiv	3.44
- Country average	3.34
15 Khmelnytsk	3.25
16 Chernihiv	3.22
17 Volyn	3.14
18 Ternopil	3.12
19 Kherson	3.07
20 Rivne	3.02
21 Zhytomyr	3.01
22 Chernivtsi	2.80
23 Donetsk	2.63
24 Luhansk	2.01

The Economic output pillar is the other of the two components of economic activity subindex. The focus has mainly been on summary and average indicators for key sectors and specific companies. Unlike the economic environment pillar, here the measurements concentrated on statistical indicators.

From all 13 indicators, the measurable values are monitored in 10 cases. One of the main indicators is the produced added value and the productivity of employees in the industrial sector. Also, when calculating the component two indicators of foreign economic activity of regions are taken into account - the total volume of imports and exports of goods and services.

One of the important parameters is the environmental friendliness of production, i.e., the production of waste per unit of value created: the higher the pollution levels, the worse the assessment of the district. Air pollution was monitored separately. Construction output may have some bearing on the assessment of the activities of districts just as much as on the assessment of economic activities of the whole country - its higher intensity precedes growth in other sectors. Special attention is given to tourism.

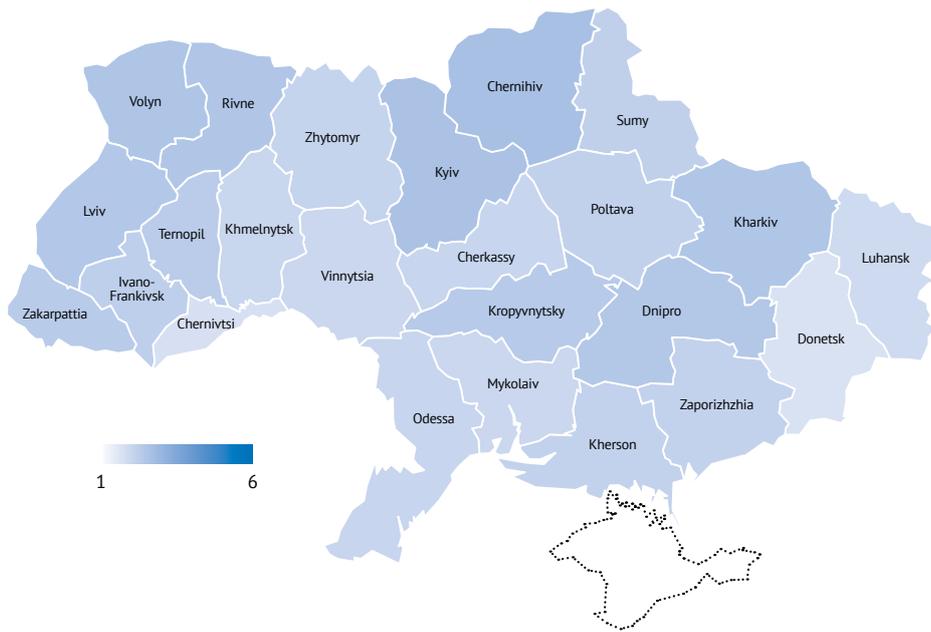
In the survey, entrepreneurs in the districts answered questions about their productivity and profitability dynamics, and potential opportunities for their personal development. Geographical distribution features of the „Economic output“ pillar overlap with distribution caused by „Economic environment“ pillar. Leading positions are occupied by regions located in the geographical area which extends from east to south and includes a number of eastern regions. The main industrial and agricultural potential of the Ukrainian economy is concentrated in these regions. Poltava region got the highest rating in the „Economic output“ pillar. High points in the region are provided by environmental production, and

also the region has high points on indicators of industrial production sales volume and gross value which generated by enterprises of the region. Second place in the ranking is taken by the neighbor of Poltava region - the Kiev region which is inferior to the winner just in 0.11 points. The position of the Kiev region is provided by high points due to such indicators as environmental production, housing construction, foreign trade turnover of goods.

Western region are lagging behind on points of aforementioned regions due to lower levels of industry and the agricultural sector in these regions. However, the Lviv region result should be allocated, which ranked the sixth place in the component. Lviv competitive advantages are the high foreign trade turnover in services and balance of services, indicating the region orientation to the service sector. Also there are high rates of housing construction in the region.

Lugansk and Donetsk regions became the outsiders of rankings in the „Economic output“ pillar. Before the ATO in 2014 Donetsk region was one of the regional economic leaders. But military actions on its territory have caused significant infrastructure destruction, damage and loss of its industrial potential. The critical situation of small and medium business has developed. Much of the population was forced to move to other oblasts and to receive the “refugees” status which also negatively affected the economic output of the region. The situation is even worse in the Luhansk region, where the loss of economic potential according to various estimates is up to 90%. Shattered internal economic relations limited the economic output almost in all regions of Ukraine. The conflict has led to the gap of industrial relations in such areas as metallurgy, electric power and mechanical engineering. Thus the economic reintegration of Donetsk and Lugansk regions should be one of the key objectives in the field of public policy.

3rd pillar: Legislation



Region	Score
1 Chernihiv	2.93
2 Kyiv	2.88
3 Volyn	2.83
4 Kharkiv	2.81
5 Rivne	2.80
6 Dnipro	2.78
7 Lviv	2.77
8 Kropyvnytsky	2.71
9 Zakarpattia	2.70
10 Ternopil	2.67
11 Ivano-Frankivsk	2.62
12 Sumy	2.59
- Country average	2.58
13 Poltava	2.57
14 Kherson	2.54
15 Zaporizhia	2.54
16 Zhytomyr	2.50
17 Odessa	2.47
18 Cherkassy	2.47
19 Khmelnytsk	2.45
20 Mykolaiv	2.43
21 Vinnytsia	2.43
22 Luhansk	2.37
23 Chernivtsi	2.21
24 Donetsk	2.18

The Legislation pillar is one of the two components of the Public administration and legislation subindex. Since laws and regulations governing business activity are mostly adopted at the central government level, the chances of local governments in the division of responsibilities in the public administration are relatively low. Still, they have some impact on businesses, especially the smaller ones, which is lacking in a number of Ukrainian regions.

The components calculation has only three indicators, which are based on the companies' survey. Employers in the regions assessed the existing barriers to business development, the perception of local taxes and prospects of their own businesses development.

With regard to the perception of legislative barriers to entrepreneurship on the part of entrepreneurs, the results are not very different from each other and districts can not be combined into coherent blocks.

The two leaders of the rating are in the northern part of Ukraine. Chernihiv region showed the best result in this component. Entrepreneurs believe that the lowest barriers to business development are in this area. The Second place the Kiev region took with a small gap from the leader took. Third place went to West region - Volyn region. In this area entrepreneurs are the most optimistic about the prospects for business development. At the same time the existing barriers for business development are well below the average value of the country (18th place). Kharkiv region took fourth place. High field position is conditioned by the positive assessment of such indicators as the level of existing barriers for business development and the entrepreneurs' assessment in the region of local taxes. Rivne region completes the top five leaders. Its position in this rating the region received through high points obtained in the two indicators – the assessment

of existing barriers for business development and assessment of the prospects of their own businesses.

The three the outsiders are the two eastern and one western region - Donetsk, Zaporizhia and Luhansk. The low position of Lugansk and Donetsk regions are caused by unfavorable business conditions and prospects for business development with a view of hostilities on their territory.

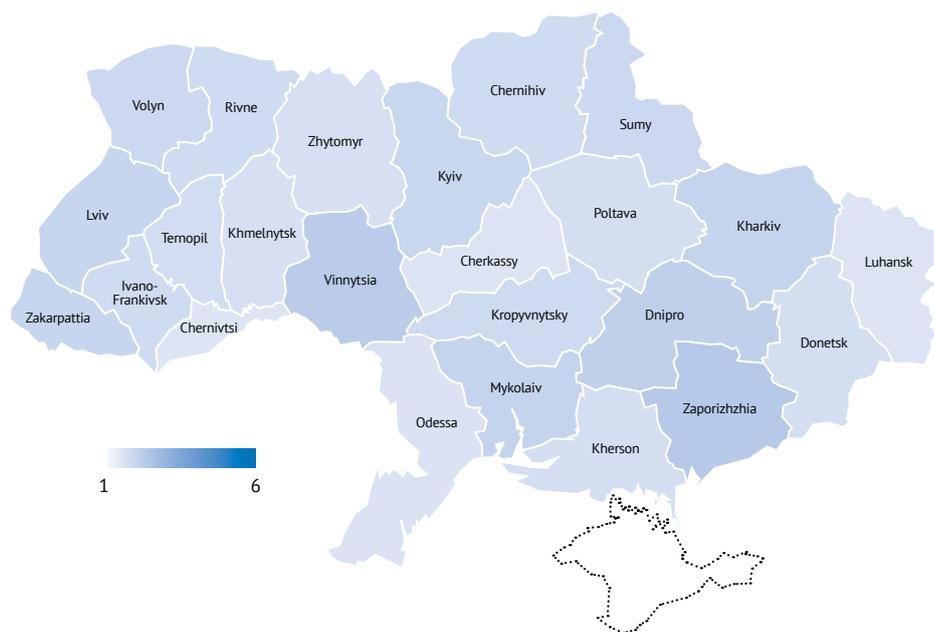
It should be noted that such indicator as the level of perception existing local tax didn't become a critical competitive disadvantage for the regions of Ukraine. Ironically, but most points on this index are gained by Lugansk region.

However, this didn't help it to leave such field zone outsiders. Chernivtsi region is the most sensitive to the level of local taxes. The entrepreneurs of this area high assess the level of local taxes which have a negative impact on the development of their business.

The entrepreneurs from the Western Regions have the most optimism for the prospects assess of their own business. According to this individual index the Volyn region is forged ahead, and it is followed by Lviv and Rivne region.

In the summary assessment of this pillar one should bear in mind that while the difference between the best and the worst district is not negligible, the room for improvement is very spacy, because the legislation pillar has reached the second lowest average score among all the pillars.

4th pillar: Public administration



Region	Score
1 Zaporizhia	2.73
2 Vinnytsia	2.67
3 Dnipro	2.58
4 Mykolaiv	2.50
5 Kharkiv	2.50
6 Lviv	2.47
7 Zakarpattia	2.47
8 Kyiv	2.45
9 Sumy	2.40
10 Volyn	2.40
- Country average	2.37
11 Kropyvnytsky	2.36
12 Chernihiv	2.35
13 Ivano-Frankivsk	2.34
14 Rivne	2.34
15 Ternopil	2.30
16 Poltava	2.27
17 Kherson	2.26
18 Donetsk	2.26
19 Khmelnytsk	2.23
20 Zhytomyr	2.22
21 Odessa	2.16
22 Cherkassy	2.12
23 Luhansk	2.11
24 Chernivtsi	2.10

The Public administration pillar is the second component of the Public administration and legislation subindex. It is completely based on the perception of entrepreneurs.

The pillar assesses how public administration meets entrepreneurs' demands and whether and how it creates conditions for the development of local economic activities. The survey respondents answered questions designed to investigate the performance of self-governments and of local state governments.

Generally, the survey attempted to find out whether the authorities fulfill their obligations, and particularly whether the self-governments are efficient in carrying out these tasks. The survey monitored the officials' approach to clients, the level of bureaucracy and procedural delays. Corruption in Ukraine is a generally widespread problem; the survey aimed to investigate if entrepreneurs believed the decisions were influenced by bribes.

Another focus of interest was satisfaction with the communication with authorities and the availability of information, with particular focus on the use of electronic forms of communication. It monitored the level of protection of private property by local and state police and probed into the quality of the work of local courts and law enforcement. Entrepreneurs could also answer the question whether the state showed enough interest in their district.

The best results were observed in Zaporizhia, Vinnytsia and Dnipro regions. The primacy of Zaporizhia has been due to the such factors as lower impact of corruption in authorities and better law enforcement at the local courts.

The worst results were in Cherkasy, Luhansk and Zaporizhia regions. Entrepreneurs low rated the Chernivtsi region

practically all indicators included in the calculation of the component.

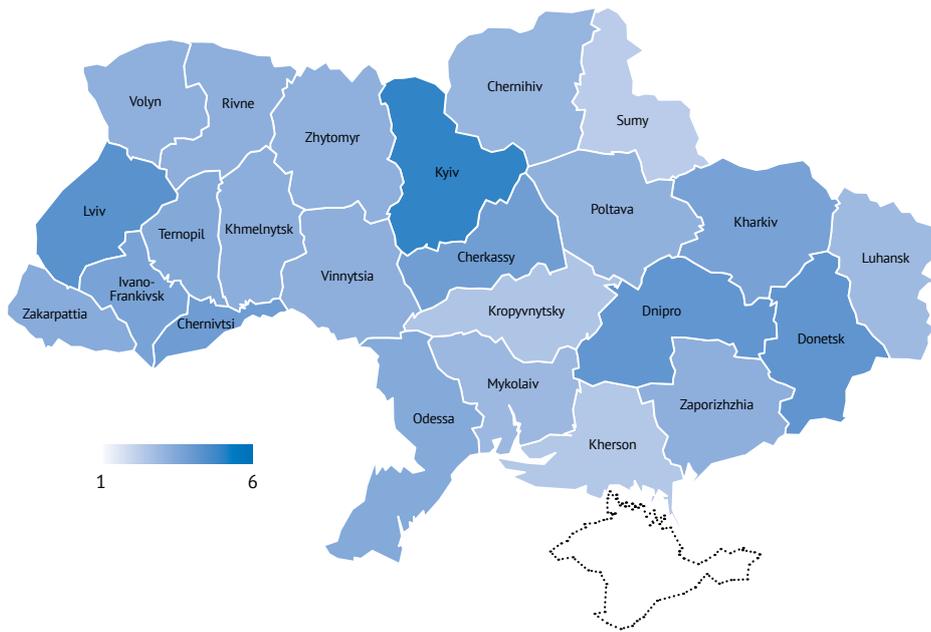
The color tones of the assessment map show generally low scores for this indicator in all regions of Ukraine. On average, the pillar has received a clearly negative assessment and its assessment is almost the same as the legislation pillar. The latter reached a national average score of 2.93, while the pillar of public administration received 2.73 points out of the possible maximum of 6.00. This means that such components are the biggest competitive hurdle for all regions among others components.

The results achieved indicate that the level of service provided in the area of public administration offers the greatest opportunities for the local self-governments to remedy the situation and to boost the regions.

The central government in particular should give more thought to the overall negative assessment of the pillar. Four indicators of this pillar, which are of direct concern for the government, got among nationwide barriers to business development in the regions.

The government should, as a rule, increase its interest in the development of districts, which is largely perceived as low by entrepreneurs. Judiciary needs urgent overhaul, as law enforcement is very poor. It is necessary to improve the work of state authorities as their impact on business is negative. This area in particular calls for the elimination of bureaucracy and procedural delays.

5th pillar: Infrastructure



Region	Score
1 Kyiv	4.44
2 Lviv	3.99
3 Donetsk	3.90
4 Dnipro	3.88
5 Chernivtsi	3.72
6 Cherkassy	3.69
7 Kharkiv	3.58
8 Ivano-Frankivsk	3.57
- Country average	3.50
9 Ternopil	3.43
10 Odessa	3.41
11 Zakarpattia	3.37
12 Khmelnytsk	3.31
13 Vinnytsia	3.29
14 Zaporizhia	3.29
15 Rivne	3.28
16 Volyn	3.27
17 Zhytomyr	3.27
18 Poltava	3.24
19 Chernihiv	3.17
20 Mykolaiv	3.09
21 Luhansk	3.05
22 Kropyvnytsky	2.83
23 Kherson	2.78
24 Sumy	2.67

The “Infrastructure” pillar is a component of the „Technology and infrastructure” subindex. This pillar has only 12 indicators, which, however, are critical to the business environment. To calculate the pillar seven statistical indicators and five indicators are used, which are based on companies` surveys. Herewith exactly half of the indicators concern the qualities and conditions of road infrastructure. To number of indicators relating to the road infrastructure assessment such indicators are included as roads density grades 1-4, the quality of roads, overall density of highways in the region. The rest of the indicators assess other subsystems infrastructure elements, including bank accessibility, the availability and accessibility of post offices and the capacity of medical facilities.

The infrastructure creates basic preconditions for the development of economic activities. If missing, it makes business difficult; if available, it brings major investments.

The highest points in the “Infrastructure” pillar Kiev region received, which is significantly ahead of its closest pursuer - Lviv region (by 0.45 points). Kyiv region received the highest points in such indicators that are based on statistical data, as the density of first class roads and the number of bank branches. The lowest points Kyiv region received on such indicators as the hospital beds availability (14th place) and the density of fourth class roads (13th place). However, even for these indicators Kiev region is ahead the average value of the country. The high place of the Kiev region can be explained by its favorable location in the central-northern part of Ukraine and the capital factor, which is in its territory - it provides a concentration of transport routes in its territory.

Lviv region occupies the second position. Its high point is caused by the factor that the Lviv region has enough developed infrastructure with the Lviv city dominant role in it, as a major regional transport center. The highways

that connect the eastern and central Ukraine with Western neighbors run through the region.

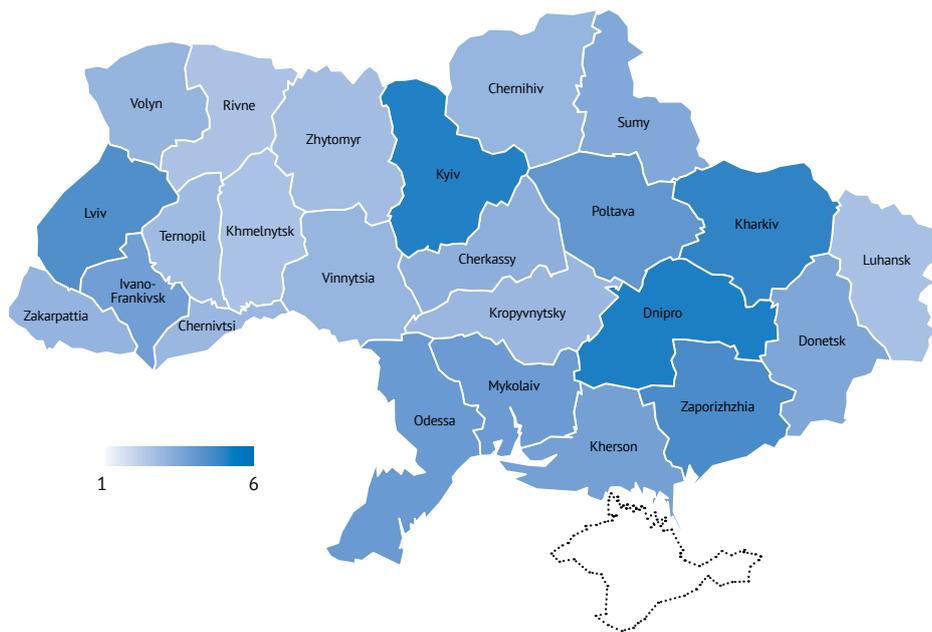
The outsiders at this pillar are Sumy, Kherson, Kropyvnytsky, Luhansk, Mykolaiv, Poltava and Chernihiv regions. These regions are forming a kind of zone, which extends from the north to the south of Ukraine, including some central regions.

It can be concluded that in almost every region of our country all infrastructure components are found in poor condition. This applies particularly to the transport subsystem, its main problems are: poor road conditions, high level of moral and physical deterioration of material and technical base, mismatch to modern requirements.

Thus, it is extremely important for Ukraine the issue of the modernization and development of an integrated transport network, including - in the part of the main transport corridors, improving road network bandwidth, eliminating “bottlenecks” at the entrances to major cities and developing safe and effective supporting transportation network, local routes, creating communication and so on.

The attention should be paid also to the development of other infrastructure subsystems that create proper conditions for regional competitiveness improving.

6th pillar: Technology



Region	Score
1 Dnipro	4.61
2 Kyiv	4.57
3 Kharkiv	4.45
4 Zaporizhia	4.18
5 Lviv	4.09
6 Poltava	3.89
7 Odessa	3.79
8 Mykolaiv	3.76
9 Ivano-Frankivsk	3.68
- Country average	3.66
10 Kherson	3.64
11 Donetsk	3.50
12 Sumy	3.46
13 Cherkassy	3.29
14 Zakarpattia	3.20
15 Volyn	3.19
16 Vinnytsia	3.17
17 Chernihiv	3.17
18 Chernivtsi	3.12
19 Kropyvnytsky	3.11
20 Ternopil	3.04
21 Zhytomyr	3.00
22 Luhansk	2.93
23 Khmelnytsk	2.90
24 Rivne	2.89

Technology pillar is the second component of the Technology and infrastructure subindex. It monitors the level of existing technologies used by enterprises, as well as their ability to absorb new technologies.

A major role in this category is played by the entry of foreign investors, who often bring in new production processes. The pillar has 15 indicators, 9 of which are prepared on the basis of statistical information and the 6 are based on the survey among representatives of the corporate sector.

Statistical indicators assess the number of innovative companies, technical companies, scientific and technical companies, scientific and technical specialists, volume of innovative products. Also statistical indicators reflect level of foreign direct investments and volume of capital investments. Costs of providing mobile services and costs of providing internet access are measured as well.

Data from the survey focus on the assessment of the level of technology in the district – the respondents answered the question about the position of their district on the nationwide scale in terms of the overall technological development of Ukraine. With regard to the future prospects the respondents were asked to assess the extent to which companies will be able to exploit the latest technology. Special attention was given to the internet and the rate of its use in individual enterprises, rate of usage of personal motor vehicles and Information on the supply of goods and services.

The map of the districts with regard to the rate of application of technologies divides Ukraine into three areas. These are already known from the pillar assessing the development level of economic environment. The south-eastern, most advanced part includes Dnipro, Kharkiv, Odessa and Mykolaiv regions. The second, which is located in the northern-central part of Ukraine with leading role of Kyiv

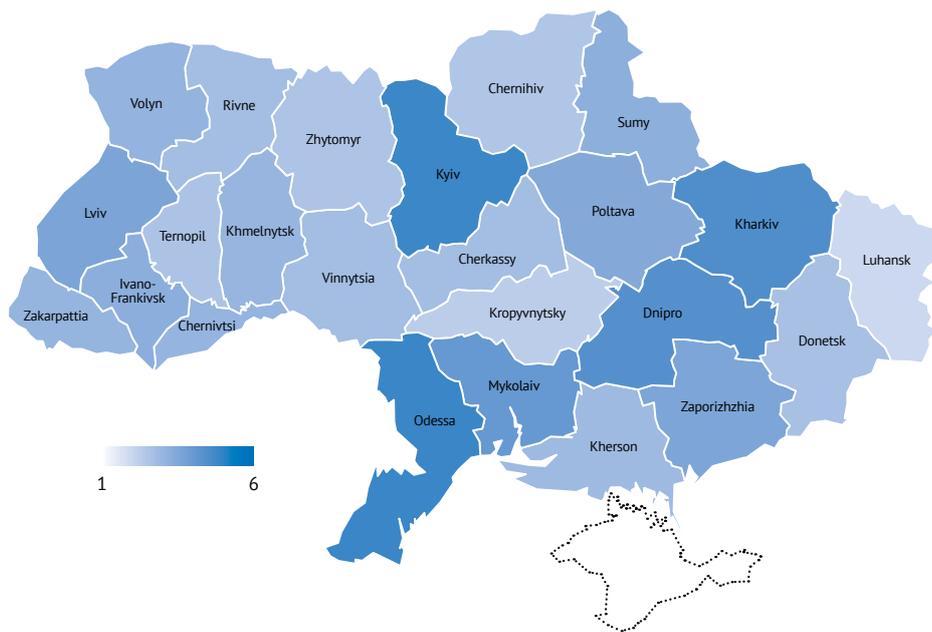
region. The third belt includes western part of Ukraine with the least developed regions.

The main weaknesses of regions in the “Technology” pillar are the lack of investment resources, including foreign direct investment and low capacity to develop and implement innovative technologies. Socio-economic instability of the country adversely affected the investment activities of enterprises in each region, particularly affected by the hostilities in the east, and has led to decrease in investment attractiveness of regions and worsening investment climate. Eventually this leads to a lack of resources for the renewal of fixed assets, replenishment of current assets and cause the effect of “a spiral of investment” when the investment unattractive regions are unable to attract investment resources and they stay economically underdeveloped and investment unattractive.

To stimulate the inflow of the regions it is necessary to provide the formation of investment strategies for the regions in Ukraine and to create an objective picture of the needs of regional enterprises in investment capital.

The main factors that hinder the regions of Ukraine to introduce innovative technologies are: limited funding, low qualified staff, lack of ability of managers at various levels to assess new technologies, organizational problems, limited scientific and technical support from the state.

7th pillar: Human resources



Region	Score
1 Odessa	4.35
2 Kyiv	4.33
3 Kharkiv	4.10
4 Dnipro	4.04
5 Mykolaiv	3.83
6 Lviv	3.53
7 Zaporizhia	3.51
8 Poltava	3.42
- Country average	3.37
9 Ivano-Frankivsk	3.31
10 Sumy	3.30
11 Volyn	3.20
12 Zakarpattia	3.19
13 Chernivtsi	3.18
14 Khmelnytsk	3.16
15 Kherson	3.05
16 Vinnytsia	2.99
17 Cherkassy	2.98
18 Rivne	2.98
19 Donetsk	2.94
20 Ternopil	2.86
21 Zhytomyr	2.84
22 Chernihiv	2.81
23 Kropyvnytsky	2.65
24 Luhansk	2.41

The Education pillar is the other component of the Education and human resources subindex. It particularly assesses educational process and institutions. Also, it takes note of the availability of workers in the labor market and explores, through the eyes of entrepreneurs, interconnection between education and labor market. A total of 16 indicators are divided into 6 statistical and 10 perceptual, drawn from the results of a survey among entrepreneurs. Statistical indicators include such indicators as the number of higher education institutions, vocational education institutions and secondary schools in calculation for the number of people in the region and the number of students in higher education, vocational and technical education institutions and secondary schools in the regions.

Indicators obtained from companies' survey relating to assessing the overall level of education, the level of native and foreign languages, assessing the skill level of employees and persons seeking employment, and assessing the availability of labor of various skill levels. The important indicator is the assessment of the vocational education institutions conformity with the requirements of the labor market.

Regions map, given the quality of education, allow to distinguish three zones. The largest is the western part of Ukraine with Lviv region leading position. The high general level of education and a high level of language skills are the competitive advantages of the winner in this pillar. Also, the region gained high points in all six statistical indicators. The high level assessment of the education level in the western regions is also received by Chernivtsi, Ternopil and Ivano-Frankivsk regions.

In the east, the three regions got high points - Kharkiv (3rd place), Dnipropetrovsk (4th place) and Zaporizhia (7th place).

These areas are characterized by traditionally high level of training experts in technical direction.

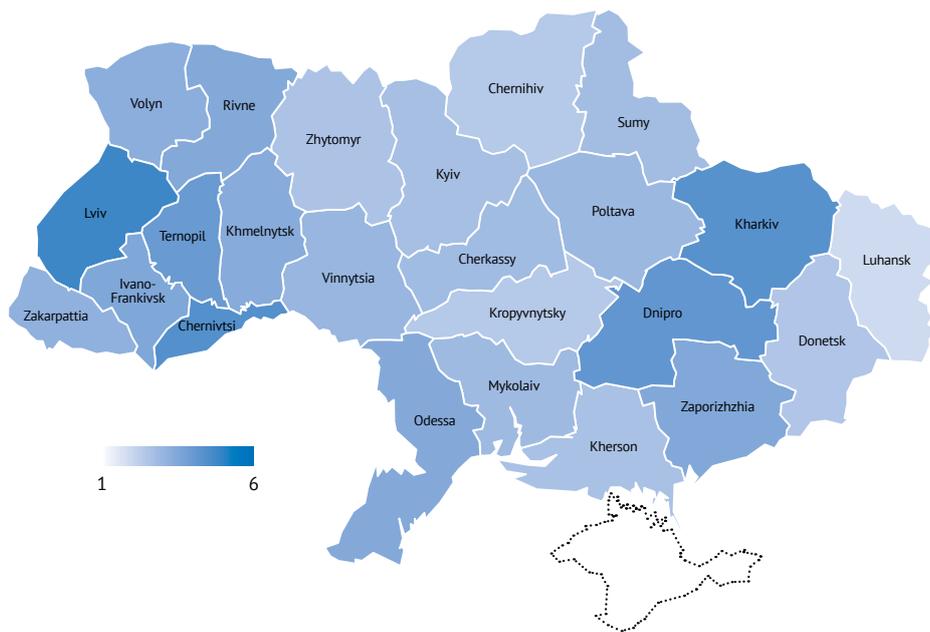
The lowest points were received by regions in the north-central part of Ukraine. This can be explained by the fact that Kiev didn't participate in the ranking, where a lot of educational institutions are focused.

According to the Global Competitiveness Report by the World Economic Forum, Ukraine traditionally has a quite high scores with regard to primary school enrolment, secondary education, and in higher professional education. By their nature, these indicators are quantitative and demonstrate that Ukrainians are highly educated compared with other countries. However, the international rankings that assess the qualitative aspects of education and labor, including productivity, indicate a low position of Ukraine in comparison with other developed countries.

Low education level in Ukraine is a major challenge for the central government, particularly for the Ministry of Education and Science, which is held responsible for educational policies. It is expected that self-governments, which administer primary and secondary schools, will promote disciplines and fields demanded by the labor market in conjunction with local entrepreneurs

Such measures will promote the leveling regional disparities and improve the overall level of education in Ukraine: decentralization of higher education, the real universities autonomization (including economic activity), private sector development in higher education with the simultaneous introduction of an effective system of education quality assessment, based on independent agencies evaluating quality, and also the gradual restructuring and optimization of state order for training to bring public order in line with the actual needs of the economy.

8th pillar: Education



Region	Score
1 Lviv	4.32
2 Chernivtsi	4.06
3 Kharkiv	4.01
4 Dnipro	3.88
5 Ternopil	3.79
6 Ivano-Frankivsk	3.48
7 Zaporizhia	3.46
8 Rivne	3.43
9 Odessa	3.42
10 Khmelnytsk	3.37
11 Volyn	3.31
- Country average	3.31
12 Zakarpattia	3.26
13 Vinnytsia	3.15
14 Poltava	3.10
15 Mykolaiv	3.05
16 Cherkassy	3.02
17 Sumy	3.00
18 Kyiv	2.95
19 Kherson	2.92
20 Zhytomyr	2.86
21 Donetsk	2.82
22 Kropyvnytsky	2.75
23 Chernihiv	2.74
24 Luhansk	2.37

The Human resources pillar is one of the two components of the Education and human resources subindex. It maps the availability of workers to meet the companies' needs, their professionalism, skill and flexibility. It also gives a picture of the quality of the work force in the regions of Ukraine.

The pillar contains 16 indicators of which 7 are statistical. It includes such standard indicators as natural population growth, migration of residents, number of vacant working positions and average monthly salary. Further indicators that were monitored were the unemployment rate across the districts, including the age structure of candidates.

The survey conducted among business representatives focused on unemployment rate, availability of labor force and migration of skilled labor. The respondents answered the questions concerning the expectations of incoming wage workers, motivation, discipline and diligence of their staff.

When analyzing the geographical differences of regions according to the present component the significant gap leaders from other regions should be noted. At the same time leaders are mainly in the southeast region. This is the kind zone which is formed by Kharkiv (3rd place), Dnipropetrovsk (4th place), Nicholas (5th place) and Odessa (1st place) regions. The exception is Kyiv region, which ranks the second place.

Western region have high rates in the Human Resources pillar. Lviv, Ivano-Frankivsk, Volyn, Zakarpattia and Chernivtsi regions occupy the sixth, ninth, eleventh and twelfth place in accordance.

Regional differences in production, population, migration, social and other factors determine the heterogeneity of the labor market structure in Ukraine. In some regions of the country there is a significant deterioration in the regional

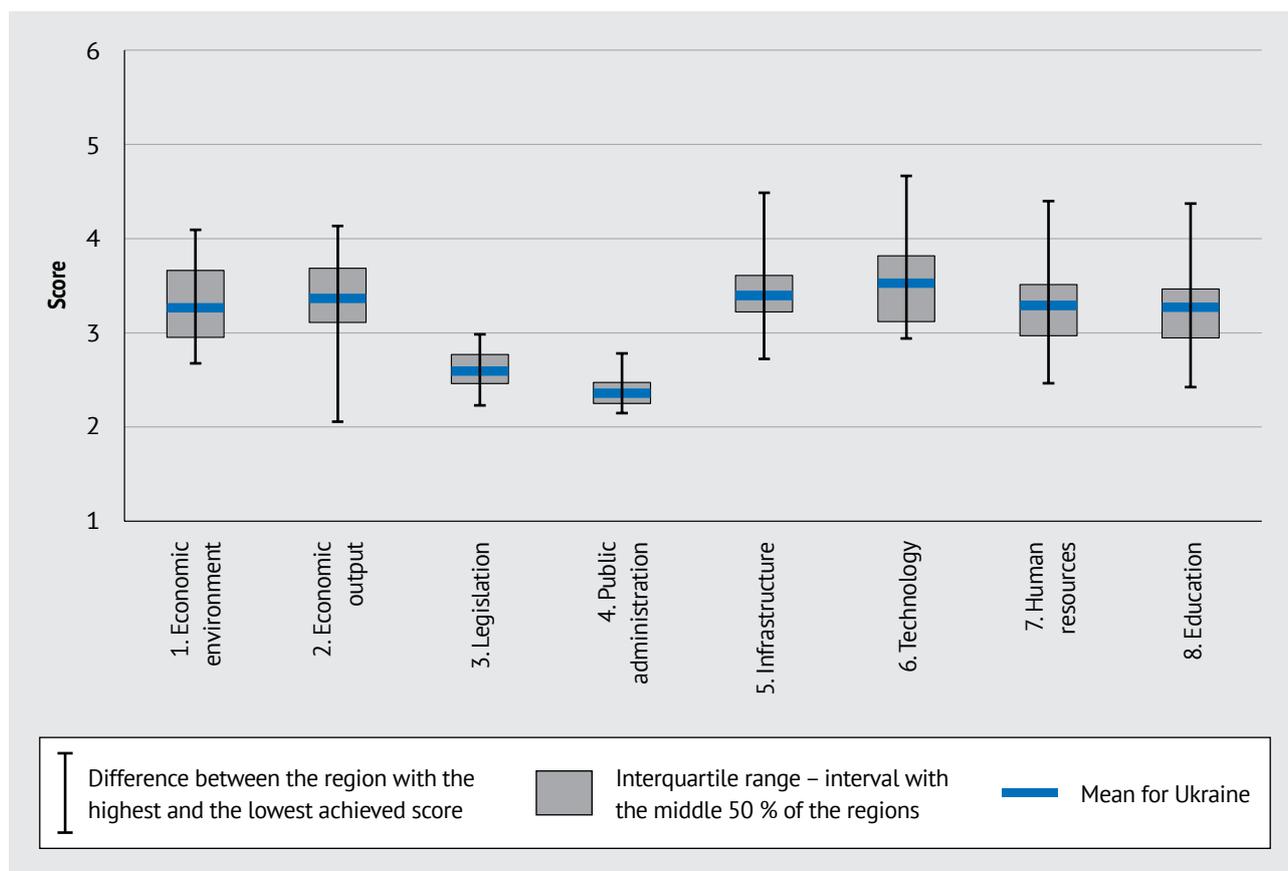
labor markets, which is manifested in the imperfections of the mechanisms of self-regulation, increasing the number of unemployed, duration of unemployment, imbalance of demand and supply of labor, outflow of human resources and the spread of illegal employment.

The absence of effective and synchronous interaction between the labor market and the market of educational services lead to a deepening shortage of skilled workers in all areas of economic activity and in almost all regions. This leads to higher unemployment, especially - among young people.

Since the beginning of 2014 Ukraine faced an additional problem – the employment of internally displaced persons affected by the hostilities in Donbas. Local companies and companies with regional offices in these areas suffered serious disruption or destruction, which caused staff cuts or even closures. Besides, levels of migration increased.

Nowadays Ukrainian regions deal not only with labor migration but also with migration of refugees from unstable regions. The labor market of central and western regions of Ukraine is burdened with internal migration, which affects the level of unemployment. In addition, qualified Ukrainian specialists are in great demand abroad due to their low level of financial expectations despite high qualifications.

Eight pillars of the Regional Business Environment Index



RBEI analysis based on pillars that are the part of the subindexes gives a comprehensive understanding of the competitive advantages and disadvantages as for specific regions and for Ukraine in general.

The analysis shows that the largest relative competitive advantages for all regions of Ukraine are the Technology and the Economic output pillars. However, even for these components regions points are far from the maximum of 6 points, that indicating a potential hidden opportunities for improvement of regions situation according to the components.

If to analyze the components for compliance the difference between the highest and the lowest rate, the largest variation would be observed of the Economic output pillar. This is caused by the uneven economic development of regions in Ukraine, historically conditioned geographical features of the location production in the southeast of Ukraine and the relatively low level of industrial development of the western and northern regions of Ukraine.

If to analyze the pillars on their interquartile range, similar values of the Economic output and the Technology pillars should be noted. Obviously, the enterprises that can ensure the positive economic dynamics of the region are investing financial resources in modern technology. A similar interquartile range is observed between pillars.

Public administration and Legislation are the pillars that impair the competitive position of almost all Ukrainian regions. Characteristically, for these components there is the slightest difference between the highest and the lowest and narrowest Interquartile range. This shows the low score data component within all regions of Ukraine.

Similar differences between the highest and the lowest rate are observed between the Human Resources and Education pillars. Interquartile range is also similar in their value that indicates a strong relationship between education level and quality of human resources in most regions of Ukraine.

Chapter 2

Analyses and recommendations

Key problems of regional development

In assessing the business environment in the regions of the Ukraine one can identify a number of problems. The research was conducted in the form of a questionnaire survey, where entrepreneurs commented on 43 components of business environment, rating them on a scale from best to worst, or stated their views in an open response format.

The evaluation of responses from all 24 Ukrainian regions shows that on the average, the entrepreneurs rated the business environment favorably on 10 items and unfavorably on 33 items. Positive assessment relates to those categories where companies are usually able to cope on their own. The indicator marked as “impact of natural conditions on doing business” was ranked the highest. The second best indicator was the availability of unskilled workforce. Items that received mostly positive rating throughout the country include wide branches of bank system, availability of unskilled workforce and Impact of region location on doing business.

A mixture of indicators is in the neutral zone, where businesses can influence the situation or have to rely on the wise decisions of other subjects. Indicators such as the availability of free labor, discipline and diligence of employees, knowledge of mother language and also the information on the supply of goods and services are rated slightly favorably, while reliability of business partners, level of education, time structure of unemployment and qualification of employees are rated slightly unfavorably. Dissatisfaction then goes up steadily on other specific indicators. This category shares a common feature – it lists predominantly external business environment conditions and mostly depend on the development of economic and social spheres of each region, governmental policy and interest in the region's growth. The only exception are: the perception of corruption among private enterprises, which is rather a reflection of distortions fueled by the public sector, and the bureaucracy and delays in the offices, because of no will of private entrepreneurs to move to a simplified e-system of doing business and to change the old system by electronic workflows. Respondents complain about high density of road infrastructure, low knowledge of foreign language, high migration of skilled labor and weak connections of vocational schools and labor market.

The significant problem which involves a lot of negative evaluation indicators is connected with the labor market. Today due to the low living standards in the country there is the predominance of financial motivation in the stimulating system in the companies. Jobseekers with low qualifications or lack of experience, skills and education make high demands on wages when applying for a job. Also the significant problem is unfairness in the selection of candidates when friendly communications and recommendations play the main role in the hiring process. Young people look for work in the capital of Ukraine, Dnipro, Odessa, Lviv, Chernihiv regions or abroad, where more prospects and opportunities for professional development

and higher wages are proposed. Therefore, many regions (such as Zakarpattia, Rivne, Sumy, Chernivtsi regions, etc.) lose active qualified employees, and this factor has a negative impact on their growth.

Entrepreneurs are most critical about the quality of road infrastructure. Their open responses show the highest degree of dissatisfaction with motorways and expressways. The reasons include less than mediocre coverage by these types of road communication and high expectations of entrepreneurs from the central government. The quality of roads in the western and southern regions of Ukraine is extremely low, which prevent the high speed movement both of cars and trucks. Railways are mostly worn and need a recent modernization. However, government authorities understand the importance to improve infrastructure and quality of Ukrainian roads. They lead the projects to attract foreign investments for repair and modernization of key transport hubs and destinations. However, modernization work is not carried out fast enough and do not always have good results. The reason is the high level of corruption and poor control of the responsible authorities. Anyway reforms in the sphere of infrastructure have to be continued and the efficient use of invested money should to be under tight control of investors.

The construction of new roads moves sluggishly; the higher are the expectations of entrepreneurs in remote regions of the all-cure infrastructure. Yet the results of this and other analyses show that a fast road is not the only prerequisite for the development of economic activity. There are more than this one, which can even push the missing motorway into the side lines. Ukraine is brimming with plans to build new motorways and expressways. Since the scope is large on paper while the funding is limited, there is inevitable pressure for preferential treatment of selected regions at the expense of others.

After a detailed analysis special commission has to identify the most vulnerable undeveloped regions that can not grow rapidly because of low quality of infrastructure. The upgrading must be gradually and moderately, with the main aim – not to lose time for areas with critical regional infrastructure. But, unfortunately, today governmental authorities can't solve all of these issues for all regions because of unfair selective principles. Not surprisingly, then, the next largest barrier to the development of business environment in the regions is little interest of the state and state institutions in individual districts. If the region is weak and takes a small place in the country's GDP, the government is not interested in its development and modernization, because this process is long and expensive. But in fact only such modernization can give significant impulse to the rapid growth of the regional economy.

The police force should work better to ensure proper protection of private property (the 33th place in a ranking). The 34th position of this indicator among the biggest barriers is confirmed by the already mentioned dissatisfaction with the work of district courts. The informal economy is fueling

foul business practices, which the government and local authorities are unable to identify and push out of the market. This not only impoverishes the public budget plagued by income tax and social security tax evasion, but also honest entrepreneurs, who are often associated with fraudsters and criminals and, being rendered disreputable, suffer from loss of competitiveness. In addition to the most serious barriers, there are also problems with the availability of financial and capital resources (42nd place). Financial flows are mainly concentrated in the capital of Ukraine, the central regions and the regions with significant contribution to GDP. The redistribution of financial resources between the regions is carried out inefficiently and does not lead to alignment between underdeveloped (weak) and developed (strong) regions. It is necessary to attract foreign investments under certain projects (agriculture, infrastructure, education, science, improvement of technological production, etc.) for some weak regions. This will enable them to provide jobs and attract qualified young people to stay in native region. An important focus is decentralization and independent usage of money by the regions. This financial freedom will help to channel funds into the most demanding industries and solve their problems quickly.

Of course, foreign investment is not a miracle for each country and doesn't solve all internal problems of regional development. This is just additional financial ability to achieve the goals. But at first it is necessary to start the effective work of identifying the main issues and areas of regional changes. Each Ukrainian region is special and unique, has its drawbacks, which should be fought with, and the benefits to be properly used. Unfortunately, high level of corruption, weak control and irresponsibility and incompetence of government authorities became the reason of the fact that only 10 of 43 positions were evaluated positively.

Ranking of business environment components evaluated in the survey

Factor	Score	
1 Impact of natural conditions on doing business	1.73	
2 Availability of unskilled skilled workforce	1.55	
3 Availability of banks	1.31	
4 Availability of partially skilled workforce	0.91	
5 Impact of region location on doing business	0.79	
6 Employee motivation for productivity increase	0.49	
7 Availability of free labor	0.47	
8 Knowledge of mother language	0.43	
9 Discipline and diligence of employees	0.29	
10 Information on the supply of goods and services	0.28	
11 Level of competitiveness in services	-0.04	
12 Reliability of business partners	-0.06	
13 Level of education	-0.07	
14 Time structure of unemployment	-0.14	
15 Qualification of employees	-0.24	
16 Availability of highly skilled labor	-0.24	
17 Perception of local taxes	-0.30	
18 Impact of trade unions on doing business	-0.30	
19 Age structure of unemployment	-0.39	
20 Level of competitiveness in industry	-0.41	
21 Availability of necessary materials and services	-0.46	
22 Knowledge of natural sciences	-0.50	
23 Wage expectations of jobseekers	-0.54	
24 Availability of public information	-0.63	
25 Perception of unemployment	-0.64	
26 Fairness in employee selection	-0.67	
27 Electronic communication with local authorities	-0.71	
28 Interest of the state institutions in the region	-0.86	
29 Level of corruption among private businesses	-0.86	
30 Impact of authorities	-0.87	
31 Fulfillment of tasks by local authorities	-0.91	
32 Qualification of jobseekers	-0.94	
33 Protection of private property	-0.95	
34 Law enforcement in the local court	-0.96	
35 Bureaucracy and delays in the offices	-1.04	
36 Density of road infrastructure	-1.07	
37 Impact of the informal economy on doing business	-1.07	
38 Knowledge of foreign languages	-1.09	
39 Migration of skilled labor	-1.09	
40 Impact of corruption on authorities	-1.23	
41 Connection of vocational schools and labor market	-1.28	
42 Availability of financial and capital resources	-1.32	
43 Quality of road infrastructure	-1.45	

Score of each factor for Ukraine, which was used to rank the factors from the most positive (the biggest competitive advantage) to the most negative (the largest barrier to business development), is calculated by comparing the achieved score in the survey with its reference value. Each factor represents one question from the survey, but not each question of the survey was included in the list of factors significantly affecting the quality of business environment.

Each question has possible answers from the set of {1; 2; 3; 4; 5; 6}, where the responses 1 and 6 were given verbal meaning with opposite

impact on the business environment. Response 1 represents the most negative impact, response 6 represents the most positive impact and the average score of question is calculated as average of replies submitted by all survey respondents (more details can be found in the third chapter).

The score of each factor is given as the difference between the achieved value of particular question and number 3.30, which is the overall value of the Regional Business Environment Index in Ukraine.

Recommendations for Ukraine

Ukraine's contemporary challenges that concern Ukraine's international integration, military situation in Eastern and Southern regions have focused on an important problem – increasing competitiveness of regions, especially of business climate. Decentralization reform also facilitates this necessity which provides for departing from centralized form of government, ensuring capacities of local self-governance and establishing an efficient system of territorial organization of power in Ukraine, implementing the provisions of the European Charter of Local Self-Government to the fullest, subsidiarity, comprehensiveness and financial self-sufficiency of local self-government. Challenges related to low competitiveness of national economy, unreformed administrative and territorial structure and investment attractiveness of territories are hampered by weak competences and financial capacities by organs of local self-government to tackle current and future local problems related, in particular, to low revenues to state budget. These problems are more visible in regions that are historically more backward and have a lower economic potential.

For recent decade, regions mostly face the following problems: extensive development of main economic industries, modernization of industry and development of innovative spheres, predominantly low added value, inability by state institutions to maintain regional development. Regions with higher quantitative and qualitative indicators win the competition. Therefore, it is necessary to pay greater attention to regional entrepreneurial business, define strengths and weaknesses of each region and further elaborate support and development programs. A policy of regional industrial climate support should be an important part of state economic policy and aimed at strengthening international cooperation of regions. All of the above and war with Russia push for searching new and alternative resources to ensure social and economic development of regions and resolving problems of communities.

For recent years, neither the state, nor NGOs have assessed a development of regional entrepreneurship. Before 2014 a foundation 'Efficient Management' conducted an assessment of the National Competitiveness Index covering all 27 administrative and territorial units that allowed to make a comparative analysis of results by each particular region in dynamics, comparison with other regions and countries. The National Competitiveness Index is based on a methodology of the Global Competitiveness Index by the World Economic Forum which covers 148 countries.

General recommendations to increase competitiveness of regions:

Subindex I: Economic activity

- Efficient fight against shadowing and criminalization of economy and society, privatization of strategic communal and state enterprises.
- Elaboration of stimulus for state support in regional programs (tax, customs, subsidies, programs of entrepreneurial development initiatives).

- Elimination of disproportions in innovative and export structure of production, territorial structure, balance between small, medium and large enterprises, employment structures etc.
- Support for adapting regional enterprises to changes during integration into world economy that provide for the following: elaboration of competitive policy mechanism; protection of competition; restriction of industrial monopolism, realization of goods; reduction of extreme concentration of economic and financial resources; ensuring a system of permanent monitoring of goods market to prevent imbalances in prices, manipulation of prices and inefficient exploitation of resources; stimulus and support for innovations; encouraging production with new technologies and materials.

Subindex II: Public administration and legislation

It is necessary to establish a system of standard in public services to define an objective volume of resources for delegated competences. Such standards should be elaborated and scientifically proved for each kind of public services and contain a full list of quantitative and qualitative indicators covering this service. For instance, a standard of services in fieldsher-midwife station shall include a list of free medical actions and a list of drugs, equipment and materials necessary to ensure such medical actions, including salaries of staff. Furthermore, the standard shall include an information of patient's access to this service in terms of time and/or territory. Such standards should be approved by a separate law or a decision by the government.

Monetary standards of public services shall be basis of methodology to distribute interregional equation transfers (unconditional transfers):

- To define an objective volume of local budget expenditures that are accounted during definition of interregional equation transfers;
- To review a methodology of calculating such transfers;
- To bring a legislative resolution of refusals by local self-government organs from exercising powers, delegated by the state but not ensured financially.
- To establish institutions which could consider budget disputes between different levels of management.

Subindex III: Technology and infrastructure

Given local self-government reform and territorial organization of power in Ukraine, regional development strategies of local infrastructure shall pay the greatest attention to education, healthcare, culture and social security.

Regional development strategies are being revised amid current reforms of state regional policy. Unlike current ones, new regional development strategies shall be based on feasible investments. As regions are unable to attract billions of funds for their development, financing infrastructural growth areas, proposed in the research based on combination of

various financial mechanisms, is a feasible means to increase the competitiveness of national economy and its regions, welfare of population and support its territorial integrity.

- To contribute to attracting potential investors in a region on terms of a state-private partnership, concessions in communal utilities
- To construct a facility for recycling solid household rubbish in towns
- To improve pavement on state and local roads and bridges
- To contribute to attracting potential investors in a region on terms of a state-private partnership, concessions
- To establish logistical centres of production and social infrastructure
- To increase investment image of regions by means of promoting its potential during international events – both in Ukraine and abroad
- To develop recreation facilities (leisure centres, camping, agricultural bases) and tourist ecological routes in Northern regions
- To ensure a minimum resource-incentive, reliable and efficient heating. An objective in this sphere is launching alternative fuels, including biofuels
- Decentralization of heating in regional settlements

Enhancing technological activity:

- A close interaction between legislative organs, executive organs and scientific and technological community in management of innovations; a participation of scientists in elaborating and adopting the most important decisions in the sphere of science and technics at all levels of management.
- An active use of market as an efficient instrument to coordinate activities by members of innovative cycle 'scientific research, elaborations – production – sales – service'; establishing conditions for developing various forms of enterprises in the sphere of science, production and turnover; a flexible combination of centralized and market means to regulate innovations; orientation on long-term management; implementation of significant structural economic changes.
- A formulation of an efficient means of selecting priorities and provide them with a comprehensive organizational and economic support. Key elements of this mechanism are institutions of long-term scientific and technological forecasting; organization of project contests under competition of alternative productions; independent expertize of projects and program documentation; a close interaction between authorities and scientific and technological community in shaping and implementing priorities; permanent concretization and adjustment of priorities.

Subindex IV: Education and human resources

Improvement of quality of life in regions is impossible without an active engagement of local self-government bodies. However, changes in many spheres, for instance, healthcare and education, are mostly initiated and funded by the government of Ukraine as local self-government bodies are significantly restricted in taking their own decisions. Initiatives on regional equation by the government and local self-government bodies shall seek to help regional outsiders, on the one hand, and preserve incentives for development of regional leaders, on the other hand.

The following changes are necessary to improve Ukrainian social protection and social services:

Financial reform

As a majority of social services are provided at a local level, an equation system that distributes resources between state and local budgets shall be reformed. Moreover, it is necessary to strengthen a financial base of local self-government bodies, probably, by means of reforming local taxes and duties.

Privileges reform

State privileges system shall be reformed. First, annulation of privileges shall be combined with increasing salaries for specialists that were eligible to such privileges. Second, social privileges, such as subsidies for communal services, shall be transformed into conditional transfers. These shall be either direct money payments for persons or certain service vouchers by communal enterprises.

Speaking about priorities of state educational policy, urgent issues are fighting corruption and accommodating educational system with needs of labour market. Meanwhile, a question is not in realizing these problems at a national level or acknowledging their priority meaning that has been already done to a certain extent. A more important problem is insufficient coordination and poor results demonstrated by authorities.

A priority objective in state management at a regional level is training managerial staff that should include establishing mechanisms for sustainable development of regional educational space, in general, and mechanisms for state management of training managerial staff, in particular. Analysis of theoretical background proves that pursuing this goal requires achieving specific regional objectives, namely: to ensure a free access of youth to full-fledged quality education according to their interests, skills and needs; to develop an education as an open state-societal system based on sharing responsibility between subjects of educational policy; to increase a role of participants in educational process; to increase a social status and professionalism of educational staff and provide with state and public support. The most important requirement to managerial staff at any level is managerial skills, in other words, being aware of opportunities of their subordinates. Thus, an important component of state educational policy in a region is a constant attention to increasing professionalism of managerial staff and training civil servants in educational management.

Chapter 3

Methodology

Formation of the indicators

Introduction

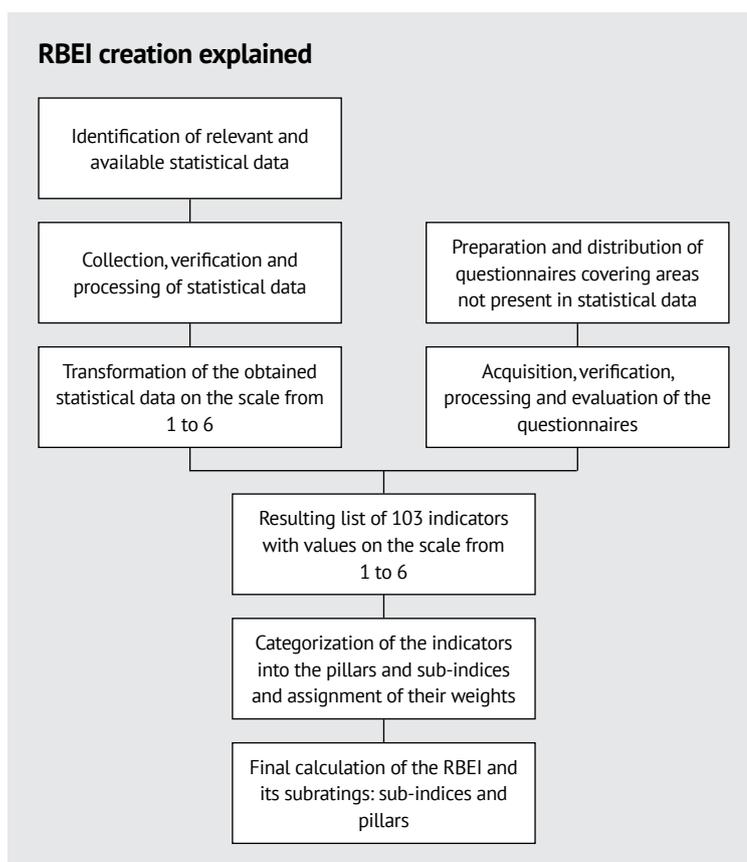
The project was inspired by similar project implemented in the Slovak Republic in 2011 and 2012 called Competitive Regions 21. Its main scope is to evaluate business environment in Ukraine at regional level. This evaluation takes place at the level of oblasts, whose number levelled off at 24. Oblasts are the second largest administrative units in Ukraine with an average population of 1.7 million and an area of 24,000 km². A total of 24 oblasts are constituted by capital town and adjacent villages, some of which may even have the status of a city.

The Regional Business Environment Index (RBEI) reflects the overall quality of business conditions in the oblasts. Its creation was motivated by a lack of tools that would enable effective comparisons between individual oblasts. It presents an output of a complex model and is calculated for each oblast separately based on available statistical data and data obtained from the affective survey among managers of firms. The values for each oblast fall within the range of [1; 6], where 1 reflects the worst and 6 expresses the best possible conditions for entrepreneurship.

RBEI consists of 103 mutually independent indicators, which assess different aspects of business conditions. Each of these indicators, like the entire RBEI, falls within the range of [1; 6] allowing a comparison of oblasts in the given area. All 103 indicators are further classified into eight pillars, which combine indicators into larger logical units. The pillars represent the 8 main identified areas of business environment. These areas in turn fall under four subsequent regional business environment sub-indices, two pillars per each subindex. RBEI comes as a result of their merger.

- Subindex I: Economic activity
 - 1st pillar: Economic environment
 - 2nd pillar: Economic output
- Subindex II: Public administration and legislation
 - 3rd pillar: Legislation
 - 4th pillar: Public administration
- Subindex III: Technology and infrastructure
 - 5th pillar: Infrastructure
 - 6th pillar: Technology
- Subindex IV: Education and human resources
 - 7th pillar: Human resources
 - 8th pillar: Education

Calculation of RBEI and its elements consists of three key parts: 1. identifying and collecting relevant statistical data, 2. conducting a survey and collecting its results and 3. creating the RBEI model and calculating the RBEI rating.



Identification, collection, verification and processing of relevant and available statistical data

All statistical indicators were obtained from the State Statistics Service of Ukraine. In order to make RBEI as robust as possible, we took into account values for the newest two years (2014 - 2015) where available with corresponding weights for each year (see 3a). We have identified a total of 45 statistical datasets that exists at regional level, are relevant for business environment and are at least partially mutually independent. They constitute a total of 43 indicators (2 datasets are included only as a denominator for remaining 43 indicators). However, not all datasets were available for all for years - missing years were not taken into account.

After collecting all these indicators for all available years and all 24 oblasts, they were verified by identifying and inspecting extreme outliers for each indicator, i.e. values outside interval [mean - 3 x interquartile range; mean + 3 x interquartile range], where interquartile range is defined as 75th percentile minus 25th percentile of all values of particular indicator.

Transformation of the obtained statistical data on the scale from 1 to 6

A total of 43 sets of statistical data were selected for the model. Each set of data for each oblast could represent either simple data (e.g. average monthly salary), ratio data (e.g. capital investments per resident), or index created on the basis of partial data (e.g. average duration of unemployment).

To enable comparison of incongruent data such as number of people per km² and exam pass rate measured as a percentage, it was necessary to devise a universal transformation method. Yet, variety of units was not the only problem. To make the data comparable, it was also necessary to make them equally scalable. Thus, the usage of a suitable transformation model can solve both problems simultaneously. All 43 sets of data are subject to transformation, while for most of them logarithmic transformation, which is commonly used in economics, proved to be the most appropriate. In other cases linear transformation was used. Regardless of the function applied, the transformation guarantees that its output for each oblast is the number in the interval [1; 6], for which we will hereafter use the term score. This feature of transformation ensures comparability of statistical data with data from the survey, as possible answers of respondents in the survey also come from the interval [1; 6].

The transformation procedure is applicable to any of 43 data sets, after establishing whether it logically conforms to a concave, linear, or convex utility function and whether it is appropriate to set lower and upper limits by the algorithm or by a reasonably determined value. The lower and upper limits should be set with respect to a theoretically achievable range of values in Ukrainian conditions. For example, urbanization may reach any value in the interval [0%; 100%], therefore it reasonably defines both boundaries. However, in the case of average salary, we can not speak of a coherent theoretical minimum or maximum, so, for the purpose of transformation, these values should be determined by the algorithm.

The last step of the transformation process ensures that a higher score will always represent better conditions in the oblast. Indeed, for some data, such as unemployment rate, a higher value represents an undesirable situation. In this case, transformation ensures that oblast with lower ageing index will be assigned higher scores and vice versa. It should also be noted that not every set of data must contain values for all oblast. In such a case, the missing data are not included in the calculations and the oblasts have no associated score. In the following paragraphs the actual process of transformation is described in detail.

Let n be the number of oblasts with the data available for their particular set and the corresponding oblasts be 1, 2, 3, ..., n . Let x_i be a value that i -th oblast has reached.

1. Determination of lower bound L and upper bound U for theoretically achievable values x_i . It is obvious that $L \leq \min x_i$ and $U \geq \max x_i$. Let sort the values x_i from the smallest to the largest and name them $y_i, i = 1, 2, 3, \dots, n$. If values of y_i for i close to n are

increasing rapidly, U must have „sufficient reserve“ from value y_n . U must therefore take into account the increase in y_i and as i converges to n , the weight of this increase has to grow. A similar methodology can also be used to calculate L . Thus

$$L = y_1 - \frac{\sum_{i=1}^{n-1} \left(\frac{4}{5}\right)^i (y_{i+1} - y_i)}{\sum_{i=1}^{n-1} \left(\frac{4}{5}\right)^i} \quad (1)$$

$$U = y_n + \frac{\sum_{i=1}^{n-1} \left(\frac{4}{5}\right)^{n-i} (y_{i+1} - y_i)}{\sum_{i=1}^{n-1} \left(\frac{4}{5}\right)^{n-i}}$$

2. Normalizing values x_i on the interval [0,1]. If we define normalized values of x_i as x'_i , then

$$x'_i = \frac{x_i - L}{U - L} \quad (2)$$

3. Transformation of normalized values x'_i of particular data set into new values x''_i , based on the character of utility function using such a transformation function $x''_i = f(x'_i)$, that f represents utility function and satisfies the condition $f(\cdot) : [0,1] \rightarrow [0,1]$.

If utility function of the data set is linear, then

$$f(x') = x'$$

otherwise

$$f(x') = \log_k (1 + (k-1)x') \quad (3)$$

where k is set in such a manner that $f'(0)$ reflects sharpness of distribution of x' as follows: if the utility function is concave,

$$\frac{k-1}{\ln k} = \left(\frac{\bar{x} - \min_{i \leq n} x_i}{\max_{i \leq n} x_i - \min_{i \leq n} x_i} \right)^{-\frac{3}{2}} \quad (4a)$$

if the utility function is convex,

$$\frac{k-1}{\ln k} = \left(\frac{\bar{x} - \min_{i \leq n} x_i}{\max_{i \leq n} x_i - \min_{i \leq n} x_i} \right)^{\frac{3}{2}} \quad (4b)$$

4. Creation of the final score of particular data set for all oblasts. If the data set is „positive“, i.e. increase in the values results in a better quality of business environment, the final score s_i of particular data set for oblast i is defined as

$$s_i = 1 + 5x''_i \quad (5)$$

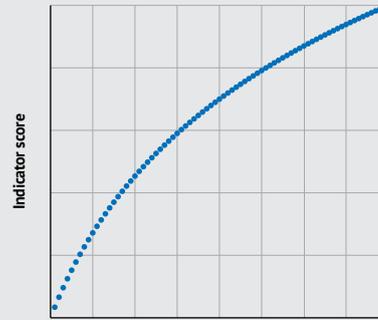
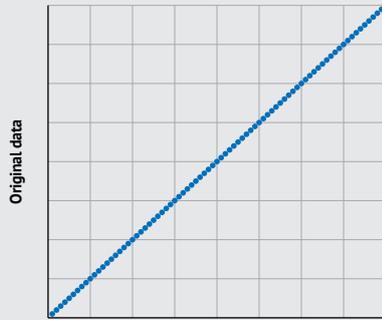
If the data set is negative,

$$s_i = 6 - 5x''_i \quad (6)$$

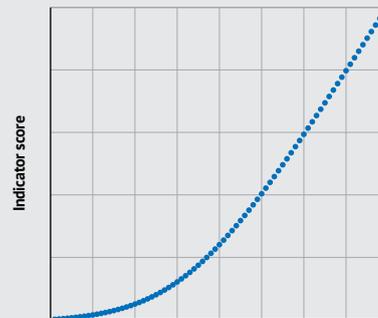
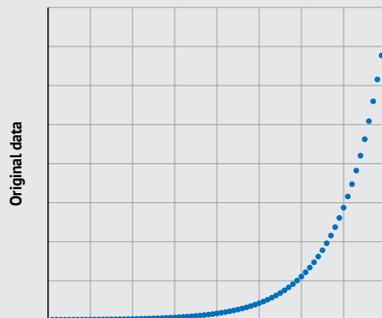
How the transformation affects different sets of data

Transformation of the source statistical data to the range from 1 to 6 is necessary for a fair region assessment. The following charts show the impact of universal transformation of the data coming from different distributions. For each type of distribution, the graph on the left side shows the original distribution of data that corresponds to

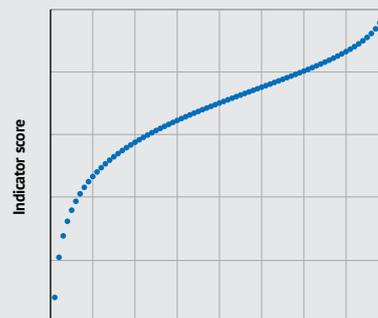
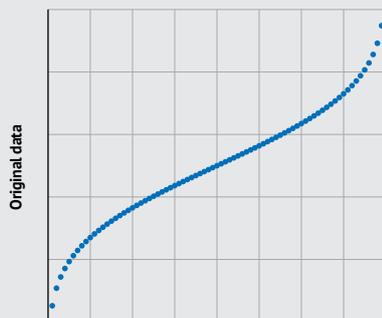
their statistical indicator, the graph on the right side represents the score achieved by individual districts after applying an appropriate transformation. In all cases shown, we used a concave utility function, since a linear function fully transforms the shape of the original data into the final scores and the transformation would be meaningless.



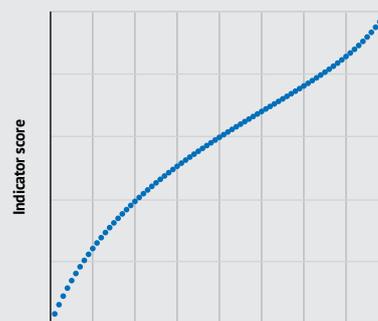
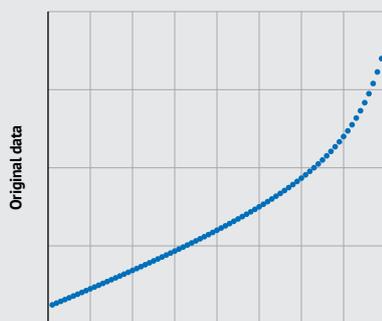
Uniform distribution, which following the sorting of data looks like an approximately linear line, is typical for indicators with a kind of natural lower and upper boundary – such as share of urban population.



Exponential distribution, represented by an approximately exponential curve with decreasing density of data, is typical for most indicators with the lower boundary set and the upper boundary open – such as foreign direct investments per capita.



Graph of ordered realizations from a normal distribution is typically center-symmetric and has tails at both ends. Such distribution is characteristic of the indicators with some kind of mean value and possible deviations on both sides – such as net migration.



This graph does not directly represent any standard statistical distribution, but there are many indicators consisting of such data – for example registered unemployment rate.

Example of transformation – Foreign direct investments per capita

It can be assumed that increasing foreign direct investments (FDI) per capita improve conditions for business activity in the region. But as the FDI per capita grow, each their additional unit increase has a smaller contribution to business conditions improvement than the previous one. It follows that the utility function of such indicator is concave and that it is appropriate for that set of data to apply logarithmic functions when transforming original values. U boundary is to be set by the algorithm, since it cannot be determined arbitrarily based on the assumption of a region with certain maximum FDI per capita.

The necessity of applying a logarithmic function to transform the original values can be well illustrated by the fact that the FDI per capita is very diverse. If we did not use logarithmic transformation on the data, only the Dnipro region would achieve a high score, Kyiv region and a few others would achieve a relatively low score

and finally all remaining regions achieve scores close to the lowest possible. The Zhytomyr region would, therefore, not benefit from the fact that it has more than five times greater FDI per capita than the Chernivtsi region. Usage of appropriate logarithmic transformation eliminates this effect.

Region	Foreign direct investments per capita	Score	Score without transformation
Dnipropetrovsk	2,388	5.82	6.00
Kyiv	1,176	4.87	3.39
Zhytomyr	375	3.42	1.66
Sumy	206	2.82	1.30
Chernivtsi	67	1.84	1.00

Application of presented transformation process on any particular set of data ensures invariance of the achieved score under linear transformations of these data – shifts or multiplications. In other words, if for example, the ageing index in all oblasts falls equally by one percentage point per year (shift), or exam pass rate halves (multiplication), the scores in these indicators achieved in all oblasts do not change.

This invariance is ensured by equations (1) and (2), thus values of x' do not change regardless of any shifts or multiplications of original data.

Preparation, distribution, acquisition, verification, processing and evaluation of the questionnaires

As already mentioned earlier, statistical data on the regional level were not available for all factors affecting the business environment. In order to cover all these aspects as completely as possible, in addition to areas already covered with statistical indicators, we compiled a survey to obtain the remaining indicators affecting business environment, based on the entrepreneurs' opinions. This survey was conducted mainly in July, August, September and October 2016, delivered primarily to executives working in Ukrainian companies with an aim to obtain data describing selected areas of business environment.

A total of 60 questions were created. The survey consists of closed questions with possible answers from the set of {1, 2, 3, 4, 5, 6}, where the responses 1 and 6 were given verbal meaning with opposite impacts on the business environment. Answers 2, 3, 4 and 5 represent intermediate stages between the two extreme views. Response 1 represents the most negative impact while response 6 represents the most positive impact on the business environment.

Each question from the survey constitutes one indicator, hereinafter referred to as "survey indicator". The 43 statistical indicators were joined with 60 survey indicators to form a final set of 103 indicators. The score for each survey indicator for each oblast is calculated as the arithmetic mean of responses from all relevant respondents to this question for a particular

oblast. When calculating these scores, no transformation was used. It was not even necessary, given the questions in the survey were automatically constructed so that a higher average response represents better conditions in the oblast.

Both statistical and survey indicators are therefore consistent – higher scores of any indicator always represent better business conditions. The consistency is also guaranteed by the fact that, in simple terms, it is approximately as difficult to achieve a score of 5.2 within a statistical indicator as to achieve a score of 5.2 within a survey indicator. These properties allow for meaningful comparisons and averaging of both types of indicators.

However, not all survey results enter the calculation of RBEI. Before entering the calculation, respondents with extremely improbable answers have to be removed. Those respondents can be divided into two groups: respondents with answers too similar to some other respondent and respondents with answers too different from all other respondents. A total of 470 people responded to the survey, of which 30 were too different and 20 were too similar (12 were both too different and too similar), which results to final set of 432 respondents.

Respondents with too extreme answers were identified using Mahalanobis distance. If we define $\mathbf{x} = (x_1, x_2, \dots, x_{60})^T$ as a set of answers of any respondent (values for unanswered questions were defined as an average of all respondents that have answered particular question) and $\mathbf{m} = (m_1, m_2, \dots, m_{60})^T$ as a mean of all respondents, Mahalanobis distance of a set of answers of any respondent from the total average follows chi-square distribution with 60 degrees of freedom. Respondents with Mahalanobis distance greater than 99.9th percentile of corresponding chi-square distribution were flagged as bad.

Respondents with answers too similar to some other respondent were identified using simpler method. In the first step, similarity between answers of respondents A and B was calculated for each pair of respondents. If we define $\mathbf{a} = (a_1, a_2, \dots, a_{60})^T$ as a set of answers of respondent A and $\mathbf{b} = (b_1, b_2, \dots, b_{60})^T$ as a set of answers of respondent B, their similarity $S_{A,B}$ is calculated as $(\mathbf{a}^T \mathbf{b})^{1/2}$.

In the second step, for each respondent $R \in \{r_1, r_2, r_3, \dots, r_{470}\}$, minimum of its similarities with all 469 other respondents is calculated. Let call this minimum for respondent i as M_i . Then, respondents with their minimum similarity smaller than $\text{mean}(M) - 1.5 * \text{stdev}(M)$ were flagged as bad.

Finally, respondents flagged as bad (either by being too similar or too dissimilar) were removed. Oblast with the fewest good respondents is Chernivtsi with 8 such respondents, while oblast with the most good respondents is Ivano-Frankivsk with 22 such respondents. Average number of good respondents per oblast is 18.

Sample question

How do you perceive the quality of road infrastructure?

Roads are in poor condition

1	2	3	4	5	6
---	---	---	---	---	---

 Road infrastructure is very well maintained

- 1 I agree completely with the answer on the left-hand side
- 2 I largely agree with the answer on the left-hand side
- 3 I somewhat agree with the answer on the left-hand side
- 4 I somewhat agree with the answer on the right-hand side
- 5 I largely agree with the answer on the right-hand side
- 6 I agree completely with the answer on the right-hand side

Categorization of resulting list of 103 indicators into the pillars and sub-indices, assignment of their weights and final calculation of RBEI

A total of 103 indicators were prepared for the model, of which 43 came from the statistical data and the remaining 60 were collected from the opinion survey. Each of these indicators was assigned its own weight that reflected the influence of a particular indicator on the business environment in such a way that the total sum of weights of all statistical indicators is double the total sum of weights of all survey indicators. As we already mentioned, statistical indicators were obtained for two latest years (if available). Each of these years enters the calculation with its weight in addition to overall weight of particular indicator: 1 for the year 2014 and 2 for the year 2015.

The process of calculation statistical indicator from raw statistical data is as follows: in the first step, values for each of the four years are transformed to the interval 1 - 6 using method described in section 3a. In the second step, these transformed values are averaged using weights 1 and 2, resulting into final value of particular statistical indicator for all oblasts. In the third step, the (transformed and average-weighted) value enters the calculation of RBEI score with its given overall weight (see section 6).

For better orientation in the set of indicators and in order to streamline the overall model, it proved suitable to classify individual indicators into larger logical units that describe wider areas of business environment. We identified eight such areas and defined them as the pillars of business

environment. They are Economic environment, Economic output, Legislation, Public administration, Infrastructure, Technology, Human resources and Education. Each of the 103 indicators is clearly assigned to only one of these pillars. The regional score in each pillar is calculated as a weighted average of all the indicators included in the pillar. Eight pillars of business environment form pairwise four subindexes. The first and second pillar taken together make up the Economic activity subindex. The third and fourth pillar constitute a subindex called Public administration and legislation. Combining the fifth and sixth pillars creates a Technology and infrastructure subindex. The last two pillars form Education and Human Resources subindex.

Score of an oblast achieved in each subindex is calculated similarly to the score of the pillars, in this case taking into account all the indicators that fall under either of the pillars of the appropriate subindex. Finally, the weighted average of all 103 indicators gives us the Regional Business Environment Index itself. If any oblast does not have all statistical data available and thus has not been assigned a score for a particular indicator, this indicator has not been taken into account in the calculation of RBEI; the weighted average is calculated only from the indicators defined for that oblast and the sum of weights is therefore adequately less. The same principle holds when calculating the score of each pillar or subindex.

In the above text we have discussed the principles of calculating scores for all oblasts, whether in individual indicators or in larger units such as pillars, subindexes or finally throughout the whole RBEI. It should be noted that scores can be calculated not only for the oblasts, but also for the entire Ukraine. The (average) score of any indicator for the whole country is calculated as a weighted average score of all oblasts, where the weights correspond to the population of particular oblast. Similarly, it is possible to evaluate a national average of pillars, subindexes, or the whole RBEI.

For a better overview, we present a list of all 103 indicators entering the calculation of RBEI. The indicators are ordered by their classification in RBEI, where we chose the identification number of indicator consisting of the respective pillar number and the serial number of indicator within the pillar as the decisive criterion for their rank. The next element of indicator identification is its name. If the name is followed by an asterisk, the indicator comes from the survey. Otherwise, the indicator is based on statistical data.

Disclaimer: the model was developed and built on the most accurate data available at that time; some of the figures may have changed after the model was completed.

Overview of the indicators

For a better overview, we present a list of all 103 indicators entering the calculation of RBEI. The indicators are ordered by their classification in RBEI, where we chose the identification number of indicator consisting of the respective pillar number and the serial number of indicator within the pillar as the decisive criterion for their rank. The next element of indicator identification is its name. If the name is followed by an asterisk, the indicator comes from the survey. Otherwise, the indicator is based on statistical data.

All statistical indicators have three basic parameters below their name that reveal some important properties. The number listed on the left-hand side represents the weight of the indicator in RBEI. If the symbol in the middle part is '+', then higher values of the statistical data are beneficial for the region's business conditions. Conversely, the presence of the symbol '-' indicates that business conditions improve with the decrease of the original data, or that higher values are unwanted. This can be seen, for example, in unemployment rate. In such cases, however, the transformation used ensures that regions with low unemployment rates are finally rewarded with higher scores and vice versa. The right-hand side of the parameter line contains information on the units of the original statistical data. If the source data do not have a clearly identifiable unit, the term 'no unit' is used. The subsequent lines contain complete indicator identification.

Description of the survey indicators has a different form. The line under the name of the indicator contains only two data. While the number on the left-hand side represents the indicator weight within RBEI, the word 'survey' on the right-hand side indicates that the indicator is affective, based on the survey, and thus is only a verbal complement to the asterisk placed right after the indicator name. Placing the symbols '+' or '-' known from the description of statistical indicators would be redundant, since the survey questions were constructed so that a higher average response represents better business conditions in the region. The next section of the indicator description presents the full wording of a survey question accompanied by the verbal meaning of extreme responses and a histogram thumbnail. This histogram consists of six columns that, from left to right, represent relative frequency of each possible answer from the range {1, 2, 3, 4, 5, 6}. Please note that the survey data were collected mainly in July, August, September and October 2016 and respondents do not have to respond to all questions.

The model was developed and built on the most accurate data available at that time; some of the figures may have changed after the publication was completed. The results of the model based on the most recent data can be found on the project website.

1st pillar: Economic environment

1.01 Population density

10 | + | inhabitants / km²

Population density

1.02 Urban population

5 | + | %

Urban population in % of total population

1.03 Economically active population

5 | + | %

Economically active population in % of total population

1.04 Number of companies

15 | + | no unit

Number of companies per 1,000 residents

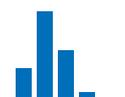
1.05 Multinational and foreign companies*

1 | survey

How many multinational or foreign companies do their business in your region?

1 - I do not know of any such company

6 - the majority of companies in the region is multinational or foreign



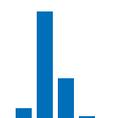
1.06 Impact of the informal economy on doing business*

5 | survey

To what extent does the informal economy (undocumented transactions) harm the business in your region?

1 - very adversely affects market conditions

6 - informal economy does not exist in the region



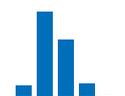
1.07 Level of corruption among private businesses*

5 | survey

To what extent, in your estimation, does corruption among private enterprises occur in your region?

1 - its presence significantly deforms market conditions

6 - corruption among private enterprises is not present in the region



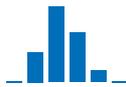
1.08 Level of competitiveness in services*

2 | survey

How well is competitiveness in services developed in your region?

1 - the region suffers from a significant lack of competition

6 - competition is very well developed



1.09 Level of competitiveness in industry*

2 | survey

How well is competitiveness in industry developed in your region?

1 - the region suffers from a significant lack of competition

6 - competition is very well developed



1.10 Reliability of business partners*

2 | survey

Do you consider your business partners in your region reliable and trustworthy?

1 - they often do not adhere to the agreed conditions

6 - I can totally rely on them



1.11 Availability of financial and capital resources*

2 | survey

How accessible are financial and capital resources in your region?

1 - the costs of obtaining necessary resources are intolerable

6 - we can secure the necessary resources very effectively



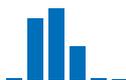
1.12 Availability of necessary materials and services*

1 | survey

How difficult is it for your company to secure the materials and services necessary for its operation?

1 - their acquisition is very demanding and requires a long time

6 - we can secure them very effectively



1.13 Impact of region location on doing business*

1 | survey

How does your region location (availability of motorways, railways, proximity to customers, relationship to neighboring regions...) affect business opportunities?

1 - its position is a crucial competitive disadvantage

6 - its strategic location allows for greater success in the market



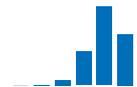
1.14 Impact of natural conditions on doing business*

1 | survey

How do the natural conditions in your region (climate, floods, terrain, ...) affect business opportunities?

1 - significantly increase business costs

6 - they are no obstacle



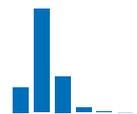
1.15 Current business conditions*

1 | survey

Assess your overall satisfaction with the current business conditions in your region

1 - maximum dissatisfaction

6 - maximum satisfaction



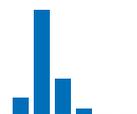
1.16 Change of business conditions in recent years*

1 | survey

Assess your overall satisfaction with the changes in business conditions in your region over the last three years

1 - maximum dissatisfaction

6 - maximum satisfaction



1.17 Potential for tourism development*

1 | survey

What is the potential for tourism development in your region?

1 - the region does not have conditions for attracting visitors

6 - favorable conditions in the region allow significant development of services in tourism



2nd pillar: Economic output

2.01 Development potential of businesses*

3 | survey

How do you perceive the development potential of your business?

1 - I assume its bankruptcy

6 - I assume its distinctive development



2.02 Profitability and productivity of businesses*

1 | survey

How do you perceive the prevailing profitability and productivity of your enterprise?

1 - our revenues are insufficient even to cover the necessary costs

6 - our management enables the company to significantly expand



2.03 Gross added value

20 | + | mil. UAH

Gross added value per 1,000 residents

2.04 Volume of sales industrial products

10 | + | mil. UAH

Volume of sales industrial products per 1,000 residents

2.05 Balance of goods

5 | + | mil. USD

Balance of goods per 1,000 residents

2.06 Balance of services

7 | + | mil. USD

Balance of services per 1,000 residents

2.07 Foreign turnover of goods

3 | + | mil. USD

Foreign turnover of goods per 1,000 residents

2.08 Foreign turnover of services

5 | + | mil. USD

Foreign turnover of services per 1,000 residents

2.09 Profitable companies

10 | + | %

Number of profitable companies in % of total companies

2.10 Financial results before taxation

10 | + | mil. USD

Financial results before taxation (profit / loss) per 1,000 residents

2.11 Residential construction

10 | + | m²

Residential construction commissioned area per 1,000 residents

2.12 Environmental friendliness of production*

1 | survey

How do the companies in your region affect the environment?

1 - companies dramatically worsen the environment by their business

6 - companies do not affect the environment at all



2.13 Emissions of pollutants

5 | - | tonnes

Emissions of pollutants per Mil. UAH gross added value

3rd pillar: Legislation

3.01 Barriers to business development*

8 | survey

Do you perceive any legislative barriers to the development of your business?

1 - barriers do significantly and often unnecessarily limit its development

6 - development of our business is by no means restricted



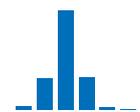
3.02 Perception of local taxes*

8 | survey

How do you perceive the level of local taxes?

1 - local taxes are extremely high

6 - local taxes are negligible



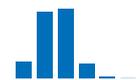
3.03 Business development prospects*

8 | survey

Will the current barriers to the development of your business be removed in the next two years?

1 - I expect substantial worsening of business conditions

6 - I am already noticing a significant improvement of business conditions



4th pillar: Public administration

4.01 Fulfillment of tasks by local authorities*

3 | survey

Do the authorities perform their duties as expected by entrepreneurs?

1 - they perform their duties very poorly

6 - they perform duties beyond their obligations



4.02 Bureaucracy and delays in the offices*

3 | survey

Do you encounter bureaucracy and delays in the administrative proceeding with the authorities?

1 - every time

6 - have not encountered yet



4.03 Availability of public information*

3 | survey

How do you perceive communication with the authorities and availability of public information (about the activities of the authorities, regulations, notices, ...)?

1 - I cannot obtain any information

6 - communication is prompt and information is easily available and comprehensible



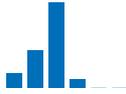
4.04 Electronic communication with local authorities*

2 | survey

Are you satisfied with the level of electronic communication with the authorities?

1 - authorities do not support electronic communication

6 - they react objectively and expeditiously



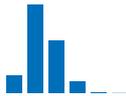
4.05 Law enforcement in the local court*

7 | survey

Are you satisfied with the law enforcement in your local court?

1 - judges resolve disputes very slowly and act unfairly

6 - judges resolve disputes without delay and fairly



4.06 Impact of corruption on authorities*

7 | survey

In your estimation, how often are decisions made by the authorities affected by corruption?

1 - almost always

6 - corruption does not occur in the offices



4.07 Protection of private property*

4 | survey

Is private property in your region protected sufficiently?

1 - state and police fail to protect property

6 - property rights are fully respected



4.08 Interest of the state institutions in the region*

2 | survey

To what extent is the state (government ministries, Parliament, other institutions) interested in your region?

1 - the situation in our region is indifferent to state

6 - the state takes keen interest in solving problems in our region



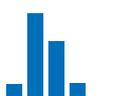
4.09 Impact of authorities*

2 | survey

To what extent do the authorities affect business environment in your region?

1 - they create significant barriers

6 - they significantly contribute to its development



4.10 Economic management of local authorities*

2 | survey

Do the local authorities manage your region effectively?

1 - their ineffective management generates significant debt

6 - their management promotes the development of the region



4.11 Impact of trade unions on doing business*

1 | survey

What is the impact of trade unions on doing business in your region?

1 - their activity significantly harms the business environment

6 - their activity significantly contributes to improving business conditions



5th pillar: Infrastructure

5.01 Density of 1st class roads

10 | + | no unit

Total length of 1st class roads divided by area of region

5.02 Density of 2nd class roads

6 | + | no unit

Total length of 2nd class roads divided by area of region

5.03 Density of 3rd class roads

3 | + | no unit

Total length of 3rd class roads divided by area of region

5.04 Density of 4th class roads

1 | + | no unit

Total length of 4th class roads divided by area of region

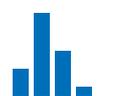
5.05 Density of road infrastructure*

1 | survey

How do you perceive the density of road infrastructure?

1 - road capacity is significantly underestimated

6 - road infrastructure is well developed



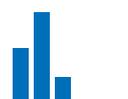
5.06 Quality of road infrastructure*

4 | survey

How do you perceive the quality of road infrastructure?

1 - roads are in poor condition

6 - road infrastructure is very well maintained



5.07 Number of bank branches

5 | + | no unit

Number of bank branches per 1,000 km²

5.08 Availability of banks*

3 | survey

To what extent, in your estimation, are banks available in your region?

1 - they are very difficult to access and do not solve requests

6 - their availability is excellent and they solve requests very efficiently



5.09 Number of post offices

5 | + | no unit

Number of post offices per 1,000 km²

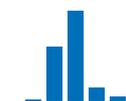
5.10 Availability of post offices*

1 | survey

To what extent, in your estimation, are post offices available in your region?

1 - they are very difficult to access and do not solve requests

6 - their availability is excellent and they solve requests very efficiently



5.11 Number of hospital beds

5 | + | no unit

Number of hospital beds per 1,000 residents

5.12 Availability of medical facilities*

1 | survey

To what extent, in your estimation, are medical facilities available in your region?

1 - they are very difficult to access and do not help with problems

6 - their availability is excellent and they help with problems very efficiently



6th pillar: Technology

6.01 Innovative companies

3 | + | %

Number of innovative enterprises in % of total enterprises

6.02 Technical companies

3 | + | %

Number of technical enterprises per 1,000 companies

6.03 Scientific and technical companies

3 | + | %

Number of scientific and technical companies per 1,000 companies

6.04 Scientific and technical specialists

3 | + | no unit

Number of scientific and technical specialists per 1,000 economically active population

6.05 Volume of innovative products

3 | + | mil. UAH

Volume of innovative products per 1,000 residents

6.06 Foreign direct investments

15 | + | mil. USD

Foreign direct investments per 1,000 residents

6.07 Capital investments

15 | + | mil. UAH

Capital investments per 1,000 residents

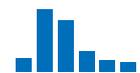
6.08 Technology level*

4 | survey

How do you perceive the level of technological sophistication in your region?

1 - our region is one of the least technologically advanced in Ukraine

6 - our region is one of the most technologically advanced in Ukraine



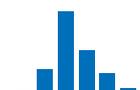
6.09 Ability of businesses to use latest technologies*

2 | survey

Is your company able to use the latest technologies?

1 - latest technologies are of no benefit to our business

6 - our services/products are based on them



6.10 Costs of providing mobile services

5 | + | mil. UAH

Costs of providing mobile services per 1,000 residents

6.11 Costs of providing internet access

10 | + | mil. UAH

Costs of providing internet access per 1,000 residents

6.12 Usage of Internet services by businesses*

3 | survey

To what extent does your company use internet services?

1 - our company has no website or e-mail

6 - Internet and electronic communication are essential to our business



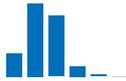
6.13 Usage of personal motor vehicles*

2 | survey

To what extent, in your estimation, are passenger cars used in your region?

1 - passenger cars are barely used

6 - almost every household uses passenger car



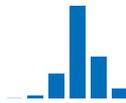
6.14 Usage of commercial motor vehicles*

2 | survey

To what extent, in your estimation, are commercial vehicles (trucks, lorries,...) used in your region?

1 - commercial vehicles are barely used

6 - almost every company uses one or more commercial vehicles



6.15 Information on the supply of goods and services*

2 | survey

Do you have enough information on goods and services available in your region?

1 - it is extremely difficult to obtain information

6 - information can be obtained very easily



7th pillar: Human resources

7.01 Natural population growth

5 | + | no unit

Natural population growth per 1,000 residents

7.02 Migration of residents

5 | + | no unit

Net migration of residents per 1,000 residents

7.03 Unemployment

15 | - | %

Number of unemployed persons in % of total economically active population

7.04 Perception of unemployment*

5 | survey

How would you describe unemployment in your region?

1 - I find it alarming

6 - anyone who wants to work has already got the job



7.05 Average age of unemployed persons

5 | + | years

Average age of unemployed persons

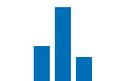
7.06 Perception of age structure of unemployment*

1 | survey

Which group of people is prevalent among the unemployed in your region?

1 - large majority of unemployed are young persons

6 - large majority of unemployed are old persons



7.07 Average duration of unemployment

5 | - | months

Average duration of unemployment in months

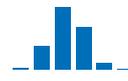
7.08 Perception of long-term unemployment*

2 | survey

How long does it take for unemployed to find their job in your region?

1 - the majority of unemployed finds their job within one month

6 - the majority of unemployed is unable to find their job within two years



7.09 Vacant working positions

15 | + | no unit

Vacant working positions per 1,000 economically active population

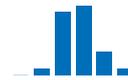
7.10 Availability of free labor*

1 | survey

Is there long-term availability of free labor?

1 - we are forced to look for free workforce outside our region

6 - number of people applying for jobs far exceeds the demand



7.11 Average monthly salary

15 | + | UAH

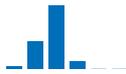
Average monthly salary

7.12 Wage expectations of jobseekers*

1 | survey

Do the jobseekers in your company have adequate expectations about their monthly wage?

1 - wage expectations are much higher than is the real benefit from employee
6 - wage expectations are significantly lower than offered by the labor market conditions



7.13 Migration of skilled labor*

1 | survey

How do you perceive the movement of skilled labor from and to your region?

1 - region suffers from a significant outflow of skilled workers
6 - availability of attractive job vacancies motivates skilled workers to arrive



7.14 Discipline and diligence of employees*

1 | survey

How are you satisfied with the discipline and diligence of your employees?

1 - poor employee discipline significantly reduces the productivity of our business
6 - employees are willing to contribute to the enhancement of the company's performance



7.15 Employee motivation for productivity increase*

1 | survey

Are employees in your company motivated to increase their labor productivity (e.g. by a remuneration system)?

1 - employee motivation is very low
6 - motivation system is one of the main sources of our business development



7.16 Fairness in employee selection*

2 | survey

How are employees in your region selected for their jobs (both management and regular)?

1 - positions are filled by close friends or family members irrespective of their quality
6 - employees are selected solely on the basis of best qualification



8th pillar: Education

8.01 Level of education*

3 | survey

How do you perceive the level of education of people in your region?

1 - as the lowest among all regions in Ukraine
6 - as the highest among all regions in Ukraine



8.02 Mother language skills*

1 | survey

What is the level of mother language skills of people in your region?

1 - their poor knowledge of mother languages significantly complicates business and discourages investors
6 - their good knowledge of mother languages greatly increases work efficiency

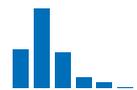


8.03 Foreign language skills*

1 | survey

What is the level of foreign language skills of people in your region?

1 - their poor knowledge of foreign languages significantly complicates business and discourages investors
6 - their good knowledge of foreign languages greatly increases work efficiency



8.04 Natural science skills*

1 | survey

What is the level of natural science skills of people in your region?

1 - their poor knowledge of natural sciences significantly complicates business and discourages investors
6 - their good knowledge of natural sciences greatly increases work efficiency

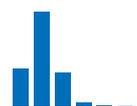


8.05 Connection of vocational schools and labor market*

2 | survey

How do you perceive the interconnection between vocational schools in your region and the labor market?

1 - schools produce graduates with low chances of employment
6 - the training fully corresponds with the practical needs



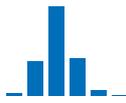
8.06 Qualification of employees*

3 | survey

How do you perceive the qualifications of employees in your region?

1 - employees need additional training to increase their productivity

6 - qualification of employees fully meets the requirements of their jobs



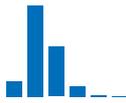
8.07 Qualification of jobseekers*

3 | survey

How do you perceive the qualifications of jobseekers in your region?

1 - candidates need additional training to increase their chances in job market

6 - qualification of applicants fully meets the needs of the market



8.08 Availability of highly skilled workforce*

2 | survey

How do you assess the availability of highly skilled workforce in your region?

1 - There is no highly skilled workforce in our region at all

6 - the number of highly skilled workers in our region exceeds the needs of the market



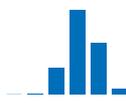
8.09 Availability of partially skilled workforce*

3 | survey

How do you assess the availability of partially skilled workforce in your region?

1 - There is no partially skilled workforce in our region at all

6 - the number of partially skilled workers in our region exceeds the needs of the market



8.10 Availability of unskilled workforce*

1 | survey

How do you assess the availability of unskilled workforce in your region?

1 - There is no unskilled workforce in our region at all

6 - the number of unskilled workers in our region exceeds the needs of the market



8.11 Density of secondary schools

2 | + | no unit

Number of secondary schools per 1,000 km²

8.12 Secondary schools students

2 | + | no unit

Number of secondary schools students per 1,000 residents

8.13 Density of vocational schools

3 | + | no unit

Number of vocational schools per 1,000 km²

8.14 Vocational schools students

3 | + | no unit

Number of vocational schools students per 1,000 residents

8.15 Density of institutions of higher education

5 | + | no unit

Number of institutions of higher education per 1,000 km²

8.16 Higher education students

5 | + | no unit

Number of higher education students per 1,000 residents

Chapter 4

Region profiles

Explanatory notes

Regional Business Environment Index (RBEI)

Main components of the Regional Business Environment Index. The first column represents the ranking in all 24 Ukrainian oblasts, the second column shows the absolute score on a scale from 1 (worst) to 6 (best) and the third represents the score of individual components for the whole Ukraine for better comparison of performance of individual oblasts.

Main competitive advantages and disadvantages

A list of factors that respondents perceive as the biggest competitive advantages or disadvantages of the regional business environment. A total of 43 factors were selected from 60 survey questions so that they would not include questions about specific companies and the overall business environment. The exact list of factors can be found in the first part of Chapter 2, which describes main problems of regional development.

Score of each factor for each region, which was used to rank the factors from the most negative (the largest barrier to business development) to the most positive (the biggest competitive advantage), is calculated by comparing the score achieved in the survey with its reference value.

Let $a_{ij1}, a_{ij2}, \dots, a_{ijk}$ be the answers of respondents 1, 2, ..., k from i -th oblast to the question about j -th factor. Answers are from the set {1; 2; 3; 4; 5; 6}. The average achieved score a_{ij} is:

$$a_{ij} = \frac{\sum_{l=1}^k a_{ijl}}{k}$$

The reference value b_{ij} , which is compared with a_{ij} , is calculated from the average value of factor j across all oblasts and from overall RBEI of the oblast i :

$$b_{ij} = \frac{3}{4} \sum_{k=1}^{24} w_k a_{kj} + \frac{1}{4} RBEI_i$$

where w_k is the weight of k -th oblast, i.e. its population in proportion to the population of Ukraine and $RBEI_i$ is overall RBEI of i -th region.

The final score S_{ij} of j -th factor in i -th oblast is given as:

$$S_{ij} = a_{ij} - b_{ij}$$

Knowing all values of S_{ij} for some oblast i , there is no difficulty to determine the biggest competitive advantages and disadvantages. They are such j , for which S_{ij} reaches five largest, respectively five smallest values.

RBEI Indicators

A detailed list of all 103 indicators that constitute the Regional Business Environment Index. The indicators are grouped under the respective pillars and subindices. For each indicator and the pillar, its position among the 24 regions of Ukraine, its achieved score in the range from 1 to 6 and a sign, whether it is a significant competitive advantage, a significant competitive disadvantage or falls into the average, is displayed. Indicators marked with an asterisk come from the Survey of entrepreneurs' opinions.

Indicators and pillars are divided into three categories – strong competitive advantage of region, strong competitive disadvantage of region and not very strong (dis)advantage of region – based on comparing the achieved score with its reference value, similar to the procedure used in the above section.

Let s_{ij} represent a score of j -th indicator in i -th oblast, S_{ij} a score of j -th pillar in i -th oblast and r_{ij} , respectively R_{ij} their reference values. Then

$$r_{ij} = \frac{3}{4} \sum_{k=1}^{24} w_k s_{kj} + \frac{1}{4} \sum_{k=1}^{103} v_k s_{ik}$$

$$R_{ij} = \frac{3}{4} \sum_{k=1}^{24} w_k s_{kj} + \frac{1}{4} \sum_{k=1}^8 u_k s_{ik}$$

where w_k is a weight of k -th oblast, i.e. its population in proportion to the population of Ukraine, v_k is weight of k -th indicator and u_k is weight of k -th pillar in the RBEI. Distribution of indicators is defined as follows:

■ If $s_{ij} - r_{ij} \geq 0.5$,

the indicator is considered to be a significant competitive advantage and the corresponding square is blue.

■ If $s_{ij} - r_{ij} \in (-0.5; 0.5)$,

the indicator is not considered to be a significant competitive advantage or disadvantage and the corresponding square is gray.

■ If $s_{ij} - r_{ij} \leq -0.5$,

the indicator is considered to be a significant competitive disadvantage and the corresponding square is yellow.

List of regions

Dnipro	48
Donetsk	50
Cherkassy	52
Chernihiv	54
Chernivtsi	56
Ivano-Frankivsk	58
Kharkiv	60
Kherson	62
Khmelnysk	64
Kropyvnytsky	66
Kyiv	68
Luhansk	70
Lviv	72
Mykolaiv	74
Odessa	76
Poltava	78
Rivne	80
Sumy	82
Ternopil	84
Vinnytsia	86
Volyn	88
Zakarpattia	90
Zaporizhia	92
Zhytomyr	94

Dnipro

rank: **2** of 24



Population	3,254,884
Area	31,923 km ²

Population density	102 inhab. / km ²
Unemployment rate	8 %
Average monthly wage	4,366 ₴

Region overview

Dnipro region is located in the southeastern part of Ukraine, takes the area of 31.9 km², and has the population about 3.25m of people. The region is one of the most economically developed centers and has the powerful industrial potential. The industries that define the specialization of the region are iron ore, manganese ore, metallurgical, engineering, metal and chemical production. Dnipro region is unique amongst other regions of Ukraine because of its mineral deposits' variety. Also it has a quite well developed agricultural sector. The high level of economic development of the region, the dense population of the territory led to the development of different transport modes.

Dnipro region takes the 2nd place in the overall rankings and significantly ahead the average indicators of the country on most indexes. In particular, the region takes the 1st place at such indexes as "Economic environment"

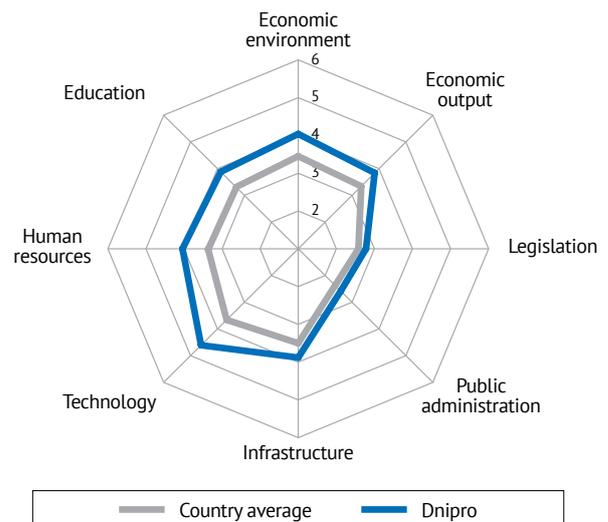
and "Economic output". The region takes the 1st place over the country on gross added value.

The main competitive advantages of the region are: technology, high level of education, high competition in production and services and the availability of skilled labor. The adverse factor of the region is high pollution of the environment by industry.

Recommendations: development of the environmental projects, ecological protecting from the negative impact of industry, attracting of foreign investment, improvement of the infrastructure and the tourism industry.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	2	3.86	3.30
Economic activity	1	3.92	3.39
Economic environment	2	4.04	3.45
Economic output	4	3.84	3.34
Public administration and legislation	1	2.66	2.45
Legislation	6	2.78	2.58
Public administration	3	2.58	2.37
Technology and infrastructure	2	4.32	3.60
Infrastructure	4	3.88	3.50
Technology	1	4.61	3.66
Education and human resources	3	3.99	3.35
Human resources	4	4.04	3.37
Education	4	3.88	3.31



Main competitive advantages

Technology level	2.41	<div style="width: 100%;"></div>
Level of education	1.20	<div style="width: 50%;"></div>
Level of competitiveness in industry	1.05	<div style="width: 40%;"></div>
Availability of highly skilled workforce	0.56	<div style="width: 20%;"></div>
Level of competitiveness in services	0.56	<div style="width: 20%;"></div>

Main competitive disadvantages

Environmental friendliness of production	-1.75	<div style="width: 100%;"></div>
Mother language skills	-0.73	<div style="width: 50%;"></div>
Availability of free labor	-0.68	<div style="width: 40%;"></div>
Impact of trade unions on doing business	-0.61	<div style="width: 30%;"></div>
Perception of unemployment	-0.58	<div style="width: 20%;"></div>

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	2	4.04	■
1.1 Population density	4	4.64	■
1.2 Urban population	3	5.31	■
1.3 Economically active population	1	5.77	■
1.4 Number of companies	5	4.51	■
1.5 Multinational and foreign companies*	4	2.81	■
1.6 Impact of the informal economy on doing business*	10	2.24	■
1.7 Level of corruption among private businesses*	16	2.29	■
1.8 Level of competitiveness in services*	4	3.95	■
1.9 Level of competitiveness in industry*	3	4.38	■
1.10 Reliability of business partners*	4	3.38	■
1.11 Availability of financial and capital resources*	6	2.10	■
1.12 Availability of necessary materials and services*	8	3.05	■
1.13 Impact of region location on doing business*	13	3.95	■
1.14 Impact of natural conditions on doing business*	18	4.86	■
1.15 Current business conditions*	2	2.57	■
1.16 Change of business conditions in recent years*	1	2.86	■
1.17 Potential for tourism development*	14	2.76	■
2nd pillar: Economic output	4	3.84	■
2.1 Development potential of businesses*	8	3.19	■
2.2 Profitability and productivity of businesses*	9	2.76	■
2.3 Gross added value	1	5.78	■
2.4 Volume of sales industrial products	1	5.83	■
2.5 Balance of goods	2	5.50	■
2.6 Balance of services	21	2.36	■
2.7 Foreign turnover of goods	1	5.82	■
2.8 Foreign turnover of services	4	4.38	■
2.9 Profitable companies	19	2.47	■
2.10 Financial results before taxation	23	1.56	■
2.11 Residential construction	21	2.46	■
2.12 Environmental friendliness of production*	23	1.81	■
2.13 Emissions of pollutants	22	1.79	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	6	2.78	■
3.1 Barriers to business development*	3	2.67	■
3.2 Perception of local taxes*	8	3.10	■
3.3 Business development prospects*	11	2.57	■
4th pillar: Public administration	3	2.58	■
4.1 Fulfillment of tasks by local authorities*	3	2.71	■
4.2 Bureaucracy and delays in the offices*	10	2.33	■
4.3 Availability of public information*	7	2.85	■
4.4 Electronic communication with local authorities*	8	2.75	■
4.5 Law enforcement in the local court*	9	2.43	■
4.6 Impact of corruption on authorities*	15	2.05	■
4.7 Protection of private property*	1	2.90	■
4.8 Interest of the state institutions in the region*	2	3.33	■
4.9 Impact of authorities*	3	2.76	■
4.10 Economic management of local authorities*	2	3.00	■
4.11 Impact of trade unions on doing business*	23	2.60	■

- Strong competitive **advantage** of region
- Strong competitive **disadvantage** of region
- Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	4	3.88	■
5.1 Density of 1st class roads	3	4.93	■
5.2 Density of 2nd class roads	12	3.87	■
5.3 Density of 3rd class roads	19	3.55	■
5.4 Density of 4th class roads	4	4.63	■
5.5 Density of road infrastructure*	8	2.33	■
5.6 Quality of road infrastructure*	12	1.81	■
5.7 Number of bank branches	3	4.54	■
5.8 Availability of banks*	9	4.76	■
5.9 Number of post offices	18	2.88	■
5.10 Availability of post offices*	8	3.90	■
5.11 Number of hospital beds	-	-	
5.12 Availability of medical facilities*	6	2.43	■
6th pillar: Technology	1	4.61	■
6.1 Innovative companies	16	3.91	■
6.2 Technical companies	10	3.14	■
6.3 Scientific and technical companies	11	3.97	■
6.4 Scientific and technical specialists	2	4.89	■
6.5 Volume of innovative products	15	2.02	■
6.6 Foreign direct investments	1	5.82	■
6.7 Capital investments	2	4.85	■
6.8 Technology level*	1	5.76	■
6.9 Ability of businesses to use latest technologies*	14	3.29	■
6.10 Costs of providing mobile services	-	-	
6.11 Costs of providing internet access	-	-	
6.12 Usage of internet services by businesses*	6	3.67	■
6.13 Usage of personal motor vehicles*	4	2.90	■
6.14 Usage of commercial motor vehicles*	4	4.52	■
6.15 Information on the supply of goods and services*	8	3.71	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	4	4.04	■
7.1 Natural population growth	15	2.42	■
7.2 Migration of residents	16	2.47	■
7.3 Unemployment	4	5.09	■
7.4 Perception of unemployment*	15	2.38	■
7.5 Average age of unemployed persons	18	3.12	■
7.6 Perception of age structure of unemployment*	5	3.10	■
7.7 Average duration of unemployment	14	3.35	■
7.8 Perception of long-term unemployment*	21	2.75	■
7.9 Vacant working positions	5	4.66	■
7.10 Availability of free labor*	24	3.10	■
7.11 Average monthly salary	2	5.18	■
7.12 Wage expectations of jobseekers*	19	2.56	■
7.13 Migration of skilled labor*	3	2.67	■
7.14 Discipline and diligence of employees*	13	3.62	■
7.15 Employee motivation for productivity increase*	16	3.62	■
7.16 Fairness in employee selection*	4	3.19	■
8th pillar: Education	4	3.88	■
8.1 Level of education*	1	4.67	■
8.2 Mother language skills*	17	2.81	■
8.3 Foreign language skills*	6	2.67	■
8.4 Natural science skills*	3	3.50	■
8.5 Connection of vocational schools and labor market*	7	2.24	■
8.6 Qualification of employees*	2	3.81	■
8.7 Qualification of jobseekers*	3	2.95	■
8.8 Availability of highly skilled workforce*	1	3.81	■
8.9 Availability of partially skilled workforce*	11	4.24	■
8.10 Availability of unskilled workforce*	17	4.76	■
8.11 Density of secondary schools	10	3.56	■
8.12 Secondary schools students	16	2.82	■
8.13 Density of vocational schools	3	4.55	■
8.14 Vocational schools students	15	3.35	■
8.15 Density of institutions of higher education	4	4.92	■
8.16 Higher education students	5	4.28	■

Donetsk

rank: **19** of 24



Population	4,265,145
Area	26,517 km ²

Population density	161 inhab. / km ²
Unemployment rate	11 %
Average monthly wage	4,980 ₴

Region overview

Donetsk region is located in the south-east of Ukraine with the access to the Azov Sea. The area of the region is 25.5 thousand km², and its population is 4.3m people.

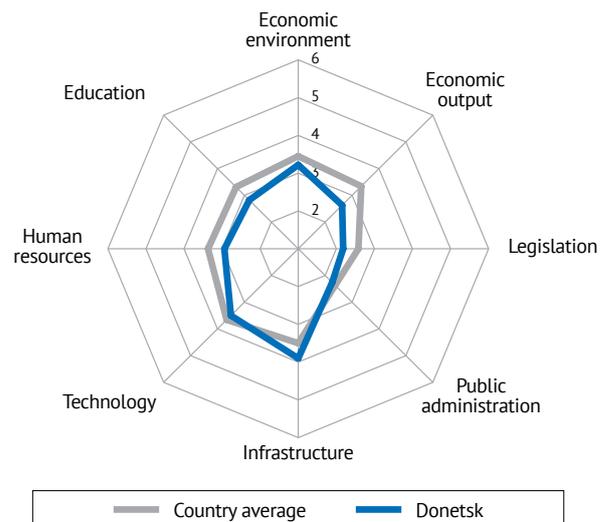
Prior to the ATO Donetsk region provided 16% of the gross domestic product of Ukraine. In the structure of industrial production the highest share occupied siderurgy, and almost 25% was accounted for fuel and energy sector. Donetsk region is the largest area of the coal industry. It provides 70% of total Ukrainian coal production and more than 80% - of coking coal.

At the beginning of 2017 the 45 thousand km² of region's area wasn't controlled by Ukrainian authorities. As a result of ATO the region suffered significant infrastructure damage, some companies stopped its work, great

part of the region's population was forced to move to other regions of the country.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	19	3.00	3.30
Economic activity	23	2.90	3.39
Economic environment	10	3.22	3.45
Economic output	23	2.63	3.34
Public administration and legislation	22	2.23	2.45
Legislation	24	2.18	2.58
Public administration	18	2.26	2.37
Technology and infrastructure	6	3.67	3.60
Infrastructure	3	3.90	3.50
Technology	11	3.50	3.66
Education and human resources	20	2.90	3.35
Human resources	19	2.94	3.37
Education	21	2.82	3.31



Main competitive advantages

Advantage	Score
Availability of unskilled workforce	1.10
Availability of partially skilled workforce	0.60
Electronic communication with local authorities	0.37
Level of competitiveness in industry	0.35
Bureaucracy and delays in the offices	0.27

Main competitive disadvantages

Disadvantage	Score
Environmental friendliness of production	-1.65
Potential for tourism development	-1.49
Mother language skills	-1.48
Impact of region location on doing business	-1.23
Information on the supply of goods and services	-1.02

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	10	3.22	■
1.1 Population density	1	5.80	■
1.2 Urban population	1	5.61	■
1.3 Economically active population	12	3.53	■
1.4 Number of companies	23	2.01	■
1.5 Multinational and foreign companies*	15	1.92	■
1.6 Impact of the informal economy on doing business*	18	2.08	■
1.7 Level of corruption among private businesses*	15	2.31	■
1.8 Level of competitiveness in services*	20	2.85	■
1.9 Level of competitiveness in industry*	7	3.46	■
1.10 Reliability of business partners*	24	2.69	■
1.11 Availability of financial and capital resources*	21	1.77	■
1.12 Availability of necessary materials and services*	23	2.38	■
1.13 Impact of region location on doing business*	23	2.46	■
1.14 Impact of natural conditions on doing business*	24	4.38	■
1.15 Current business conditions*	23	1.46	■
1.16 Change of business conditions in recent years*	1	1.62	■
1.17 Potential for tourism development*	22	1.62	■
2nd pillar: Economic output	23	2.63	■
2.1 Development potential of businesses*	11	3.00	■
2.2 Profitability and productivity of businesses*	20	2.08	■
2.3 Gross added value	15	3.29	■
2.4 Volume of sales industrial products	4	4.56	■
2.5 Balance of goods	-	-	
2.6 Balance of services	-	-	
2.7 Foreign turnover of goods	-	-	
2.8 Foreign turnover of services	-	-	
2.9 Profitable companies	24	1.31	■
2.10 Financial results before taxation	21	1.74	■
2.11 Residential construction	22	2.35	■
2.12 Environmental friendliness of production*	24	1.69	■
2.13 Emissions of pollutants	24	1.14	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	24	2.18	■
3.1 Barriers to business development*	21	2.00	■
3.2 Perception of local taxes*	19	2.92	■
3.3 Business development prospects*	24	1.62	■
4th pillar: Public administration	18	2.26	■
4.1 Fulfillment of tasks by local authorities*	7	2.54	■
4.2 Bureaucracy and delays in the offices*	2	2.77	■
4.3 Availability of public information*	9	2.82	■
4.4 Electronic communication with local authorities*	1	3.09	■
4.5 Law enforcement in the local court*	7	2.46	■
4.6 Impact of corruption on authorities*	24	1.77	■
4.7 Protection of private property*	23	1.62	■
4.8 Interest of the state institutions in the region*	24	1.69	■
4.9 Impact of authorities*	23	1.92	■
4.10 Economic management of local authorities*	20	2.23	■
4.11 Impact of trade unions on doing business*	7	3.00	■

- Strong competitive **advantage** of region
- Strong competitive **disadvantage** of region
- Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	3	3.90	■
5.1 Density of 1st class roads	2	5.14	■
5.2 Density of 2nd class roads	2	5.06	■
5.3 Density of 3rd class roads	11	4.26	■
5.4 Density of 4th class roads	7	4.10	■
5.5 Density of road infrastructure*	21	1.77	■
5.6 Quality of road infrastructure*	22	1.31	■
5.7 Number of bank branches	2	4.65	■
5.8 Availability of banks*	23	3.54	■
5.9 Number of post offices	4	4.71	■
5.10 Availability of post offices*	22	3.31	■
5.11 Number of hospital beds	22	1.49	■
5.12 Availability of medical facilities*	24	1.77	■
6th pillar: Technology	11	3.50	■
6.1 Innovative companies	17	3.86	■
6.2 Technical companies	2	5.55	■
6.3 Scientific and technical companies	16	3.73	■
6.4 Scientific and technical specialists	9	3.63	■
6.5 Volume of innovative products	11	3.13	■
6.6 Foreign direct investments	9	3.78	■
6.7 Capital investments	23	3.05	■
6.8 Technology level*	5	3.31	■
6.9 Ability of businesses to use latest technologies*	18	3.23	■
6.10 Costs of providing mobile services	-	-	
6.11 Costs of providing internet access	-	-	
6.12 Usage of internet services by businesses*	9	3.54	■
6.13 Usage of personal motor vehicles*	10	2.46	■
6.14 Usage of commercial motor vehicles*	16	4.08	■
6.15 Information on the supply of goods and services*	24	2.38	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	19	2.94	■
7.1 Natural population growth	23	1.34	■
7.2 Migration of residents	24	1.05	■
7.3 Unemployment	18	2.23	■
7.4 Perception of unemployment*	21	2.08	■
7.5 Average age of unemployed persons	14	3.64	■
7.6 Perception of age structure of unemployment*	10	2.92	■
7.7 Average duration of unemployment	21	2.43	■
7.8 Perception of long-term unemployment*	15	3.00	■
7.9 Vacant working positions	19	2.25	■
7.10 Availability of free labor*	12	3.77	■
7.11 Average monthly salary	1	5.81	■
7.12 Wage expectations of jobseekers*	9	2.86	■
7.13 Migration of skilled labor*	22	1.46	■
7.14 Discipline and diligence of employees*	20	3.23	■
7.15 Employee motivation for productivity increase*	18	3.54	■
7.16 Fairness in employee selection*	12	2.31	■
8th pillar: Education	21	2.82	■
8.1 Level of education*	13	3.00	■
8.2 Mother language skills*	23	1.85	■
8.3 Foreign language skills*	23	1.46	■
8.4 Natural science skills*	7	3.17	■
8.5 Connection of vocational schools and labor market*	4	2.38	■
8.6 Qualification of employees*	20	2.77	■
8.7 Qualification of jobseekers*	14	2.31	■
8.8 Availability of highly skilled workforce*	21	2.77	■
8.9 Availability of partially skilled workforce*	8	4.54	■
8.10 Availability of unskilled workforce*	1	5.54	■
8.11 Density of secondary schools	12	3.14	■
8.12 Secondary schools students	23	1.39	■
8.13 Density of vocational schools	7	4.18	■
8.14 Vocational schools students	23	1.32	■
8.15 Density of institutions of higher education	10	3.43	■
8.16 Higher education students	24	2.02	■

Cherkassy

rank: **12** of 24



Population	1,242,965
Area	20,916 km ²

Population density	59 inhab. / km ²
Unemployment rate	10.2 %
Average monthly wage	3,360 ₴

Region overview

Cherkasy region is located in the central part of Ukraine; its area is 20,9 thousand km² (about 3.5% of the state territory (18th place in the country)). The Cherkasy region's population is 1.2m residents; the region's contribution to GDP is 2.42%.

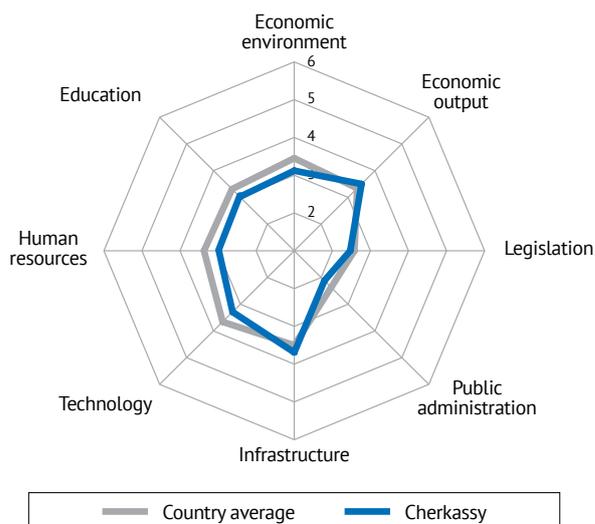
Economics of the region is represented by agricultural and industrial sectors. Agricultural lands occupy 70% of the total region's area. The food and chemical industries dominate in the industrial production. The region is rich in non-metallic minerals, which are used primarily as a building material. Cherkasy region has many deposits of various clays, quartz sand, building stone, expanded clay materials. The coal and peat dominate among fuel resources.

Cherkasy region takes the 12th place in the overall ranking of regional competitiveness. The favorable factors of the region are: comfortable location and natural conditions on doing business, the availability of unskilled workforce and free labor. The adverse factors of the region are: the low level of competition in industry, low technology level and low level of the presence of foreign companies.

Recommendations: increasing of the technological and innovative production, creating of favorable conditions for foreign companies' access to the regional market, improvement of the infrastructure and the tourism industry.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	12	3.13	3.30
Economic activity	11	3.35	3.39
Economic environment	13	3.12	3.45
Economic output	10	3.50	3.34
Public administration and legislation	21	2.26	2.45
Legislation	17	2.47	2.58
Public administration	22	2.12	2.37
Technology and infrastructure	11	3.44	3.60
Infrastructure	6	3.69	3.50
Technology	13	3.29	3.66
Education and human resources	19	3.00	3.35
Human resources	17	2.98	3.37
Education	16	3.02	3.31



Main competitive advantages

Advantage	Score
Impact of natural conditions on doing business	0.70
Availability of unskilled workforce	0.58
Availability of free labor	0.51
Availability of banks	0.45
Mother language skills	0.34

Main competitive disadvantages

Disadvantage	Score
Level of competitiveness in industry	-1.35
Multinational and foreign companies	-0.99
Natural science skills	-0.94
Potential for tourism development	-0.94
Technology level	-0.92

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	13	3.12	■
1.1 Population density	15	3.18	■
1.2 Urban population	16	4.09	■
1.3 Economically active population	9	4.17	■
1.4 Number of companies	11	3.70	■
1.5 Multinational and foreign companies*	24	1.45	■
1.6 Impact of the informal economy on doing business*	21	2.00	■
1.7 Level of corruption among private businesses*	21	2.15	■
1.8 Level of competitiveness in services*	22	2.60	■
1.9 Level of competitiveness in industry*	23	1.80	■
1.10 Reliability of business partners*	10	3.25	■
1.11 Availability of financial and capital resources*	19	1.85	■
1.12 Availability of necessary materials and services*	17	2.60	■
1.13 Impact of region location on doing business*	17	3.70	■
1.14 Impact of natural conditions on doing business*	9	5.20	■
1.15 Current business conditions*	21	1.80	■
1.16 Change of business conditions in recent years*	2	2.00	■
1.17 Potential for tourism development*	20	2.20	■
2nd pillar: Economic output	10	3.50	■
2.1 Development potential of businesses*	17	2.65	■
2.2 Profitability and productivity of businesses*	14	2.30	■
2.3 Gross added value	8	3.79	■
2.4 Volume of sales industrial products	7	4.19	■
2.5 Balance of goods	10	3.35	■
2.6 Balance of services	19	2.93	■
2.7 Foreign turnover of goods	15	2.82	■
2.8 Foreign turnover of services	19	2.24	■
2.9 Profitable companies	5	4.64	■
2.10 Financial results before taxation	5	3.85	■
2.11 Residential construction	15	2.91	■
2.12 Environmental friendliness of production*	15	3.50	■
2.13 Emissions of pollutants	19	2.50	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	17	2.47	■
3.1 Barriers to business development*	8	2.35	■
3.2 Perception of local taxes*	20	2.90	■
3.3 Business development prospects*	19	2.15	■
4th pillar: Public administration	22	2.12	■
4.1 Fulfillment of tasks by local authorities*	22	2.05	■
4.2 Bureaucracy and delays in the offices*	24	1.85	■
4.3 Availability of public information*	22	2.31	■
4.4 Electronic communication with local authorities*	10	2.69	■
4.5 Law enforcement in the local court*	24	1.85	■
4.6 Impact of corruption on authorities*	13	2.05	■
4.7 Protection of private property*	20	2.00	■
4.8 Interest of the state institutions in the region*	12	2.20	■
4.9 Impact of authorities*	14	2.30	■
4.10 Economic management of local authorities*	15	2.30	■
4.11 Impact of trade unions on doing business*	2	3.33	■

- Strong competitive **advantage** of region
- Strong competitive **disadvantage** of region
- Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	6	3.69	■
5.1 Density of 1st class roads	8	4.00	■
5.2 Density of 2nd class roads	10	4.01	■
5.3 Density of 3rd class roads	6	4.77	■
5.4 Density of 4th class roads	15	3.54	■
5.5 Density of road infrastructure*	15	2.00	■
5.6 Quality of road infrastructure*	17	1.70	■
5.7 Number of bank branches	7	4.00	■
5.8 Availability of banks*	16	4.60	■
5.9 Number of post offices	7	4.08	■
5.10 Availability of post offices*	21	3.35	■
5.11 Number of hospital beds	9	3.19	■
5.12 Availability of medical facilities*	23	1.85	■
6th pillar: Technology	13	3.29	■
6.1 Innovative companies	13	4.08	■
6.2 Technical companies	17	2.16	■
6.3 Scientific and technical companies	5	4.46	■
6.4 Scientific and technical specialists	13	3.25	■
6.5 Volume of innovative products	13	2.17	■
6.6 Foreign direct investments	11	3.31	■
6.7 Capital investments	15	3.61	■
6.8 Technology level*	19	2.25	■
6.9 Ability of businesses to use latest technologies*	8	3.45	■
6.10 Costs of providing mobile services	10	3.67	■
6.11 Costs of providing internet access	12	3.20	■
6.12 Usage of internet services by businesses*	20	3.10	■
6.13 Usage of personal motor vehicles*	16	2.10	■
6.14 Usage of commercial motor vehicles*	13	4.20	■
6.15 Information on the supply of goods and services*	17	3.30	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	17	2.98	■
7.1 Natural population growth	13	2.53	■
7.2 Migration of residents	20	2.29	■
7.3 Unemployment	15	3.26	■
7.4 Perception of unemployment*	5	3.00	■
7.5 Average age of unemployed persons	12	3.77	■
7.6 Perception of age structure of unemployment*	15	2.80	■
7.7 Average duration of unemployment	14	3.35	■
7.8 Perception of long-term unemployment*	11	3.35	■
7.9 Vacant working positions	17	2.73	■
7.10 Availability of free labor*	7	4.10	■
7.11 Average monthly salary	16	3.01	■
7.12 Wage expectations of jobseekers*	16	2.64	■
7.13 Migration of skilled labor*	17	2.00	■
7.14 Discipline and diligence of employees*	24	3.05	■
7.15 Employee motivation for productivity increase*	24	3.20	■
7.16 Fairness in employee selection*	2	2.20	■
8th pillar: Education	16	3.02	■
8.1 Level of education*	21	2.70	■
8.2 Mother language skills*	13	3.70	■
8.3 Foreign language skills*	18	1.70	■
8.4 Natural science skills*	22	2.00	■
8.5 Connection of vocational schools and labor market*	18	1.90	■
8.6 Qualification of employees*	22	2.60	■
8.7 Qualification of jobseekers*	9	2.40	■
8.8 Availability of highly skilled workforce*	13	3.00	■
8.9 Availability of partially skilled workforce*	20	3.75	■
8.10 Availability of unskilled workforce*	7	5.05	■
8.11 Density of secondary schools	11	3.45	■
8.12 Secondary schools students	19	2.60	■
8.13 Density of vocational schools	17	2.99	■
8.14 Vocational schools students	17	3.10	■
8.15 Density of institutions of higher education	12	3.05	■
8.16 Higher education students	11	3.73	■

Chernihiv

rank: **22** of 24



Population	1,044,975
Area	31,903 km ²

Population density	33 inhab. / km ²
Unemployment rate	11.2 %
Average monthly wage	3,295 ₴

Region overview

Chernihiv region is located in the north-eastern part of Ukraine and borders with Russia and Belarus. Chernihiv region takes the 3rd place among other regions of Ukraine and occupies 5% of the country territory. The region's population is 1.04m residents (it's 2.6% of the population of Ukraine). The region's contribution to GDP is 1.77%. Chernihiv region has the industrially-agrarian structure of the economy. The key industries in the region are: light and food industry, also such sectors as machinery, chemicals and wood. Chernihiv region has high recreational potential, but it is not used to full capacity.

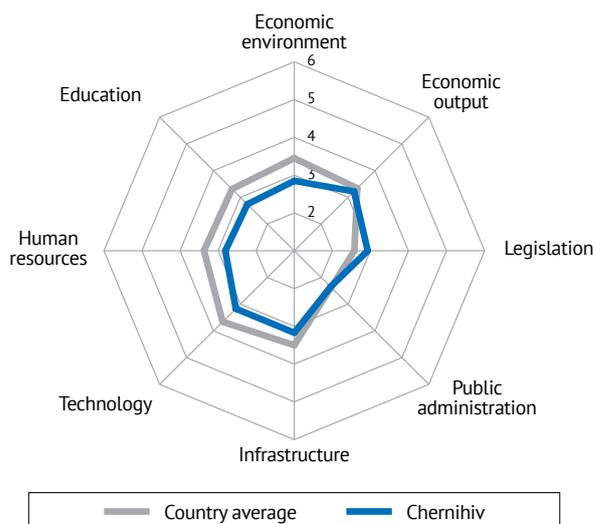
Chernihiv region takes the 23th place at "Economic environment" index, the 16th place at "Economic output" index and the 18th place at "Technology and Infrastructure" index. The region takes the 22th place over the country on regional GDP. The main competitive advantages of the region are:

environmental friendliness of production, the availability of partially skilled, unskilled workforce and free labor. The disadvantage factors of the region, that reduces the competitiveness, are: the low level of competition in industry, the low technology level and level of the presence of foreign companies and the high level of unemployment.

Recommendations: opening the regional market for foreign investors, building the competitive environment for leading business, development of the programs of technological production, reducing of the unemployment level by supporting SMEs.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	22	2.96	3.30
Economic activity	17	3.07	3.39
Economic environment	23	2.85	3.45
Economic output	16	3.22	3.34
Public administration and legislation	6	2.58	2.45
Legislation	1	2.93	2.58
Public administration	12	2.35	2.37
Technology and infrastructure	18	3.17	3.60
Infrastructure	19	3.17	3.50
Technology	17	3.17	3.66
Education and human resources	22	2.79	3.35
Human resources	22	2.81	3.37
Education	23	2.74	3.31



Main competitive advantages

Availability of partially skilled workforce	1.03	<div style="width: 103%;"></div>
Availability of unskilled workforce	0.97	<div style="width: 97%;"></div>
Availability of free labor	0.95	<div style="width: 95%;"></div>
Environmental friendliness of production	0.87	<div style="width: 87%;"></div>
Mother language skills	0.84	<div style="width: 84%;"></div>

Main competitive disadvantages

Level of competitiveness in industry	-1.10	<div style="width: -110%;"></div>
Technology level	-0.78	<div style="width: -78%;"></div>
Multinational and foreign companies	-0.70	<div style="width: -70%;"></div>
Perception of unemployment	-0.58	<div style="width: -58%;"></div>
Usage of personal motor vehicles	-0.53	<div style="width: -53%;"></div>

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	23	2.85	■
1.1 Population density	24	1.35	■
1.2 Urban population	9	4.46	■
1.3 Economically active population	7	4.39	■
1.4 Number of companies	14	3.29	■
1.5 Multinational and foreign companies*	21	1.70	■
1.6 Impact of the informal economy on doing business*	20	2.05	■
1.7 Level of corruption among private businesses*	7	2.55	■
1.8 Level of competitiveness in services*	16	3.10	■
1.9 Level of competitiveness in industry*	21	2.00	■
1.10 Reliability of business partners*	3	3.40	■
1.11 Availability of financial and capital resources*	14	1.90	■
1.12 Availability of necessary materials and services*	18	2.50	■
1.13 Impact of region location on doing business*	21	3.30	■
1.14 Impact of natural conditions on doing business*	12	5.05	■
1.15 Current business conditions*	4	2.45	■
1.16 Change of business conditions in recent years*	11	2.35	■
1.17 Potential for tourism development*	10	3.15	■
2nd pillar: Economic output	16	3.22	■
2.1 Development potential of businesses*	17	2.65	■
2.2 Profitability and productivity of businesses*	16	2.20	■
2.3 Gross added value	14	3.45	■
2.4 Volume of sales industrial products	15	3.31	■
2.5 Balance of goods	11	3.35	■
2.6 Balance of services	18	2.96	■
2.7 Foreign turnover of goods	11	3.56	■
2.8 Foreign turnover of services	20	2.24	■
2.9 Profitable companies	12	3.69	■
2.10 Financial results before taxation	11	3.27	■
2.11 Residential construction	13	3.08	■
2.12 Environmental friendliness of production*	10	4.20	■
2.13 Emissions of pollutants	17	2.73	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	1	2.93	■
3.1 Barriers to business development*	1	2.85	■
3.2 Perception of local taxes*	7	3.10	■
3.3 Business development prospects*	5	2.85	■
4th pillar: Public administration	12	2.35	■
4.1 Fulfillment of tasks by local authorities*	5	2.60	■
4.2 Bureaucracy and delays in the offices*	19	2.00	■
4.3 Availability of public information*	17	2.50	■
4.4 Electronic communication with local authorities*	20	2.33	■
4.5 Law enforcement in the local court*	20	2.15	■
4.6 Impact of corruption on authorities*	2	2.30	■
4.7 Protection of private property*	18	2.15	■
4.8 Interest of the state institutions in the region*	10	2.55	■
4.9 Impact of authorities*	8	2.55	■
4.10 Economic management of local authorities*	4	2.80	■
4.11 Impact of trade unions on doing business*	7	3.00	■

■ Strong competitive **advantage** of region
 ■ Strong competitive **disadvantage** of region
 ■ Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	19	3.17	■
5.1 Density of 1st class roads	9	3.51	■
5.2 Density of 2nd class roads	24	2.01	■
5.3 Density of 3rd class roads	21	3.43	■
5.4 Density of 4th class roads	12	3.70	■
5.5 Density of road infrastructure*	6	2.60	■
5.6 Quality of road infrastructure*	8	1.90	■
5.7 Number of bank branches	20	2.35	■
5.8 Availability of banks*	7	4.80	■
5.9 Number of post offices	20	2.70	■
5.10 Availability of post offices*	18	3.65	■
5.11 Number of hospital beds	1	5.18	■
5.12 Availability of medical facilities*	15	2.05	■
6th pillar: Technology	17	3.17	■
6.1 Innovative companies	15	3.92	■
6.2 Technical companies	22	1.65	■
6.3 Scientific and technical companies	7	4.29	■
6.4 Scientific and technical specialists	15	2.99	■
6.5 Volume of innovative products	14	2.09	■
6.6 Foreign direct investments	22	2.18	■
6.7 Capital investments	16	3.57	■
6.8 Technology level*	18	2.35	■
6.9 Ability of businesses to use latest technologies*	21	3.15	■
6.10 Costs of providing mobile services	5	4.52	■
6.11 Costs of providing internet access	7	3.84	■
6.12 Usage of internet services by businesses*	15	3.25	■
6.13 Usage of personal motor vehicles*	19	2.00	■
6.14 Usage of commercial motor vehicles*	10	4.25	■
6.15 Information on the supply of goods and services*	9	3.70	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	22	2.81	■
7.1 Natural population growth	12	2.54	■
7.2 Migration of residents	22	1.41	■
7.3 Unemployment	20	1.91	■
7.4 Perception of unemployment*	20	2.15	■
7.5 Average age of unemployed persons	8	3.90	■
7.6 Perception of age structure of unemployment*	3	3.35	■
7.7 Average duration of unemployment	14	3.35	■
7.8 Perception of long-term unemployment*	9	3.40	■
7.9 Vacant working positions	9	3.89	■
7.10 Availability of free labor*	3	4.50	■
7.11 Average monthly salary	21	2.65	■
7.12 Wage expectations of jobseekers*	20	2.56	■
7.13 Migration of skilled labor*	18	1.95	■
7.14 Discipline and diligence of employees*	16	3.35	■
7.15 Employee motivation for productivity increase*	10	3.90	■
7.16 Fairness in employee selection*	1	2.50	■
8th pillar: Education	23	2.74	■
8.1 Level of education*	18	2.95	■
8.2 Mother language skills*	9	4.15	■
8.3 Foreign language skills*	16	1.85	■
8.4 Natural science skills*	8	3.14	■
8.5 Connection of vocational schools and labor market*	3	2.45	■
8.6 Qualification of employees*	4	3.55	■
8.7 Qualification of jobseekers*	16	2.15	■
8.8 Availability of highly skilled workforce*	5	3.25	■
8.9 Availability of partially skilled workforce*	1	4.95	■
8.10 Availability of unskilled workforce*	2	5.40	■
8.11 Density of secondary schools	22	2.14	■
8.12 Secondary schools students	20	2.52	■
8.13 Density of vocational schools	24	1.41	■
8.14 Vocational schools students	19	2.51	■
8.15 Density of institutions of higher education	24	1.65	■
8.16 Higher education students	19	2.72	■

Chernivtsi

rank: **14** of 24



Population	909,893
Area	8,096 km ²

Population density	112 inhab. / km ²
Unemployment rate	9 %
Average monthly wage	3,050 ₴

Region overview

Chernivtsi region is located in the south-western part of Ukraine and borders with Romania and Moldova. It is the smallest region in terms of population. The region's contribution to GDP is 0.95%.

The region has favorable transport and geographical position, dense railways network and roads, pipelines and power lines. Four fields of oil and gas deposits are found on the region's territory, also there are significant deposits of building materials. Forests have the great importance in economic and social development of the region. The light, food, wood industries and agriculture sector play the leading role in the regional economy.

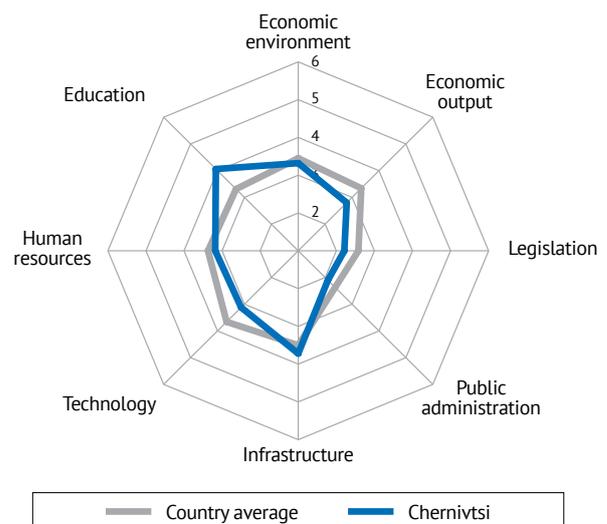
The region got high scores for the indexes of economic environment (the 8th place), infrastructure (the 5th place) and education (the 2nd place).

The main competitive advantages of the region are: environmental friendliness of production, potential of tourism development and the high level of education. The disadvantage factors of the region, that reduces the competitiveness, are: the low level of usage of internet services by businesses, the low level of availability of highly skilled workforce and the low quality of road infrastructure.

Recommendations: conducting the programs aimed at electronic communications' learning and development of Internet services, use of the educational potential for the development of innovation and technology industries, improving the quality of roads.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	14	3.11	3.30
Economic activity	20	3.01	3.39
Economic environment	8	3.32	3.45
Economic output	22	2.80	3.34
Public administration and legislation	24	2.14	2.45
Legislation	23	2.21	2.58
Public administration	24	2.10	2.37
Technology and infrastructure	12	3.35	3.60
Infrastructure	5	3.72	3.50
Technology	18	3.12	3.66
Education and human resources	8	3.48	3.35
Human resources	13	3.18	3.37
Education	2	4.06	3.31



Main competitive advantages

Environmental friendliness of production	2.51	<div style="width: 100%;"></div>
Mother language skills	2.40	<div style="width: 95%;"></div>
Potential for tourism development	2.37	<div style="width: 90%;"></div>
Availability of medical facilities	1.90	<div style="width: 70%;"></div>
Reliability of business partners	1.45	<div style="width: 50%;"></div>

Main competitive disadvantages

Usage of Internet services by businesses	-1.14	<div style="width: 40%; background-color: yellow;"></div>
Electronic communication with local authorities	-1.12	<div style="width: 38%; background-color: yellow;"></div>
Availability of highly skilled workforce	-0.94	<div style="width: 30%; background-color: yellow;"></div>
Economic management of local authorities	-0.75	<div style="width: 25%; background-color: yellow;"></div>
Quality of road infrastructure	-0.72	<div style="width: 24%; background-color: yellow;"></div>

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	8	3.32	■
1.1 Population density	3	4.89	■
1.2 Urban population	23	3.41	■
1.3 Economically active population	20	2.57	■
1.4 Number of companies	22	2.72	■
1.5 Multinational and foreign companies*	9	2.38	■
1.6 Impact of the informal economy on doing business*	21	2.00	■
1.7 Level of corruption among private businesses*	9	2.50	■
1.8 Level of competitiveness in services*	1	4.25	■
1.9 Level of competitiveness in industry*	6	3.50	■
1.10 Reliability of business partners*	1	4.63	■
1.11 Availability of financial and capital resources*	1	2.88	■
1.12 Availability of necessary materials and services*	16	2.63	■
1.13 Impact of region location on doing business*	5	4.75	■
1.14 Impact of natural conditions on doing business*	1	5.88	■
1.15 Current business conditions*	1	3.13	■
1.16 Change of business conditions in recent years*	1	2.38	■
1.17 Potential for tourism development*	3	5.50	■
2nd pillar: Economic output	22	2.80	■
2.1 Development potential of businesses*	3	3.50	■
2.2 Profitability and productivity of businesses*	1	3.50	■
2.3 Gross added value	23	2.05	■
2.4 Volume of sales industrial products	24	2.13	■
2.5 Balance of goods	18	2.98	■
2.6 Balance of services	12	3.17	■
2.7 Foreign turnover of goods	22	1.86	■
2.8 Foreign turnover of services	22	2.02	■
2.9 Profitable companies	21	2.15	■
2.10 Financial results before taxation	6	3.84	■
2.11 Residential construction	5	4.19	■
2.12 Environmental friendliness of production*	1	5.88	■
2.13 Emissions of pollutants	8	3.07	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	23	2.21	■
3.1 Barriers to business development*	12	2.25	■
3.2 Perception of local taxes*	24	2.50	■
3.3 Business development prospects*	22	1.88	■
4th pillar: Public administration	24	2.10	■
4.1 Fulfillment of tasks by local authorities*	24	1.88	■
4.2 Bureaucracy and delays in the offices*	23	1.88	■
4.3 Availability of public information*	21	2.38	■
4.4 Electronic communication with local authorities*	24	1.63	■
4.5 Law enforcement in the local court*	9	2.43	■
4.6 Impact of corruption on authorities*	22	1.88	■
4.7 Protection of private property*	19	2.13	■
4.8 Interest of the state institutions in the region*	14	2.13	■
4.9 Impact of authorities*	20	2.13	■
4.10 Economic management of local authorities*	24	1.88	■
4.11 Impact of trade unions on doing business*	7	3.00	■

■ Strong competitive **advantage** of region
 ■ Strong competitive **disadvantage** of region
 ■ Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	5	3.72	■
5.1 Density of 1st class roads	17	2.77	■
5.2 Density of 2nd class roads	7	4.43	■
5.3 Density of 3rd class roads	15	4.03	■
5.4 Density of 4th class roads	23	2.65	■
5.5 Density of road infrastructure*	4	3.00	■
5.6 Quality of road infrastructure*	21	1.38	■
5.7 Number of bank branches	4	4.51	■
5.8 Availability of banks*	4	4.88	■
5.9 Number of post offices	1	5.75	■
5.10 Availability of post offices*	1	5.00	■
5.11 Number of hospital beds	18	2.87	■
5.12 Availability of medical facilities*	1	4.38	■
6th pillar: Technology	18	3.12	■
6.1 Innovative companies	10	4.40	■
6.2 Technical companies	11	2.96	■
6.3 Scientific and technical companies	3	5.42	■
6.4 Scientific and technical specialists	12	3.33	■
6.5 Volume of innovative products	-	-	
6.6 Foreign direct investments	24	1.84	■
6.7 Capital investments	21	3.31	■
6.8 Technology level*	15	2.50	■
6.9 Ability of businesses to use latest technologies*	15	3.25	■
6.10 Costs of providing mobile services	9	3.68	■
6.11 Costs of providing internet access	10	3.41	■
6.12 Usage of internet services by businesses*	24	2.25	■
6.13 Usage of personal motor vehicles*	1	3.75	■
6.14 Usage of commercial motor vehicles*	10	4.25	■
6.15 Information on the supply of goods and services*	13	3.63	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	13	3.18	■
7.1 Natural population growth	3	3.20	■
7.2 Migration of residents	5	3.70	■
7.3 Unemployment	8	4.40	■
7.4 Perception of unemployment*	12	2.75	■
7.5 Average age of unemployed persons	8	3.90	■
7.6 Perception of age structure of unemployment*	24	2.25	■
7.7 Average duration of unemployment	18	2.75	■
7.8 Perception of long-term unemployment*	1	4.13	■
7.9 Vacant working positions	15	3.21	■
7.10 Availability of free labor*	1	5.00	■
7.11 Average monthly salary	23	1.70	■
7.12 Wage expectations of jobseekers*	24	2.25	■
7.13 Migration of skilled labor*	21	1.75	■
7.14 Discipline and diligence of employees*	6	3.88	■
7.15 Employee motivation for productivity increase*	22	3.25	■
7.16 Fairness in employee selection*	1	3.38	■
8th pillar: Education	2	4.06	■
8.1 Level of education*	4	4.38	■
8.2 Mother language skills*	2	5.75	■
8.3 Foreign language skills*	4	2.88	■
8.4 Natural science skills*	3	3.50	■
8.5 Connection of vocational schools and labor market*	1	3.25	■
8.6 Qualification of employees*	3	3.63	■
8.7 Qualification of jobseekers*	1	3.38	■
8.8 Availability of highly skilled workforce*	24	2.13	■
8.9 Availability of partially skilled workforce*	21	3.63	■
8.10 Availability of unskilled workforce*	5	5.25	■
8.11 Density of secondary schools	3	5.22	■
8.12 Secondary schools students	4	3.84	■
8.13 Density of vocational schools	2	4.70	■
8.14 Vocational schools students	16	3.30	■
8.15 Density of institutions of higher education	2	5.57	■
8.16 Higher education students	9	3.86	■

Ivano-Frankivsk

rank: **9** of 24



Population	1,382,352
Area	13,927 km ²

Population density	99 inhab. / km ²
Unemployment rate	8.1 %
Average monthly wage	3,402 ₴

Region overview

Ivano-Frankivsk region is located in the west part of Ukraine, borders with Romania and has an area about 13.9 thousand km² (it's 2.4% of the territory of Ukraine). It belongs to the densely populated Ukrainian regions, the most part of the population lives in rural areas (57.9%). The significant reserves of salt brines, magnesium crude salts, construction materials and potash are concentrated in the region. Forest resources take the main place at the natural resource potential. The industrial potential of the region is very low and is represented by fuel and energy, chemical, petrochemical, forest, woodworking, light and food industries. Being the home for nearly 3% of Ukraine residents it can produce only 1,6-2% of industrial products.

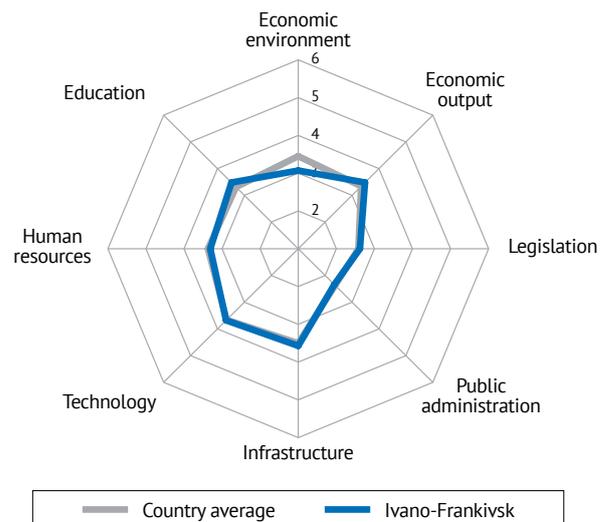
Ivano-Frankivsk region takes the 9th place on RBEI. The high scores it has for such indexes as technology and Infrastructure (the 8th place) and education and human resources (the 9th place). The main competitive

advantages of the region are: high potential for both domestic and foreign tourism, environmental friendliness of production and availability of banks. The adverse factors of the region are: the low technology level, the low level of competitiveness in industry, the high level of corruption among private businesses and bad road infrastructure.

Recommendations: the struggle against corruption at private sector, the development of the programs of technological production and the investing in tourist industry.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	9	3.30	3.30
Economic activity	13	3.31	3.39
Economic environment	17	3.07	3.45
Economic output	12	3.48	3.34
Public administration and legislation	14	2.45	2.45
Legislation	11	2.62	2.58
Public administration	13	2.34	2.37
Technology and infrastructure	8	3.64	3.60
Infrastructure	8	3.57	3.50
Technology	9	3.68	3.66
Education and human resources	9	3.37	3.35
Human resources	9	3.31	3.37
Education	6	3.48	3.31



Main competitive advantages

Potential for tourism development	2.46	<div style="width: 246%;"></div>
Mother language skills	2.10	<div style="width: 210%;"></div>
Environmental friendliness of production	1.26	<div style="width: 126%;"></div>
Impact of region location on doing business	0.78	<div style="width: 78%;"></div>
Availability of banks	0.67	<div style="width: 67%;"></div>

Main competitive disadvantages

Technology level	-1.31	<div style="width: -131%;"></div>
Level of competitiveness in industry	-1.24	<div style="width: -124%;"></div>
Availability of partially skilled workforce	-0.74	<div style="width: -74%;"></div>
Level of corruption among private businesses	-0.68	<div style="width: -68%;"></div>
Density of road infrastructure	-0.68	<div style="width: -68%;"></div>

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	17	3.07	■
1.1 Population density	5	4.56	■
1.2 Urban population	22	3.44	■
1.3 Economically active population	24	1.25	■
1.4 Number of companies	13	3.29	■
1.5 Multinational and foreign companies*	8	2.41	■
1.6 Impact of the informal economy on doing business*	17	2.09	■
1.7 Level of corruption among private businesses*	23	1.95	■
1.8 Level of competitiveness in services*	17	3.09	■
1.9 Level of competitiveness in industry*	22	1.95	■
1.10 Reliability of business partners*	18	3.14	■
1.11 Availability of financial and capital resources*	3	2.23	■
1.12 Availability of necessary materials and services*	12	2.95	■
1.13 Impact of region location on doing business*	9	4.55	■
1.14 Impact of natural conditions on doing business*	17	4.86	■
1.15 Current business conditions*	14	2.00	■
1.16 Change of business conditions in recent years*	1	2.09	■
1.17 Potential for tourism development*	1	5.64	■
2nd pillar: Economic output	12	3.48	■
2.1 Development potential of businesses*	9	3.09	■
2.2 Profitability and productivity of businesses*	5	3.09	■
2.3 Gross added value	12	3.50	■
2.4 Volume of sales industrial products	11	3.52	■
2.5 Balance of goods	17	3.04	■
2.6 Balance of services	11	3.23	■
2.7 Foreign turnover of goods	20	2.70	■
2.8 Foreign turnover of services	15	2.54	■
2.9 Profitable companies	2	4.97	■
2.10 Financial results before taxation	19	2.46	■
2.11 Residential construction	2	5.01	■
2.12 Environmental friendliness of production*	4	4.68	■
2.13 Emissions of pollutants	23	1.59	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	11	2.62	■
3.1 Barriers to business development*	16	2.18	■
3.2 Perception of local taxes*	11	3.05	■
3.3 Business development prospects*	10	2.64	■
4th pillar: Public administration	13	2.34	■
4.1 Fulfillment of tasks by local authorities*	13	2.36	■
4.2 Bureaucracy and delays in the offices*	16	2.09	■
4.3 Availability of public information*	13	2.64	■
4.4 Electronic communication with local authorities*	16	2.41	■
4.5 Law enforcement in the local court*	3	2.64	■
4.6 Impact of corruption on authorities*	18	1.91	■
4.7 Protection of private property*	15	2.23	■
4.8 Interest of the state institutions in the region*	7	2.77	■
4.9 Impact of authorities*	18	2.23	■
4.10 Economic management of local authorities*	17	2.27	■
4.11 Impact of trade unions on doing business*	21	2.83	■

■ Strong competitive **advantage** of region
 ■ Strong competitive **disadvantage** of region
 ■ Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	8	3.57	■
5.1 Density of 1st class roads	16	2.77	■
5.2 Density of 2nd class roads	5	4.73	■
5.3 Density of 3rd class roads	20	3.55	■
5.4 Density of 4th class roads	20	2.92	■
5.5 Density of road infrastructure*	20	1.77	■
5.6 Quality of road infrastructure*	16	1.73	■
5.7 Number of bank branches	10	3.92	■
5.8 Availability of banks*	5	4.86	■
5.9 Number of post offices	2	5.40	■
5.10 Availability of post offices*	6	3.95	■
5.11 Number of hospital beds	15	3.01	■
5.12 Availability of medical facilities*	19	2.00	■
6th pillar: Technology	9	3.68	■
6.1 Innovative companies	4	5.21	■
6.2 Technical companies	7	3.58	■
6.3 Scientific and technical companies	15	3.86	■
6.4 Scientific and technical specialists	18	2.67	■
6.5 Volume of innovative products	4	4.02	■
6.6 Foreign direct investments	8	4.14	■
6.7 Capital investments	3	4.64	■
6.8 Technology level*	22	1.91	■
6.9 Ability of businesses to use latest technologies*	12	3.32	■
6.10 Costs of providing mobile services	16	2.43	■
6.11 Costs of providing internet access	17	2.85	■
6.12 Usage of internet services by businesses*	5	3.68	■
6.13 Usage of personal motor vehicles*	5	2.86	■
6.14 Usage of commercial motor vehicles*	21	3.82	■
6.15 Information on the supply of goods and services*	16	3.41	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	9	3.31	■
7.1 Natural population growth	4	3.20	■
7.2 Migration of residents	6	3.61	■
7.3 Unemployment	5	5.08	■
7.4 Perception of unemployment*	11	2.77	■
7.5 Average age of unemployed persons	21	1.65	■
7.6 Perception of age structure of unemployment*	1	3.45	■
7.7 Average duration of unemployment	12	3.63	■
7.8 Perception of long-term unemployment*	20	2.82	■
7.9 Vacant working positions	18	2.51	■
7.10 Availability of free labor*	18	3.50	■
7.11 Average monthly salary	13	3.17	■
7.12 Wage expectations of jobseekers*	11	2.82	■
7.13 Migration of skilled labor*	19	1.86	■
7.14 Discipline and diligence of employees*	11	3.73	■
7.15 Employee motivation for productivity increase*	6	4.00	■
7.16 Fairness in employee selection*	1	2.27	■
8th pillar: Education	6	3.48	■
8.1 Level of education*	6	3.45	■
8.2 Mother language skills*	4	5.50	■
8.3 Foreign language skills*	8	2.27	■
8.4 Natural science skills*	17	2.43	■
8.5 Connection of vocational schools and labor market*	16	1.91	■
8.6 Qualification of employees*	15	2.91	■
8.7 Qualification of jobseekers*	13	2.32	■
8.8 Availability of highly skilled workforce*	18	2.86	■
8.9 Availability of partially skilled workforce*	24	3.27	■
8.10 Availability of unskilled workforce*	23	4.14	■
8.11 Density of secondary schools	4	5.20	■
8.12 Secondary schools students	5	3.82	■
8.13 Density of vocational schools	9	4.04	■
8.14 Vocational schools students	11	3.45	■
8.15 Density of institutions of higher education	6	4.34	■
8.16 Higher education students	13	3.43	■



Population	2,718,616
Area	31,418 km ²

Population density	87 inhab. / km ²
Unemployment rate	7.8 %
Average monthly wage	3,697 ₴

Region overview

Kharkiv region is located in northeastern part of Ukraine and borders with Russia. The region's contribution to GDP is 6.09%. The region has a high level of economic development, due to the favorable economic and geographical location and wide base of raw materials. Industry of the region comprises by such sectors as: engineering, chemical, pharmaceutical, fuel and energy, light and food. Well developed infrastructure reinforces the economic potential of the region.

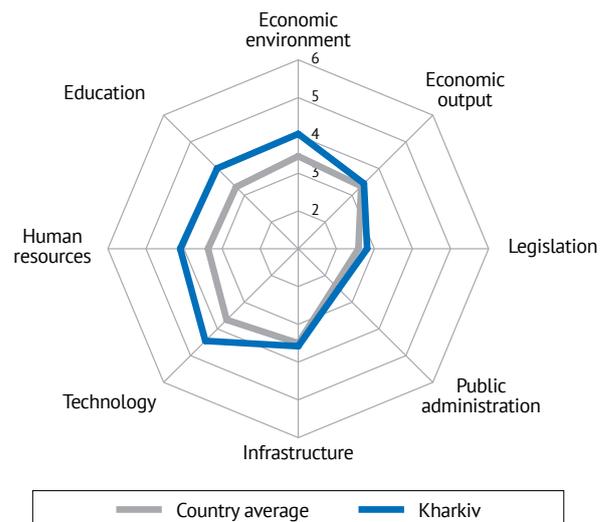
Kharkiv region takes the 3rd place in the overall rankings and significantly ahead the average indicators of the country on most indexes. The region takes the 3rd place over the country on regional GDP and is the most competitive economic environment among other regions. The main advantages of the region are: high competition in production and services, high technology and educational level. It is the presence of highly

qualified professionals and educated youth make this region extremely attractive for business. The adverse factors of the region, that reduces the competitiveness, are low potential for tourism development, weak availability of public information, low profitability and productivity of businesses.

Recommendations: development of high technological and innovative businesses, attracting of foreign investment, improvement of the infrastructure and the tourism industry.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	3	3.76	3.30
Economic activity	8	3.68	3.39
Economic environment	1	4.04	3.45
Economic output	14	3.44	3.34
Public administration and legislation	3	2.62	2.45
Legislation	4	2.81	2.58
Public administration	5	2.50	2.37
Technology and infrastructure	3	4.13	3.60
Infrastructure	7	3.58	3.50
Technology	3	4.45	3.66
Education and human resources	1	4.07	3.35
Human resources	3	4.10	3.37
Education	3	4.01	3.31



Main competitive advantages

Level of competitiveness in industry	1.92	<div style="width: 100%;"></div>
Technology level	1.56	<div style="width: 80%;"></div>
Level of education	1.05	<div style="width: 60%;"></div>
Perception of unemployment	0.90	<div style="width: 50%;"></div>
Usage of commercial motor vehicles	0.83	<div style="width: 45%;"></div>

Main competitive disadvantages

Perception of long-term unemployment	-1.04	<div style="width: 80%;"></div>
Potential for tourism development	-0.90	<div style="width: 70%;"></div>
Availability of public information	-0.74	<div style="width: 60%;"></div>
Profitability and productivity of businesses	-0.66	<div style="width: 55%;"></div>
Availability of free labor	-0.64	<div style="width: 55%;"></div>

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	1	4.04	■
1.1 Population density	7	4.20	■
1.2 Urban population	4	5.18	■
1.3 Economically active population	2	5.56	■
1.4 Number of companies	3	5.00	■
1.5 Multinational and foreign companies*	6	2.67	■
1.6 Impact of the informal economy on doing business*	7	2.28	■
1.7 Level of corruption among private businesses*	18	2.22	■
1.8 Level of competitiveness in services*	8	3.44	■
1.9 Level of competitiveness in industry*	1	5.22	■
1.10 Reliability of business partners*	9	3.28	■
1.11 Availability of financial and capital resources*	12	2.00	■
1.12 Availability of necessary materials and services*	2	3.28	■
1.13 Impact of region location on doing business*	14	3.89	■
1.14 Impact of natural conditions on doing business*	22	4.72	■
1.15 Current business conditions*	9	2.22	■
1.16 Change of business conditions in recent years*	1	2.39	■
1.17 Potential for tourism development*	18	2.39	■
2nd pillar: Economic output	14	3.44	■
2.1 Development potential of businesses*	11	3.00	■
2.2 Profitability and productivity of businesses*	17	2.17	■
2.3 Gross added value	4	4.38	■
2.4 Volume of sales industrial products	6	4.24	■
2.5 Balance of goods	20	2.91	■
2.6 Balance of services	5	3.60	■
2.7 Foreign turnover of goods	9	3.67	■
2.8 Foreign turnover of services	8	3.82	■
2.9 Profitable companies	22	2.01	■
2.10 Financial results before taxation	10	3.28	■
2.11 Residential construction	17	2.84	■
2.12 Environmental friendliness of production*	19	3.00	■
2.13 Emissions of pollutants	14	2.86	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	4	2.81	■
3.1 Barriers to business development*	2	2.72	■
3.2 Perception of local taxes*	3	3.17	■
3.3 Business development prospects*	12	2.56	■
4th pillar: Public administration	5	2.50	■
4.1 Fulfillment of tasks by local authorities*	2	2.72	■
4.2 Bureaucracy and delays in the offices*	3	2.67	■
4.3 Availability of public information*	24	2.21	■
4.4 Electronic communication with local authorities*	13	2.57	■
4.5 Law enforcement in the local court*	4	2.61	■
4.6 Impact of corruption on authorities*	11	2.06	■
4.7 Protection of private property*	7	2.56	■
4.8 Interest of the state institutions in the region*	4	3.11	■
4.9 Impact of authorities*	11	2.50	■
4.10 Economic management of local authorities*	16	2.28	■
4.11 Impact of trade unions on doing business*	4	3.25	■

■ Strong competitive **advantage** of region
 ■ Strong competitive **disadvantage** of region
 ■ Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	7	3.58	■
5.1 Density of 1st class roads	7	4.09	■
5.2 Density of 2nd class roads	17	3.32	■
5.3 Density of 3rd class roads	8	4.43	■
5.4 Density of 4th class roads	5	4.40	■
5.5 Density of road infrastructure*	14	2.06	■
5.6 Quality of road infrastructure*	13	1.78	■
5.7 Number of bank branches	8	3.95	■
5.8 Availability of banks*	10	4.72	■
5.9 Number of post offices	14	3.28	■
5.10 Availability of post offices*	14	3.78	■
5.11 Number of hospital beds	8	3.34	■
5.12 Availability of medical facilities*	3	2.72	■
6th pillar: Technology	3	4.45	■
6.1 Innovative companies	1	5.60	■
6.2 Technical companies	1	5.84	■
6.3 Scientific and technical companies	1	5.85	■
6.4 Scientific and technical specialists	1	5.83	■
6.5 Volume of innovative products	5	3.83	■
6.6 Foreign direct investments	7	4.16	■
6.7 Capital investments	13	3.80	■
6.8 Technology level*	3	4.89	■
6.9 Ability of businesses to use latest technologies*	4	3.82	■
6.10 Costs of providing mobile services	1	5.76	■
6.11 Costs of providing internet access	4	4.39	■
6.12 Usage of internet services by businesses*	4	3.88	■
6.13 Usage of personal motor vehicles*	8	2.50	■
6.14 Usage of commercial motor vehicles*	1	4.89	■
6.15 Information on the supply of goods and services*	7	3.72	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	3	4.10	■
7.1 Natural population growth	2	3.72	■
7.2 Migration of residents	17	2.42	■
7.3 Unemployment	2	5.25	■
7.4 Perception of unemployment*	1	3.83	■
7.5 Average age of unemployed persons	3	4.77	■
7.6 Perception of age structure of unemployment*	17	2.78	■
7.7 Average duration of unemployment	6	4.37	■
7.8 Perception of long-term unemployment*	24	2.22	■
7.9 Vacant working positions	8	4.13	■
7.10 Availability of free labor*	23	3.11	■
7.11 Average monthly salary	8	4.00	■
7.12 Wage expectations of jobseekers*	7	2.89	■
7.13 Migration of skilled labor*	1	3.06	■
7.14 Discipline and diligence of employees*	4	3.94	■
7.15 Employee motivation for productivity increase*	1	4.44	■
7.16 Fairness in employee selection*	1	3.56	■
8th pillar: Education	3	4.01	■
8.1 Level of education*	3	4.50	■
8.2 Mother language skills*	15	2.89	■
8.3 Foreign language skills*	10	2.11	■
8.4 Natural science skills*	2	3.71	■
8.5 Connection of vocational schools and labor market*	2	2.56	■
8.6 Qualification of employees*	1	4.06	■
8.7 Qualification of jobseekers*	2	3.28	■
8.8 Availability of highly skilled workforce*	10	3.11	■
8.9 Availability of partially skilled workforce*	13	4.17	■
8.10 Availability of unskilled workforce*	19	4.67	■
8.11 Density of secondary schools	14	3.04	■
8.12 Secondary schools students	22	2.23	■
8.13 Density of vocational schools	6	4.29	■
8.14 Vocational schools students	20	2.30	■
8.15 Density of institutions of higher education	1	5.67	■
8.16 Higher education students	1	5.77	■

Kherson

rank: **16** of 24



Population	1,062,356
Area	28,461 km ²

Population density	37 inhab. / km ²
Unemployment rate	9.9 %
Average monthly wage	3,123 ₴

Region overview

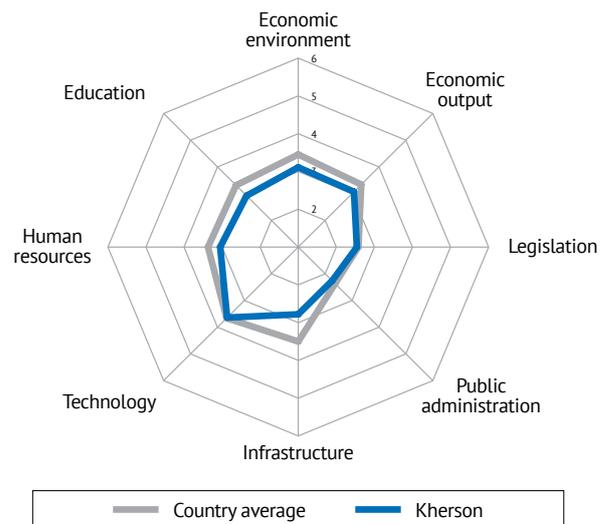
Kherson region is located in the south of Ukraine and has access to the Black and Azov Seas. The region has an area about 28.5 thousand km² and it takes the 7th place among other regions of Ukraine (4.7% of the territory of Ukraine). The region has a population of 1,06m people (2.5% of the Ukrainian population). The density of the population is almost twice less than the average in Ukraine. The main sectors of the regional economy are: shipbuilding, energy, food industry, machine building, metallurgy, pulp and paper industry and agriculture (mostly plant growing). The fertile land resources define the basic potential of the region. It covers 2m hectares of agricultural lands (the largest area of arable land in Ukraine). Kherson region has an extensive transport infrastructure: rail, sea and river, automobile.

The region takes the 16th place on RBEI ranking. It shows the average scores for such indexes as economic environment, technology and human resources. The main advantages of the region are: availability of free labor and unskilled workforce, high potential for tourism, comfortable natural and geographical position on doing agriculture business. The main disadvantages are: low level of mother language skills, low technology level, low presence of international companies and foreign investment.

Recommendations: opening the regional market for foreign investors, the introduction of new technical developments, especially in agriculture sector.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	16	3.03	3.30
Economic activity	16	3.09	3.39
Economic environment	14	3.11	3.45
Economic output	19	3.07	3.34
Public administration and legislation	17	2.37	2.45
Legislation	14	2.54	2.58
Public administration	17	2.26	2.37
Technology and infrastructure	13	3.32	3.60
Infrastructure	23	2.78	3.50
Technology	10	3.64	3.66
Education and human resources	18	3.01	3.35
Human resources	15	3.05	3.37
Education	19	2.92	3.31



Main competitive advantages

Availability of free labor	1.17	<div style="width: 117%;"></div>
Availability of unskilled workforce	0.87	<div style="width: 87%;"></div>
Availability of partially skilled workforce	0.85	<div style="width: 85%;"></div>
Employee motivation for productivity increase	0.68	<div style="width: 68%;"></div>
Impact of natural conditions on doing business	0.58	<div style="width: 58%;"></div>

Main competitive disadvantages

Mother language skills	-1.33	<div style="width: -133%;"></div>
Usage of personal motor vehicles	-0.71	<div style="width: -71%;"></div>
Multinational and foreign companies	-0.63	<div style="width: -63%;"></div>
Interest of the state institutions in the region	-0.60	<div style="width: -60%;"></div>
Availability of medical facilities	-0.51	<div style="width: -51%;"></div>

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	14	3.11	■
1.1 Population density	23	1.77	■
1.2 Urban population	13	4.30	■
1.3 Economically active population	8	4.22	■
1.4 Number of companies	8	4.17	■
1.5 Multinational and foreign companies*	18	1.79	■
1.6 Impact of the informal economy on doing business*	19	2.05	■
1.7 Level of corruption among private businesses*	17	2.26	■
1.8 Level of competitiveness in services*	19	2.89	■
1.9 Level of competitiveness in industry*	9	3.00	■
1.10 Reliability of business partners*	21	3.11	■
1.11 Availability of financial and capital resources*	16	1.89	■
1.12 Availability of necessary materials and services*	22	2.42	■
1.13 Impact of region location on doing business*	16	3.74	■
1.14 Impact of natural conditions on doing business*	11	5.05	■
1.15 Current business conditions*	20	1.84	■
1.16 Change of business conditions in recent years*	9	2.16	■
1.17 Potential for tourism development*	9	3.68	■
2nd pillar: Economic output	19	3.07	■
2.1 Development potential of businesses*	16	2.68	■
2.2 Profitability and productivity of businesses*	15	2.26	■
2.3 Gross added value	20	2.83	■
2.4 Volume of sales industrial products	18	3.16	■
2.5 Balance of goods	15	3.14	■
2.6 Balance of services	14	3.15	■
2.7 Foreign turnover of goods	21	2.36	■
2.8 Foreign turnover of services	18	2.27	■
2.9 Profitable companies	10	3.79	■
2.10 Financial results before taxation	4	3.89	■
2.11 Residential construction	19	2.67	■
2.12 Environmental friendliness of production*	16	3.42	■
2.13 Emissions of pollutants	13	2.90	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	14	2.54	■
3.1 Barriers to business development*	15	2.21	■
3.2 Perception of local taxes*	9	3.05	■
3.3 Business development prospects*	16	2.37	■
4th pillar: Public administration	17	2.26	■
4.1 Fulfillment of tasks by local authorities*	16	2.32	■
4.2 Bureaucracy and delays in the offices*	14	2.11	■
4.3 Availability of public information*	14	2.62	■
4.4 Electronic communication with local authorities*	6	2.77	■
4.5 Law enforcement in the local court*	14	2.32	■
4.6 Impact of corruption on authorities*	19	1.89	■
4.7 Protection of private property*	14	2.26	■
4.8 Interest of the state institutions in the region*	18	2.00	■
4.9 Impact of authorities*	16	2.26	■
4.10 Economic management of local authorities*	14	2.32	■
4.11 Impact of trade unions on doing business*	7	3.00	■

- Strong competitive **advantage** of region
- Strong competitive **disadvantage** of region
- Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	23	2.78	■
5.1 Density of 1st class roads	21	2.43	■
5.2 Density of 2nd class roads	22	2.93	■
5.3 Density of 3rd class roads	17	3.78	■
5.4 Density of 4th class roads	22	2.67	■
5.5 Density of road infrastructure*	16	1.95	■
5.6 Quality of road infrastructure*	9	1.89	■
5.7 Number of bank branches	23	2.12	■
5.8 Availability of banks*	11	4.68	■
5.9 Number of post offices	22	2.21	■
5.10 Availability of post offices*	5	4.05	■
5.11 Number of hospital beds	2	3.62	■
5.12 Availability of medical facilities*	21	1.95	■
6th pillar: Technology	10	3.64	■
6.1 Innovative companies	3	5.25	■
6.2 Technical companies	12	2.85	■
6.3 Scientific and technical companies	6	4.46	■
6.4 Scientific and technical specialists	10	3.52	■
6.5 Volume of innovative products	8	3.61	■
6.6 Foreign direct investments	12	3.31	■
6.7 Capital investments	22	3.30	■
6.8 Technology level*	10	2.89	■
6.9 Ability of businesses to use latest technologies*	13	3.32	■
6.10 Costs of providing mobile services	4	4.85	■
6.11 Costs of providing internet access	6	4.32	■
6.12 Usage of internet services by businesses*	14	3.26	■
6.13 Usage of personal motor vehicles*	23	1.84	■
6.14 Usage of commercial motor vehicles*	18	4.05	■
6.15 Information on the supply of goods and services*	10	3.68	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	15	3.05	■
7.1 Natural population growth	16	2.31	■
7.2 Migration of residents	11	2.81	■
7.3 Unemployment	14	3.60	■
7.4 Perception of unemployment*	16	2.37	■
7.5 Average age of unemployed persons	4	4.28	■
7.6 Perception of age structure of unemployment*	16	2.79	■
7.7 Average duration of unemployment	2	5.23	■
7.8 Perception of long-term unemployment*	7	3.53	■
7.9 Vacant working positions	16	2.78	■
7.10 Availability of free labor*	2	4.74	■
7.11 Average monthly salary	22	2.04	■
7.12 Wage expectations of jobseekers*	1	3.33	■
7.13 Migration of skilled labor*	15	2.11	■
7.14 Discipline and diligence of employees*	21	3.21	■
7.15 Employee motivation for productivity increase*	3	4.26	■
7.16 Fairness in employee selection*	1	2.63	■
8th pillar: Education	19	2.92	■
8.1 Level of education*	12	3.05	■
8.2 Mother language skills*	22	2.00	■
8.3 Foreign language skills*	14	1.89	■
8.4 Natural science skills*	12	2.86	■
8.5 Connection of vocational schools and labor market*	5	2.32	■
8.6 Qualification of employees*	14	2.95	■
8.7 Qualification of jobseekers*	6	2.63	■
8.8 Availability of highly skilled workforce*	13	3.00	■
8.9 Availability of partially skilled workforce*	3	4.79	■
8.10 Availability of unskilled workforce*	4	5.32	■
8.11 Density of secondary schools	24	1.78	■
8.12 Secondary schools students	11	3.34	■
8.13 Density of vocational schools	23	2.46	■
8.14 Vocational schools students	11	3.45	■
8.15 Density of institutions of higher education	22	2.09	■
8.16 Higher education students	18	3.11	■

Khmelnysk

rank: **18** of 24



Population	1,294,413
Area	20,629 km ²

Population density	63 inhab. / km ²
Unemployment rate	9.4 %
Average monthly wage	3,371 ₴

Region overview

Khmelnysk region is located in the western part of Ukraine and has a population of 1.3 m people. The region's area is 20.6 thousand km² (3.4% of Ukrainian territory). Khmelnytsky region generates 2.03% of national GDP.

Economics of the region is represented by electric power, agriculture, engineering, metalwork, food and light industry. The Khmelnytsky region is covered by almost 4% of all agricultural land of Ukraine. The plant growing takes a championship among all agriculture sectors.

Khmelnysk region takes the 18th place on the RBEI ranking. The average scores it has only for infrastructure (the 12th place) and education (the 10th place).

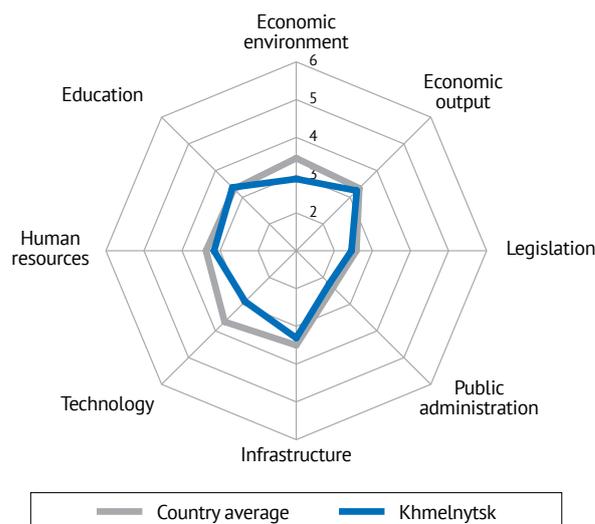
The main competitive advantages of the region are: the availability of unskilled and partially skilled workforce, good impact of natural conditions

on doing business and environmental friendliness of production. The region widely uses the commercial motor vehicles. This makes it more competitive. The adverse factors of the region are: the low technology level, the low level of competitiveness in industry, weak natural science skills. Also the region has high legal barriers to business development and has problems with a big share of economically inactive population.

Recommendations: promotion of the natural science in the educational system of the region, implementation of technology and innovative machines in industry, increasing the share of active residents, opening the regional market for foreign investors.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	18	3.02	3.30
Economic activity	15	3.11	3.39
Economic environment	19	2.90	3.45
Economic output	15	3.25	3.34
Public administration and legislation	19	2.32	2.45
Legislation	19	2.45	2.58
Public administration	19	2.23	2.37
Technology and infrastructure	21	3.06	3.60
Infrastructure	12	3.31	3.50
Technology	23	2.90	3.66
Education and human resources	12	3.23	3.35
Human resources	14	3.16	3.37
Education	10	3.37	3.31



Main competitive advantages

Availability of unskilled workforce	0.76	<div style="width: 76%;"></div>
Availability of partially skilled workforce	0.61	<div style="width: 61%;"></div>
Usage of commercial motor vehicles	0.58	<div style="width: 58%;"></div>
Impact of natural conditions on doing business	0.48	<div style="width: 48%;"></div>
Environmental friendliness of production	0.45	<div style="width: 45%;"></div>

Main competitive disadvantages

Technology level	-1.05	<div style="width: 105%;"></div>
Level of competitiveness in industry	-0.97	<div style="width: 97%;"></div>
Fairness in employee selection	-0.72	<div style="width: 72%;"></div>
Natural science skills	-0.63	<div style="width: 63%;"></div>
Interest of the state institutions in the region	-0.55	<div style="width: 55%;"></div>

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	19	2.90	■
1.1 Population density	12	3.33	■
1.2 Urban population	17	4.07	■
1.3 Economically active population	21	2.28	■
1.4 Number of companies	15	3.13	■
1.5 Multinational and foreign companies*	16	1.90	■
1.6 Impact of the informal economy on doing business*	23	1.95	■
1.7 Level of corruption among private businesses*	14	2.35	■
1.8 Level of competitiveness in services*	14	3.15	■
1.9 Level of competitiveness in industry*	19	2.15	■
1.10 Reliability of business partners*	22	3.00	■
1.11 Availability of financial and capital resources*	14	1.90	■
1.12 Availability of necessary materials and services*	14	2.75	■
1.13 Impact of region location on doing business*	15	3.80	■
1.14 Impact of natural conditions on doing business*	14	4.95	■
1.15 Current business conditions*	14	2.00	■
1.16 Change of business conditions in recent years*	2	2.05	■
1.17 Potential for tourism development*	13	2.80	■
2nd pillar: Economic output	15	3.25	■
2.1 Development potential of businesses*	20	2.40	■
2.2 Profitability and productivity of businesses*	19	2.10	■
2.3 Gross added value	17	3.17	■
2.4 Volume of sales industrial products	17	3.30	■
2.5 Balance of goods	14	3.19	■
2.6 Balance of services	15	3.06	■
2.7 Foreign turnover of goods	18	2.76	■
2.8 Foreign turnover of services	21	2.06	■
2.9 Profitable companies	9	3.85	■
2.10 Financial results before taxation	9	3.35	■
2.11 Residential construction	7	4.06	■
2.12 Environmental friendliness of production*	12	3.80	■
2.13 Emissions of pollutants	10	3.01	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	19	2.45	■
3.1 Barriers to business development*	12	2.25	■
3.2 Perception of local taxes*	10	3.05	■
3.3 Business development prospects*	21	2.05	■
4th pillar: Public administration	19	2.23	■
4.1 Fulfillment of tasks by local authorities*	18	2.25	■
4.2 Bureaucracy and delays in the offices*	15	2.10	■
4.3 Availability of public information*	23	2.27	■
4.4 Electronic communication with local authorities*	11	2.67	■
4.5 Law enforcement in the local court*	16	2.20	■
4.6 Impact of corruption on authorities*	10	2.10	■
4.7 Protection of private property*	13	2.30	■
4.8 Interest of the state institutions in the region*	17	2.05	■
4.9 Impact of authorities*	21	2.10	■
4.10 Economic management of local authorities*	21	2.20	■
4.11 Impact of trade unions on doing business*	7	3.00	■

- Strong competitive **advantage** of region
- Strong competitive **disadvantage** of region
- Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	12	3.31	■
5.1 Density of 1st class roads	19	2.64	■
5.2 Density of 2nd class roads	11	3.87	■
5.3 Density of 3rd class roads	1	5.83	■
5.4 Density of 4th class roads	9	4.00	■
5.5 Density of road infrastructure*	13	2.10	■
5.6 Quality of road infrastructure*	10	1.85	■
5.7 Number of bank branches	15	2.93	■
5.8 Availability of banks*	18	4.50	■
5.9 Number of post offices	8	3.74	■
5.10 Availability of post offices*	11	3.85	■
5.11 Number of hospital beds	12	3.13	■
5.12 Availability of medical facilities*	13	2.10	■
6th pillar: Technology	23	2.90	■
6.1 Innovative companies	21	3.68	■
6.2 Technical companies	24	1.00	■
6.3 Scientific and technical companies	24	3.07	■
6.4 Scientific and technical specialists	24	2.00	■
6.5 Volume of innovative products	-	-	■
6.6 Foreign direct investments	19	2.54	■
6.7 Capital investments	7	4.10	■
6.8 Technology level*	20	2.10	■
6.9 Ability of businesses to use latest technologies*	15	3.25	■
6.10 Costs of providing mobile services	20	1.29	■
6.11 Costs of providing internet access	15	2.91	■
6.12 Usage of internet services by businesses*	18	3.20	■
6.13 Usage of personal motor vehicles*	13	2.20	■
6.14 Usage of commercial motor vehicles*	5	4.45	■
6.15 Information on the supply of goods and services*	17	3.30	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	14	3.16	■
7.1 Natural population growth	14	2.50	■
7.2 Migration of residents	12	2.74	■
7.3 Unemployment	11	4.12	■
7.4 Perception of unemployment*	17	2.35	■
7.5 Average age of unemployed persons	7	4.15	■
7.6 Perception of age structure of unemployment*	19	2.70	■
7.7 Average duration of unemployment	3	5.03	■
7.8 Perception of long-term unemployment*	12	3.15	■
7.9 Vacant working positions	22	2.11	■
7.10 Availability of free labor*	8	3.90	■
7.11 Average monthly salary	14	3.11	■
7.12 Wage expectations of jobseekers*	16	2.64	■
7.13 Migration of skilled labor*	16	2.10	■
7.14 Discipline and diligence of employees*	18	3.30	■
7.15 Employee motivation for productivity increase*	17	3.55	■
7.16 Fairness in employee selection*	2	2.05	■
8th pillar: Education	10	3.37	■
8.1 Level of education*	13	3.00	■
8.2 Mother language skills*	14	3.40	■
8.3 Foreign language skills*	13	1.90	■
8.4 Natural science skills*	20	2.29	■
8.5 Connection of vocational schools and labor market*	19	1.85	■
8.6 Qualification of employees*	10	3.05	■
8.7 Qualification of jobseekers*	16	2.15	■
8.8 Availability of highly skilled workforce*	16	2.90	■
8.9 Availability of partially skilled workforce*	7	4.55	■
8.10 Availability of unskilled workforce*	6	5.20	■
8.11 Density of secondary schools	6	4.18	■
8.12 Secondary schools students	12	3.26	■
8.13 Density of vocational schools	8	4.16	■
8.14 Vocational schools students	5	4.25	■
8.15 Density of institutions of higher education	9	3.46	■
8.16 Higher education students	14	3.37	■

Kropyvnytsky

rank: **21** of 24



Population	973,150
Area	24,588 km ²

Population density	40 inhab. / km ²
Unemployment rate	11.2 %
Average monthly wage	3,282 ₴

Region overview

Kropyvnytsky region is located in the central part of Ukraine and covers an area of 24.6 thousand km² (4.1% of Ukrainian territory). It has the population about 973.1 thousand people and generates 1.81% of national GDP.

Kropyvnytsky region is the geographical center of Ukraine. The region's economy has agro-industrial structure. The plant growing takes the leading place at the structure of gross agricultural production. The most important sectors of the industrial production are: food industry, which is represented by sugar production, engineering and metalworking, electricity, construction materials industry.

Kropyvnytsky region takes the uncompetitive place in the overall ranking. The region takes the 22nd place, having not bad scores on legislation (the

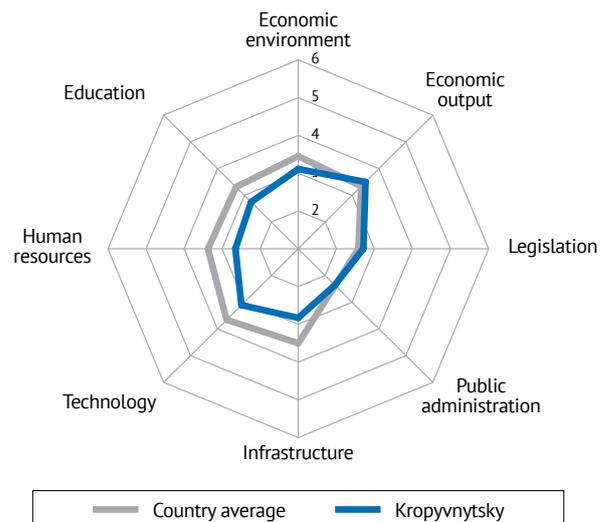
8th place) and economic output (the 11th place). The main advantages of the region are: availability of banks, high profitability and productivity of business and good impact of region location on doing business.

The adverse factors of the region, that reduces its competitiveness, are: low potential for tourism development, weak labor market and foreign language skills, low qualifications of jobseekers.

Recommendations: attracting of foreign investment, improvement of the infrastructure, tourism industry and educational system, promotion of the programs of learning foreign languages among young people and the business environment.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	21	2.96	3.30
Economic activity	12	3.34	3.39
Economic environment	15	3.11	3.45
Economic output	11	3.50	3.34
Public administration and legislation	11	2.50	2.45
Legislation	8	2.71	2.58
Public administration	11	2.36	2.37
Technology and infrastructure	23	3.01	3.60
Infrastructure	22	2.83	3.50
Technology	19	3.11	3.66
Education and human resources	23	2.68	3.35
Human resources	23	2.65	3.37
Education	22	2.75	3.31



Main competitive advantages

Availability of banks	0.78	<div style="width: 78%;"></div>
Profitability and productivity of businesses	0.73	<div style="width: 73%;"></div>
Impact of region location on doing business	0.73	<div style="width: 73%;"></div>
Development potential of businesses	0.68	<div style="width: 68%;"></div>
Employee motivation for productivity increase	0.61	<div style="width: 61%;"></div>

Main competitive disadvantages

Potential for tourism development	-1.39	<div style="width: 139%;"></div>
Connection of vocational schools and labor market	-0.71	<div style="width: 71%;"></div>
Foreign language skills	-0.65	<div style="width: 65%;"></div>
Interest of the state institutions in the region	-0.64	<div style="width: 64%;"></div>
Qualification of jobseekers	-0.56	<div style="width: 56%;"></div>

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	15	3.11	■
1.1 Population density	22	1.96	■
1.2 Urban population	10	4.38	■
1.3 Economically active population	17	2.84	■
1.4 Number of companies	7	4.31	■
1.5 Multinational and foreign companies*	17	1.88	■
1.6 Impact of the informal economy on doing business*	4	2.35	■
1.7 Level of corruption among private businesses*	5	2.65	■
1.8 Level of competitiveness in services*	11	3.24	■
1.9 Level of competitiveness in industry*	14	2.59	■
1.10 Reliability of business partners*	19	3.12	■
1.11 Availability of financial and capital resources*	18	1.88	■
1.12 Availability of necessary materials and services*	9	3.00	■
1.13 Impact of region location on doing business*	12	4.41	■
1.14 Impact of natural conditions on doing business*	21	4.76	■
1.15 Current business conditions*	17	1.94	■
1.16 Change of business conditions in recent years*	9	1.94	■
1.17 Potential for tourism development*	21	1.71	■
2nd pillar: Economic output	11	3.50	■
2.1 Development potential of businesses*	2	3.59	■
2.2 Profitability and productivity of businesses*	4	3.55	■
2.3 Gross added value	9	3.73	■
2.4 Volume of sales industrial products	13	3.42	■
2.5 Balance of goods	8	3.75	■
2.6 Balance of services	17	2.98	■
2.7 Foreign turnover of goods	16	2.80	■
2.8 Foreign turnover of services	12	2.72	■
2.9 Profitable companies	1	5.79	■
2.10 Financial results before taxation	15	2.80	■
2.11 Residential construction	20	2.54	■
2.12 Environmental friendliness of production*	17	3.29	■
2.13 Emissions of pollutants	6	3.12	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	8	2.71	■
3.1 Barriers to business development*	6	2.41	■
3.2 Perception of local taxes*	21	2.88	■
3.3 Business development prospects*	6	2.82	■
4th pillar: Public administration	11	2.36	■
4.1 Fulfillment of tasks by local authorities*	17	2.29	■
4.2 Bureaucracy and delays in the offices*	12	2.29	■
4.3 Availability of public information*	10	2.76	■
4.4 Electronic communication with local authorities*	7	2.76	■
4.5 Law enforcement in the local court*	13	2.35	■
4.6 Impact of corruption on authorities*	16	2.00	■
4.7 Protection of private property*	10	2.47	■
4.8 Interest of the state institutions in the region*	22	1.94	■
4.9 Impact of authorities*	6	2.65	■
4.10 Economic management of local authorities*	10	2.53	■
4.11 Impact of trade unions on doing business*	20	2.94	■

■ Strong competitive **advantage** of region
 ■ Strong competitive **disadvantage** of region
 ■ Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	22	2.83	■
5.1 Density of 1st class roads	13	3.26	■
5.2 Density of 2nd class roads	23	2.58	■
5.3 Density of 3rd class roads	12	4.23	■
5.4 Density of 4th class roads	17	3.38	■
5.5 Density of road infrastructure*	17	1.88	■
5.6 Quality of road infrastructure*	19	1.53	■
5.7 Number of bank branches	22	2.17	■
5.8 Availability of banks*	3	4.88	■
5.9 Number of post offices	24	1.27	■
5.10 Availability of post offices*	3	4.06	■
5.11 Number of hospital beds	5	3.44	■
5.12 Availability of medical facilities*	19	2.00	■
6th pillar: Technology	19	3.11	■
6.1 Innovative companies	6	5.04	■
6.2 Technical companies	13	2.57	■
6.3 Scientific and technical companies	17	3.71	■
6.4 Scientific and technical specialists	14	3.13	■
6.5 Volume of innovative products	10	3.26	■
6.6 Foreign direct investments	23	1.98	■
6.7 Capital investments	11	3.85	■
6.8 Technology level*	8	2.94	■
6.9 Ability of businesses to use latest technologies*	11	3.35	■
6.10 Costs of providing mobile services	11	3.39	■
6.11 Costs of providing internet access	16	2.85	■
6.12 Usage of internet services by businesses*	17	3.24	■
6.13 Usage of personal motor vehicles*	14	2.18	■
6.14 Usage of commercial motor vehicles*	14	4.12	■
6.15 Information on the supply of goods and services*	22	3.24	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	23	2.65	■
7.1 Natural population growth	20	2.14	■
7.2 Migration of residents	19	2.30	■
7.3 Unemployment	19	1.92	■
7.4 Perception of unemployment*	18	2.29	■
7.5 Average age of unemployed persons	14	3.64	■
7.6 Perception of age structure of unemployment*	23	2.53	■
7.7 Average duration of unemployment	23	1.30	■
7.8 Perception of long-term unemployment*	5	3.59	■
7.9 Vacant working positions	12	3.40	■
7.10 Availability of free labor*	11	3.88	■
7.11 Average monthly salary	18	2.78	■
7.12 Wage expectations of jobseekers*	8	2.88	■
7.13 Migration of skilled labor*	11	2.18	■
7.14 Discipline and diligence of employees*	12	3.71	■
7.15 Employee motivation for productivity increase*	4	4.18	■
7.16 Fairness in employee selection*	1	2.65	■
8th pillar: Education	22	2.75	■
8.1 Level of education*	20	2.82	■
8.2 Mother language skills*	16	2.82	■
8.3 Foreign language skills*	17	1.71	■
8.4 Natural science skills*	11	2.88	■
8.5 Connection of vocational schools and labor market*	22	1.59	■
8.6 Qualification of employees*	21	2.71	■
8.7 Qualification of jobseekers*	20	2.00	■
8.8 Availability of highly skilled workforce*	9	3.12	■
8.9 Availability of partially skilled workforce*	16	4.00	■
8.10 Availability of unskilled workforce*	14	4.88	■
8.11 Density of secondary schools	21	2.50	■
8.12 Secondary schools students	15	2.86	■
8.13 Density of vocational schools	18	2.99	■
8.14 Vocational schools students	10	3.55	■
8.15 Density of institutions of higher education	17	2.40	■
8.16 Higher education students	22	2.24	■



Population	1,732,235
Area	28,121 km ²

Population density	62 inhab. / km ²
Unemployment rate	8 %
Average monthly wage	4,153 ₴

Region overview

Kyiv region is located in the north part of Ukraine and borders with Belarus. The area of the region is 28.1 thousand km² (the 8th place among other Ukrainian regions) with the population of 1.7 m people (the 10th place among other Ukrainian regions). The most important sectors of the industrial production of Kyiv region are: electricity, food, chemical and petrochemical industry, machine building and metalworking. Also the agriculture is well developed in the region. Kyiv is the capital of Ukraine and this is an important factor for raising the competitiveness of the region.

Kyiv region takes the 1st place on such indexes as "Technology and infrastructure" and the 2nd place on "Economic activity". The region takes the 1st place over the country on regional GDP and has a strong potential for regional growth. The main advantages of the region are: high quality of production, very good Impact of region location on doing business, high

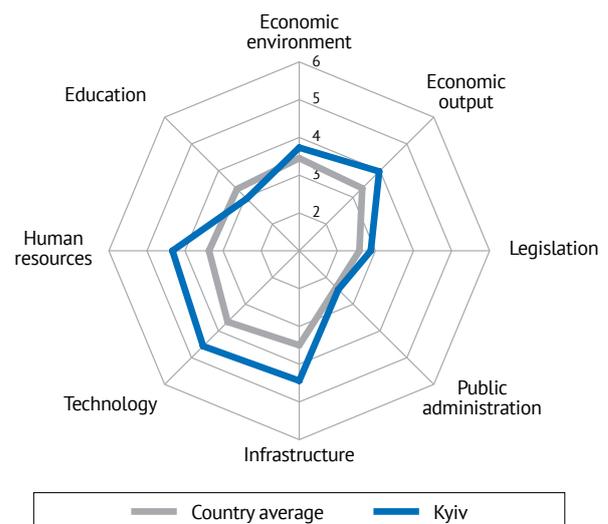
concentration of educated, skilled workers fluent in a foreign language, tourism growth.

The main disadvantages of the region are: poorly organized labor market, low use of personal motor vehicles, low level of the competitiveness in industry, the high level of corruption among private businesses that leads to decreasing of foreign investments.

Recommendations: improvement of the infrastructure and the tourism industry, development of high technological and innovative businesses, reducing of the pressure on SMEs, legal fighting against corruption.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	1	3.88	3.30
Economic activity	2	3.87	3.39
Economic environment	5	3.73	3.45
Economic output	2	3.97	3.34
Public administration and legislation	4	2.62	2.45
Legislation	2	2.88	2.58
Public administration	8	2.45	2.37
Technology and infrastructure	1	4.52	3.60
Infrastructure	1	4.44	3.50
Technology	2	4.57	3.66
Education and human resources	4	3.87	3.35
Human resources	2	4.33	3.37
Education	18	2.95	3.31



Main competitive advantages

Advantage	Score
Environmental friendliness of production	0.86
Impact of region location on doing business	0.77
Mother language skills	0.67
Availability of partially skilled workforce	0.64
Impact of natural conditions on doing business	0.58

Main competitive disadvantages

Disadvantage	Score
Connection of vocational schools and labor market	-1.11
Usage of personal motor vehicles	-0.87
Level of competitiveness in industry	-0.70
Bureaucracy and delays in the offices	-0.67
Usage of commercial motor vehicles	-0.66

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	5	3.73	■
1.1 Population density	13	3.27	■
1.2 Urban population	11	4.35	■
1.3 Economically active population	15	3.09	■
1.4 Number of companies	1	5.74	■
1.5 Multinational and foreign companies*	5	2.68	■
1.6 Impact of the informal economy on doing business*	13	2.16	■
1.7 Level of corruption among private businesses*	19	2.21	■
1.8 Level of competitiveness in services*	12	3.21	■
1.9 Level of competitiveness in industry*	13	2.63	■
1.10 Reliability of business partners*	6	3.37	■
1.11 Availability of financial and capital resources*	9	2.05	■
1.12 Availability of necessary materials and services*	9	3.00	■
1.13 Impact of region location on doing business*	8	4.68	■
1.14 Impact of natural conditions on doing business*	5	5.26	■
1.15 Current business conditions*	8	2.37	■
1.16 Change of business conditions in recent years*	2	2.42	■
1.17 Potential for tourism development*	11	3.05	■
2nd pillar: Economic output	2	3.97	■
2.1 Development potential of businesses*	6	3.26	■
2.2 Profitability and productivity of businesses*	10	2.63	■
2.3 Gross added value	3	5.35	■
2.4 Volume of sales industrial products	5	4.32	■
2.5 Balance of goods	22	1.37	■
2.6 Balance of services	6	3.54	■
2.7 Foreign turnover of goods	2	5.44	■
2.8 Foreign turnover of services	5	4.38	■
2.9 Profitable companies	16	3.11	■
2.10 Financial results before taxation	22	1.74	■
2.11 Residential construction	1	5.81	■
2.12 Environmental friendliness of production*	9	4.42	■
2.13 Emissions of pollutants	18	2.66	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	2	2.88	■
3.1 Barriers to business development*	4	2.58	■
3.2 Perception of local taxes*	6	3.11	■
3.3 Business development prospects*	4	2.95	■
4th pillar: Public administration	8	2.45	■
4.1 Fulfillment of tasks by local authorities*	12	2.37	■
4.2 Bureaucracy and delays in the offices*	18	2.05	■
4.3 Availability of public information*	1	3.06	■
4.4 Electronic communication with local authorities*	4	2.87	■
4.5 Law enforcement in the local court*	15	2.26	■
4.6 Impact of corruption on authorities*	5	2.21	■
4.7 Protection of private property*	9	2.47	■
4.8 Interest of the state institutions in the region*	6	2.79	■
4.9 Impact of authorities*	4	2.74	■
4.10 Economic management of local authorities*	18	2.26	■
4.11 Impact of trade unions on doing business*	4	3.25	■

■ Strong competitive **advantage** of region
 ■ Strong competitive **disadvantage** of region
 ■ Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	1	4.44	■
5.1 Density of 1st class roads	1	5.80	■
5.2 Density of 2nd class roads	6	4.72	■
5.3 Density of 3rd class roads	2	5.27	■
5.4 Density of 4th class roads	13	3.68	■
5.5 Density of road infrastructure*	11	2.21	■
5.6 Quality of road infrastructure*	6	2.00	■
5.7 Number of bank branches	1	5.81	■
5.8 Availability of banks*	6	4.84	■
5.9 Number of post offices	9	3.67	■
5.10 Availability of post offices*	10	3.89	■
5.11 Number of hospital beds	14	3.03	■
5.12 Availability of medical facilities*	4	2.63	■
6th pillar: Technology	2	4.57	■
6.1 Innovative companies	19	3.82	■
6.2 Technical companies	14	2.44	■
6.3 Scientific and technical companies	23	3.27	■
6.4 Scientific and technical specialists	7	3.96	■
6.5 Volume of innovative products	7	3.73	■
6.6 Foreign direct investments	2	4.87	■
6.7 Capital investments	1	5.81	■
6.8 Technology level*	12	2.79	■
6.9 Ability of businesses to use latest technologies*	10	3.37	■
6.10 Costs of providing mobile services	2	5.32	■
6.11 Costs of providing internet access	1	5.77	■
6.12 Usage of internet services by businesses*	10	3.47	■
6.13 Usage of personal motor vehicles*	22	1.89	■
6.14 Usage of commercial motor vehicles*	23	3.42	■
6.15 Information on the supply of goods and services*	10	3.68	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	2	4.33	■
7.1 Natural population growth	1	6.00	■
7.2 Migration of residents	10	2.84	■
7.3 Unemployment	3	5.15	■
7.4 Perception of unemployment*	2	3.32	■
7.5 Average age of unemployed persons	19	2.33	■
7.6 Perception of age structure of unemployment*	6	3.00	■
7.7 Average duration of unemployment	18	2.75	■
7.8 Perception of long-term unemployment*	13	3.14	■
7.9 Vacant working positions	1	5.35	■
7.10 Availability of free labor*	17	3.58	■
7.11 Average monthly salary	4	4.87	■
7.12 Wage expectations of jobseekers*	12	2.75	■
7.13 Migration of skilled labor*	7	2.47	■
7.14 Discipline and diligence of employees*	23	3.16	■
7.15 Employee motivation for productivity increase*	15	3.63	■
7.16 Fairness in employee selection*	1	2.58	■
8th pillar: Education	18	2.95	■
8.1 Level of education*	13	3.00	■
8.2 Mother language skills*	8	4.21	■
8.3 Foreign language skills*	11	1.95	■
8.4 Natural science skills*	5	3.22	■
8.5 Connection of vocational schools and labor market*	24	1.42	■
8.6 Qualification of employees*	9	3.05	■
8.7 Qualification of jobseekers*	5	2.68	■
8.8 Availability of highly skilled workforce*	2	3.47	■
8.9 Availability of partially skilled workforce*	3	4.79	■
8.10 Availability of unskilled workforce*	8	5.00	■
8.11 Density of secondary schools	16	3.03	■
8.12 Secondary schools students	7	3.53	■
8.13 Density of vocational schools	22	2.50	■
8.14 Vocational schools students	21	2.21	■
8.15 Density of institutions of higher education	14	2.94	■
8.16 Higher education students	21	2.29	■

Luhansk

rank: **24** of 24



Population	2,205,389
Area	26,683 km ²

Population density	83 inhab./ km ²
Unemployment rate	11.4 %
Average monthly wage	3,427 ₴

Region overview

Luhansk region is located in the east of Ukraine and boards with Russian Federation. The area of the region is 26.7 thousand km², and it's population is 2.2m people (the 6th place over other Ukrainian regions). The southern part of Luhansk region is mainly industrial. The northern territory of the region is covered by the fertile black soil that promote to the development of agricultural sector.

Lugansk region was one of quite developed among the industrialized regions of Ukraine with a wide range of different types of minerals that are represented by deposits of coal, gas, construction materials, phosphate, gold and mineral water.

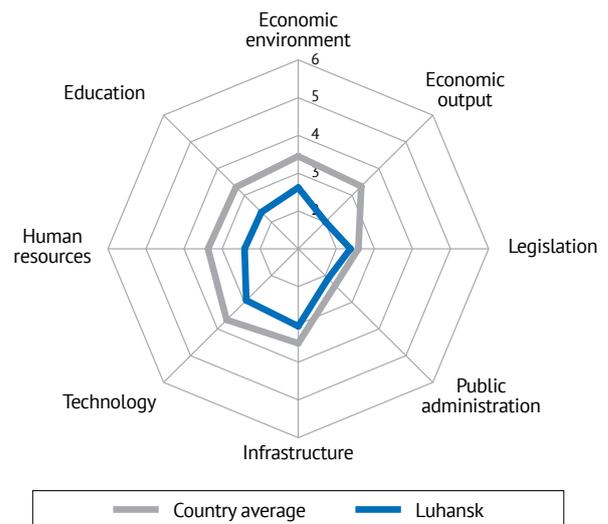
Before the ATO has started the region had had a wide transport infrastructure: road, rail, air and pipeline transport that was necessary for

transportation of coal and products of metallurgy, oil refining, chemical and other industries.

As a result of ATO the region suffered significant infrastructure damage, some companies stopped its work, great part of the region's population was forced to move to other regions of the country.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	24	2.48	3.30
Economic activity	24	2.29	3.39
Economic environment	24	2.62	3.45
Economic output	24	2.01	3.34
Public administration and legislation	23	2.21	2.45
Legislation	22	2.37	2.58
Public administration	23	2.11	2.37
Technology and infrastructure	24	2.98	3.60
Infrastructure	21	3.05	3.50
Technology	22	2.93	3.66
Education and human resources	24	2.40	3.35
Human resources	24	2.41	3.37
Education	24	2.37	3.31



Main competitive advantages

Availability of unskilled workforce	1.03	<div style="width: 103%;"></div>
Availability of free labor	1.02	<div style="width: 102%;"></div>
Availability of partially skilled workforce	0.75	<div style="width: 75%;"></div>
Perception of long-term unemployment	0.61	<div style="width: 61%;"></div>
Perception of local taxes	0.45	<div style="width: 45%;"></div>

Main competitive disadvantages

Potential for tourism development	-1.86	<div style="width: 186%;"></div>
Impact of region location on doing business	-1.56	<div style="width: 156%;"></div>
Mother language skills	-1.53	<div style="width: 153%;"></div>
Usage of commercial motor vehicles	-1.18	<div style="width: 118%;"></div>
Level of competitiveness in services	-1.05	<div style="width: 105%;"></div>

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	24	2.62	■
1.1 Population density	8	4.08	■
1.2 Urban population	2	5.45	■
1.3 Economically active population	18	2.59	■
1.4 Number of companies	24	1.54	■
1.5 Multinational and foreign companies*	22	1.67	■
1.6 Impact of the informal economy on doing business*	24	1.89	■
1.7 Level of corruption among private businesses*	22	2.11	■
1.8 Level of competitiveness in services*	24	2.00	■
1.9 Level of competitiveness in industry*	9	3.00	■
1.10 Reliability of business partners*	23	2.89	■
1.11 Availability of financial and capital resources*	24	1.56	■
1.12 Availability of necessary materials and services*	24	2.11	■
1.13 Impact of region location on doing business*	24	2.00	■
1.14 Impact of natural conditions on doing business*	23	4.44	■
1.15 Current business conditions*	24	1.33	■
1.16 Change of business conditions in recent years*	1	1.78	■
1.17 Potential for tourism development*	24	1.11	■
2nd pillar: Economic output	24	2.01	■
2.1 Development potential of businesses*	24	2.11	■
2.2 Profitability and productivity of businesses*	24	1.89	■
2.3 Gross added value	24	1.36	■
2.4 Volume of sales industrial products	21	2.97	■
2.5 Balance of goods	-	-	
2.6 Balance of services	-	-	
2.7 Foreign turnover of goods	-	-	
2.8 Foreign turnover of services	-	-	
2.9 Profitable companies	14	3.40	■
2.10 Financial results before taxation	24	1.13	■
2.11 Residential construction	24	1.38	■
2.12 Environmental friendliness of production*	21	2.33	■
2.13 Emissions of pollutants	15	2.84	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	22	2.37	■
3.1 Barriers to business development*	21	2.00	■
3.2 Perception of local taxes*	1	3.33	■
3.3 Business development prospects*	23	1.78	■
4th pillar: Public administration	23	2.11	■
4.1 Fulfillment of tasks by local authorities*	21	2.11	■
4.2 Bureaucracy and delays in the offices*	6	2.56	■
4.3 Availability of public information*	20	2.43	■
4.4 Electronic communication with local authorities*	22	2.25	■
4.5 Law enforcement in the local court*	21	2.11	■
4.6 Impact of corruption on authorities*	4	2.22	■
4.7 Protection of private property*	24	1.33	■
4.8 Interest of the state institutions in the region*	18	2.00	■
4.9 Impact of authorities*	24	1.78	■
4.10 Economic management of local authorities*	23	2.00	■
4.11 Impact of trade unions on doing business*	7	3.00	■

- Strong competitive **advantage** of region
- Strong competitive **disadvantage** of region
- Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	21	3.05	■
5.1 Density of 1st class roads	14	3.04	■
5.2 Density of 2nd class roads	9	4.23	■
5.3 Density of 3rd class roads	13	4.11	■
5.4 Density of 4th class roads	21	2.73	■
5.5 Density of road infrastructure*	23	1.56	■
5.6 Quality of road infrastructure*	24	1.22	■
5.7 Number of bank branches	19	2.50	■
5.8 Availability of banks*	24	3.00	■
5.9 Number of post offices	10	3.63	■
5.10 Availability of post offices*	23	3.22	■
5.11 Number of hospital beds	-	-	
5.12 Availability of medical facilities*	22	1.89	■
6th pillar: Technology	22	2.93	■
6.1 Innovative companies	22	3.66	■
6.2 Technical companies	18	2.05	■
6.3 Scientific and technical companies	2	5.46	■
6.4 Scientific and technical specialists	23	2.02	■
6.5 Volume of innovative products	-	-	
6.6 Foreign direct investments	14	3.13	■
6.7 Capital investments	24	2.56	■
6.8 Technology level*	13	2.78	■
6.9 Ability of businesses to use latest technologies*	23	2.67	■
6.10 Costs of providing mobile services	-	-	
6.11 Costs of providing internet access	-	-	
6.12 Usage of internet services by businesses*	11	3.44	■
6.13 Usage of personal motor vehicles*	24	1.44	■
6.14 Usage of commercial motor vehicles*	24	2.56	■
6.15 Information on the supply of goods and services*	12	3.67	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	24	2.41	■
7.1 Natural population growth	24	1.00	■
7.2 Migration of residents	23	1.20	■
7.3 Unemployment	22	1.52	■
7.4 Perception of unemployment*	24	1.78	■
7.5 Average age of unemployed persons	1	5.74	■
7.6 Perception of age structure of unemployment*	22	2.56	■
7.7 Average duration of unemployment	18	2.75	■
7.8 Perception of long-term unemployment*	6	3.56	■
7.9 Vacant working positions	24	1.46	■
7.10 Availability of free labor*	4	4.44	■
7.11 Average monthly salary	9	3.75	■
7.12 Wage expectations of jobseekers*	15	2.67	■
7.13 Migration of skilled labor*	24	1.33	■
7.14 Discipline and diligence of employees*	14	3.56	■
7.15 Employee motivation for productivity increase*	23	3.22	■
7.16 Fairness in employee selection*	4	2.44	■
8th pillar: Education	24	2.37	■
8.1 Level of education*	24	2.22	■
8.2 Mother language skills*	24	1.67	■
8.3 Foreign language skills*	24	1.33	■
8.4 Natural science skills*	21	2.20	■
8.5 Connection of vocational schools and labor market*	10	2.00	■
8.6 Qualification of employees*	24	2.56	■
8.7 Qualification of jobseekers*	20	2.00	■
8.8 Availability of highly skilled workforce*	23	2.44	■
8.9 Availability of partially skilled workforce*	6	4.56	■
8.10 Availability of unskilled workforce*	3	5.33	■
8.11 Density of secondary schools	23	1.80	■
8.12 Secondary schools students	24	1.19	■
8.13 Density of vocational schools	19	2.86	■
8.14 Vocational schools students	24	1.21	■
8.15 Density of institutions of higher education	21	2.20	■
8.16 Higher education students	20	2.46	■



Population	2,534,174
Area	21,831 km ²

Population density	116 inhab. / km ²
Unemployment rate	8.6 %
Average monthly wage	3,646 ₴

Region overview

Lviv region is located in the west part of Ukraine and borders with Poland. The region's population is 2.5 m inhabitants that live on the area of 21.8 thousand km² (the region has one of the highest indexes of population density - 116 inhabitants per thousand km). The most important sectors of industrial production are food industry, petrochemical, pulp and paper, wood processing industry, engineering and metalworking, electricity. Natural conditions and rich historical heritage promote to the high tourist and recreational potential of the region. The transport system of the region is highly developed due to convenient geographical location.

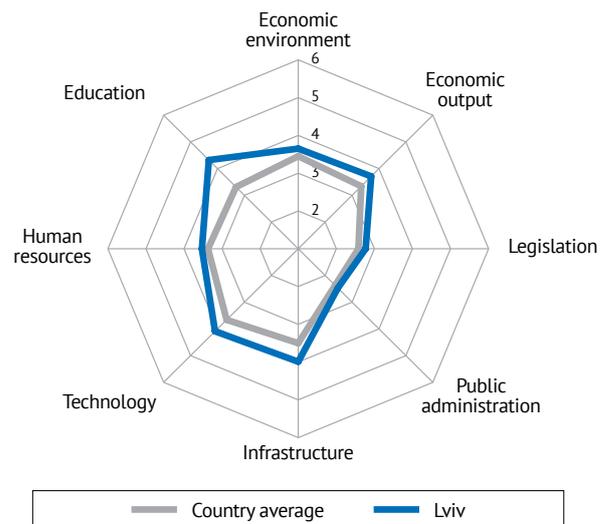
Lviv region takes the 1st place on education index, the 2nd place on infrastructure index and the 7th place on economic activity index. The region takes the 4th place on RBEI ranking. The main advantages of the region are: high potential of tourism development, very good mother

language and foreign language skills, high level of education and high quality of regional production. The main disadvantages of the region are: low level of the competitiveness in industry, poorly organized labor market, high level of corruption among private businesses.

Recommendations: use of the benefits of quality education in the field of production and business development, use of the benefits of active tourism to improve the infrastructure and attract foreign investments, reducing of the pressure on SMEs, legal fighting against corruption.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	4	3.67	3.30
Economic activity	7	3.68	3.39
Economic environment	7	3.65	3.45
Economic output	6	3.71	3.34
Public administration and legislation	5	2.59	2.45
Legislation	7	2.77	2.58
Public administration	6	2.47	2.37
Technology and infrastructure	4	4.05	3.60
Infrastructure	2	3.99	3.50
Technology	5	4.09	3.66
Education and human resources	5	3.79	3.35
Human resources	6	3.53	3.37
Education	1	4.32	3.31



Main competitive advantages

Potential for tourism development	2.28	<div style="width: 80%;"></div>
Mother language skills	1.86	<div style="width: 60%;"></div>
Level of education	1.13	<div style="width: 30%;"></div>
Environmental friendliness of production	0.94	<div style="width: 20%;"></div>
Impact of region location on doing business	0.89	<div style="width: 18%;"></div>

Main competitive disadvantages

Level of competitiveness in industry	-0.88	<div style="width: 40%; background-color: yellow;"></div>
Connection of vocational schools and labor market	-0.72	<div style="width: 30%; background-color: yellow;"></div>
Development potential of businesses	-0.54	<div style="width: 20%; background-color: yellow;"></div>
Fairness in employee selection	-0.53	<div style="width: 20%; background-color: yellow;"></div>
Bureaucracy and delays in the offices	-0.47	<div style="width: 18%; background-color: yellow;"></div>

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	7	3.65	■
1.1 Population density	2	4.97	■
1.2 Urban population	14	4.29	■
1.3 Economically active population	19	2.57	■
1.4 Number of companies	9	4.05	■
1.5 Multinational and foreign companies*	2	2.85	■
1.6 Impact of the informal economy on doing business*	3	2.55	■
1.7 Level of corruption among private businesses*	9	2.50	■
1.8 Level of competitiveness in services*	6	3.80	■
1.9 Level of competitiveness in industry*	16	2.40	■
1.10 Reliability of business partners*	16	3.15	■
1.11 Availability of financial and capital resources*	5	2.10	■
1.12 Availability of necessary materials and services*	6	3.10	■
1.13 Impact of region location on doing business*	5	4.75	■
1.14 Impact of natural conditions on doing business*	10	5.15	■
1.15 Current business conditions*	10	2.20	■
1.16 Change of business conditions in recent years*	1	2.40	■
1.17 Potential for tourism development*	2	5.55	■
2nd pillar: Economic output	6	3.71	■
2.1 Development potential of businesses*	19	2.55	■
2.2 Profitability and productivity of businesses*	11	2.60	■
2.3 Gross added value	10	3.70	■
2.4 Volume of sales industrial products	14	3.34	■
2.5 Balance of goods	6	3.81	■
2.6 Balance of services	1	5.81	■
2.7 Foreign turnover of goods	13	3.02	■
2.8 Foreign turnover of services	1	5.84	■
2.9 Profitable companies	18	2.60	■
2.10 Financial results before taxation	13	2.91	■
2.11 Residential construction	3	4.44	■
2.12 Environmental friendliness of production*	8	4.45	■
2.13 Emissions of pollutants	16	2.82	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	7	2.77	■
3.1 Barriers to business development*	11	2.30	■
3.2 Perception of local taxes*	12	3.00	■
3.3 Business development prospects*	2	3.00	■
4th pillar: Public administration	6	2.47	■
4.1 Fulfillment of tasks by local authorities*	14	2.35	■
4.2 Bureaucracy and delays in the offices*	13	2.20	■
4.3 Availability of public information*	4	2.94	■
4.4 Electronic communication with local authorities*	9	2.72	■
4.5 Law enforcement in the local court*	11	2.40	■
4.6 Impact of corruption on authorities*	9	2.15	■
4.7 Protection of private property*	4	2.70	■
4.8 Interest of the state institutions in the region*	8	2.70	■
4.9 Impact of authorities*	14	2.30	■
4.10 Economic management of local authorities*	5	2.75	■
4.11 Impact of trade unions on doing business*	7	3.00	■

- Strong competitive advantage of region
- Strong competitive disadvantage of region
- Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	2	3.99	■
5.1 Density of 1st class roads	18	2.71	■
5.2 Density of 2nd class roads	1	5.80	■
5.3 Density of 3rd class roads	4	5.01	■
5.4 Density of 4th class roads	3	4.94	■
5.5 Density of road infrastructure*	9	2.25	■
5.6 Quality of road infrastructure*	4	2.15	■
5.7 Number of bank branches	5	4.49	■
5.8 Availability of banks*	7	4.80	■
5.9 Number of post offices	3	5.14	■
5.10 Availability of post offices*	19	3.55	■
5.11 Number of hospital beds	3	3.60	■
5.12 Availability of medical facilities*	5	2.55	■
6th pillar: Technology	5	4.09	■
6.1 Innovative companies	9	4.63	■
6.2 Technical companies	16	2.41	■
6.3 Scientific and technical companies	4	4.92	■
6.4 Scientific and technical specialists	3	4.47	■
6.5 Volume of innovative products	12	2.78	■
6.6 Foreign direct investments	5	4.29	■
6.7 Capital investments	8	4.10	■
6.8 Technology level*	9	2.90	■
6.9 Ability of businesses to use latest technologies*	6	3.60	■
6.10 Costs of providing mobile services	14	2.99	■
6.11 Costs of providing internet access	2	5.63	■
6.12 Usage of internet services by businesses*	2	4.10	■
6.13 Usage of personal motor vehicles*	12	2.25	■
6.14 Usage of commercial motor vehicles*	6	4.35	■
6.15 Information on the supply of goods and services*	3	4.10	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	6	3.53	■
7.1 Natural population growth	7	2.84	■
7.2 Migration of residents	7	3.51	■
7.3 Unemployment	7	4.75	■
7.4 Perception of unemployment*	4	3.20	■
7.5 Average age of unemployed persons	22	1.51	■
7.6 Perception of age structure of unemployment*	6	3.00	■
7.7 Average duration of unemployment	7	4.14	■
7.8 Perception of long-term unemployment*	14	3.10	■
7.9 Vacant working positions	14	3.27	■
7.10 Availability of free labor*	15	3.60	■
7.11 Average monthly salary	10	3.71	■
7.12 Wage expectations of jobseekers*	13	2.73	■
7.13 Migration of skilled labor*	10	2.20	■
7.14 Discipline and diligence of employees*	10	3.75	■
7.15 Employee motivation for productivity increase*	10	3.90	■
7.16 Fairness in employee selection*	1	2.40	■
8th pillar: Education	1	4.32	■
8.1 Level of education*	2	4.55	■
8.2 Mother language skills*	5	5.35	■
8.3 Foreign language skills*	3	3.05	■
8.4 Natural science skills*	13	2.78	■
8.5 Connection of vocational schools and labor market*	21	1.75	■
8.6 Qualification of employees*	5	3.40	■
8.7 Qualification of jobseekers*	10	2.35	■
8.8 Availability of highly skilled workforce*	11	3.10	■
8.9 Availability of partially skilled workforce*	16	4.00	■
8.10 Availability of unskilled workforce*	15	4.80	■
8.11 Density of secondary schools	1	5.82	■
8.12 Secondary schools students	9	3.43	■
8.13 Density of vocational schools	1	5.77	■
8.14 Vocational schools students	1	5.66	■
8.15 Density of institutions of higher education	3	5.42	■
8.16 Higher education students	2	4.87	■

Mykolaiv

rank: **7** of 24



Population	1,158,207
Area	24,585 km ²

Population density	47 inhab. / km ²
Unemployment rate	9.1 %
Average monthly wage	3,984 ₴

Region overview

Mykolaiv region is located in the south of Ukraine with the access to the Black Sea. The area of the region is 24.6 thousand km², and its population is 1.2m people. The region's contribution to GDP is 2.23%.

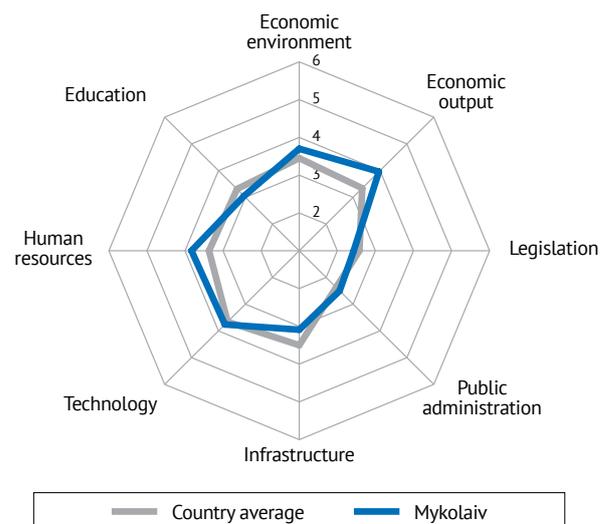
Natural and climatic conditions of the region promote to significant development of crop agriculture. The industry is represented by production in the area of shipbuilding, power engineering, alumina, electricity and food.

Mykolaiv region takes the 7th place in the overall ranking of regional competitiveness. The region got particularly high scores for the indexes of economic environment (6th place out of 24), economic outcome (3rd of 24) and state management (4th of 24). The region got relatively low scores for such directions as legislation and infrastructure (20th of 24) and education (15th of 24). The favorable factors of the region are:

comfortable location and natural conditions for leading business, the density of road infrastructure, high level of competition in the industry and high productivity in business. The adverse factors of the region are: the low level of competition in the sector of services, low level of knowledge of both native and foreign languages, low qualifications of people looking for job, low level of the presence of foreign companies. Recommendations: quality improvement of the education, creating of favorable conditions for foreign companies' access to the regional market, representation of the regional companies at international exhibitions, creation of the innovative productions.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	7	3.50	3.30
Economic activity	3	3.86	3.39
Economic environment	6	3.70	3.45
Economic output	3	3.96	3.34
Public administration and legislation	13	2.47	2.45
Legislation	20	2.43	2.58
Public administration	4	2.50	2.37
Technology and infrastructure	10	3.51	3.60
Infrastructure	20	3.09	3.50
Technology	8	3.76	3.66
Education and human resources	6	3.57	3.35
Human resources	5	3.83	3.37
Education	15	3.05	3.31



Main competitive advantages

Advantage	Score
Impact of region location on doing business	0.99
Density of road infrastructure	0.83
Profitability and productivity of businesses	0.67
Impact of natural conditions on doing business	0.65
Level of competitiveness in industry	0.62

Main competitive disadvantages

Disadvantage	Score
Level of competitiveness in services	-1.02
Mother language skills	-0.97
Foreign language skills	-0.87
Qualification of jobseekers	-0.79
Multinational and foreign companies	-0.77

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	6	3.70	■
1.1 Population density	19	2.50	■
1.2 Urban population	7	4.63	■
1.3 Economically active population	5	4.65	■
1.4 Number of companies	4	4.96	■
1.5 Multinational and foreign companies*	19	1.76	■
1.6 Impact of the informal economy on doing business*	2	2.76	■
1.7 Level of corruption among private businesses*	1	3.24	■
1.8 Level of competitiveness in services*	23	2.29	■
1.9 Level of competitiveness in industry*	4	3.86	■
1.10 Reliability of business partners*	4	3.38	■
1.11 Availability of financial and capital resources*	2	2.24	■
1.12 Availability of necessary materials and services*	4	3.19	■
1.13 Impact of region location on doing business*	4	4.81	■
1.14 Impact of natural conditions on doing business*	7	5.24	■
1.15 Current business conditions*	13	2.05	■
1.16 Change of business conditions in recent years*	7	2.05	■
1.17 Potential for tourism development*	8	3.76	■
2nd pillar: Economic output	3	3.96	■
2.1 Development potential of businesses*	5	3.38	■
2.2 Profitability and productivity of businesses*	3	3.43	■
2.3 Gross added value	7	3.86	■
2.4 Volume of sales industrial products	9	3.87	■
2.5 Balance of goods	3	5.30	■
2.6 Balance of services	2	5.18	■
2.7 Foreign turnover of goods	4	4.89	■
2.8 Foreign turnover of services	2	5.37	■
2.9 Profitable companies	4	4.81	■
2.10 Financial results before taxation	16	2.70	■
2.11 Residential construction	18	2.82	■
2.12 Environmental friendliness of production*	20	2.81	■
2.13 Emissions of pollutants	3	3.27	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	20	2.43	■
3.1 Barriers to business development*	21	2.00	■
3.2 Perception of local taxes*	22	2.81	■
3.3 Business development prospects*	15	2.48	■
4th pillar: Public administration	4	2.50	■
4.1 Fulfillment of tasks by local authorities*	11	2.38	■
4.2 Bureaucracy and delays in the offices*	10	2.33	■
4.3 Availability of public information*	6	2.86	■
4.4 Electronic communication with local authorities*	17	2.38	■
4.5 Law enforcement in the local court*	2	2.71	■
4.6 Impact of corruption on authorities*	3	2.29	■
4.7 Protection of private property*	5	2.67	■
4.8 Interest of the state institutions in the region*	18	2.00	■
4.9 Impact of authorities*	12	2.48	■
4.10 Economic management of local authorities*	11	2.48	■
4.11 Impact of trade unions on doing business*	7	3.00	■

- Strong competitive **advantage** of region
- Strong competitive **disadvantage** of region
- Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	20	3.09	■
5.1 Density of 1st class roads	12	3.27	■
5.2 Density of 2nd class roads	13	3.69	■
5.3 Density of 3rd class roads	22	3.27	■
5.4 Density of 4th class roads	19	3.04	■
5.5 Density of road infrastructure*	1	3.33	■
5.6 Quality of road infrastructure*	7	1.90	■
5.7 Number of bank branches	13	3.16	■
5.8 Availability of banks*	22	4.29	■
5.9 Number of post offices	23	1.95	■
5.10 Availability of post offices*	7	3.95	■
5.11 Number of hospital beds	10	3.19	■
5.12 Availability of medical facilities*	18	2.05	■
6th pillar: Technology	8	3.76	■
6.1 Innovative companies	2	5.56	■
6.2 Technical companies	9	3.34	■
6.3 Scientific and technical companies	8	4.25	■
6.4 Scientific and technical specialists	8	3.66	■
6.5 Volume of innovative products	18	1.81	■
6.6 Foreign direct investments	16	3.01	■
6.7 Capital investments	6	4.11	■
6.8 Technology level*	4	3.43	■
6.9 Ability of businesses to use latest technologies*	2	4.00	■
6.10 Costs of providing mobile services	3	4.94	■
6.11 Costs of providing internet access	3	4.44	■
6.12 Usage of internet services by businesses*	13	3.33	■
6.13 Usage of personal motor vehicles*	17	2.10	■
6.14 Usage of commercial motor vehicles*	19	4.05	■
6.15 Information on the supply of goods and services*	21	3.24	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	5	3.83	■
7.1 Natural population growth	9	2.70	■
7.2 Migration of residents	13	2.67	■
7.3 Unemployment	9	4.36	■
7.4 Perception of unemployment*	14	2.43	■
7.5 Average age of unemployed persons	14	3.64	■
7.6 Perception of age structure of unemployment*	21	2.57	■
7.7 Average duration of unemployment	14	3.35	■
7.8 Perception of long-term unemployment*	3	3.67	■
7.9 Vacant working positions	6	4.41	■
7.10 Availability of free labor*	6	4.14	■
7.11 Average monthly salary	5	4.56	■
7.12 Wage expectations of jobseekers*	6	2.94	■
7.13 Migration of skilled labor*	5	2.62	■
7.14 Discipline and diligence of employees*	8	3.81	■
7.15 Employee motivation for productivity increase*	13	3.76	■
7.16 Fairness in employee selection*	3	2.57	■
8th pillar: Education	15	3.05	■
8.1 Level of education*	17	2.95	■
8.2 Mother language skills*	20	2.48	■
8.3 Foreign language skills*	22	1.62	■
8.4 Natural science skills*	9	3.10	■
8.5 Connection of vocational schools and labor market*	17	1.90	■
8.6 Qualification of employees*	19	2.81	■
8.7 Qualification of jobseekers*	23	1.90	■
8.8 Availability of highly skilled workforce*	3	3.33	■
8.9 Availability of partially skilled workforce*	15	4.10	■
8.10 Availability of unskilled workforce*	11	4.95	■
8.11 Density of secondary schools	19	2.57	■
8.12 Secondary schools students	14	3.01	■
8.13 Density of vocational schools	13	3.48	■
8.14 Vocational schools students	4	4.37	■
8.15 Density of institutions of higher education	20	2.28	■
8.16 Higher education students	12	3.58	■

Odesa

rank: **5** of 24



Population	2,390,289
Area	33,314 km ²

Population density	72 inhab. / km ²
Unemployment rate	6.7 %
Average monthly wage	3,897 ₴

Region overview

Odesa region is the largest region of Ukraine (with area about 33.3 thousand km²) that is located in the southwest of the country. It borders with Romania and Moldova and has an access to the Black Sea. The region's contribution to GDP is 4.72%.

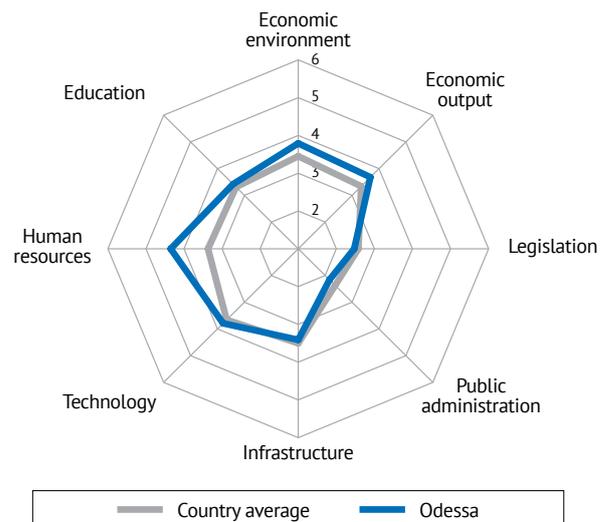
The main industrial sectors of Odesa region are engineering and metalworking, fuel, chemical and petrochemical industries as well as food, trade and agriculture industry. Odesa region is located at the intersection of international waterways that provides a strong transit potential to the region and contributes to the development of shipbuilding. Natural and climate factors create favorable conditions for the growth of tourism and recreation industry.

Odesa region takes the 1st place on human resources index, the 4th place on economic environment index and the 7th place on technology index. It takes the 5th place over the country on regional GDP and has strong potential for regional growth. The main advantages of the region are: high potential of tourism development, good impact of region location and national conditions on doing business, high competition in production and services. The adverse factors of the region are low mother language skills, bad quality of road infrastructure, high level of corruption among private businesses.

Recommendations: development of high technological and innovative businesses, attracting of foreign investment, improvement of the road infrastructure and the tourism industry, legal fighting against corruption.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	5	3.59	3.30
Economic activity	6	3.72	3.39
Economic environment	4	3.79	3.45
Economic output	7	3.68	3.34
Public administration and legislation	20	2.28	2.45
Legislation	17	2.47	2.58
Public administration	21	2.16	2.37
Technology and infrastructure	9	3.63	3.60
Infrastructure	10	3.41	3.50
Technology	7	3.79	3.66
Education and human resources	2	4.04	3.35
Human resources	1	4.35	3.37
Education	9	3.42	3.31



Main competitive advantages

Potential for tourism development	2.05	<div style="width: 100%;"></div>
Impact of region location on doing business	1.11	<div style="width: 55%;"></div>
Information on the supply of goods and services	0.90	<div style="width: 45%;"></div>
Impact of natural conditions on doing business	0.79	<div style="width: 40%;"></div>
Availability of banks	0.69	<div style="width: 35%;"></div>

Main competitive disadvantages

Mother language skills	-0.92	<div style="width: 46%; background-color: yellow;"></div>
Quality of road infrastructure	-0.92	<div style="width: 46%; background-color: yellow;"></div>
Density of road infrastructure	-0.87	<div style="width: 43.5%; background-color: yellow;"></div>
Development potential of businesses	-0.82	<div style="width: 41%; background-color: yellow;"></div>
Profitability and productivity of businesses	-0.73	<div style="width: 36.5%; background-color: yellow;"></div>

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	4	3.79	■
1.1 Population density	10	3.70	■
1.2 Urban population	8	4.56	■
1.3 Economically active population	16	2.91	■
1.4 Number of companies	2	5.48	■
1.5 Multinational and foreign companies*	14	1.95	■
1.6 Impact of the informal economy on doing business*	15	2.10	■
1.7 Level of corruption among private businesses*	7	2.55	■
1.8 Level of competitiveness in services*	13	3.15	■
1.9 Level of competitiveness in industry*	5	3.55	■
1.10 Reliability of business partners*	16	3.15	■
1.11 Availability of financial and capital resources*	19	1.85	■
1.12 Availability of necessary materials and services*	7	3.05	■
1.13 Impact of region location on doing business*	1	4.95	■
1.14 Impact of natural conditions on doing business*	2	5.40	■
1.15 Current business conditions*	21	1.80	■
1.16 Change of business conditions in recent years*	2	2.05	■
1.17 Potential for tourism development*	4	5.30	■
2nd pillar: Economic output	7	3.68	■
2.1 Development potential of businesses*	22	2.25	■
2.2 Profitability and productivity of businesses*	22	2.05	■
2.3 Gross added value	6	4.01	■
2.4 Volume of sales industrial products	19	3.16	■
2.5 Balance of goods	7	3.76	■
2.6 Balance of services	3	5.10	■
2.7 Foreign turnover of goods	8	3.96	■
2.8 Foreign turnover of services	3	5.36	■
2.9 Profitable companies	11	3.75	■
2.10 Financial results before taxation	20	2.11	■
2.11 Residential construction	8	3.90	■
2.12 Environmental friendliness of production*	14	3.55	■
2.13 Emissions of pollutants	4	3.25	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	17	2.47	■
3.1 Barriers to business development*	8	2.35	■
3.2 Perception of local taxes*	14	2.95	■
3.3 Business development prospects*	20	2.10	■
4th pillar: Public administration	21	2.16	■
4.1 Fulfillment of tasks by local authorities*	23	2.00	■
4.2 Bureaucracy and delays in the offices*	20	1.95	■
4.3 Availability of public information*	15	2.57	■
4.4 Electronic communication with local authorities*	19	2.36	■
4.5 Law enforcement in the local court*	11	2.40	■
4.6 Impact of corruption on authorities*	23	1.85	■
4.7 Protection of private property*	20	2.00	■
4.8 Interest of the state institutions in the region*	11	2.30	■
4.9 Impact of authorities*	22	1.95	■
4.10 Economic management of local authorities*	22	2.15	■
4.11 Impact of trade unions on doing business*	7	3.00	■

- Strong competitive **advantage** of region
- Strong competitive **disadvantage** of region
- Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	10	3.41	■
5.1 Density of 1st class roads	6	4.12	■
5.2 Density of 2nd class roads	14	3.51	■
5.3 Density of 3rd class roads	23	3.06	■
5.4 Density of 4th class roads	11	3.77	■
5.5 Density of road infrastructure*	22	1.65	■
5.6 Quality of road infrastructure*	23	1.30	■
5.7 Number of bank branches	6	4.12	■
5.8 Availability of banks*	2	4.95	■
5.9 Number of post offices	17	2.94	■
5.10 Availability of post offices*	13	3.80	■
5.11 Number of hospital beds	13	3.08	■
5.12 Availability of medical facilities*	12	2.15	■
6th pillar: Technology	7	3.79	■
6.1 Innovative companies	8	4.66	■
6.2 Technical companies	20	1.73	■
6.3 Scientific and technical companies	13	3.94	■
6.4 Scientific and technical specialists	5	4.05	■
6.5 Volume of innovative products	6	3.74	■
6.6 Foreign direct investments	3	4.42	■
6.7 Capital investments	12	3.81	■
6.8 Technology level*	11	2.80	■
6.9 Ability of businesses to use latest technologies*	15	3.25	■
6.10 Costs of providing mobile services	-	-	-
6.11 Costs of providing internet access	-	-	-
6.12 Usage of internet services by businesses*	15	3.25	■
6.13 Usage of personal motor vehicles*	11	2.30	■
6.14 Usage of commercial motor vehicles*	6	4.35	■
6.15 Information on the supply of goods and services*	1	4.45	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	1	4.35	■
7.1 Natural population growth	5	3.02	■
7.2 Migration of residents	8	3.26	■
7.3 Unemployment	1	5.83	■
7.4 Perception of unemployment*	8	2.95	■
7.5 Average age of unemployed persons	2	5.38	■
7.6 Perception of age structure of unemployment*	13	2.85	■
7.7 Average duration of unemployment	1	5.79	■
7.8 Perception of long-term unemployment*	18	2.85	■
7.9 Vacant working positions	7	4.32	■
7.10 Availability of free labor*	8	3.90	■
7.11 Average monthly salary	6	4.25	■
7.12 Wage expectations of jobseekers*	22	2.46	■
7.13 Migration of skilled labor*	4	2.65	■
7.14 Discipline and diligence of employees*	19	3.25	■
7.15 Employee motivation for productivity increase*	14	3.65	■
7.16 Fairness in employee selection*	1	2.65	■
8th pillar: Education	9	3.42	■
8.1 Level of education*	13	3.00	■
8.2 Mother language skills*	19	2.55	■
8.3 Foreign language skills*	9	2.15	■
8.4 Natural science skills*	15	2.67	■
8.5 Connection of vocational schools and labor market*	14	1.95	■
8.6 Qualification of employees*	10	3.05	■
8.7 Qualification of jobseekers*	7	2.50	■
8.8 Availability of highly skilled workforce*	6	3.20	■
8.9 Availability of partially skilled workforce*	9	4.40	■
8.10 Availability of unskilled workforce*	18	4.75	■
8.11 Density of secondary schools	15	3.03	■
8.12 Secondary schools students	10	3.35	■
8.13 Density of vocational schools	15	3.24	■
8.14 Vocational schools students	18	3.01	■
8.15 Density of institutions of higher education	7	4.04	■
8.16 Higher education students	3	4.73	■



Population	1,438,948
Area	28,750 km ²

Population density	50 inhab. / km ²
Unemployment rate	11.5 %
Average monthly wage	3,783 ₴

Region overview

Poltava region is located in the central part of Ukraine and occupies 4.8% territory of Ukraine. The population of the region is 1.4m people. The region's contribution to GDP is 4.40%.

The economy of the region is represented by agricultural and industrial production. The most important sectors of industrial production are fuel, food industry, machine building and metallurgy.

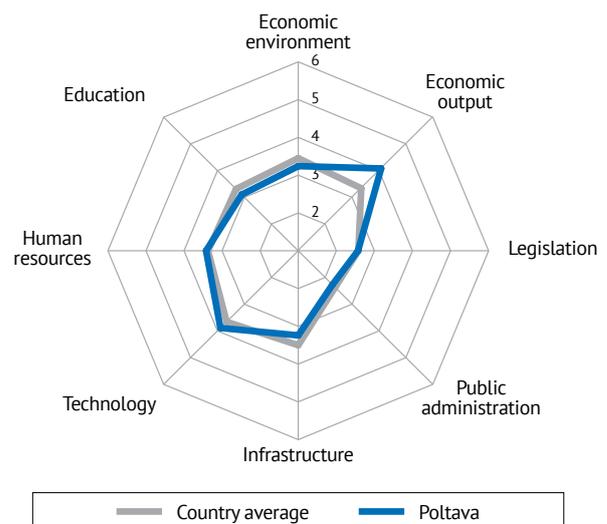
Poltava region takes the 8th place in overall ranking. The high scores it has for economic output (the 1st place) and human resources (the 8th place). The main competitive advantages of the region are: environmental friendliness of production, the availability of partially skilled workforce and free labor. At the same time Poltava region has high potential in tourism because of its interesting historic and authentic Ukrainian heritage.

The important disadvantages of the region are: the low level of education despite of good knowledge of mother language, the low interest of the state institutions in the region, high density of the roads, low qualification of jobseekers and as a result - a high level of unemployment.

Recommendations: development of high technological, innovative businesses and tourism industry, improvement of the educational system and youth involvement in social projects that will help to improve foreign language, implementation of the projects to improve infrastructure and to facilitate small businesses, attracting of foreign investment.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	8	3.42	3.30
Economic activity	5	3.75	3.39
Economic environment	9	3.24	3.45
Economic output	1	4.08	3.34
Public administration and legislation	16	2.39	2.45
Legislation	13	2.57	2.58
Public administration	16	2.27	2.37
Technology and infrastructure	7	3.65	3.60
Infrastructure	18	3.24	3.50
Technology	6	3.89	3.66
Education and human resources	10	3.31	3.35
Human resources	8	3.42	3.37
Education	14	3.10	3.31



Main competitive advantages

Advantage	Score
Environmental friendliness of production	1.05
Availability of partially skilled workforce	0.86
Availability of free labor	0.74
Perception of long-term unemployment	0.47
Availability of unskilled workforce	0.46

Main competitive disadvantages

Disadvantage	Score
Level of education	-1.06
Interest of the state institutions in the region	-1.00
Density of road infrastructure	-0.93
Qualification of jobseekers	-0.87
Perception of unemployment	-0.80

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	9	3.24	■
1.1 Population density	18	2.68	■
1.2 Urban population	12	4.33	■
1.3 Economically active population	6	4.42	■
1.4 Number of companies	10	3.88	■
1.5 Multinational and foreign companies*	20	1.75	■
1.6 Impact of the informal economy on doing business*	9	2.25	■
1.7 Level of corruption among private businesses*	9	2.50	■
1.8 Level of competitiveness in services*	18	3.00	■
1.9 Level of competitiveness in industry*	11	2.90	■
1.10 Reliability of business partners*	10	3.25	■
1.11 Availability of financial and capital resources*	10	2.05	■
1.12 Availability of necessary materials and services*	15	2.65	■
1.13 Impact of region location on doing business*	19	3.45	■
1.14 Impact of natural conditions on doing business*	19	4.85	■
1.15 Current business conditions*	18	1.90	■
1.16 Change of business conditions in recent years*	4	2.15	■
1.17 Potential for tourism development*	17	2.50	■
2nd pillar: Economic output	1	4.08	■
2.1 Development potential of businesses*	15	2.70	■
2.2 Profitability and productivity of businesses*	22	2.05	■
2.3 Gross added value	2	5.45	■
2.4 Volume of sales industrial products	2	5.45	■
2.5 Balance of goods	4	3.98	■
2.6 Balance of services	22	1.55	■
2.7 Foreign turnover of goods	6	4.66	■
2.8 Foreign turnover of services	7	3.88	■
2.9 Profitable companies	7	4.31	■
2.10 Financial results before taxation	7	3.60	■
2.11 Residential construction	12	3.12	■
2.12 Environmental friendliness of production*	7	4.50	■
2.13 Emissions of pollutants	11	2.99	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	13	2.57	■
3.1 Barriers to business development*	12	2.25	■
3.2 Perception of local taxes*	2	3.25	■
3.3 Business development prospects*	18	2.20	■
4th pillar: Public administration	16	2.27	■
4.1 Fulfillment of tasks by local authorities*	20	2.15	■
4.2 Bureaucracy and delays in the offices*	8	2.40	■
4.3 Availability of public information*	5	2.94	■
4.4 Electronic communication with local authorities*	13	2.57	■
4.5 Law enforcement in the local court*	22	2.05	■
4.6 Impact of corruption on authorities*	6	2.20	■
4.7 Protection of private property*	16	2.20	■
4.8 Interest of the state institutions in the region*	23	1.70	■
4.9 Impact of authorities*	19	2.20	■
4.10 Economic management of local authorities*	13	2.35	■
4.11 Impact of trade unions on doing business*	6	3.20	■

- Strong competitive **advantage** of region
- Strong competitive **disadvantage** of region
- Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	18	3.24	■
5.1 Density of 1st class roads	10	3.51	■
5.2 Density of 2nd class roads	21	2.93	■
5.3 Density of 3rd class roads	18	3.67	■
5.4 Density of 4th class roads	1	5.69	■
5.5 Density of road infrastructure*	24	1.55	■
5.6 Quality of road infrastructure*	20	1.40	■
5.7 Number of bank branches	11	3.51	■
5.8 Availability of banks*	18	4.50	■
5.9 Number of post offices	13	3.40	■
5.10 Availability of post offices*	24	3.20	■
5.11 Number of hospital beds	10	3.19	■
5.12 Availability of medical facilities*	15	2.05	■
6th pillar: Technology	6	3.89	■
6.1 Innovative companies	18	3.83	■
6.2 Technical companies	5	4.51	■
6.3 Scientific and technical companies	14	3.92	■
6.4 Scientific and technical specialists	11	3.44	■
6.5 Volume of innovative products	9	3.29	■
6.6 Foreign direct investments	4	4.36	■
6.7 Capital investments	4	4.46	■
6.8 Technology level*	14	2.60	■
6.9 Ability of businesses to use latest technologies*	20	3.16	■
6.10 Costs of providing mobile services	6	4.26	■
6.11 Costs of providing internet access	9	3.69	■
6.12 Usage of internet services by businesses*	21	2.95	■
6.13 Usage of personal motor vehicles*	20	1.90	■
6.14 Usage of commercial motor vehicles*	20	4.00	■
6.15 Information on the supply of goods and services*	14	3.60	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	8	3.42	■
7.1 Natural population growth	6	2.92	■
7.2 Migration of residents	1	4.40	■
7.3 Unemployment	24	1.27	■
7.4 Perception of unemployment*	23	2.05	■
7.5 Average age of unemployed persons	8	3.90	■
7.6 Perception of age structure of unemployment*	4	3.15	■
7.7 Average duration of unemployment	10	3.89	■
7.8 Perception of long-term unemployment*	4	3.65	■
7.9 Vacant working positions	3	4.99	■
7.10 Availability of free labor*	5	4.40	■
7.11 Average monthly salary	7	4.15	■
7.12 Wage expectations of jobseekers*	2	3.00	■
7.13 Migration of skilled labor*	12	2.15	■
7.14 Discipline and diligence of employees*	15	3.40	■
7.15 Employee motivation for productivity increase*	19	3.50	■
7.16 Fairness in employee selection*	1	2.45	■
8th pillar: Education	14	3.10	■
8.1 Level of education*	23	2.30	■
8.2 Mother language skills*	12	3.85	■
8.3 Foreign language skills*	18	1.70	■
8.4 Natural science skills*	18	2.38	■
8.5 Connection of vocational schools and labor market*	10	2.00	■
8.6 Qualification of employees*	18	2.85	■
8.7 Qualification of jobseekers*	24	1.80	■
8.8 Availability of highly skilled workforce*	8	3.15	■
8.9 Availability of partially skilled workforce*	2	4.90	■
8.10 Availability of unskilled workforce*	8	5.00	■
8.11 Density of secondary schools	17	2.80	■
8.12 Secondary schools students	18	2.60	■
8.13 Density of vocational schools	10	3.81	■
8.14 Vocational schools students	11	3.45	■
8.15 Density of institutions of higher education	16	2.58	■
8.16 Higher education students	8	3.91	■

Rivne

rank: **20** of 24



Population	1,161,811
Area	20,051 km ²

Population density	58 inhab. / km ²
Unemployment rate	10.6 %
Average monthly wage	3,573 ₴

Region overview

Rivne region is located in the north-west part of Ukraine and borders with Belarus. The area of the region is 20.1 thousand km² (3.3% of the territory of Ukraine). The region is one of the least densely populated in Ukraine. The region's contribution to GDP is 1.81 %.

The region has a favorable geographical position and developed transport network. The industry and agriculture play the leading role in the regional economy, but it does not apply to industrially developed regions. The main sectors of agriculture are the production of grain, sugar beet, animal products. The industry is represented by food, chemical industry and electric power.

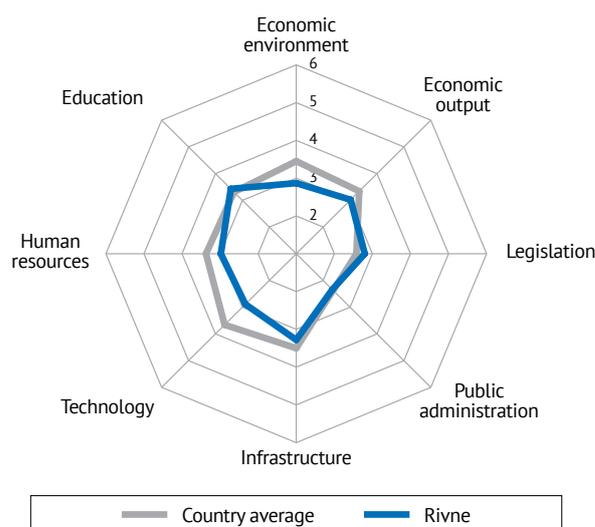
Rivne region takes one of the lowest positions in the ranking. It has the 22nd place both on economic activity index and technology and

infrastructure index. The region takes the average position on education index. It takes the 20th place over the country on regional GDP. The main advantages of the region are: high mother language and foreign language skills, availability of partially skilled and unskilled workforce, good impact of natural conditions on doing business. The adverse factors of the region are: low technology level, low level of competitiveness in industry, low potential for tourism development and low level of education.

Recommendations: development of high technological and innovative businesses, attracting of foreign investment, implementation of programs to support tourism and education, improvement of the infrastructure and facilitation of doing small business.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	20	2.97	3.30
Economic activity	22	2.96	3.39
Economic environment	21	2.87	3.45
Economic output	20	3.02	3.34
Public administration and legislation	10	2.52	2.45
Legislation	5	2.80	2.58
Public administration	14	2.34	2.37
Technology and infrastructure	22	3.04	3.60
Infrastructure	15	3.28	3.50
Technology	24	2.89	3.66
Education and human resources	16	3.13	3.35
Human resources	18	2.98	3.37
Education	8	3.43	3.31



Main competitive advantages

Mother language skills	1.73	<div style="width: 100%;"></div>
Availability of partially skilled workforce	0.77	<div style="width: 77%;"></div>
Availability of unskilled workforce	0.57	<div style="width: 57%;"></div>
Foreign language skills	0.45	<div style="width: 45%;"></div>
Impact of natural conditions on doing business	0.44	<div style="width: 44%;"></div>

Main competitive disadvantages

Technology level	-1.03	<div style="width: 103%;"></div>
Level of competitiveness in industry	-1.01	<div style="width: 101%;"></div>
Potential for tourism development	-0.84	<div style="width: 84%;"></div>
Level of education	-0.80	<div style="width: 80%;"></div>
Usage of personal motor vehicles	-0.63	<div style="width: 63%;"></div>

Subindex I: Economic activity

	Rank	Score	
1st pillar: Economic environment	21	2.87	■
1.1 Population density	16	3.10	■
1.2 Urban population	20	3.64	■
1.3 Economically active population	13	3.40	■
1.4 Number of companies	21	2.74	■
1.5 Multinational and foreign companies*	10	2.30	■
1.6 Impact of the informal economy on doing business*	15	2.10	■
1.7 Level of corruption among private businesses*	6	2.60	■
1.8 Level of competitiveness in services*	9	3.40	■
1.9 Level of competitiveness in industry*	20	2.10	■
1.10 Reliability of business partners*	7	3.30	■
1.11 Availability of financial and capital resources*	12	2.00	■
1.12 Availability of necessary materials and services*	18	2.50	■
1.13 Impact of region location on doing business*	17	3.70	■
1.14 Impact of natural conditions on doing business*	16	4.90	■
1.15 Current business conditions*	12	2.15	■
1.16 Change of business conditions in recent years*	2	2.15	■
1.17 Potential for tourism development*	19	2.25	■
2nd pillar: Economic output	20	3.02	■
2.1 Development potential of businesses*	21	2.30	■
2.2 Profitability and productivity of businesses*	18	2.15	■
2.3 Gross added value	16	3.18	■
2.4 Volume of sales industrial products	12	3.43	■
2.5 Balance of goods	13	3.31	■
2.6 Balance of services	16	3.00	■
2.7 Foreign turnover of goods	19	2.74	■
2.8 Foreign turnover of services	17	2.27	■
2.9 Profitable companies	20	2.34	■
2.10 Financial results before taxation	18	2.52	■
2.11 Residential construction	9	3.86	■
2.12 Environmental friendliness of production*	13	3.70	■
2.13 Emissions of pollutants	2	3.28	■

Subindex II: Public administration and legislation

	Rank	Score	
3rd pillar: Legislation	5	2.80	■
3.1 Barriers to business development*	5	2.50	■
3.2 Perception of local taxes*	14	2.95	■
3.3 Business development prospects*	3	2.95	■
4th pillar: Public administration	14	2.34	■
4.1 Fulfillment of tasks by local authorities*	8	2.50	■
4.2 Bureaucracy and delays in the offices*	5	2.60	■
4.3 Availability of public information*	7	2.85	■
4.4 Electronic communication with local authorities*	5	2.80	■
4.5 Law enforcement in the local court*	22	2.05	■
4.6 Impact of corruption on authorities*	6	2.20	■
4.7 Protection of private property*	20	2.00	■
4.8 Interest of the state institutions in the region*	13	2.15	■
4.9 Impact of authorities*	8	2.55	■
4.10 Economic management of local authorities*	19	2.25	■
4.11 Impact of trade unions on doing business*	7	3.00	■

- Strong competitive **advantage** of region
- Strong competitive **disadvantage** of region
- Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure

	Rank	Score	
5th pillar: Infrastructure	15	3.28	■
5.1 Density of 1st class roads	5	4.20	■
5.2 Density of 2nd class roads	20	3.03	■
5.3 Density of 3rd class roads	24	2.84	■
5.4 Density of 4th class roads	10	3.95	■
5.5 Density of road infrastructure*	12	2.15	■
5.6 Quality of road infrastructure*	5	2.05	■
5.7 Number of bank branches	18	2.63	■
5.8 Availability of banks*	21	4.45	■
5.9 Number of post offices	12	3.44	■
5.10 Availability of post offices*	9	3.90	■
5.11 Number of hospital beds	16	3.00	■
5.12 Availability of medical facilities*	15	2.05	■
6th pillar: Technology	24	2.89	■
6.1 Innovative companies	20	3.77	■
6.2 Technical companies	19	2.05	■
6.3 Scientific and technical companies	10	4.20	■
6.4 Scientific and technical specialists	21	2.26	■
6.5 Volume of innovative products	20	1.46	■
6.6 Foreign direct investments	17	3.00	■
6.7 Capital investments	14	3.63	■
6.8 Technology level*	20	2.10	■
6.9 Ability of businesses to use latest technologies*	6	3.60	■
6.10 Costs of providing mobile services	18	1.87	■
6.11 Costs of providing internet access	19	2.06	■
6.12 Usage of internet services by businesses*	7	3.60	■
6.13 Usage of personal motor vehicles*	20	1.90	■
6.14 Usage of commercial motor vehicles*	10	4.25	■
6.15 Information on the supply of goods and services*	6	3.75	■

Subindex IV: Education and human resources

	Rank	Score	
7th pillar: Human resources	18	2.98	■
7.1 Natural population growth	18	2.28	■
7.2 Migration of residents	3	4.29	■
7.3 Unemployment	17	2.75	■
7.4 Perception of unemployment*	13	2.55	■
7.5 Average age of unemployed persons	24	1.23	■
7.6 Perception of age structure of unemployment*	19	2.70	■
7.7 Average duration of unemployment	22	1.70	■
7.8 Perception of long-term unemployment*	17	2.95	■
7.9 Vacant working positions	11	3.55	■
7.10 Availability of free labor*	20	3.25	■
7.11 Average monthly salary	11	3.68	■
7.12 Wage expectations of jobseekers*	23	2.38	■
7.13 Migration of skilled labor*	12	2.15	■
7.14 Discipline and diligence of employees*	22	3.20	■
7.15 Employee motivation for productivity increase*	20	3.40	■
7.16 Fairness in employee selection*	1	2.75	■
8th pillar: Education	8	3.43	■
8.1 Level of education*	22	2.45	■
8.2 Mother language skills*	6	5.05	■
8.3 Foreign language skills*	5	2.80	■
8.4 Natural science skills*	19	2.33	■
8.5 Connection of vocational schools and labor market*	20	1.80	■
8.6 Qualification of employees*	13	2.95	■
8.7 Qualification of jobseekers*	15	2.25	■
8.8 Availability of highly skilled workforce*	12	3.05	■
8.9 Availability of partially skilled workforce*	5	4.70	■
8.10 Availability of unskilled workforce*	8	5.00	■
8.11 Density of secondary schools	8	3.75	■
8.12 Secondary schools students	1	5.45	■
8.13 Density of vocational schools	16	3.24	■
8.14 Vocational schools students	2	4.86	■
8.15 Density of institutions of higher education	15	2.66	■
8.16 Higher education students	10	3.84	■

Sumy

rank: **13** of 24



Population	1,113,256
Area	23,832 km ²

Population density	47 inhab. / km ²
Unemployment rate	9.5 %
Average monthly wage	3,449 ₴

Region overview

Sumy region is located in northeastern Ukraine and borders with Russia. The region generates 1.92% of Ukrainian GDP. At the same time it has an area about 23.8 thousand km² where 2.6% of the total population Ukraine lives. Mining and production are dominated in the regional industry. It mainly consists of engineering and construction, food industry, agriculture, chemical and petrochemical industries. One third of all Ukrainian hydrocarbons' processing is grouped in Sumy region.

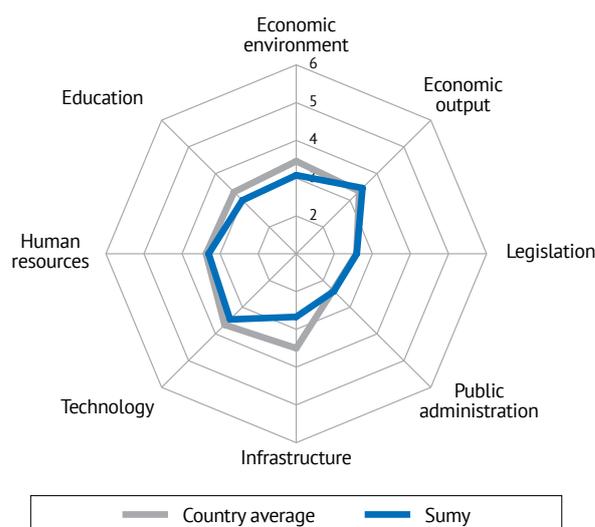
Sumy region takes the competitive place in the overall rankings. The region takes the 13th place over the country on regional GDP, having good scores on economic activity, education and human resources (the 14th place) and public administration and legislation (the 12th place). But technology and infrastructure are weak and undeveloped in the region. The main advantages of the region are: good impact of natural conditions on doing

business, high level of competitiveness in services, ability of businesses to use the latest technologies. The adverse factors of the region that reduce its competitiveness, are: low potential for tourism development, weak mother language and foreign language skills, low qualifications of jobseekers.

Recommendations: attracting of foreign investment, improvement of the infrastructure, tourism industry and educational system, promotion of the programs of learning foreign languages among young people and the business environment.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	13	3.13	3.30
Economic activity	14	3.31	3.39
Economic environment	16	3.08	3.45
Economic output	13	3.46	3.34
Public administration and legislation	12	2.48	2.45
Legislation	12	2.59	2.58
Public administration	9	2.40	2.37
Technology and infrastructure	19	3.17	3.60
Infrastructure	24	2.67	3.50
Technology	12	3.46	3.66
Education and human resources	14	3.20	3.35
Human resources	10	3.30	3.37
Education	17	3.00	3.31



Main competitive advantages

Advantage	Score
Impact of natural conditions on doing business	0.74
Level of competitiveness in services	0.67
Discipline and diligence of employees	0.53
Ability of businesses to use latest technologies	0.52
Availability of post offices	0.48

Main competitive disadvantages

Disadvantage	Score
Potential for tourism development	-1.55
Foreign language skills	-0.75
Mother language skills	-0.71
Qualification of jobseekers	-0.54
Usage of personal motor vehicles	-0.52

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	16	3.08	■
1.1 Population density	20	2.48	■
1.2 Urban population	6	4.64	■
1.3 Economically active population	4	4.72	■
1.4 Number of companies	18	3.06	■
1.5 Multinational and foreign companies*	11	2.12	■
1.6 Impact of the informal economy on doing business*	4	2.35	■
1.7 Level of corruption among private businesses*	13	2.35	■
1.8 Level of competitiveness in services*	5	3.88	■
1.9 Level of competitiveness in industry*	8	3.24	■
1.10 Reliability of business partners*	12	3.24	■
1.11 Availability of financial and capital resources*	7	2.06	■
1.12 Availability of necessary materials and services*	13	2.82	■
1.13 Impact of region location on doing business*	22	3.29	■
1.14 Impact of natural conditions on doing business*	8	5.24	■
1.15 Current business conditions*	11	2.18	■
1.16 Change of business conditions in recent years*	7	2.06	■
1.17 Potential for tourism development*	23	1.59	■
2nd pillar: Economic output	13	3.46	■
2.1 Development potential of businesses*	14	2.82	■
2.2 Profitability and productivity of businesses*	12	2.59	■
2.3 Gross added value	13	3.47	■
2.4 Volume of sales industrial products	8	3.88	■
2.5 Balance of goods	9	3.40	■
2.6 Balance of services	20	2.47	■
2.7 Foreign turnover of goods	10	3.59	■
2.8 Foreign turnover of services	10	3.38	■
2.9 Profitable companies	15	3.15	■
2.10 Financial results before taxation	1	5.12	■
2.11 Residential construction	16	2.90	■
2.12 Environmental friendliness of production*	18	3.29	■
2.13 Emissions of pollutants	7	3.08	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	12	2.59	■
3.1 Barriers to business development*	17	2.18	■
3.2 Perception of local taxes*	18	2.94	■
3.3 Business development prospects*	9	2.65	■
4th pillar: Public administration	9	2.40	■
4.1 Fulfillment of tasks by local authorities*	6	2.56	■
4.2 Bureaucracy and delays in the offices*	7	2.53	■
4.3 Availability of public information*	11	2.65	■
4.4 Electronic communication with local authorities*	21	2.31	■
4.5 Law enforcement in the local court*	6	2.47	■
4.6 Impact of corruption on authorities*	16	2.00	■
4.7 Protection of private property*	8	2.53	■
4.8 Interest of the state institutions in the region*	15	2.12	■
4.9 Impact of authorities*	10	2.53	■
4.10 Economic management of local authorities*	9	2.65	■
4.11 Impact of trade unions on doing business*	22	2.65	■

- Strong competitive **advantage** of region
- Strong competitive **disadvantage** of region
- Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	24	2.67	■
5.1 Density of 1st class roads	24	1.18	■
5.2 Density of 2nd class roads	18	3.13	■
5.3 Density of 3rd class roads	10	4.33	■
5.4 Density of 4th class roads	6	4.31	■
5.5 Density of road infrastructure*	10	2.24	■
5.6 Quality of road infrastructure*	15	1.76	■
5.7 Number of bank branches	17	2.65	■
5.8 Availability of banks*	17	4.59	■
5.9 Number of post offices	21	2.52	■
5.10 Availability of post offices*	3	4.06	■
5.11 Number of hospital beds	6	3.41	■
5.12 Availability of medical facilities*	7	2.35	■
6th pillar: Technology	12	3.46	■
6.1 Innovative companies	7	4.74	■
6.2 Technical companies	6	3.67	■
6.3 Scientific and technical companies	9	4.24	■
6.4 Scientific and technical specialists	4	4.27	■
6.5 Volume of innovative products	1	5.83	■
6.6 Foreign direct investments	18	2.82	■
6.7 Capital investments	18	3.54	■
6.8 Technology level*	6	3.00	■
6.9 Ability of businesses to use latest technologies*	4	3.82	■
6.10 Costs of providing mobile services	8	3.96	■
6.11 Costs of providing internet access	18	2.59	■
6.12 Usage of internet services by businesses*	8	3.59	■
6.13 Usage of personal motor vehicles*	18	2.06	■
6.14 Usage of commercial motor vehicles*	17	4.06	■
6.15 Information on the supply of goods and services*	5	3.82	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	10	3.30	■
7.1 Natural population growth	19	2.17	■
7.2 Migration of residents	21	1.96	■
7.3 Unemployment	12	4.00	■
7.4 Perception of unemployment*	18	2.29	■
7.5 Average age of unemployed persons	4	4.28	■
7.6 Perception of age structure of unemployment*	2	3.35	■
7.7 Average duration of unemployment	12	3.63	■
7.8 Perception of long-term unemployment*	15	3.00	■
7.9 Vacant working positions	13	3.39	■
7.10 Availability of free labor*	16	3.59	■
7.11 Average monthly salary	12	3.26	■
7.12 Wage expectations of jobseekers*	2	3.00	■
7.13 Migration of skilled labor*	14	2.12	■
7.14 Discipline and diligence of employees*	3	4.00	■
7.15 Employee motivation for productivity increase*	9	3.94	■
7.16 Fairness in employee selection*	1	3.12	■
8th pillar: Education	17	3.00	■
8.1 Level of education*	11	3.06	■
8.2 Mother language skills*	18	2.65	■
8.3 Foreign language skills*	21	1.65	■
8.4 Natural science skills*	10	2.89	■
8.5 Connection of vocational schools and labor market*	10	2.00	■
8.6 Qualification of employees*	7	3.18	■
8.7 Qualification of jobseekers*	19	2.06	■
8.8 Availability of highly skilled workforce*	7	3.18	■
8.9 Availability of partially skilled workforce*	23	3.47	■
8.10 Availability of unskilled workforce*	24	4.06	■
8.11 Density of secondary schools	18	2.58	■
8.12 Secondary schools students	21	2.27	■
8.13 Density of vocational schools	11	3.66	■
8.14 Vocational schools students	7	4.14	■
8.15 Density of institutions of higher education	23	2.07	■
8.16 Higher education students	7	3.94	■

Ternopil

rank: **17** of 24



Population	1,065,709
Area	13,824 km ²

Population density	77 inhab. / km ²
Unemployment rate	11.3 %
Average monthly wage	2,994 ₴

Region overview

Ternopil region is located in western Ukraine and is one of the smallest regions of Ukraine (13.8 thousand km²) with the population about 1.06m people. The most important sector of the economy of the region is agriculture. Over 70% of the total regional area of land fund is used for agriculture. Plant growing is dominated among the sectors of agriculture.

Industry in the region is represented by food, light, woodworking and engineering sectors. Tourism industry has a significant potential in the region because of its historical and natural heritage.

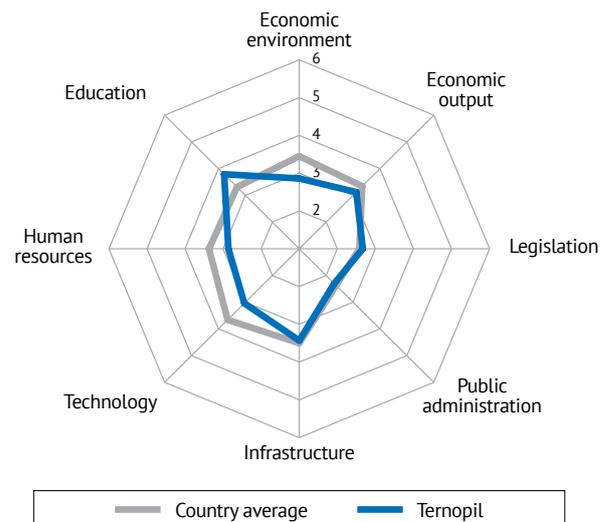
Ternopil region takes the 5th place on education index, the 9th place on infrastructure index, but only the 19th place on economic activity index. The region takes the 17th place in overall ranking. The main factors that raise the region's competitiveness are: high potential of tourism

development, very good mother language skills, high level of education and high quality of regional production. The main disadvantages of the region are: low technology level, weak innovative development of businesses, active migration of skilled labor (mainly the high educated youth), poorly organized labor market, high level of corruption among private businesses.

Recommendations: use of the benefits of quality education in the field of business development, use of the benefits of active tourism to improve the infrastructure and attract foreign investments, reducing of the pressure on SMEs, legal fighting against corruption.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	17	3.03	3.30
Economic activity	19	3.02	3.39
Economic environment	22	2.86	3.45
Economic output	18	3.12	3.34
Public administration and legislation	15	2.45	2.45
Legislation	10	2.67	2.58
Public administration	15	2.30	2.37
Technology and infrastructure	17	3.19	3.60
Infrastructure	9	3.43	3.50
Technology	20	3.04	3.66
Education and human resources	15	3.17	3.35
Human resources	20	2.86	3.37
Education	5	3.79	3.31



Main competitive advantages

Mother language skills	2.45	<div style="width: 100%;"></div>
Environmental friendliness of production	1.32	<div style="width: 50%;"></div>
Potential for tourism development	1.28	<div style="width: 48%;"></div>
Availability of banks	0.93	<div style="width: 30%;"></div>
Perception of long-term unemployment	0.86	<div style="width: 25%;"></div>

Main competitive disadvantages

Technology level	-1.59	<div style="width: 75%;"></div>
Level of competitiveness in industry	-1.35	<div style="width: 65%;"></div>
Migration of skilled labor	-0.96	<div style="width: 45%;"></div>
Development potential of businesses	-0.70	<div style="width: 30%;"></div>
Perception of unemployment	-0.70	<div style="width: 30%;"></div>

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	22	2.86	■
1.1 Population density	9	3.89	■
1.2 Urban population	21	3.49	■
1.3 Economically active population	22	1.93	■
1.4 Number of companies	20	2.87	■
1.5 Multinational and foreign companies*	12	2.06	■
1.6 Impact of the informal economy on doing business*	11	2.22	■
1.7 Level of corruption among private businesses*	24	1.94	■
1.8 Level of competitiveness in services*	7	3.56	■
1.9 Level of competitiveness in industry*	24	1.78	■
1.10 Reliability of business partners*	15	3.17	■
1.11 Availability of financial and capital resources*	23	1.67	■
1.12 Availability of necessary materials and services*	9	3.00	■
1.13 Impact of region location on doing business*	20	3.33	■
1.14 Impact of natural conditions on doing business*	15	4.94	■
1.15 Current business conditions*	19	1.89	■
1.16 Change of business conditions in recent years*	1	2.00	■
1.17 Potential for tourism development*	6	4.39	■
2nd pillar: Economic output	18	3.12	■
2.1 Development potential of businesses*	23	2.22	■
2.2 Profitability and productivity of businesses*	21	2.06	■
2.3 Gross added value	21	2.61	■
2.4 Volume of sales industrial products	22	2.59	■
2.5 Balance of goods	19	2.97	■
2.6 Balance of services	10	3.31	■
2.7 Foreign turnover of goods	17	2.78	■
2.8 Foreign turnover of services	13	2.69	■
2.9 Profitable companies	6	4.36	■
2.10 Financial results before taxation	14	2.86	■
2.11 Residential construction	4	4.19	■
2.12 Environmental friendliness of production*	5	4.67	■
2.13 Emissions of pollutants	5	3.15	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	10	2.67	■
3.1 Barriers to business development*	10	2.33	■
3.2 Perception of local taxes*	16	2.94	■
3.3 Business development prospects*	7	2.72	■
4th pillar: Public administration	15	2.30	■
4.1 Fulfillment of tasks by local authorities*	15	2.33	■
4.2 Bureaucracy and delays in the offices*	21	1.94	■
4.3 Availability of public information*	19	2.45	■
4.4 Electronic communication with local authorities*	18	2.36	■
4.5 Law enforcement in the local court*	8	2.44	■
4.6 Impact of corruption on authorities*	20	1.89	■
4.7 Protection of private property*	11	2.44	■
4.8 Interest of the state institutions in the region*	16	2.11	■
4.9 Impact of authorities*	5	2.67	■
4.10 Economic management of local authorities*	7	2.67	■
4.11 Impact of trade unions on doing business*	7	3.00	■

- Strong competitive **advantage** of region
- Strong competitive **disadvantage** of region
- Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	9	3.43	■
5.1 Density of 1st class roads	23	2.27	■
5.2 Density of 2nd class roads	4	4.95	■
5.3 Density of 3rd class roads	5	4.99	■
5.4 Density of 4th class roads	16	3.51	■
5.5 Density of road infrastructure*	19	1.78	■
5.6 Quality of road infrastructure*	18	1.67	■
5.7 Number of bank branches	16	2.81	■
5.8 Availability of banks*	1	5.06	■
5.9 Number of post offices	6	4.55	■
5.10 Availability of post offices*	14	3.78	■
5.11 Number of hospital beds	4	3.47	■
5.12 Availability of medical facilities*	14	2.06	■
6th pillar: Technology	20	3.04	■
6.1 Innovative companies	11	4.39	■
6.2 Technical companies	3	5.03	■
6.3 Scientific and technical companies	12	3.94	■
6.4 Scientific and technical specialists	19	2.50	■
6.5 Volume of innovative products	17	1.96	■
6.6 Foreign direct investments	21	2.30	■
6.7 Capital investments	17	3.57	■
6.8 Technology level*	24	1.56	■
6.9 Ability of businesses to use latest technologies*	19	3.17	■
6.10 Costs of providing mobile services	19	1.45	■
6.11 Costs of providing internet access	8	3.80	■
6.12 Usage of internet services by businesses*	23	2.94	■
6.13 Usage of personal motor vehicles*	15	2.11	■
6.14 Usage of commercial motor vehicles*	2	4.67	■
6.15 Information on the supply of goods and services*	19	3.28	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	20	2.86	■
7.1 Natural population growth	11	2.64	■
7.2 Migration of residents	9	2.97	■
7.3 Unemployment	21	1.64	■
7.4 Perception of unemployment*	22	2.06	■
7.5 Average age of unemployed persons	17	3.38	■
7.6 Perception of age structure of unemployment*	14	2.83	■
7.7 Average duration of unemployment	5	4.60	■
7.8 Perception of long-term unemployment*	2	3.94	■
7.9 Vacant working positions	4	4.98	■
7.10 Availability of free labor*	14	3.61	■
7.11 Average monthly salary	24	1.36	■
7.12 Wage expectations of jobseekers*	2	3.00	■
7.13 Migration of skilled labor*	23	1.44	■
7.14 Discipline and diligence of employees*	17	3.33	■
7.15 Employee motivation for productivity increase*	21	3.39	■
7.16 Fairness in employee selection*	1	2.67	■
8th pillar: Education	5	3.79	■
8.1 Level of education*	7	3.33	■
8.2 Mother language skills*	1	5.78	■
8.3 Foreign language skills*	7	2.44	■
8.4 Natural science skills*	15	2.67	■
8.5 Connection of vocational schools and labor market*	9	2.17	■
8.6 Qualification of employees*	12	3.00	■
8.7 Qualification of jobseekers*	12	2.33	■
8.8 Availability of highly skilled workforce*	20	2.78	■
8.9 Availability of partially skilled workforce*	18	3.94	■
8.10 Availability of unskilled workforce*	22	4.39	■
8.11 Density of secondary schools	2	5.67	■
8.12 Secondary schools students	8	3.43	■
8.13 Density of vocational schools	4	4.44	■
8.14 Vocational schools students	3	4.55	■
8.15 Density of institutions of higher education	5	4.58	■
8.16 Higher education students	6	4.12	■

Vinnytsia

rank: **11** of 24



Population	1,602,163
Area	26,492 km ²

Population density	60 inhab. / km ²
Unemployment rate	10.5 %
Average monthly wage	3,396 ₴

Region overview

Vinnytsia region is located in the central part of Ukraine. It has an area of 26.5 thousand km² with the population about 1.6m people. The region's contribution to GDP is 2.77%.

The region specializes on the production of agricultural goods and its industrial processing, that are the priority sectors of the regional economy. Plant growing takes more than 60% in the regional agriculture structure (agricultural land's area is more than 2m hectares). Food industry is represented by sugar, canning, dairy, meat and confectionery productions. At the same time the regional economy is also represented by the sectors of electric power, machine building and metalworking, chemical and petrochemical industries.

Vinnytsia region takes the 11th place in overall ranking, having high scores on public administration (the 2nd place) and economic output (the 8th

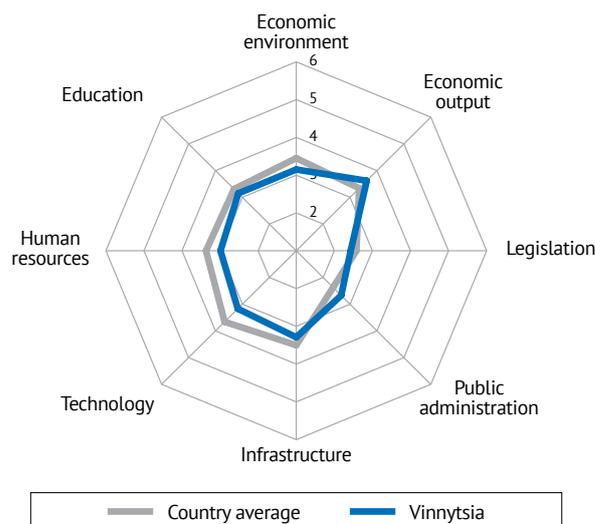
place). But indexes of technology, infrastructure and education are below the national average points. The main advantages of the region are: high quality of goods and production, good impact of natural conditions and district location on doing businesses.

The adverse factors of the region that reduce its competitiveness, are: low natural science skills, low ability of businesses to use the latest technologies, low qualifications of jobseekers and low tourism potential.

Recommendations: attracting of foreign investment, improvement of the infrastructure, tourism industry and educational system, development of high technological and innovative businesses.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	11	3.16	3.30
Economic activity	9	3.43	3.39
Economic environment	12	3.15	3.45
Economic output	8	3.62	3.34
Public administration and legislation	8	2.57	2.45
Legislation	21	2.43	2.58
Public administration	2	2.67	2.37
Technology and infrastructure	16	3.22	3.60
Infrastructure	13	3.29	3.50
Technology	16	3.17	3.66
Education and human resources	17	3.04	3.35
Human resources	16	2.99	3.37
Education	13	3.15	3.31



Main competitive advantages

Advantage	Score
Environmental friendliness of production	1.84
Interest of the state institutions in the region	0.87
Impact of natural conditions on doing business	0.77
Impact of region location on doing business	0.71
Mother language skills	0.69

Main competitive disadvantages

Disadvantage	Score
Natural science skills	-0.95
Ability of businesses to use latest technologies	-0.81
Qualification of jobseekers	-0.61
Perception of long-term unemployment	-0.54
Potential for tourism development	-0.53

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	12	3.15	■
1.1 Population density	14	3.22	■
1.2 Urban population	19	3.80	■
1.3 Economically active population	11	3.54	■
1.4 Number of companies	12	3.34	■
1.5 Multinational and foreign companies*	12	2.06	■
1.6 Impact of the informal economy on doing business*	11	2.22	■
1.7 Level of corruption among private businesses*	4	2.78	■
1.8 Level of competitiveness in services*	10	3.39	■
1.9 Level of competitiveness in industry*	12	2.83	■
1.10 Reliability of business partners*	20	3.11	■
1.11 Availability of financial and capital resources*	17	1.89	■
1.12 Availability of necessary materials and services*	5	3.17	■
1.13 Impact of region location on doing business*	10	4.44	■
1.14 Impact of natural conditions on doing business*	4	5.28	■
1.15 Current business conditions*	6	2.39	■
1.16 Change of business conditions in recent years*	2	2.50	■
1.17 Potential for tourism development*	15	2.61	■
2nd pillar: Economic output	8	3.62	■
2.1 Development potential of businesses*	10	3.06	■
2.2 Profitability and productivity of businesses*	13	2.56	■
2.3 Gross added value	11	3.50	■
2.4 Volume of sales industrial products	10	3.73	■
2.5 Balance of goods	5	3.90	■
2.6 Balance of services	9	3.33	■
2.7 Foreign turnover of goods	12	3.18	■
2.8 Foreign turnover of services	14	2.63	■
2.9 Profitable companies	7	4.31	■
2.10 Financial results before taxation	2	4.62	■
2.11 Residential construction	11	3.51	■
2.12 Environmental friendliness of production*	3	5.22	■
2.13 Emissions of pollutants	20	2.25	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	21	2.43	■
3.1 Barriers to business development*	21	2.00	■
3.2 Perception of local taxes*	16	2.94	■
3.3 Business development prospects*	17	2.33	■
4th pillar: Public administration	2	2.67	■
4.1 Fulfillment of tasks by local authorities*	4	2.67	■
4.2 Bureaucracy and delays in the offices*	1	2.89	■
4.3 Availability of public information*	2	3.06	■
4.4 Electronic communication with local authorities*	15	2.50	■
4.5 Law enforcement in the local court*	5	2.56	■
4.6 Impact of corruption on authorities*	11	2.06	■
4.7 Protection of private property*	3	2.72	■
4.8 Interest of the state institutions in the region*	1	3.50	■
4.9 Impact of authorities*	1	2.94	■
4.10 Economic management of local authorities*	1	3.11	■
4.11 Impact of trade unions on doing business*	7	3.00	■

■ Strong competitive **advantage** of region
 ■ Strong competitive **disadvantage** of region
 ■ Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	13	3.29	■
5.1 Density of 1st class roads	11	3.46	■
5.2 Density of 2nd class roads	19	3.09	■
5.3 Density of 3rd class roads	3	5.14	■
5.4 Density of 4th class roads	2	5.07	■
5.5 Density of road infrastructure*	5	2.67	■
5.6 Quality of road infrastructure*	3	2.17	■
5.7 Number of bank branches	14	2.94	■
5.8 Availability of banks*	14	4.61	■
5.9 Number of post offices	15	2.95	■
5.10 Availability of post offices*	20	3.50	■
5.11 Number of hospital beds	20	2.72	■
5.12 Availability of medical facilities*	2	2.83	■
6th pillar: Technology	16	3.17	■
6.1 Innovative companies	12	4.12	■
6.2 Technical companies	4	4.93	■
6.3 Scientific and technical companies	18	3.71	■
6.4 Scientific and technical specialists	16	2.87	■
6.5 Volume of innovative products	19	1.69	■
6.6 Foreign direct investments	20	2.46	■
6.7 Capital investments	9	4.01	■
6.8 Technology level*	7	2.94	■
6.9 Ability of businesses to use latest technologies*	24	2.50	■
6.10 Costs of providing mobile services	17	2.14	■
6.11 Costs of providing internet access	11	3.20	■
6.12 Usage of internet services by businesses*	19	3.17	■
6.13 Usage of personal motor vehicles*	6	2.83	■
6.14 Usage of commercial motor vehicles*	15	4.11	■
6.15 Information on the supply of goods and services*	23	3.06	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	16	2.99	■
7.1 Natural population growth	8	2.74	■
7.2 Migration of residents	14	2.61	■
7.3 Unemployment	16	2.94	■
7.4 Perception of unemployment*	9	2.89	■
7.5 Average age of unemployed persons	4	4.28	■
7.6 Perception of age structure of unemployment*	11	2.89	■
7.7 Average duration of unemployment	4	4.82	■
7.8 Perception of long-term unemployment*	23	2.57	■
7.9 Vacant working positions	20	2.15	■
7.10 Availability of free labor*	19	3.44	■
7.11 Average monthly salary	15	3.06	■
7.12 Wage expectations of jobseekers*	2	3.00	■
7.13 Migration of skilled labor*	6	2.61	■
7.14 Discipline and diligence of employees*	4	3.94	■
7.15 Employee motivation for productivity increase*	6	4.00	■
7.16 Fairness in employee selection*	1	2.61	■
8th pillar: Education	13	3.15	■
8.1 Level of education*	19	2.94	■
8.2 Mother language skills*	10	4.06	■
8.3 Foreign language skills*	12	1.94	■
8.4 Natural science skills*	22	2.00	■
8.5 Connection of vocational schools and labor market*	15	1.94	■
8.6 Qualification of employees*	16	2.89	■
8.7 Qualification of jobseekers*	20	2.00	■
8.8 Availability of highly skilled workforce*	19	2.83	■
8.9 Availability of partially skilled workforce*	10	4.28	■
8.10 Availability of unskilled workforce*	20	4.61	■
8.11 Density of secondary schools	9	3.73	■
8.12 Secondary schools students	13	3.04	■
8.13 Density of vocational schools	12	3.52	■
8.14 Vocational schools students	5	4.25	■
8.15 Density of institutions of higher education	13	2.99	■
8.16 Higher education students	17	3.11	■

Volyn

rank: **15** of 24



Population	1,042,668
Area	20,144 km ²

Population density	52 inhab. / km ²
Unemployment rate	9.9 %
Average monthly wage	3,291 ₴

Region overview

Volyn region is located in northwestern Ukraine and borders with Poland and Belarus. The region's area is about 20,1 thousand km² (3.3% of Ukrainian territory) which is home to 2.3% of the population of Ukraine. The region's contribution to GDP is 1.52%.

Volyn region belongs to the group of agrarian regions according to the structure of the economy. Agriculture specializes primarily on meat and dairy sectors. The largest share in the structure of industrial production takes the food industry and processing of agricultural products, machinery and chemical industries. Also, the region has sufficient potential for tourism development.

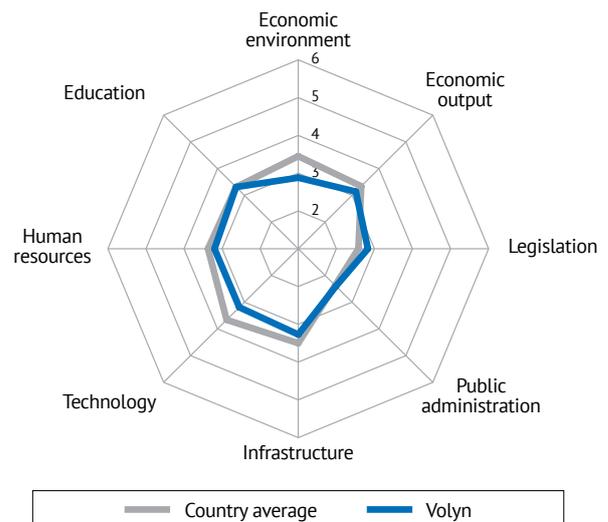
Volyn region takes average positions in the ranking. It has the 18th place both on economic activity index and technology and infrastructure index.

Educational system is well-developed. The region takes the 15th place over the country on regional GDP. The main advantages of the region are: high mother language skills, high quality of the production and good impact of region location on doing business. The adverse factors of the region are: low technology level and level of competitiveness in industry, high bureaucracy and delays in the offices and poorly organized labor market.

Recommendations: development of high technological and innovative businesses, attracting of foreign investment, implementation of programs to support tourism and education, improvement of the infrastructure and facilitation of doing small business, providing favorable conditions for farmers and entrepreneurs.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	15	3.08	3.30
Economic activity	18	3.04	3.39
Economic environment	20	2.88	3.45
Economic output	17	3.14	3.34
Public administration and legislation	7	2.57	2.45
Legislation	3	2.83	2.58
Public administration	10	2.40	2.37
Technology and infrastructure	15	3.22	3.60
Infrastructure	16	3.27	3.50
Technology	15	3.19	3.66
Education and human resources	11	3.24	3.35
Human resources	11	3.20	3.37
Education	11	3.31	3.31



Main competitive advantages

Mother language skills	2.38	<div style="width: 95%;"></div>
Environmental friendliness of production	2.08	<div style="width: 80%;"></div>
Impact of region location on doing business	1.17	<div style="width: 40%;"></div>
Usage of personal motor vehicles	1.05	<div style="width: 35%;"></div>
Potential for tourism development	1.04	<div style="width: 30%;"></div>

Main competitive disadvantages

Technology level	-1.33	<div style="width: 70%; background-color: yellow;"></div>
Level of competitiveness in industry	-0.80	<div style="width: 50%; background-color: yellow;"></div>
Bureaucracy and delays in the offices	-0.63	<div style="width: 40%; background-color: yellow;"></div>
Fairness in employee selection	-0.56	<div style="width: 35%; background-color: yellow;"></div>
Availability of financial and capital resources	-0.52	<div style="width: 30%; background-color: yellow;"></div>

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	20	2.88	■
1.1 Population density	17	2.77	■
1.2 Urban population	18	3.87	■
1.3 Economically active population	23	1.70	■
1.4 Number of companies	16	3.11	■
1.5 Multinational and foreign companies*	3	2.83	■
1.6 Impact of the informal economy on doing business*	7	2.28	■
1.7 Level of corruption among private businesses*	3	2.89	■
1.8 Level of competitiveness in services*	15	3.11	■
1.9 Level of competitiveness in industry*	17	2.33	■
1.10 Reliability of business partners*	13	3.22	■
1.11 Availability of financial and capital resources*	22	1.72	■
1.12 Availability of necessary materials and services*	18	2.50	■
1.13 Impact of region location on doing business*	3	4.89	■
1.14 Impact of natural conditions on doing business*	3	5.33	■
1.15 Current business conditions*	14	2.00	■
1.16 Change of business conditions in recent years*	2	2.22	■
1.17 Potential for tourism development*	7	4.17	■
2nd pillar: Economic output	17	3.14	■
2.1 Development potential of businesses*	13	2.89	■
2.2 Profitability and productivity of businesses*	6	3.00	■
2.3 Gross added value	19	2.97	■
2.4 Volume of sales industrial products	20	3.11	■
2.5 Balance of goods	21	2.91	■
2.6 Balance of services	8	3.36	■
2.7 Foreign turnover of goods	7	4.06	■
2.8 Foreign turnover of services	11	2.96	■
2.9 Profitable companies	17	2.81	■
2.10 Financial results before taxation	17	2.67	■
2.11 Residential construction	10	3.83	■
2.12 Environmental friendliness of production*	2	5.44	■
2.13 Emissions of pollutants	1	3.33	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	3	2.83	■
3.1 Barriers to business development*	18	2.17	■
3.2 Perception of local taxes*	5	3.11	■
3.3 Business development prospects*	1	3.22	■
4th pillar: Public administration	10	2.40	■
4.1 Fulfillment of tasks by local authorities*	1	2.94	■
4.2 Bureaucracy and delays in the offices*	22	1.89	■
4.3 Availability of public information*	16	2.56	■
4.4 Electronic communication with local authorities*	3	3.00	■
4.5 Law enforcement in the local court*	19	2.17	■
4.6 Impact of corruption on authorities*	20	1.89	■
4.7 Protection of private property*	5	2.67	■
4.8 Interest of the state institutions in the region*	9	2.67	■
4.9 Impact of authorities*	13	2.44	■
4.10 Economic management of local authorities*	2	3.00	■
4.11 Impact of trade unions on doing business*	7	3.00	■

■ Strong competitive **advantage** of region
 ■ Strong competitive **disadvantage** of region
 ■ Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	16	3.27	■
5.1 Density of 1st class roads	15	2.93	■
5.2 Density of 2nd class roads	16	3.36	■
5.3 Density of 3rd class roads	7	4.63	■
5.4 Density of 4th class roads	8	4.02	■
5.5 Density of road infrastructure*	2	3.22	■
5.6 Quality of road infrastructure*	1	3.06	■
5.7 Number of bank branches	21	2.33	■
5.8 Availability of banks*	18	4.50	■
5.9 Number of post offices	11	3.62	■
5.10 Availability of post offices*	12	3.83	■
5.11 Number of hospital beds	17	2.95	■
5.12 Availability of medical facilities*	9	2.33	■
6th pillar: Technology	15	3.19	■
6.1 Innovative companies	23	3.59	■
6.2 Technical companies	23	1.24	■
6.3 Scientific and technical companies	19	3.70	■
6.4 Scientific and technical specialists	22	2.25	■
6.5 Volume of innovative products	21	1.38	■
6.6 Foreign direct investments	13	3.15	■
6.7 Capital investments	5	4.18	■
6.8 Technology level*	23	1.83	■
6.9 Ability of businesses to use latest technologies*	9	3.39	■
6.10 Costs of providing mobile services	13	3.24	■
6.11 Costs of providing internet access	13	3.01	■
6.12 Usage of internet services by businesses*	11	3.44	■
6.13 Usage of personal motor vehicles*	2	3.61	■
6.14 Usage of commercial motor vehicles*	9	4.28	■
6.15 Information on the supply of goods and services*	19	3.28	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	11	3.20	■
7.1 Natural population growth	10	2.70	■
7.2 Migration of residents	4	3.90	■
7.3 Unemployment	13	3.67	■
7.4 Perception of unemployment*	10	2.78	■
7.5 Average age of unemployed persons	22	1.51	■
7.6 Perception of age structure of unemployment*	11	2.89	■
7.7 Average duration of unemployment	10	3.89	■
7.8 Perception of long-term unemployment*	19	2.83	■
7.9 Vacant working positions	10	3.88	■
7.10 Availability of free labor*	22	3.17	■
7.11 Average monthly salary	20	2.69	■
7.12 Wage expectations of jobseekers*	14	2.71	■
7.13 Migration of skilled labor*	9	2.33	■
7.14 Discipline and diligence of employees*	9	3.78	■
7.15 Employee motivation for productivity increase*	8	3.94	■
7.16 Fairness in employee selection*	1	2.22	■
8th pillar: Education	11	3.31	■
8.1 Level of education*	8	3.22	■
8.2 Mother language skills*	3	5.72	■
8.3 Foreign language skills*	2	3.17	■
8.4 Natural science skills*	6	3.20	■
8.5 Connection of vocational schools and labor market*	8	2.22	■
8.6 Qualification of employees*	8	3.06	■
8.7 Qualification of jobseekers*	4	2.72	■
8.8 Availability of highly skilled workforce*	22	2.67	■
8.9 Availability of partially skilled workforce*	12	4.22	■
8.10 Availability of unskilled workforce*	13	4.89	■
8.11 Density of secondary schools	7	4.13	■
8.12 Secondary schools students	3	4.94	■
8.13 Density of vocational schools	20	2.70	■
8.14 Vocational schools students	7	4.14	■
8.15 Density of institutions of higher education	18	2.31	■
8.16 Higher education students	16	3.15	■

Zakarpattia

rank: **10** of 24



Population	1,259,158
Area	12,753 km ²

Population density	99 inhab. / km ²
Unemployment rate	9.2 %
Average monthly wage	3,381 ₴

Region overview

Zakarpattia region is located in southwestern Ukraine and borders with Slovakia, Hungary, Romania and Poland. The region's area is one of the smallest in the country - 12.8 thousand km² (2,1% of Ukrainian territory) where 1.3m of citizens lives. The region's contribution to GDP is 1.52%.

The wood processing and labor-intensive production (tool production, machine building, electronic) are dominated in regional industry.

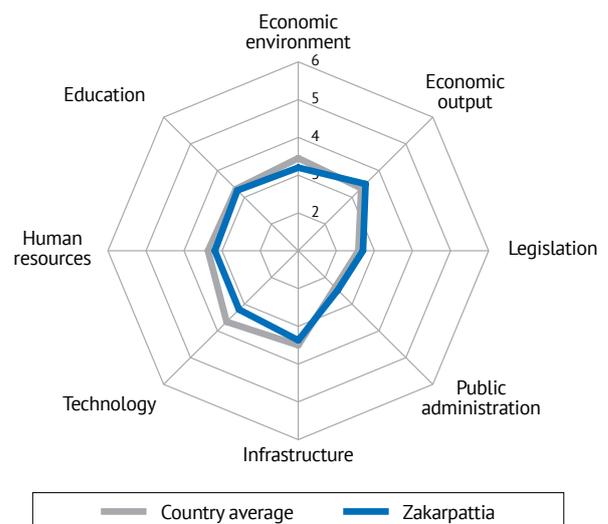
Also, the region's economy is represented by food and light industries. A characteristic feature of regional agricultural production is the low availability of land. The leading sectors of stockbreeding are breeding of beef cattle, sheep and pigs. The region has high tourist potential due to favorable natural conditions.

Zakarpattia region has the 10th place on economic activity index and 14th place on technology and infrastructure index. The region takes the 10th place in overall ranking. The main advantages of the region are: good knowledge of foreign languages, great tourism potential, very high quality of production, good impact of region location on doing business. The adverse factors of the region are: low technology level and level of competitive, active migration of skilled labor (mostly moving abroad), high quantity of unqualified workers.

Recommendations: attracting of foreign investment, support of tourism and education programs, improvement of the infrastructure, support of small business, providing favorable conditions for farmers, keeping skilled workers in the region.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	10	3.20	3.30
Economic activity	10	3.38	3.39
Economic environment	11	3.20	3.45
Economic output	9	3.50	3.34
Public administration and legislation	9	2.56	2.45
Legislation	9	2.70	2.58
Public administration	7	2.47	2.37
Technology and infrastructure	14	3.26	3.60
Infrastructure	11	3.37	3.50
Technology	14	3.20	3.66
Education and human resources	13	3.22	3.35
Human resources	12	3.19	3.37
Education	12	3.26	3.31



Main competitive advantages

Advantage	Score
Foreign language skills	2.34
Potential for tourism development	2.05
Environmental friendliness of production	1.21
Impact of region location on doing business	1.21
Mother language skills	1.03

Main competitive disadvantages

Disadvantage	Score
Level of competitiveness in industry	-0.86
Technology level	-0.79
Fairness in employee selection	-0.71
Migration of skilled labor	-0.64
Qualification of employees	-0.53

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	11	3.20	■
1.1 Population density	6	4.55	■
1.2 Urban population	24	3.11	■
1.3 Economically active population	14	3.21	■
1.4 Number of companies	19	2.89	■
1.5 Multinational and foreign companies*	1	3.10	■
1.6 Impact of the informal economy on doing business*	6	2.30	■
1.7 Level of corruption among private businesses*	20	2.20	■
1.8 Level of competitiveness in services*	3	4.10	■
1.9 Level of competitiveness in industry*	18	2.30	■
1.10 Reliability of business partners*	7	3.30	■
1.11 Availability of financial and capital resources*	10	2.05	■
1.12 Availability of necessary materials and services*	21	2.45	■
1.13 Impact of region location on doing business*	1	4.95	■
1.14 Impact of natural conditions on doing business*	13	5.00	■
1.15 Current business conditions*	4	2.45	■
1.16 Change of business conditions in recent years*	1	2.45	■
1.17 Potential for tourism development*	5	5.20	■
2nd pillar: Economic output	9	3.50	■
2.1 Development potential of businesses*	7	3.20	■
2.2 Profitability and productivity of businesses*	8	2.95	■
2.3 Gross added value	22	2.45	■
2.4 Volume of sales industrial products	23	2.58	■
2.5 Balance of goods	16	3.07	■
2.6 Balance of services	4	4.12	■
2.7 Foreign turnover of goods	5	4.67	■
2.8 Foreign turnover of services	6	4.00	■
2.9 Profitable companies	2	4.97	■
2.10 Financial results before taxation	3	3.92	■
2.11 Residential construction	6	4.09	■
2.12 Environmental friendliness of production*	6	4.60	■
2.13 Emissions of pollutants	9	3.03	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	9	2.70	■
3.1 Barriers to business development*	7	2.40	■
3.2 Perception of local taxes*	4	3.15	■
3.3 Business development prospects*	13	2.55	■
4th pillar: Public administration	7	2.47	■
4.1 Fulfillment of tasks by local authorities*	10	2.40	■
4.2 Bureaucracy and delays in the offices*	8	2.40	■
4.3 Availability of public information*	11	2.65	■
4.4 Electronic communication with local authorities*	12	2.65	■
4.5 Law enforcement in the local court*	16	2.20	■
4.6 Impact of corruption on authorities*	13	2.05	■
4.7 Protection of private property*	2	2.80	■
4.8 Interest of the state institutions in the region*	5	2.90	■
4.9 Impact of authorities*	2	2.85	■
4.10 Economic management of local authorities*	5	2.75	■
4.11 Impact of trade unions on doing business*	1	3.40	■

- Strong competitive **advantage** of region
- Strong competitive **disadvantage** of region
- Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	11	3.37	■
5.1 Density of 1st class roads	22	2.28	■
5.2 Density of 2nd class roads	8	4.25	■
5.3 Density of 3rd class roads	9	4.36	■
5.4 Density of 4th class roads	24	1.77	■
5.5 Density of road infrastructure*	6	2.60	■
5.6 Quality of road infrastructure*	2	2.55	■
5.7 Number of bank branches	9	3.93	■
5.8 Availability of banks*	12	4.63	■
5.9 Number of post offices	5	4.63	■
5.10 Availability of post offices*	17	3.70	■
5.11 Number of hospital beds	21	2.57	■
5.12 Availability of medical facilities*	8	2.35	■
6th pillar: Technology	14	3.20	■
6.1 Innovative companies	24	3.12	■
6.2 Technical companies	15	2.42	■
6.3 Scientific and technical companies	20	3.70	■
6.4 Scientific and technical specialists	17	2.85	■
6.5 Volume of innovative products	2	4.53	■
6.6 Foreign direct investments	15	3.13	■
6.7 Capital investments	20	3.38	■
6.8 Technology level*	17	2.40	■
6.9 Ability of businesses to use latest technologies*	22	2.90	■
6.10 Costs of providing mobile services	12	3.36	■
6.11 Costs of providing internet access	14	3.00	■
6.12 Usage of internet services by businesses*	21	2.95	■
6.13 Usage of personal motor vehicles*	7	2.80	■
6.14 Usage of commercial motor vehicles*	8	4.30	■
6.15 Information on the supply of goods and services*	15	3.55	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	12	3.19	■
7.1 Natural population growth	22	1.95	■
7.2 Migration of residents	2	4.30	■
7.3 Unemployment	10	4.23	■
7.4 Perception of unemployment*	3	3.25	■
7.5 Average age of unemployed persons	8	3.90	■
7.6 Perception of age structure of unemployment*	6	3.00	■
7.7 Average duration of unemployment	7	4.14	■
7.8 Perception of long-term unemployment*	22	2.67	■
7.9 Vacant working positions	21	2.13	■
7.10 Availability of free labor*	20	3.25	■
7.11 Average monthly salary	17	2.93	■
7.12 Wage expectations of jobseekers*	18	2.63	■
7.13 Migration of skilled labor*	20	1.80	■
7.14 Discipline and diligence of employees*	1	4.30	■
7.15 Employee motivation for productivity increase*	12	3.85	■
7.16 Fairness in employee selection*	1	2.10	■
8th pillar: Education	12	3.26	■
8.1 Level of education*	9	3.10	■
8.2 Mother language skills*	7	4.40	■
8.3 Foreign language skills*	1	4.75	■
8.4 Natural science skills*	14	2.75	■
8.5 Connection of vocational schools and labor market*	10	2.00	■
8.6 Qualification of employees*	22	2.60	■
8.7 Qualification of jobseekers*	10	2.35	■
8.8 Availability of highly skilled workforce*	13	3.00	■
8.9 Availability of partially skilled workforce*	14	4.10	■
8.10 Availability of unskilled workforce*	15	4.80	■
8.11 Density of secondary schools	5	5.14	■
8.12 Secondary schools students	2	5.18	■
8.13 Density of vocational schools	14	3.37	■
8.14 Vocational schools students	22	2.17	■
8.15 Density of institutions of higher education	8	3.82	■
8.16 Higher education students	23	2.21	■

Zaporizhia

rank: **6** of 24



Population	1,753,642
Area	27,183 km ²

Population density	65 inhab. / km ²
Unemployment rate	8.4 %
Average monthly wage	4,200 ₴

Region overview

Zaporizhia region is located in the southeast of Ukraine and has access to the Azov Sea. The region is a home to 3.9% of Ukrainian citizens (the 9th place over the country). The region's contribution to GDP is 4.16%.

The region is one of the most economically developed regions of Ukraine. Almost all major industrial sectors are represented in the region, among them power, metallurgy, metalworking and chemical industry. The region produces a quarter of the entire country's electricity and is one of the largest agricultural producers. The arable land area is 2,2m ha (5.4% of farmlands in Ukraine). Plant growing production (mostly grain and oilseeds), are dominated in the agricultural structure.

Zaporizhia region takes the 2nd place on public administration and legislation index and the 4th place on economic activity index. The region

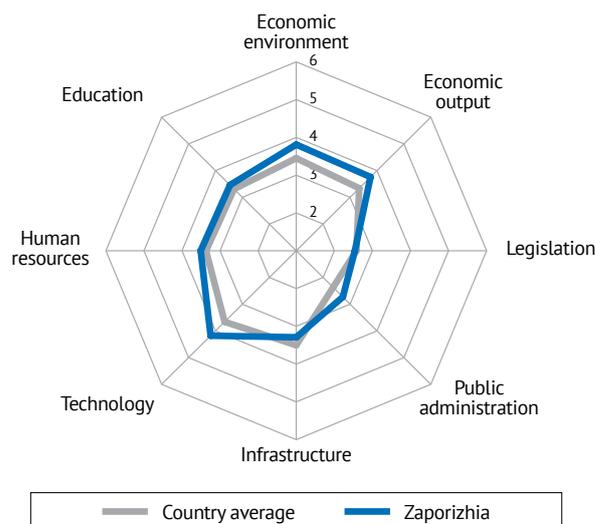
takes the 6th place in RBEI ranking. The main advantages of the region are: very high technology level and good competitiveness in industry. Also the region has a great natural and historical heritage for tourism growth, but the high pollution of the environment doesn't contribute to the inflow of tourists.

The main disadvantages of the region are: low environmental friendliness of production, weak mother language skills and negative changes of business conditions in recent years.

Recommendations: improvement of the infrastructure and the tourism industry, development of high technological and innovative businesses with the aim to environmental protection.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	6	3.57	3.30
Economic activity	4	3.78	3.39
Economic environment	3	3.81	3.45
Economic output	5	3.76	3.34
Public administration and legislation	2	2.65	2.45
Legislation	15	2.54	2.58
Public administration	1	2.73	2.37
Technology and infrastructure	5	3.85	3.60
Infrastructure	14	3.29	3.50
Technology	4	4.18	3.66
Education and human resources	7	3.49	3.35
Human resources	7	3.51	3.37
Education	7	3.46	3.31



Main competitive advantages

Technology level	1.94	<div style="width: 94%;"></div>
Level of competitiveness in industry	1.58	<div style="width: 79%;"></div>
Impact of region location on doing business	0.89	<div style="width: 44.5%;"></div>
Ability of businesses to use latest technologies	0.86	<div style="width: 43%;"></div>
Natural science skills	0.72	<div style="width: 36%;"></div>

Main competitive disadvantages

Environmental friendliness of production	-1.21	<div style="width: 60.5%;"></div>
Mother language skills	-1.13	<div style="width: 56.5%;"></div>
Change of business conditions in recent years	-0.74	<div style="width: 37%;"></div>
Potential for tourism development	-0.69	<div style="width: 34.5%;"></div>
Foreign language skills	-0.61	<div style="width: 30.5%;"></div>

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	3	3.81	■
1.1 Population density	11	3.41	■
1.2 Urban population	5	5.03	■
1.3 Economically active population	3	5.02	■
1.4 Number of companies	6	4.50	■
1.5 Multinational and foreign companies*	7	2.44	■
1.6 Impact of the informal economy on doing business*	1	2.89	■
1.7 Level of corruption among private businesses*	2	2.94	■
1.8 Level of competitiveness in services*	21	2.72	■
1.9 Level of competitiveness in industry*	2	4.83	■
1.10 Reliability of business partners*	13	3.22	■
1.11 Availability of financial and capital resources*	8	2.06	■
1.12 Availability of necessary materials and services*	3	3.22	■
1.13 Impact of region location on doing business*	7	4.72	■
1.14 Impact of natural conditions on doing business*	20	4.78	■
1.15 Current business conditions*	6	2.39	■
1.16 Change of business conditions in recent years*	2	1.78	■
1.17 Potential for tourism development*	16	2.56	■
2nd pillar: Economic output	5	3.76	■
2.1 Development potential of businesses*	4	3.44	■
2.2 Profitability and productivity of businesses*	6	3.00	■
2.3 Gross added value	5	4.34	■
2.4 Volume of sales industrial products	3	5.43	■
2.5 Balance of goods	1	5.72	■
2.6 Balance of services	7	3.38	■
2.7 Foreign turnover of goods	3	5.29	■
2.8 Foreign turnover of services	9	3.54	■
2.9 Profitable companies	13	3.43	■
2.10 Financial results before taxation	12	2.93	■
2.11 Residential construction	23	2.12	■
2.12 Environmental friendliness of production*	22	2.28	■
2.13 Emissions of pollutants	21	2.13	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	15	2.54	■
3.1 Barriers to business development*	19	2.11	■
3.2 Perception of local taxes*	12	3.00	■
3.3 Business development prospects*	14	2.50	■
4th pillar: Public administration	1	2.73	■
4.1 Fulfillment of tasks by local authorities*	9	2.44	■
4.2 Bureaucracy and delays in the offices*	3	2.67	■
4.3 Availability of public information*	3	3.00	■
4.4 Electronic communication with local authorities*	2	3.06	■
4.5 Law enforcement in the local court*	1	2.89	■
4.6 Impact of corruption on authorities*	1	2.56	■
4.7 Protection of private property*	12	2.33	■
4.8 Interest of the state institutions in the region*	3	3.22	■
4.9 Impact of authorities*	6	2.65	■
4.10 Economic management of local authorities*	7	2.67	■
4.11 Impact of trade unions on doing business*	2	3.33	■

- Strong competitive **advantage** of region
- Strong competitive **disadvantage** of region
- Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	14	3.29	■
5.1 Density of 1st class roads	20	2.46	■
5.2 Density of 2nd class roads	3	4.97	■
5.3 Density of 3rd class roads	16	3.82	■
5.4 Density of 4th class roads	14	3.57	■
5.5 Density of road infrastructure*	3	3.17	■
5.6 Quality of road infrastructure*	13	1.78	■
5.7 Number of bank branches	12	3.41	■
5.8 Availability of banks*	14	4.61	■
5.9 Number of post offices	16	2.94	■
5.10 Availability of post offices*	16	3.72	■
5.11 Number of hospital beds	7	3.38	■
5.12 Availability of medical facilities*	11	2.17	■
6th pillar: Technology	4	4.18	■
6.1 Innovative companies	5	5.17	■
6.2 Technical companies	8	3.46	■
6.3 Scientific and technical companies	21	3.51	■
6.4 Scientific and technical specialists	6	4.04	■
6.5 Volume of innovative products	3	4.53	■
6.6 Foreign direct investments	6	4.28	■
6.7 Capital investments	10	3.98	■
6.8 Technology level*	2	5.22	■
6.9 Ability of businesses to use latest technologies*	1	4.28	■
6.10 Costs of providing mobile services	7	4.11	■
6.11 Costs of providing internet access	5	4.33	■
6.12 Usage of internet services by businesses*	3	4.06	■
6.13 Usage of personal motor vehicles*	8	2.50	■
6.14 Usage of commercial motor vehicles*	3	4.61	■
6.15 Information on the supply of goods and services*	4	3.83	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	7	3.51	■
7.1 Natural population growth	17	2.30	■
7.2 Migration of residents	18	2.41	■
7.3 Unemployment	6	4.84	■
7.4 Perception of unemployment*	5	3.00	■
7.5 Average age of unemployed persons	12	3.77	■
7.6 Perception of age structure of unemployment*	17	2.78	■
7.7 Average duration of unemployment	7	4.14	■
7.8 Perception of long-term unemployment*	8	3.45	■
7.9 Vacant working positions	23	1.54	■
7.10 Availability of free labor*	10	3.89	■
7.11 Average monthly salary	3	4.87	■
7.12 Wage expectations of jobseekers*	21	2.53	■
7.13 Migration of skilled labor*	2	2.72	■
7.14 Discipline and diligence of employees*	2	4.06	■
7.15 Employee motivation for productivity increase*	5	4.06	■
7.16 Fairness in employee selection*	2	3.44	■
8th pillar: Education	7	3.46	■
8.1 Level of education*	5	3.89	■
8.2 Mother language skills*	21	2.33	■
8.3 Foreign language skills*	15	1.89	■
8.4 Natural science skills*	1	3.78	■
8.5 Connection of vocational schools and labor market*	6	2.28	■
8.6 Qualification of employees*	6	3.22	■
8.7 Qualification of jobseekers*	7	2.50	■
8.8 Availability of highly skilled workforce*	3	3.33	■
8.9 Availability of partially skilled workforce*	18	3.94	■
8.10 Availability of unskilled workforce*	12	4.94	■
8.11 Density of secondary schools	20	2.54	■
8.12 Secondary schools students	17	2.69	■
8.13 Density of vocational schools	5	4.30	■
8.14 Vocational schools students	9	3.86	■
8.15 Density of institutions of higher education	11	3.30	■
8.16 Higher education students	4	4.41	■

Zhytomyr

rank: **23** of 24



Population	1,247,549
Area	29,827 km ²

Population density	42 inhab. / km ²
Unemployment rate	11.5 %
Average monthly wage	3,271 ₴

Region overview

Zhytomyr region is located in northern Ukraine and borders with Belarus. It is one of the largest regions for the area – 29.8 thousand km² (4.9% territory of Ukraine), with the population of 1.2m people. The region's contribution to GDP is 1.88%.

The relatively low level of industrial development and the availability of forest and land resources define the agrarian and raw specialization of the region. Agriculture, processing of agricultural products, construction industry that uses local deposits of raw materials - all these create the base of regional economy. Agricultural production is represented by the sectors of plant growing and stockbreeding. Plant growing includes grain and potato directions. Stockbreeding specializes on swine breeding and livestock for meat and dairy.

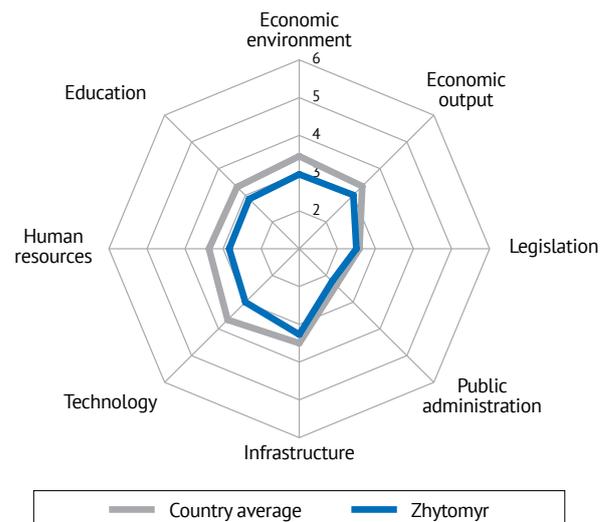
Zhytomyr region takes the 23rd place over the country on regional GDP, and this is one of the lowest indexes in the rank. It takes only 21st place on economic activity index and the 20th place on technology and infrastructure index. The main advantages of the region are: wide usage of internet services by businesses, good development potential of businesses and high level of competitiveness in services.

The adverse factors of the region that reduce its competitiveness are: low natural science skills, low presence of foreign and multinational companies, low technology level and tourism potential.

Recommendations: attracting of foreign investment, improvement of the infrastructure, development of high technological and innovative businesses.

Regional Business Environment Index

	Rank (1 - 24)	Score	Country average
RBEI	23	2.89	3.30
Economic activity	21	3.00	3.39
Economic environment	18	2.97	3.45
Economic output	21	3.01	3.34
Public administration and legislation	18	2.33	2.45
Legislation	16	2.50	2.58
Public administration	20	2.22	2.37
Technology and infrastructure	20	3.10	3.60
Infrastructure	17	3.27	3.50
Technology	21	3.00	3.66
Education and human resources	21	2.84	3.35
Human resources	21	2.84	3.37
Education	20	2.86	3.31



Main competitive advantages

Advantage	Score
Usage of Internet services by businesses	1.16
Information on the supply of goods and services	0.99
Development potential of businesses	0.98
Level of competitiveness in services	0.97
Availability of post offices	0.91

Main competitive disadvantages

Disadvantage	Score
Natural science skills	-0.88
Impact of trade unions on doing business	-0.83
Multinational and foreign companies	-0.82
Connection of vocational schools and labor market	-0.78
Technology level	-0.68

Subindex I: Economic activity			
	Rank	Score	
1st pillar: Economic environment	18	2.97	■
1.1 Population density	21	2.14	■
1.2 Urban population	15	4.19	■
1.3 Economically active population	10	3.87	■
1.4 Number of companies	17	3.08	■
1.5 Multinational and foreign companies*	23	1.56	■
1.6 Impact of the informal economy on doing business*	14	2.13	■
1.7 Level of corruption among private businesses*	12	2.44	■
1.8 Level of competitiveness in services*	2	4.13	■
1.9 Level of competitiveness in industry*	15	2.50	■
1.10 Reliability of business partners*	2	3.69	■
1.11 Availability of financial and capital resources*	4	2.13	■
1.12 Availability of necessary materials and services*	1	3.38	■
1.13 Impact of region location on doing business*	11	4.44	■
1.14 Impact of natural conditions on doing business*	6	5.25	■
1.15 Current business conditions*	3	2.56	■
1.16 Change of business conditions in recent years*	5	2.50	■
1.17 Potential for tourism development*	12	2.88	■
2nd pillar: Economic output	21	3.01	■
2.1 Development potential of businesses*	1	3.88	■
2.2 Profitability and productivity of businesses*	1	3.50	■
2.3 Gross added value	18	3.04	■
2.4 Volume of sales industrial products	16	3.31	■
2.5 Balance of goods	12	3.32	■
2.6 Balance of services	13	3.17	■
2.7 Foreign turnover of goods	14	2.86	■
2.8 Foreign turnover of services	16	2.31	■
2.9 Profitable companies	23	1.96	■
2.10 Financial results before taxation	8	3.51	■
2.11 Residential construction	14	2.96	■
2.12 Environmental friendliness of production*	11	4.13	■
2.13 Emissions of pollutants	12	2.95	■
Subindex II: Public administration and legislation			
	Rank	Score	
3rd pillar: Legislation	16	2.50	■
3.1 Barriers to business development*	20	2.06	■
3.2 Perception of local taxes*	23	2.75	■
3.3 Business development prospects*	8	2.69	■
4th pillar: Public administration	20	2.22	■
4.1 Fulfillment of tasks by local authorities*	18	2.25	■
4.2 Bureaucracy and delays in the offices*	17	2.06	■
4.3 Availability of public information*	17	2.50	■
4.4 Electronic communication with local authorities*	22	2.25	■
4.5 Law enforcement in the local court*	18	2.19	■
4.6 Impact of corruption on authorities*	8	2.19	■
4.7 Protection of private property*	17	2.19	■
4.8 Interest of the state institutions in the region*	18	2.00	■
4.9 Impact of authorities*	17	2.25	■
4.10 Economic management of local authorities*	12	2.44	■
4.11 Impact of trade unions on doing business*	24	2.14	■

■ Strong competitive **advantage** of region
 ■ Strong competitive **disadvantage** of region
 ■ Not very strong (dis)advantage of region

* Data based on the Survey of entrepreneurs' opinions

Subindex III: Technology and infrastructure			
	Rank	Score	
5th pillar: Infrastructure	17	3.27	■
5.1 Density of 1st class roads	4	4.62	■
5.2 Density of 2nd class roads	15	3.39	■
5.3 Density of 3rd class roads	14	4.06	■
5.4 Density of 4th class roads	18	3.17	■
5.5 Density of road infrastructure*	18	1.81	■
5.6 Quality of road infrastructure*	11	1.81	■
5.7 Number of bank branches	24	1.42	■
5.8 Availability of banks*	13	4.63	■
5.9 Number of post offices	19	2.81	■
5.10 Availability of post offices*	2	4.44	■
5.11 Number of hospital beds	19	2.85	■
5.12 Availability of medical facilities*	10	2.25	■
6th pillar: Technology	21	3.00	■
6.1 Innovative companies	14	4.07	■
6.2 Technical companies	21	1.70	■
6.3 Scientific and technical companies	22	3.44	■
6.4 Scientific and technical specialists	20	2.39	■
6.5 Volume of innovative products	16	2.00	■
6.6 Foreign direct investments	10	3.42	■
6.7 Capital investments	19	3.45	■
6.8 Technology level*	16	2.44	■
6.9 Ability of businesses to use latest technologies*	3	3.88	■
6.10 Costs of providing mobile services	15	2.75	■
6.11 Costs of providing internet access	20	1.40	■
6.12 Usage of internet services by businesses*	1	4.50	■
6.13 Usage of personal motor vehicles*	3	3.00	■
6.14 Usage of commercial motor vehicles*	22	3.81	■
6.15 Information on the supply of goods and services*	2	4.38	■
Subindex IV: Education and human resources			
	Rank	Score	
7th pillar: Human resources	21	2.84	■
7.1 Natural population growth	21	2.11	■
7.2 Migration of residents	15	2.60	■
7.3 Unemployment	23	1.36	■
7.4 Perception of unemployment*	5	3.00	■
7.5 Average age of unemployed persons	20	1.92	■
7.6 Perception of age structure of unemployment*	9	2.94	■
7.7 Average duration of unemployment	23	1.30	■
7.8 Perception of long-term unemployment*	9	3.40	■
7.9 Vacant working positions	2	5.19	■
7.10 Availability of free labor*	13	3.69	■
7.11 Average monthly salary	19	2.71	■
7.12 Wage expectations of jobseekers*	10	2.83	■
7.13 Migration of skilled labor*	8	2.44	■
7.14 Discipline and diligence of employees*	6	3.88	■
7.15 Employee motivation for productivity increase*	2	4.44	■
7.16 Fairness in employee selection*	1	3.13	■
8th pillar: Education	20	2.86	■
8.1 Level of education*	10	3.06	■
8.2 Mother language skills*	11	3.88	■
8.3 Foreign language skills*	20	1.69	■
8.4 Natural science skills*	22	2.00	■
8.5 Connection of vocational schools and labor market*	23	1.50	■
8.6 Qualification of employees*	17	2.88	■
8.7 Qualification of jobseekers*	18	2.06	■
8.8 Availability of highly skilled workforce*	17	2.88	■
8.9 Availability of partially skilled workforce*	21	3.63	■
8.10 Availability of unskilled workforce*	21	4.44	■
8.11 Density of secondary schools	13	3.06	■
8.12 Secondary schools students	6	3.55	■
8.13 Density of vocational schools	21	2.64	■
8.14 Vocational schools students	14	3.40	■
8.15 Density of institutions of higher education	19	2.30	■
8.16 Higher education students	15	3.21	■

Chapter 5

Indicators

Explanatory notes

The core of this chapter consists of rankings of all indicators that form Regional Business Environment Index (RBEI). Before the rankings themselves, explanations supplemented by specific features of selected indicators are present, followed by six rankings capturing the essential characteristics of the region. These rankings, unlike the others presenting indicators with their calculated values, display hard data belonging to appropriate region. Their purpose is to provide the reader with the basic measurable information about the regions – their population, area, population density, average monthly wage, and number and share of employees.

The central part of the chapter lists rankings of all 103 indicators that form RBEI. They are ordered by classification of indicators based on the identification number, which consists of the number of the appropriate pillar and the number of the indicator within the pillar. Indicators with asterisk at the end of the name come from the Survey of entrepreneurs' opinions, otherwise the indicator is based on hard data.

The aim of these rankings is to help the reader to compare the results of various regions within one indicator – for each presented indicator, one can find a particular region with its achieved score. Regions are in a descending order, from the region with the highest to the region with the lowest achieved score. Please note that detailed description of each indicator contained in the RBEI can be found in Chapter 3.

An interactive presentation of all results on the map of Ukraine is available at the project website. This site also allows its visitors to view a color map of Ukrainian regions based not only on individual indicators, but also with regard to the pillars and the entire RBEI while enabling the users to change the weight of each indicator separately. The result of such an additional change of weights is that the customized RBEI for each region will differ from its standard RBEI score.

List of indicators

Basic indicators

Population	100
Area	100
Population density	100
Unemployment rate	100
Average monthly wage	100

Subindex I: Economic activity

1st pillar: Economic environment

1.1 Population density	101
1.2 Urban population	101
1.3 Economically active population	101
1.4 Number of companies	101
1.5 Multinational and foreign companies*	101
1.6 Impact of the informal economy on doing business*	101
1.7 Level of corruption among private businesses*	102
1.8 Level of competitiveness in services*	102
1.9 Level of competitiveness in industry*	102
1.10 Reliability of business partners*	102
1.11 Availability of financial and capital resources*	102
1.12 Availability of necessary materials and services*	102
1.13 Impact of region location on doing business*	103
1.14 Impact of natural conditions on doing business*	103
1.15 Current business conditions*	103
1.16 Change of business conditions in recent years*	103
1.17 Potential for tourism development*	103

2nd pillar: Economic output

2.1 Development potential of businesses*	103
2.2 Profitability and productivity of businesses*	104
2.3 Gross added value	104
2.4 Volume of sales industrial products	104
2.5 Balance of goods	104
2.6 Balance of services	104
2.7 Foreign turnover of goods	104
2.8 Foreign turnover of services	105
2.9 Profitable companies	105
2.10 Financial results before taxation	105
2.11 Residential construction	105
2.12 Environmental friendliness of production*	105
2.13 Emissions of pollutants	105

Subindex II: Public administration and legislation

3rd pillar: Legislation

3.1 Barriers to business development*	106
3.2 Perception of local taxes*	106
3.3 Business development prospects*	106

4th pillar: Public administration

4.1 Fulfillment of tasks by local authorities*	106
4.2 Bureaucracy and delays in the offices*	106
4.3 Availability of public information*	106
4.4 Electronic communication with local authorities*	107
4.5 Law enforcement in the local court*	107
4.6 Impact of corruption on authorities*	107
4.7 Protection of private property*	107
4.8 Interest of the state institutions in the region*	107
4.9 Impact of authorities*	107
4.10 Economic management of local authorities*	108
4.11 Impact of trade unions on doing business*	108

Subindex III: Technology and infrastructure

5th pillar: Infrastructure

5.1 Density of 1st class roads	108
5.2 Density of 2nd class roads	108
5.3 Density of 3rd class roads	108
5.4 Density of 4th class roads	108
5.5 Density of road infrastructure*	109
5.6 Quality of road infrastructure*	109
5.7 Number of bank branches	109
5.8 Availability of banks*	109
5.9 Number of post offices	109
5.10 Availability of post offices*	109
5.11 Number of hospital beds	110
5.12 Availability of medical facilities*	110

6th pillar: Technology

6.1 Innovative companies	110
6.2 Technical companies	110
6.3 Scientific and technical companies	110
6.4 Scientific and technical specialists	110
6.5 Volume of innovative products	111
6.6 Foreign direct investments	111
6.7 Capital investments	111
6.8 Technology level*	111
6.9 Ability of businesses to use latest technologies*	111
6.10 Costs of providing mobile services	111
6.11 Costs of providing internet access	112
6.12 Usage of Internet services by businesses*	112
6.13 Usage of personal motor vehicles*	112
6.14 Usage of commercial motor vehicles*	112
6.15 Information on the supply of goods and services*	112

Subindex IV: Education and human resources

7th pillar: Human resources

7.1 Natural population growth	112
7.2 Migration of residents	113
7.3 Unemployment	113
7.4 Perception of unemployment*	113
7.5 Average age of unemployed persons	113
7.6 Perception of age structure of unemployment*	113
7.7 Average duration of unemployment	113
7.8 Perception of long-term unemployment*	114
7.9 Vacant working positions	114
7.10 Availability of free labor*	114
7.11 Average monthly salary	114
7.12 Wage expectations of jobseekers*	114
7.13 Migration of skilled labor*	114
7.14 Discipline and diligence of employees*	115
7.15 Employee motivation for productivity increase*	115
7.16 Fairness in employee selection*	115

8th pillar: Education

8.1 Level of education*	115
8.2 Mother language skills*	115
8.3 Foreign language skills*	115
8.4 Natural science skills*	116
8.5 Connection of vocational schools and labor market*	116
8.6 Qualification of employees*	116
8.7 Qualification of jobseekers*	116
8.8 Availability of highly skilled workforce*	116
8.9 Availability of partially skilled workforce*	116
8.10 Availability of unskilled workforce*	117
8.11 Density of secondary schools	117
8.12 Secondary schools students	117
8.13 Density of vocational schools	117
8.14 Vocational schools students	117
8.15 Density of institutions of higher education	117
8.16 Higher education students	118

Population

Region	Score
1 Donetsk	4,265,145
2 Dnipro	3,254,884
3 Kharkiv	2,718,616
4 Lviv	2,534,174
5 Odesa	2,390,289
6 Luhansk	2,205,389
7 Zaporizhia	1,753,642
8 Kyiv	1,732,235
9 Vinnytsia	1,602,163
10 Poltava	1,438,948
11 Ivano-Frankivsk	1,382,352
12 Khmelnytsk	1,294,413
13 Zakarpattia	1,259,158
14 Zhytomyr	1,247,549
15 Cherkasy	1,242,965
16 Rivne	1,161,811
17 Mykolaiv	1,158,207
18 Sumy	1,113,256
19 Ternopil	1,065,709
20 Kherson	1,062,356
21 Chernihiv	1,044,975
22 Volyn	1,042,668
23 Kirovograd	973,150
24 Chernivtsi	909,893

Area (km²)

Region	Score
1 Odesa	33 314
2 Dnipro	31 923
3 Chernihiv	31 903
4 Kharkiv	31 418
5 Zhytomyr	29 827
6 Poltava	28 750
7 Kherson	28 461
8 Kyiv	28 121
9 Zaporizhia	27 183
10 Luhansk	26 683
11 Donetsk	26 517
12 Vinnytsia	26 492
13 Kirovograd	24 588
14 Mykolaiv	24 585
15 Sumy	23 832
16 Lviv	21 831
17 Cherkasy	20 916
18 Khmelnytsk	20 629
19 Volyn	20 144
20 Rivne	20 051
21 Ivano-Frankivsk	13 927
22 Ternopil	13 824
23 Zakarpattia	12 753
24 Chernivtsi	8 096

Population density (inhab. / km²)

Region	Score
1 Donetsk	161
2 Lviv	116
3 Chernivtsi	112
4 Dnipro	102
5 Ivano-Frankivsk	99
6 Zakarpattia	99
7 Kharkiv	87
8 Luhansk	83
9 Ternopil	77
10 Odesa	72
11 Zaporizhia	65
12 Khmelnytsk	63
13 Kyiv	62
14 Vinnytsia	60
15 Cherkasy	59
16 Rivne	58
17 Volyn	52
18 Poltava	50
19 Mykolaiv	47
20 Sumy	47
21 Zhytomyr	42
22 Kirovograd	40
23 Kherson	37
24 Chernihiv	33

Unemployment rate (%)

Region	Score
1 Odesa	6.7 %
2 Kharkiv	7.8 %
3 Kyiv	8.0 %
4 Dnipro	8.0 %
5 Ivano-Frankivsk	8.1 %
6 Zaporizhia	8.4 %
7 Lviv	8.6 %
8 Chernivtsi	9.0 %
9 Mykolaiv	9.1 %
10 Zakarpattia	9.2 %
11 Khmelnytsk	9.4 %
12 Sumy	9.5 %
13 Volyn	9.9 %
14 Kherson	9.9 %
15 Cherkasy	10.2 %
16 Vinnytsia	10.5 %
17 Rivne	10.6 %
18 Donetsk	11.0 %
19 Kirovograd	11.2 %
20 Chernihiv	11.2 %
21 Ternopil	11.3 %
22 Luhansk	11.4 %
23 Zhytomyr	11.5 %
24 Poltava	11.5 %

Average monthly wage (UAH)

Region	Score
1 Donetsk	4,980
2 Dnipro	4,366
3 Zaporizhia	4,200
4 Kyiv	4,153
5 Mykolaiv	3,984
6 Odesa	3,897
7 Poltava	3,783
8 Kharkiv	3,697
9 Lviv	3,646
10 Rivne	3,573
11 Sumy	3,449
12 Luhansk	3,427
13 Ivano-Frankivsk	3,402
14 Vinnytsia	3,396
15 Zakarpattia	3,381
16 Khmelnytsk	3,371
17 Cherkasy	3,360
18 Chernihiv	3,295
19 Volyn	3,291
20 Kirovograd	3,282
21 Zhytomyr	3,271
22 Kherson	3,123
23 Chernivtsi	3,050
24 Ternopil	2,994

1.1 Population density

Region	Score	1	6
1 Donetsk	5.80		
2 Lviv	4.97		
3 Chernivtsi	4.89		
4 Dnipro	4.64		
5 Ivano-Frankivsk	4.56		
6 Zakarpattia	4.55		
7 Kharkiv	4.20		
8 Luhansk	4.08		
9 Ternopil	3.89		
- Country average	3.80		
10 Odessa	3.70		
11 Zaporizhia	3.41		
12 Khmelnytsk	3.33		
13 Kyiv	3.27		
14 Vinnytsia	3.22		
15 Cherkassy	3.18		
16 Rivne	3.10		
17 Volyn	2.77		
18 Poltava	2.68		
19 Mykolaiv	2.50		
20 Sumy	2.48		
21 Zhytomyr	2.14		
22 Kropyvnytsky	1.96		
23 Kherson	1.77		
24 Chernihiv	1.35		

1.2 Urban population

Region	Score	1	6
1 Donetsk	5.61		
2 Luhansk	5.45		
3 Dnipro	5.31		
4 Kharkiv	5.18		
5 Zaporizhia	5.03		
6 Sumy	4.64		
7 Mykolaiv	4.63		
8 Odessa	4.56		
- Country average	4.54		
9 Chernihiv	4.46		
10 Kropyvnytsky	4.38		
11 Kyiv	4.35		
12 Poltava	4.33		
13 Kherson	4.30		
14 Lviv	4.29		
15 Zhytomyr	4.19		
16 Cherkassy	4.09		
17 Khmelnytsk	4.07		
18 Volyn	3.87		
19 Vinnytsia	3.80		
20 Rivne	3.64		
21 Ternopil	3.49		
22 Ivano-Frankivsk	3.44		
23 Chernivtsi	3.41		
24 Zakarpattia	3.11		

1.3 Economically active population

Region	Score	1	6
1 Dnipro	5.77		
2 Kharkiv	5.56		
3 Zaporizhia	5.02		
4 Sumy	4.72		
5 Mykolaiv	4.65		
6 Poltava	4.42		
7 Chernihiv	4.39		
8 Kherson	4.22		
9 Cherkassy	4.17		
10 Zhytomyr	3.87		
- Country average	3.65		
11 Vinnytsia	3.54		
12 Donetsk	3.53		
13 Rivne	3.40		
14 Zakarpattia	3.21		
15 Kyiv	3.09		
16 Odessa	2.91		
17 Kropyvnytsky	2.84		
18 Luhansk	2.59		
19 Lviv	2.57		
20 Chernivtsi	2.57		
21 Khmelnytsk	2.28		
22 Ternopil	1.93		
23 Volyn	1.70		
24 Ivano-Frankivsk	1.25		

1.4 Number of companies

Region	Score	1	6
1 Kyiv	5.74		
2 Odessa	5.48		
3 Kharkiv	5.00		
4 Mykolaiv	4.96		
5 Dnipro	4.51		
6 Zaporizhia	4.50		
7 Kropyvnytsky	4.31		
8 Kherson	4.17		
9 Lviv	4.05		
10 Poltava	3.88		
11 Cherkassy	3.70		
- Country average	3.67		
12 Vinnytsia	3.34		
13 Ivano-Frankivsk	3.29		
14 Chernihiv	3.29		
15 Khmelnytsk	3.13		
16 Volyn	3.11		
17 Zhytomyr	3.08		
18 Sumy	3.06		
19 Zakarpattia	2.89		
20 Ternopil	2.87		
21 Rivne	2.74		
22 Chernivtsi	2.72		
23 Donetsk	2.01		
24 Luhansk	1.54		

1.5 Multinational and foreign companies*

Region	Score	1	6
1 Zakarpattia	3.10		
2 Lviv	2.85		
3 Volyn	2.83		
4 Dnipro	2.81		
5 Kyiv	2.68		
6 Kharkiv	2.67		
7 Zaporizhia	2.44		
8 Ivano-Frankivsk	2.41		
9 Chernivtsi	2.38		
10 Rivne	2.30		
- Country average	2.21		
11 Sumy	2.12		
12 Ternopil	2.06		
13 Vinnytsia	2.06		
14 Odessa	1.95		
15 Donetsk	1.92		
16 Khmelnytsk	1.90		
17 Kropyvnytsky	1.88		
18 Kherson	1.79		
19 Mykolaiv	1.76		
20 Poltava	1.75		
21 Chernihiv	1.70		
22 Luhansk	1.67		
23 Zhytomyr	1.56		
24 Cherkassy	1.45		

1.6 Impact of the informal economy on doing business*

Region	Score	1	6
1 Zaporizhia	2.89		
2 Mykolaiv	2.76		
3 Lviv	2.55		
4 Kropyvnytsky	2.35		
5 Sumy	2.35		
6 Zakarpattia	2.30		
7 Volyn	2.28		
8 Kharkiv	2.28		
9 Poltava	2.25		
10 Dnipro	2.24		
11 Ternopil	2.22		
12 Vinnytsia	2.22		
- Country average	2.22		
13 Kyiv	2.16		
14 Zhytomyr	2.13		
15 Odessa	2.10		
16 Rivne	2.10		
17 Ivano-Frankivsk	2.09		
18 Donetsk	2.08		
19 Kherson	2.05		
20 Chernihiv	2.05		
21 Cherkassy	2.00		
22 Chernivtsi	2.00		
23 Khmelnytsk	1.95		
24 Luhansk	1.89		

1.7 Level of corruption among private businesses*

Region	Score	1	6
1 Mykolaiv	3.24		
2 Zaporizhia	2.94		
3 Volyn	2.89		
4 Vinnytsia	2.78		
5 Kropyvnytsky	2.65		
6 Rivne	2.60		
7 Odessa	2.55		
8 Chernihiv	2.55		
9 Poltava	2.50		
10 Lviv	2.50		
11 Chernivtsi	2.50		
12 Zhytomyr	2.44		
- Country average	2.41		
13 Sumy	2.35		
14 Khmelnytsk	2.35		
15 Donetsk	2.31		
16 Dnipro	2.29		
17 Kherson	2.26		
18 Kharkiv	2.22		
19 Kyiv	2.21		
20 Zakarpattia	2.20		
21 Cherkassy	2.15		
22 Luhansk	2.11		
23 Ivano-Frankivsk	1.95		
24 Ternopil	1.94		

1.8 Level of competitiveness in services*

Region	Score	1	6
1 Chernivtsi	4.25		
2 Zhytomyr	4.13		
3 Zakarpattia	4.10		
4 Dnipro	3.95		
5 Sumy	3.88		
6 Lviv	3.80		
7 Ternopil	3.56		
8 Kharkiv	3.44		
9 Rivne	3.40		
10 Vinnytsia	3.39		
- Country average	3.24		
11 Kropyvnytsky	3.24		
12 Kyiv	3.21		
13 Odessa	3.15		
14 Khmelnytsk	3.15		
15 Volyn	3.11		
16 Chernihiv	3.10		
17 Ivano-Frankivsk	3.09		
18 Poltava	3.00		
19 Kherson	2.89		
20 Donetsk	2.85		
21 Zaporizhia	2.72		
22 Cherkassy	2.60		
23 Mykolaiv	2.29		
24 Luhansk	2.00		

1.9 Level of competitiveness in industry*

Region	Score	1	6
1 Kharkiv	5.22		
2 Zaporizhia	4.83		
3 Dnipro	4.38		
4 Mykolaiv	3.86		
5 Odessa	3.55		
6 Chernivtsi	3.50		
7 Donetsk	3.46		
8 Sumy	3.24		
- Country average	3.15		
9 Luhansk	3.00		
10 Kherson	3.00		
11 Poltava	2.90		
12 Vinnytsia	2.83		
13 Kyiv	2.63		
14 Kropyvnytsky	2.59		
15 Zhytomyr	2.50		
16 Lviv	2.40		
17 Volyn	2.33		
18 Zakarpattia	2.30		
19 Khmelnytsk	2.15		
20 Rivne	2.10		
21 Chernihiv	2.00		
22 Ivano-Frankivsk	1.95		
23 Cherkassy	1.80		
24 Ternopil	1.78		

1.10 Reliability of business partners*

Region	Score	1	6
1 Chernivtsi	4.63		
2 Zhytomyr	3.69		
3 Chernihiv	3.40		
4 Dnipro	3.38		
5 Mykolaiv	3.38		
6 Kyiv	3.37		
7 Rivne	3.30		
8 Zakarpattia	3.30		
9 Kharkiv	3.28		
10 Poltava	3.25		
11 Cherkassy	3.25		
12 Sumy	3.24		
13 Zaporizhia	3.22		
14 Volyn	3.22		
- Country average	3.20		
15 Ternopil	3.17		
16 Lviv	3.15		
17 Odessa	3.15		
18 Ivano-Frankivsk	3.14		
19 Kropyvnytsky	3.12		
20 Vinnytsia	3.11		
21 Kherson	3.11		
22 Khmelnytsk	3.00		
23 Luhansk	2.89		
24 Donetsk	2.69		

1.11 Availability of financial and capital resources*

Region	Score	1	6
1 Chernivtsi	2.88		
2 Mykolaiv	2.24		
3 Ivano-Frankivsk	2.23		
4 Zhytomyr	2.13		
5 Lviv	2.10		
6 Dnipro	2.10		
7 Sumy	2.06		
8 Zaporizhia	2.06		
9 Kyiv	2.05		
10 Poltava	2.05		
11 Zakarpattia	2.05		
12 Kharkiv	2.00		
13 Rivne	2.00		
- Country average	1.97		
14 Khmelnytsk	1.90		
15 Chernihiv	1.90		
16 Kherson	1.89		
17 Vinnytsia	1.89		
18 Kropyvnytsky	1.88		
19 Odessa	1.85		
20 Cherkassy	1.85		
21 Donetsk	1.77		
22 Volyn	1.72		
23 Ternopil	1.67		
24 Luhansk	1.56		

1.12 Availability of necessary materials and services*

Region	Score	1	6
1 Zhytomyr	3.38		
2 Kharkiv	3.28		
3 Zaporizhia	3.22		
4 Mykolaiv	3.19		
5 Vinnytsia	3.17		
6 Lviv	3.10		
7 Odessa	3.05		
8 Dnipro	3.05		
9 Ternopil	3.00		
10 Kyiv	3.00		
11 Kropyvnytsky	3.00		
12 Ivano-Frankivsk	2.95		
- Country average	2.83		
13 Sumy	2.82		
14 Khmelnytsk	2.75		
15 Poltava	2.65		
16 Chernivtsi	2.63		
17 Cherkassy	2.60		
18 Rivne	2.50		
19 Volyn	2.50		
20 Chernihiv	2.50		
21 Zakarpattia	2.45		
22 Kherson	2.42		
23 Donetsk	2.38		
24 Luhansk	2.11		

1.13 Impact of region location on doing business*

Region	Score	1	6
1 Odessa	4.95		
2 Zakarpattia	4.95		
3 Volyn	4.89		
4 Mykolaiv	4.81		
5 Lviv	4.75		
6 Chernivtsi	4.75		
7 Zaporizhia	4.72		
8 Kyiv	4.68		
9 Ivano-Frankivsk	4.55		
10 Vinnytsia	4.44		
11 Zhytomyr	4.44		
12 Kropyvnytsky	4.41		
13 Dnipro	3.95		
- Country average	3.93		
14 Kharkiv	3.89		
15 Khmelnytsk	3.80		
16 Kherson	3.74		
17 Cherkassy	3.70		
18 Rivne	3.70		
19 Poltava	3.45		
20 Ternopil	3.33		
21 Chernihiv	3.30		
22 Sumy	3.29		
23 Donetsk	2.46		
24 Luhansk	2.00		

1.14 Impact of natural conditions on doing business*

Region	Score	1	6
1 Chernivtsi	5.88		
2 Odessa	5.40		
3 Volyn	5.33		
4 Vinnytsia	5.28		
5 Kyiv	5.26		
6 Zhytomyr	5.25		
7 Mykolaiv	5.24		
8 Sumy	5.24		
9 Cherkassy	5.20		
10 Lviv	5.15		
11 Kherson	5.05		
12 Chernihiv	5.05		
13 Zakarpattia	5.00		
- Country average	4.96		
14 Khmelnytsk	4.95		
15 Ternopil	4.94		
16 Rivne	4.90		
17 Ivano-Frankivsk	4.86		
18 Dnipro	4.86		
19 Poltava	4.85		
20 Zaporizhia	4.78		
21 Kropyvnytsky	4.76		
22 Kharkiv	4.72		
23 Luhansk	4.44		
24 Donetsk	4.38		

1.15 Current business conditions*

Region	Score	1	6
1 Chernivtsi	3.13		
2 Dnipro	2.57		
3 Zhytomyr	2.56		
4 Zakarpattia	2.45		
5 Chernihiv	2.45		
6 Zaporizhia	2.39		
7 Vinnytsia	2.39		
8 Kyiv	2.37		
9 Kharkiv	2.22		
10 Lviv	2.20		
11 Sumy	2.18		
12 Rivne	2.15		
- Country average	2.08		
13 Mykolaiv	2.05		
14 Khmelnytsk	2.00		
15 Ivano-Frankivsk	2.00		
16 Volyn	2.00		
17 Kropyvnytsky	1.94		
18 Poltava	1.90		
19 Ternopil	1.89		
20 Kherson	1.84		
21 Odessa	1.80		
22 Cherkassy	1.80		
23 Donetsk	1.46		
24 Luhansk	1.33		

1.16 Change of business conditions in recent years*

Region	Score	1	6
1 Dnipro	2.86		
2 Zhytomyr	2.50		
3 Vinnytsia	2.50		
4 Zakarpattia	2.45		
5 Kyiv	2.42		
6 Lviv	2.40		
7 Kharkiv	2.39		
8 Chernivtsi	2.38		
9 Chernihiv	2.35		
10 Volyn	2.22		
- Country average	2.17		
11 Kherson	2.16		
12 Rivne	2.15		
13 Poltava	2.15		
14 Ivano-Frankivsk	2.09		
15 Sumy	2.06		
16 Khmelnytsk	2.05		
17 Odessa	2.05		
18 Mykolaiv	2.05		
19 Ternopil	2.00		
20 Cherkassy	2.00		
21 Kropyvnytsky	1.94		
22 Luhansk	1.78		
23 Zaporizhia	1.78		
24 Donetsk	1.62		

1.17 Potential for tourism development*

Region	Score	1	6
1 Ivano-Frankivsk	5.64		
2 Lviv	5.55		
3 Chernivtsi	5.50		
4 Odessa	5.30		
5 Zakarpattia	5.20		
6 Ternopil	4.39		
7 Volyn	4.17		
8 Mykolaiv	3.76		
9 Kherson	3.68		
10 Chernihiv	3.15		
- Country average	3.14		
11 Kyiv	3.05		
12 Zhytomyr	2.88		
13 Khmelnytsk	2.80		
14 Dnipro	2.76		
15 Vinnytsia	2.61		
16 Zaporizhia	2.56		
17 Poltava	2.50		
18 Kharkiv	2.39		
19 Rivne	2.25		
20 Cherkassy	2.20		
21 Kropyvnytsky	1.71		
22 Donetsk	1.62		
23 Sumy	1.59		
24 Luhansk	1.11		

2.1 Development potential of businesses*

Region	Score	1	6
1 Zhytomyr	3.88		
2 Kropyvnytsky	3.59		
3 Chernivtsi	3.50		
4 Zaporizhia	3.44		
5 Mykolaiv	3.38		
6 Kyiv	3.26		
7 Zakarpattia	3.20		
8 Dnipro	3.19		
9 Ivano-Frankivsk	3.09		
10 Vinnytsia	3.06		
11 Donetsk	3.00		
12 Kharkiv	3.00		
- Country average	2.89		
13 Volyn	2.89		
14 Sumy	2.82		
15 Poltava	2.70		
16 Kherson	2.68		
17 Chernihiv	2.65		
18 Cherkassy	2.65		
19 Lviv	2.55		
20 Khmelnytsk	2.40		
21 Rivne	2.30		
22 Odessa	2.25		
23 Ternopil	2.22		
24 Luhansk	2.11		

2.2 Profitability and productivity of businesses*

Region	Score	1	6
1 Zhytomyr	3.50		
2 Chernivtsi	3.50		
3 Mykolaiv	3.43		
4 Kropyvnytsky	3.35		
5 Ivano-Frankivsk	3.09		
6 Zaporizhia	3.00		
7 Volyn	3.00		
8 Zakarpattia	2.95		
9 Dnipro	2.76		
10 Kyiv	2.63		
11 Lviv	2.60		
12 Sumy	2.59		
13 Vinnytsia	2.56		
- Country average	2.51		
14 Cherkassy	2.30		
15 Kherson	2.26		
16 Chernihiv	2.20		
17 Kharkiv	2.17		
18 Rivne	2.15		
19 Khmelnytsk	2.10		
20 Donetsk	2.08		
21 Ternopil	2.06		
22 Odessa	2.05		
23 Poltava	2.05		
24 Luhansk	1.89		

2.3 Gross added value

Region	Score	1	6
1 Dnipro	5.78		
2 Poltava	5.45		
3 Kyiv	5.35		
4 Kharkiv	4.38		
5 Zaporizhia	4.34		
6 Odessa	4.01		
7 Mykolaiv	3.86		
8 Cherkassy	3.79		
9 Kropyvnytsky	3.73		
- Country average	3.70		
10 Lviv	3.70		
11 Vinnytsia	3.50		
12 Ivano-Frankivsk	3.50		
13 Sumy	3.47		
14 Chernihiv	3.45		
15 Donetsk	3.29		
16 Rivne	3.18		
17 Khmelnytsk	3.17		
18 Zhytomyr	3.04		
19 Volyn	2.97		
20 Kherson	2.83		
21 Ternopil	2.61		
22 Zakarpattia	2.45		
23 Chernivtsi	2.05		
24 Luhansk	1.36		

2.4 Volume of sales industrial products

Region	Score	1	6
1 Dnipro	5.83		
2 Poltava	5.45		
3 Zaporizhia	5.43		
4 Donetsk	4.56		
5 Kyiv	4.32		
6 Kharkiv	4.24		
7 Cherkassy	4.19		
- Country average	3.91		
8 Sumy	3.88		
9 Mykolaiv	3.87		
10 Vinnytsia	3.73		
11 Ivano-Frankivsk	3.52		
12 Rivne	3.43		
13 Kropyvnytsky	3.42		
14 Lviv	3.34		
15 Chernihiv	3.31		
16 Zhytomyr	3.31		
17 Khmelnytsk	3.30		
18 Kherson	3.16		
19 Odessa	3.16		
20 Volyn	3.11		
21 Luhansk	2.97		
22 Ternopil	2.59		
23 Zakarpattia	2.58		
24 Chernivtsi	2.13		

2.5 Balance of goods

Region	Score	1	6
1 Zaporizhia	5.72		
2 Dnipro	5.50		
3 Mykolaiv	5.30		
4 Poltava	3.98		
5 Vinnytsia	3.90		
6 Lviv	3.81		
7 Odessa	3.76		
8 Kropyvnytsky	3.75		
- Country average	3.67		
9 Sumy	3.40		
10 Cherkassy	3.35		
11 Chernihiv	3.35		
12 Zhytomyr	3.32		
13 Rivne	3.31		
14 Khmelnytsk	3.19		
15 Kherson	3.14		
16 Zakarpattia	3.07		
17 Ivano-Frankivsk	3.04		
18 Chernivtsi	2.98		
19 Ternopil	2.97		
20 Kharkiv	2.91		
21 Volyn	2.91		
22 Kyiv	1.37		
23 Luhansk	-		
24 Donetsk	-		

2.6 Balance of services

Region	Score	1	6
1 Lviv	5.81		
2 Mykolaiv	5.18		
3 Odessa	5.10		
4 Zakarpattia	4.12		
5 Kharkiv	3.60		
6 Kyiv	3.54		
- Country average	3.50		
7 Zaporizhia	3.38		
8 Volyn	3.36		
9 Vinnytsia	3.33		
10 Ternopil	3.31		
11 Ivano-Frankivsk	3.23		
12 Chernivtsi	3.17		
13 Zhytomyr	3.17		
14 Kherson	3.15		
15 Khmelnytsk	3.06		
16 Rivne	3.00		
17 Kropyvnytsky	2.98		
18 Chernihiv	2.96		
19 Cherkassy	2.93		
20 Sumy	2.47		
21 Dnipro	2.36		
22 Poltava	1.55		
23 Luhansk	-		
24 Donetsk	-		

2.7 Foreign turnover of goods

Region	Score	1	6
1 Dnipro	5.82		
2 Kyiv	5.44		
3 Zaporizhia	5.29		
4 Mykolaiv	4.89		
5 Zakarpattia	4.67		
6 Poltava	4.66		
7 Volyn	4.06		
8 Odessa	3.96		
- Country average	3.82		
9 Kharkiv	3.67		
10 Sumy	3.59		
11 Chernihiv	3.56		
12 Vinnytsia	3.18		
13 Lviv	3.02		
14 Zhytomyr	2.86		
15 Cherkassy	2.82		
16 Kropyvnytsky	2.80		
17 Ternopil	2.78		
18 Khmelnytsk	2.76		
19 Rivne	2.74		
20 Ivano-Frankivsk	2.70		
21 Kherson	2.36		
22 Chernivtsi	1.86		
23 Donetsk	-		
24 Luhansk	-		

2.8 Foreign turnover of services

Region	Score	1	6
1 Lviv	5.84		
2 Mykolaiv	5.37		
3 Odessa	5.36		
4 Dnipro	4.38		
5 Kyiv	4.38		
6 Zakarpattia	4.00		
7 Poltava	3.88		
8 Kharkiv	3.82		
- Country average	3.61		
9 Zaporizhia	3.54		
10 Sumy	3.38		
11 Volyn	2.96		
12 Kropyvnytsky	2.72		
13 Ternopil	2.69		
14 Vinnytsia	2.63		
15 Ivano-Frankivsk	2.54		
16 Zhytomyr	2.31		
17 Rivne	2.27		
18 Kherson	2.27		
19 Cherkassy	2.24		
20 Chernihiv	2.24		
21 Khmelnytsk	2.06		
22 Chernivtsi	2.02		
23 Donetsk	-		
24 Luhansk	-		

2.9 Profitable companies

Region	Score	1	6
1 Kropyvnytsky	5.79		
2 Ivano-Frankivsk	4.97		
3 Zakarpattia	4.97		
4 Mykolaiv	4.81		
5 Cherkassy	4.64		
6 Ternopil	4.36		
7 Poltava	4.31		
8 Vinnytsia	4.31		
9 Khmelnytsk	3.85		
10 Kherson	3.79		
11 Odessa	3.75		
12 Chernihiv	3.69		
13 Zaporizhia	3.43		
14 Luhansk	3.40		
- Country average	3.21		
15 Sumy	3.15		
16 Kyiv	3.11		
17 Volyn	2.81		
18 Lviv	2.60		
19 Dnipro	2.47		
20 Rivne	2.34		
21 Chernivtsi	2.15		
22 Kharkiv	2.01		
23 Zhytomyr	1.96		
24 Donetsk	1.31		

2.10 Financial results before taxation

Region	Score	1	6
1 Sumy	5.12		
2 Vinnytsia	4.62		
3 Zakarpattia	3.92		
4 Kherson	3.89		
5 Cherkassy	3.85		
6 Chernivtsi	3.84		
7 Poltava	3.60		
8 Zhytomyr	3.51		
9 Khmelnytsk	3.35		
10 Kharkiv	3.28		
11 Chernihiv	3.27		
12 Zaporizhia	2.93		
13 Lviv	2.91		
14 Ternopil	2.86		
15 Kropyvnytsky	2.80		
- Country average	2.77		
16 Mykolaiv	2.70		
17 Volyn	2.67		
18 Rivne	2.52		
19 Ivano-Frankivsk	2.46		
20 Odessa	2.11		
21 Donetsk	1.74		
22 Kyiv	1.74		
23 Dnipro	1.56		
24 Luhansk	1.13		

2.11 Residential construction

Region	Score	1	6
1 Kyiv	5.81		
2 Ivano-Frankivsk	5.01		
3 Lviv	4.44		
4 Ternopil	4.19		
5 Chernivtsi	4.19		
6 Zakarpattia	4.09		
7 Khmelnytsk	4.06		
8 Odessa	3.90		
9 Rivne	3.86		
10 Volyn	3.83		
11 Vinnytsia	3.51		
- Country average	3.25		
12 Poltava	3.12		
13 Chernihiv	3.08		
14 Zhytomyr	2.96		
15 Cherkassy	2.91		
16 Sumy	2.90		
17 Kharkiv	2.84		
18 Mykolaiv	2.82		
19 Kherson	2.67		
20 Kropyvnytsky	2.54		
21 Dnipro	2.46		
22 Donetsk	2.35		
23 Zaporizhia	2.12		
24 Luhansk	1.38		

2.12 Environmental friendliness of production*

Region	Score	1	6
1 Chernivtsi	5.88		
2 Volyn	5.44		
3 Vinnytsia	5.22		
4 Ivano-Frankivsk	4.68		
5 Ternopil	4.67		
6 Zakarpattia	4.60		
7 Poltava	4.50		
8 Lviv	4.45		
9 Kyiv	4.42		
10 Chernihiv	4.20		
11 Zhytomyr	4.13		
12 Khmelnytsk	3.80		
13 Rivne	3.70		
14 Odessa	3.55		
15 Cherkassy	3.50		
- Country average	3.46		
16 Kherson	3.42		
17 Kropyvnytsky	3.29		
18 Sumy	3.29		
19 Kharkiv	3.00		
20 Mykolaiv	2.81		
21 Luhansk	2.33		
22 Zaporizhia	2.28		
23 Dnipro	1.81		
24 Donetsk	1.69		

2.13 Emissions of pollutants

Region	Score	1	6
1 Volyn	3.33		
2 Rivne	3.28		
3 Mykolaiv	3.27		
4 Odessa	3.25		
5 Ternopil	3.15		
6 Kropyvnytsky	3.12		
7 Sumy	3.08		
8 Chernivtsi	3.07		
9 Zakarpattia	3.03		
10 Khmelnytsk	3.01		
11 Poltava	2.99		
12 Zhytomyr	2.95		
13 Kherson	2.90		
14 Kharkiv	2.86		
15 Luhansk	2.84		
16 Lviv	2.82		
17 Chernihiv	2.73		
18 Kyiv	2.66		
- Country average	2.56		
19 Cherkassy	2.50		
20 Vinnytsia	2.25		
21 Zaporizhia	2.13		
22 Dnipro	1.79		
23 Ivano-Frankivsk	1.59		
24 Donetsk	1.14		

3.1 Barriers to business development*

Region	Score	1	6
1 Chernihiv	2.85		
2 Kharkiv	2.72		
3 Dnipro	2.67		
4 Kyiv	2.58		
5 Rivne	2.50		
6 Kropyvnytsky	2.41		
7 Zakarpattia	2.40		
8 Cherkassy	2.35		
9 Odessa	2.35		
10 Ternopil	2.33		
11 Lviv	2.30		
- Country average	2.30		
12 Khmelnytsk	2.25		
13 Chernivtsi	2.25		
14 Poltava	2.25		
15 Kherson	2.21		
16 Ivano-Frankivsk	2.18		
17 Sumy	2.18		
18 Volyn	2.17		
19 Zaporizhia	2.11		
20 Zhytomyr	2.06		
21 Mykolaiv	2.00		
22 Donetsk	2.00		
23 Vinnytsia	2.00		
24 Luhansk	2.00		

3.2 Perception of local taxes*

Region	Score	1	6
1 Luhansk	3.33		
2 Poltava	3.25		
3 Kharkiv	3.17		
4 Zakarpattia	3.15		
5 Volyn	3.11		
6 Kyiv	3.11		
7 Chernihiv	3.10		
8 Dnipro	3.10		
9 Kherson	3.05		
10 Khmelnytsk	3.05		
11 Ivano-Frankivsk	3.05		
- Country average	3.02		
12 Zaporizhia	3.00		
13 Lviv	3.00		
14 Rivne	2.95		
15 Odessa	2.95		
16 Ternopil	2.94		
17 Vinnytsia	2.94		
18 Sumy	2.94		
19 Donetsk	2.92		
20 Cherkassy	2.90		
21 Kropyvnytsky	2.88		
22 Mykolaiv	2.81		
23 Zhytomyr	2.75		
24 Chernivtsi	2.50		

3.3 Business development prospects*

Region	Score	1	6
1 Volyn	3.22		
2 Lviv	3.00		
3 Rivne	2.95		
4 Kyiv	2.95		
5 Chernihiv	2.85		
6 Kropyvnytsky	2.82		
7 Ternopil	2.72		
8 Zhytomyr	2.69		
9 Sumy	2.65		
10 Ivano-Frankivsk	2.64		
11 Dnipro	2.57		
12 Kharkiv	2.56		
13 Zakarpattia	2.55		
14 Zaporizhia	2.50		
15 Mykolaiv	2.48		
- Country average	2.41		
16 Kherson	2.37		
17 Vinnytsia	2.33		
18 Poltava	2.20		
19 Cherkassy	2.15		
20 Odessa	2.10		
21 Khmelnytsk	2.05		
22 Chernivtsi	1.88		
23 Luhansk	1.78		
24 Donetsk	1.62		

4.1 Fulfillment of tasks by local authorities*

Region	Score	1	6
1 Volyn	2.94		
2 Kharkiv	2.72		
3 Dnipro	2.71		
4 Vinnytsia	2.67		
5 Chernihiv	2.60		
6 Sumy	2.56		
7 Donetsk	2.54		
8 Rivne	2.50		
9 Zaporizhia	2.44		
- Country average	2.41		
10 Zakarpattia	2.40		
11 Mykolaiv	2.38		
12 Kyiv	2.37		
13 Ivano-Frankivsk	2.36		
14 Lviv	2.35		
15 Ternopil	2.33		
16 Kherson	2.32		
17 Kropyvnytsky	2.29		
18 Zhytomyr	2.25		
19 Khmelnytsk	2.25		
20 Poltava	2.15		
21 Luhansk	2.11		
22 Cherkassy	2.05		
23 Odessa	2.00		
24 Chernivtsi	1.88		

4.2 Bureaucracy and delays in the offices*

Region	Score	1	6
1 Vinnytsia	2.89		
2 Donetsk	2.77		
3 Zaporizhia	2.67		
4 Kharkiv	2.67		
5 Rivne	2.60		
6 Luhansk	2.56		
7 Sumy	2.53		
8 Poltava	2.40		
9 Zakarpattia	2.40		
- Country average	2.34		
10 Dnipro	2.33		
11 Mykolaiv	2.33		
12 Kropyvnytsky	2.29		
13 Lviv	2.20		
14 Kherson	2.11		
15 Khmelnytsk	2.10		
16 Ivano-Frankivsk	2.09		
17 Zhytomyr	2.06		
18 Kyiv	2.05		
19 Chernihiv	2.00		
20 Odessa	1.95		
21 Ternopil	1.94		
22 Volyn	1.89		
23 Chernivtsi	1.88		
24 Cherkassy	1.85		

4.3 Availability of public information*

Region	Score	1	6
1 Kyiv	3.06		
2 Vinnytsia	3.06		
3 Zaporizhia	3.00		
4 Lviv	2.94		
5 Poltava	2.94		
6 Mykolaiv	2.86		
7 Rivne	2.85		
8 Dnipro	2.85		
9 Donetsk	2.82		
10 Kropyvnytsky	2.76		
- Country average	2.68		
11 Zakarpattia	2.65		
12 Sumy	2.65		
13 Ivano-Frankivsk	2.64		
14 Kherson	2.62		
15 Odessa	2.57		
16 Volyn	2.56		
17 Chernihiv	2.50		
18 Zhytomyr	2.50		
19 Ternopil	2.45		
20 Luhansk	2.43		
21 Chernivtsi	2.38		
22 Cherkassy	2.31		
23 Khmelnytsk	2.27		
24 Kharkiv	2.21		

4.4 Electronic communication with local authorities*

Region	Score	1	6
1 Donetsk	3.09		
2 Zaporizhia	3.06		
3 Volyn	3.00		
4 Kyiv	2.87		
5 Rivne	2.80		
6 Kherson	2.77		
7 Kropyvnytsky	2.76		
8 Dnipro	2.75		
9 Lviv	2.72		
10 Cherkassy	2.69		
11 Khmelnytsk	2.67		
12 Zakarpattia	2.65		
- Country average	2.63		
13 Kharkiv	2.57		
14 Poltava	2.57		
15 Vinnytsia	2.50		
16 Ivano-Frankivsk	2.41		
17 Mykolaiv	2.38		
18 Ternopil	2.36		
19 Odessa	2.36		
20 Chernihiv	2.33		
21 Sumy	2.31		
22 Zhytomyr	2.25		
23 Luhansk	2.25		
24 Chernivtsi	1.63		

4.5 Law enforcement in the local court*

Region	Score	1	6
1 Zaporizhia	2.89		
2 Mykolaiv	2.71		
3 Ivano-Frankivsk	2.64		
4 Kharkiv	2.61		
5 Vinnytsia	2.56		
6 Sumy	2.47		
7 Donetsk	2.46		
8 Ternopil	2.44		
9 Chernivtsi	2.43		
10 Dnipro	2.43		
11 Odessa	2.40		
12 Lviv	2.40		
- Country average	2.37		
13 Kropyvnytsky	2.35		
14 Kherson	2.32		
15 Kyiv	2.26		
16 Zakarpattia	2.20		
17 Khmelnytsk	2.20		
18 Zhytomyr	2.19		
19 Volyn	2.17		
20 Chernihiv	2.15		
21 Luhansk	2.11		
22 Poltava	2.05		
23 Rivne	2.05		
24 Cherkassy	1.85		

4.6 Impact of corruption on authorities*

Region	Score	1	6
1 Zaporizhia	2.56		
2 Chernihiv	2.30		
3 Mykolaiv	2.29		
4 Luhansk	2.22		
5 Kyiv	2.21		
6 Rivne	2.20		
7 Poltava	2.20		
8 Zhytomyr	2.19		
9 Lviv	2.15		
10 Khmelnytsk	2.10		
- Country average	2.06		
11 Vinnytsia	2.06		
12 Kharkiv	2.06		
13 Zakarpattia	2.05		
14 Cherkassy	2.05		
15 Dnipro	2.05		
16 Sumy	2.00		
17 Kropyvnytsky	2.00		
18 Ivano-Frankivsk	1.91		
19 Kherson	1.89		
20 Volyn	1.89		
21 Ternopil	1.89		
22 Chernivtsi	1.88		
23 Odessa	1.85		
24 Donetsk	1.77		

4.7 Protection of private property*

Region	Score	1	6
1 Dnipro	2.90		
2 Zakarpattia	2.80		
3 Vinnytsia	2.72		
4 Lviv	2.70		
5 Volyn	2.67		
6 Mykolaiv	2.67		
7 Kharkiv	2.56		
8 Sumy	2.53		
9 Kyiv	2.47		
10 Kropyvnytsky	2.47		
11 Ternopil	2.44		
12 Zaporizhia	2.33		
13 Khmelnytsk	2.30		
- Country average	2.29		
14 Kherson	2.26		
15 Ivano-Frankivsk	2.23		
16 Poltava	2.20		
17 Zhytomyr	2.19		
18 Chernihiv	2.15		
19 Chernivtsi	2.13		
20 Odessa	2.00		
21 Rivne	2.00		
22 Cherkassy	2.00		
23 Donetsk	1.62		
24 Luhansk	1.33		

4.8 Interest of the state institutions in the region*

Region	Score	1	6
1 Vinnytsia	3.50		
2 Dnipro	3.33		
3 Zaporizhia	3.22		
4 Kharkiv	3.11		
5 Zakarpattia	2.90		
6 Kyiv	2.79		
7 Ivano-Frankivsk	2.77		
8 Lviv	2.70		
9 Volyn	2.67		
10 Chernihiv	2.55		
- Country average	2.46		
11 Odessa	2.30		
12 Cherkassy	2.20		
13 Rivne	2.15		
14 Chernivtsi	2.13		
15 Sumy	2.12		
16 Ternopil	2.11		
17 Khmelnytsk	2.05		
18 Zhytomyr	2.00		
19 Kherson	2.00		
20 Mykolaiv	2.00		
21 Luhansk	2.00		
22 Kropyvnytsky	1.94		
23 Poltava	1.70		
24 Donetsk	1.69		

4.9 Impact of authorities*

Region	Score	1	6
1 Vinnytsia	2.94		
2 Zakarpattia	2.85		
3 Dnipro	2.76		
4 Kyiv	2.74		
5 Ternopil	2.67		
6 Zaporizhia	2.65		
7 Kropyvnytsky	2.65		
8 Chernihiv	2.55		
9 Rivne	2.55		
10 Sumy	2.53		
11 Kharkiv	2.50		
12 Mykolaiv	2.48		
13 Volyn	2.44		
- Country average	2.37		
14 Lviv	2.30		
15 Cherkassy	2.30		
16 Kherson	2.26		
17 Zhytomyr	2.25		
18 Ivano-Frankivsk	2.23		
19 Poltava	2.20		
20 Chernivtsi	2.13		
21 Khmelnytsk	2.10		
22 Odessa	1.95		
23 Donetsk	1.92		
24 Luhansk	1.78		

4.10 Electronic communication with local authorities*

Region	Score	1	6
1 Vinnytsia	3.11		
2 Dnipro	3.00		
3 Volyn	3.00		
4 Chernihiv	2.80		
5 Zakarpattia	2.75		
6 Lviv	2.75		
7 Zaporizhia	2.67		
8 Ternopil	2.67		
9 Sumy	2.65		
10 Kropyvnytsky	2.53		
11 Mykolaiv	2.48		
- Country average	2.47		
12 Zhytomyr	2.44		
13 Poltava	2.35		
14 Kherson	2.32		
15 Cherkassy	2.30		
16 Kharkiv	2.28		
17 Ivano-Frankivsk	2.27		
18 Kyiv	2.26		
19 Rivne	2.25		
20 Donetsk	2.23		
21 Khmelnytsk	2.20		
22 Odessa	2.15		
23 Luhansk	2.00		
24 Chernivtsi	1.88		

4.11 Impact of trade unions on doing business*

Region	Score	1	6
1 Zakarpattia	3.40		
2 Zaporizhia	3.33		
3 Cherkassy	3.33		
4 Kyiv	3.25		
5 Kharkiv	3.25		
6 Poltava	3.20		
7 Odessa	3.00		
8 Rivne	3.00		
9 Vinnytsia	3.00		
10 Volyn	3.00		
11 Mykolaiv	3.00		
12 Ternopil	3.00		
- Country average	3.00		
14 Chernihiv	3.00		
15 Donetsk	3.00		
16 Chernivtsi	3.00		
17 Kherson	3.00		
18 Luhansk	3.00		
19 Khmelnytsk	3.00		
20 Kropyvnytsky	2.94		
21 Ivano-Frankivsk	2.83		
22 Sumy	2.65		
23 Dnipro	2.60		
24 Zhytomyr	2.14		

5.1 Density of 1st class roads

Region	Score	1	6
1 Kyiv	5.80		
2 Donetsk	5.14		
3 Dnipro	4.93		
4 Zhytomyr	4.62		
5 Rivne	4.20		
6 Odessa	4.12		
7 Kharkiv	4.09		
8 Cherkassy	4.00		
- Country average	3.66		
9 Chernihiv	3.51		
10 Poltava	3.51		
11 Vinnytsia	3.46		
12 Mykolaiv	3.27		
13 Kropyvnytsky	3.26		
14 Luhansk	3.04		
15 Volyn	2.93		
16 Ivano-Frankivsk	2.77		
17 Chernivtsi	2.77		
18 Lviv	2.71		
19 Khmelnytsk	2.64		
20 Zaporizhia	2.46		
21 Kherson	2.43		
22 Zakarpattia	2.28		
23 Ternopil	2.27		
24 Sumy	1.18		

5.2 Density of 2nd class roads

Region	Score	1	6
1 Lviv	5.80		
2 Donetsk	5.06		
3 Zaporizhia	4.97		
4 Ternopil	4.95		
5 Ivano-Frankivsk	4.73		
6 Kyiv	4.72		
7 Chernivtsi	4.43		
8 Zakarpattia	4.25		
9 Luhansk	4.23		
10 Cherkassy	4.01		
- Country average	4.01		
11 Khmelnytsk	3.87		
12 Dnipro	3.87		
13 Mykolaiv	3.69		
14 Odessa	3.51		
15 Zhytomyr	3.39		
16 Volyn	3.36		
17 Kharkiv	3.32		
18 Sumy	3.13		
19 Vinnytsia	3.09		
20 Rivne	3.03		
21 Poltava	2.93		
22 Kherson	2.93		
23 Kropyvnytsky	2.58		
24 Chernihiv	2.01		

5.3 Density of 3rd class roads

Region	Score	1	6
1 Khmelnytsk	5.83		
2 Kyiv	5.27		
3 Vinnytsia	5.14		
4 Lviv	5.01		
5 Ternopil	4.99		
6 Cherkassy	4.77		
7 Volyn	4.63		
8 Kharkiv	4.43		
9 Zakarpattia	4.36		
10 Sumy	4.33		
11 Donetsk	4.26		
12 Kropyvnytsky	4.23		
- Country average	4.18		
13 Luhansk	4.11		
14 Zhytomyr	4.06		
15 Chernivtsi	4.03		
16 Zaporizhia	3.82		
17 Kherson	3.78		
18 Poltava	3.67		
19 Dnipro	3.55		
20 Ivano-Frankivsk	3.55		
21 Chernihiv	3.43		
22 Mykolaiv	3.27		
23 Odessa	3.06		
24 Rivne	2.84		

5.4 Density of 4th class roads

Region	Score	1	6
1 Poltava	5.69		
2 Vinnytsia	5.07		
3 Lviv	4.94		
4 Dnipro	4.63		
5 Kharkiv	4.40		
6 Sumy	4.31		
7 Donetsk	4.10		
8 Volyn	4.02		
9 Khmelnytsk	4.00		
10 Rivne	3.95		
- Country average	3.87		
11 Odessa	3.77		
12 Chernihiv	3.70		
13 Kyiv	3.68		
14 Zaporizhia	3.57		
15 Cherkassy	3.54		
16 Ternopil	3.51		
17 Kropyvnytsky	3.38		
18 Zhytomyr	3.17		
19 Mykolaiv	3.04		
20 Ivano-Frankivsk	2.92		
21 Luhansk	2.73		
22 Kherson	2.67		
23 Chernivtsi	2.65		
24 Zakarpattia	1.77		

5.5 Density of road infrastructure*

Region	Score	1	6
1 Mykolaiv	3.33		
2 Volyn	3.22		
3 Zaporizhia	3.17		
4 Chernivtsi	3.00		
5 Vinnytsia	2.67		
6 Chernihiv	2.60		
7 Zakarpattia	2.60		
8 Dnipro	2.33		
9 Lviv	2.25		
10 Sumy	2.24		
11 Kyiv	2.21		
- Country average	2.17		
12 Rivne	2.15		
13 Khmelnytsk	2.10		
14 Kharkiv	2.06		
15 Cherkassy	2.00		
16 Kherson	1.95		
17 Kropyvnytsky	1.88		
18 Zhytomyr	1.81		
19 Ternopil	1.78		
20 Ivano-Frankivsk	1.77		
21 Donetsk	1.77		
22 Odessa	1.65		
23 Luhansk	1.56		
24 Poltava	1.55		

5.6 Quality of road infrastructure*

Region	Score	1	6
1 Volyn	3.06		
2 Zakarpattia	2.55		
3 Vinnytsia	2.17		
4 Lviv	2.15		
5 Rivne	2.05		
6 Kyiv	2.00		
7 Mykolaiv	1.90		
8 Chernihiv	1.90		
9 Kherson	1.89		
10 Khmelnytsk	1.85		
11 Zhytomyr	1.81		
12 Dnipro	1.81		
13 Kharkiv	1.78		
14 Zaporizhia	1.78		
15 Sumy	1.76		
- Country average	1.76		
16 Ivano-Frankivsk	1.73		
17 Cherkassy	1.70		
18 Ternopil	1.67		
19 Kropyvnytsky	1.53		
20 Poltava	1.40		
21 Chernivtsi	1.38		
22 Donetsk	1.31		
23 Odessa	1.30		
24 Luhansk	1.22		

5.7 Number of bank branches

Region	Score	1	6
1 Kyiv	5.81		
2 Donetsk	4.65		
3 Dnipro	4.54		
4 Chernivtsi	4.51		
5 Lviv	4.49		
6 Odessa	4.12		
7 Cherkassy	4.00		
8 Kharkiv	3.95		
9 Zakarpattia	3.93		
10 Ivano-Frankivsk	3.92		
- Country average	3.63		
11 Poltava	3.51		
12 Zaporizhia	3.41		
13 Mykolaiv	3.16		
14 Vinnytsia	2.94		
15 Khmelnytsk	2.93		
16 Ternopil	2.81		
17 Sumy	2.65		
18 Rivne	2.63		
19 Luhansk	2.50		
20 Chernihiv	2.35		
21 Volyn	2.33		
22 Kropyvnytsky	2.17		
23 Kherson	2.12		
24 Zhytomyr	1.42		

5.8 Availability of banks*

Region	Score	1	6
1 Ternopil	5.06		
2 Odessa	4.95		
3 Kropyvnytsky	4.88		
4 Chernivtsi	4.88		
5 Ivano-Frankivsk	4.86		
6 Kyiv	4.84		
7 Lviv	4.80		
8 Chernihiv	4.80		
9 Dnipro	4.76		
10 Kharkiv	4.72		
11 Kherson	4.68		
12 Zakarpattia	4.63		
13 Zhytomyr	4.63		
14 Vinnytsia	4.61		
15 Zaporizhia	4.61		
16 Cherkassy	4.60		
17 Sumy	4.59		
18 Volyn	4.50		
19 Poltava	4.50		
20 Khmelnytsk	4.50		
- Country average	4.49		
21 Rivne	4.45		
22 Mykolaiv	4.29		
23 Donetsk	3.54		
24 Luhansk	3.00		

5.9 Number of post offices

Region	Score	1	6
1 Chernivtsi	5.75		
2 Ivano-Frankivsk	5.40		
3 Lviv	5.14		
4 Donetsk	4.71		
5 Zakarpattia	4.63		
6 Ternopil	4.55		
7 Cherkassy	4.08		
8 Khmelnytsk	3.74		
9 Kyiv	3.67		
10 Luhansk	3.63		
11 Volyn	3.62		
- Country average	3.60		
12 Rivne	3.44		
13 Poltava	3.40		
14 Kharkiv	3.28		
15 Vinnytsia	2.95		
16 Zaporizhia	2.94		
17 Odessa	2.94		
18 Dnipro	2.88		
19 Zhytomyr	2.81		
20 Chernihiv	2.70		
21 Sumy	2.52		
22 Kherson	2.21		
23 Mykolaiv	1.95		
24 Kropyvnytsky	1.27		

5.10 Availability of post offices*

Region	Score	1	6
1 Chernivtsi	5.00		
2 Zhytomyr	4.44		
3 Sumy	4.06		
4 Kropyvnytsky	4.06		
5 Kherson	4.05		
6 Ivano-Frankivsk	3.95		
7 Mykolaiv	3.95		
8 Dnipro	3.90		
9 Rivne	3.90		
10 Kyiv	3.89		
11 Khmelnytsk	3.85		
12 Volyn	3.83		
13 Odessa	3.80		
14 Kharkiv	3.78		
15 Ternopil	3.78		
- Country average	3.73		
16 Zaporizhia	3.72		
17 Zakarpattia	3.70		
18 Chernihiv	3.65		
19 Lviv	3.55		
20 Vinnytsia	3.50		
21 Cherkassy	3.55		
22 Donetsk	3.31		
23 Luhansk	3.22		
24 Poltava	3.20		

5.11 Number of hospital beds

Region	Score	1	6
1 Chernihiv	5.18		
2 Kherson	3.62		
3 Lviv	3.60		
4 Ternopil	3.47		
5 Kropyvnytsky	3.44		
6 Sumy	3.41		
7 Zaporizhia	3.38		
8 Kharkiv	3.34		
9 Cherkassy	3.19		
10 Poltava	3.19		
11 Mykolaiv	3.19		
12 Khmelnytsk	3.13		
13 Odessa	3.08		
14 Kyiv	3.03		
- Country average	3.02		
15 Ivano-Frankivsk	3.01		
16 Rivne	3.00		
17 Volyn	2.95		
18 Chernivtsi	2.87		
19 Zhytomyr	2.85		
20 Vinnytsia	2.72		
21 Zakarpattia	2.57		
22 Donetsk	1.49		
23 Dnipro	-		
24 Luhansk	-		

5.12 Availability of medical facilities*

Region	Score	1	6
1 Chernivtsi	4.38		
2 Vinnytsia	2.83		
3 Kharkiv	2.72		
4 Kyiv	2.63		
5 Lviv	2.55		
6 Dnipro	2.43		
7 Sumy	2.35		
8 Zakarpattia	2.35		
9 Volyn	2.33		
- Country average	2.26		
10 Zhytomyr	2.25		
11 Zaporizhia	2.17		
12 Odessa	2.15		
13 Khmelnytsk	2.10		
14 Ternopil	2.06		
15 Chernihiv	2.05		
16 Poltava	2.05		
17 Rivne	2.05		
18 Mykolaiv	2.05		
19 Ivano-Frankivsk	2.00		
20 Kropyvnytsky	2.00		
21 Kherson	1.95		
22 Luhansk	1.89		
23 Cherkassy	1.85		
24 Donetsk	1.77		

6.1 Innovative companies

Region	Score	1	6
1 Kharkiv	5.60		
2 Mykolaiv	5.56		
3 Kherson	5.25		
4 Ivano-Frankivsk	5.21		
5 Zaporizhia	5.17		
6 Kropyvnytsky	5.04		
7 Sumy	4.74		
8 Odessa	4.66		
9 Lviv	4.63		
10 Chernivtsi	4.40		
11 Ternopil	4.39		
- Country average	4.32		
12 Vinnytsia	4.12		
13 Cherkassy	4.08		
14 Zhytomyr	4.07		
15 Chernihiv	3.92		
16 Dnipro	3.91		
17 Donetsk	3.86		
18 Poltava	3.83		
19 Kyiv	3.82		
20 Rivne	3.77		
21 Khmelnytsk	3.68		
22 Luhansk	3.66		
23 Volyn	3.59		
24 Zakarpattia	3.12		

6.2 Technical companies

Region	Score	1	6
1 Kharkiv	5.84		
2 Donetsk	5.55		
3 Ternopil	5.03		
4 Vinnytsia	4.93		
5 Poltava	4.51		
6 Sumy	3.67		
7 Ivano-Frankivsk	3.58		
8 Zaporizhia	3.46		
9 Mykolaiv	3.34		
- Country average	3.27		
10 Dnipro	3.14		
11 Chernivtsi	2.96		
12 Kherson	2.85		
13 Kropyvnytsky	2.57		
14 Kyiv	2.44		
15 Zakarpattia	2.42		
16 Lviv	2.41		
17 Cherkassy	2.16		
18 Luhansk	2.05		
19 Rivne	2.05		
20 Odessa	1.73		
21 Zhytomyr	1.70		
22 Chernihiv	1.65		
23 Volyn	1.24		
24 Khmelnytsk	1.00		

6.3 Scientific and technical companies

Region	Score	1	6
1 Kharkiv	5.85		
2 Luhansk	5.46		
3 Chernivtsi	5.42		
4 Lviv	4.92		
5 Cherkassy	4.46		
6 Kherson	4.46		
7 Chernihiv	4.29		
8 Mykolaiv	4.25		
9 Sumy	4.24		
10 Rivne	4.20		
- Country average	4.17		
11 Dnipro	3.97		
12 Ternopil	3.94		
13 Odessa	3.94		
14 Poltava	3.92		
15 Ivano-Frankivsk	3.86		
16 Donetsk	3.73		
17 Kropyvnytsky	3.71		
18 Vinnytsia	3.71		
19 Volyn	3.70		
20 Zakarpattia	3.70		
21 Zaporizhia	3.51		
22 Zhytomyr	3.44		
23 Kyiv	3.27		
24 Khmelnytsk	3.07		

6.4 Scientific and technical specialists

Region	Score	1	6
1 Kharkiv	5.83		
2 Dnipro	4.89		
3 Lviv	4.47		
4 Sumy	4.27		
5 Odessa	4.05		
6 Zaporizhia	4.04		
7 Kyiv	3.96		
8 Mykolaiv	3.66		
9 Donetsk	3.63		
- Country average	3.58		
10 Kherson	3.52		
11 Poltava	3.44		
12 Chernivtsi	3.33		
13 Cherkassy	3.25		
14 Kropyvnytsky	3.13		
15 Chernihiv	2.99		
16 Vinnytsia	2.87		
17 Zakarpattia	2.85		
18 Ivano-Frankivsk	2.67		
19 Ternopil	2.50		
20 Zhytomyr	2.59		
21 Rivne	2.26		
22 Volyn	2.25		
23 Luhansk	2.02		
24 Khmelnytsk	2.00		

6.5 Volume of innovative products

Region	Score	1	6
1 Sumy	5.83		
2 Zakarpattia	4.53		
3 Zaporizhia	4.53		
4 Ivano-Frankivsk	4.02		
5 Kharkiv	3.83		
6 Odessa	3.74		
7 Kyiv	3.73		
8 Kherson	3.61		
9 Poltava	3.29		
10 Kropyvnytsky	3.26		
11 Donetsk	3.13		
- Country average	3.04		
12 Lviv	2.78		
13 Cherkassy	2.17		
14 Chernihiv	2.09		
15 Dnipro	2.02		
16 Zhytomyr	2.00		
17 Ternopil	1.96		
18 Mykolaiv	1.81		
19 Vinnytsia	1.69		
20 Rivne	1.46		
21 Volyn	1.38		
22 Luhansk	-		
23 Chernivtsi	-		
24 Khmelnytsk	-		

6.6 Foreign direct investments

Region	Score	1	6
1 Dnipro	5.82		
2 Kyiv	4.87		
3 Odessa	4.42		
4 Poltava	4.36		
5 Lviv	4.29		
6 Zaporizhia	4.28		
7 Kharkiv	4.16		
8 Ivano-Frankivsk	4.14		
9 Donetsk	3.78		
- Country average	3.70		
10 Zhytomyr	3.42		
11 Cherkassy	3.31		
12 Kherson	3.31		
13 Volyn	3.15		
14 Luhansk	3.13		
15 Zakarpattia	3.13		
16 Mykolaiv	3.01		
17 Rivne	3.00		
18 Sumy	2.82		
19 Khmelnytsk	2.54		
20 Vinnytsia	2.46		
21 Ternopil	2.30		
22 Chernihiv	2.18		
23 Kropyvnytsky	1.98		
24 Chernivtsi	1.84		

6.7 Capital investments

Region	Score	1	6
1 Kyiv	5.81		
2 Dnipro	4.85		
3 Ivano-Frankivsk	4.64		
4 Poltava	4.46		
5 Volyn	4.18		
6 Mykolaiv	4.11		
7 Khmelnytsk	4.10		
8 Lviv	4.10		
9 Vinnytsia	4.01		
10 Zaporizhia	3.98		
- Country average	3.86		
11 Kropyvnytsky	3.85		
12 Odessa	3.81		
13 Kharkiv	3.80		
14 Rivne	3.63		
15 Cherkassy	3.61		
16 Chernihiv	3.57		
17 Ternopil	3.57		
18 Sumy	3.54		
19 Zhytomyr	3.45		
20 Zakarpattia	3.38		
21 Chernivtsi	3.31		
22 Kherson	3.30		
23 Donetsk	3.05		
24 Luhansk	2.56		

6.8 Technology level*

Region	Score	1	6
1 Dnipro	5.76		
2 Zaporizhia	5.22		
3 Kharkiv	4.89		
4 Mykolaiv	3.43		
5 Donetsk	3.31		
- Country average	3.19		
6 Sumy	3.00		
7 Vinnytsia	2.94		
8 Kropyvnytsky	2.94		
9 Lviv	2.90		
10 Kherson	2.89		
11 Odessa	2.80		
12 Kyiv	2.79		
13 Luhansk	2.78		
14 Poltava	2.60		
15 Chernivtsi	2.50		
16 Zhytomyr	2.44		
17 Zakarpattia	2.40		
18 Chernihiv	2.35		
19 Cherkassy	2.25		
20 Rivne	2.10		
21 Khmelnytsk	2.10		
22 Ivano-Frankivsk	1.91		
23 Volyn	1.83		
24 Ternopil	1.56		

6.9 Ability of businesses to use latest technologies*

Region	Score	1	6
1 Zaporizhia	4.28		
2 Mykolaiv	4.00		
3 Zhytomyr	3.88		
4 Sumy	3.82		
5 Kharkiv	3.82		
6 Rivne	3.60		
7 Lviv	3.60		
8 Cherkassy	3.45		
9 Volyn	3.39		
10 Kyiv	3.37		
- Country average	3.37		
11 Kropyvnytsky	3.35		
12 Ivano-Frankivsk	3.32		
13 Kherson	3.32		
14 Dnipro	3.29		
15 Khmelnytsk	3.25		
16 Chernivtsi	3.25		
17 Odessa	3.25		
18 Donetsk	3.23		
19 Ternopil	3.17		
20 Poltava	3.16		
21 Chernihiv	3.15		
22 Zakarpattia	2.90		
23 Luhansk	2.67		
24 Vinnytsia	2.50		

6.10 Costs of providing mobile services

Region	Score	1	6
1 Kharkiv	5.76		
2 Kyiv	5.32		
3 Mykolaiv	4.94		
4 Kherson	4.85		
5 Chernihiv	4.52		
6 Poltava	4.26		
7 Zaporizhia	4.11		
8 Sumy	3.96		
9 Chernivtsi	3.68		
10 Cherkassy	3.67		
- Country average	3.61		
11 Kropyvnytsky	3.39		
12 Zakarpattia	3.36		
13 Volyn	3.24		
14 Lviv	2.99		
15 Zhytomyr	2.75		
16 Ivano-Frankivsk	2.43		
17 Vinnytsia	2.14		
18 Rivne	1.87		
19 Ternopil	1.45		
20 Khmelnytsk	1.29		
21 Donetsk	-		
22 Odessa	-		
23 Dnipro	-		
24 Luhansk	-		

6.11 Costs of providing internet access

Region	Score	1	6
1 Kyiv	5.77		
2 Lviv	5.63		
3 Mykolaiv	4.44		
4 Kharkiv	4.39		
5 Zaporizhia	4.33		
6 Kherson	4.32		
7 Chernihiv	3.84		
8 Ternopil	3.80		
- Country average	3.73		
9 Poltava	3.69		
10 Chernivtsi	3.41		
11 Vinnytsia	3.20		
12 Cherkassy	3.20		
13 Volyn	3.01		
14 Zakarpattia	3.00		
15 Khmelnytsk	2.91		
16 Kropyvnytsky	2.85		
17 Ivano-Frankivsk	2.85		
18 Sumy	2.59		
19 Rivne	2.06		
20 Zhytomyr	1.40		
21 Donetsk	-		
22 Odessa	-		
23 Luhansk	-		
24 Dnipro	-		

6.12 Usage of Internet services by businesses*

Region	Score	1	6
1 Zhytomyr	4.50		
2 Lviv	4.10		
3 Zaporizhia	4.06		
4 Kharkiv	3.88		
5 Ivano-Frankivsk	3.68		
6 Dnipro	3.67		
7 Rivne	3.60		
8 Sumy	3.59		
9 Donetsk	3.54		
- Country average	3.49		
10 Kyiv	3.47		
11 Volyn	3.44		
12 Luhansk	3.44		
13 Mykolaiv	3.33		
14 Kherson	3.26		
15 Chernihiv	3.25		
16 Odessa	3.25		
17 Kropyvnytsky	3.24		
18 Khmelnytsk	3.20		
19 Vinnytsia	3.17		
20 Cherkassy	3.10		
21 Zakarpattia	2.95		
22 Poltava	2.95		
23 Ternopil	2.94		
24 Chernivtsi	2.25		

6.13 Usage of personal motor vehicles*

Region	Score	1	6
1 Chernivtsi	3.75		
2 Volyn	3.61		
3 Zhytomyr	3.00		
4 Dnipro	2.90		
5 Ivano-Frankivsk	2.86		
6 Vinnytsia	2.83		
7 Zakarpattia	2.80		
8 Kharkiv	2.50		
9 Zaporizhia	2.50		
10 Donetsk	2.46		
- Country average	2.39		
11 Odessa	2.30		
12 Lviv	2.25		
13 Khmelnytsk	2.20		
14 Kropyvnytsky	2.18		
15 Ternopil	2.11		
16 Cherkassy	2.10		
17 Mykolaiv	2.10		
18 Sumy	2.06		
19 Chernihiv	2.00		
20 Poltava	1.90		
21 Rivne	1.90		
22 Kyiv	1.89		
23 Kherson	1.84		
24 Luhansk	1.44		

6.14 Usage of commercial motor vehicles*

Region	Score	1	6
1 Kharkiv	4.89		
2 Ternopil	4.67		
3 Zaporizhia	4.61		
4 Dnipro	4.52		
5 Khmelnytsk	4.45		
6 Odessa	4.35		
7 Lviv	4.35		
8 Zakarpattia	4.30		
9 Volyn	4.28		
10 Rivne	4.25		
11 Chernihiv	4.25		
12 Chernivtsi	4.25		
13 Cherkassy	4.20		
- Country average	4.15		
14 Kropyvnytsky	4.12		
15 Vinnytsia	4.11		
16 Donetsk	4.08		
17 Sumy	4.06		
18 Kherson	4.05		
19 Mykolaiv	4.05		
20 Poltava	4.00		
21 Ivano-Frankivsk	3.82		
22 Zhytomyr	3.81		
23 Kyiv	3.42		
24 Luhansk	2.56		

6.15 Information on the supply of goods and services*

Region	Score	1	6
1 Odessa	4.45		
2 Zhytomyr	4.38		
3 Lviv	4.10		
4 Zaporizhia	3.83		
5 Sumy	3.82		
6 Rivne	3.75		
7 Kharkiv	3.72		
8 Dnipro	3.71		
9 Chernihiv	3.70		
10 Kyiv	3.68		
11 Kherson	3.68		
12 Luhansk	3.67		
13 Chernivtsi	3.63		
14 Poltava	3.60		
15 Zakarpattia	3.55		
- Country average	3.54		
16 Ivano-Frankivsk	3.41		
17 Khmelnytsk	3.30		
18 Cherkassy	3.30		
19 Volyn	3.28		
20 Ternopil	3.28		
21 Mykolaiv	3.24		
22 Kropyvnytsky	3.24		
23 Vinnytsia	3.06		
24 Donetsk	2.38		

7.1 Natural population growth

Region	Score	1	6
1 Kyiv	6.00		
2 Kharkiv	3.72		
3 Chernivtsi	3.20		
4 Ivano-Frankivsk	3.20		
5 Odessa	3.02		
6 Poltava	2.92		
7 Lviv	2.84		
8 Vinnytsia	2.74		
9 Mykolaiv	2.70		
10 Volyn	2.70		
11 Ternopil	2.64		
- Country average	2.59		
12 Chernihiv	2.54		
13 Cherkassy	2.53		
14 Khmelnytsk	2.50		
15 Dnipro	2.42		
16 Kherson	2.31		
17 Zaporizhia	2.30		
18 Rivne	2.28		
19 Sumy	2.17		
20 Kropyvnytsky	2.14		
21 Zhytomyr	2.11		
22 Zakarpattia	1.95		
23 Donetsk	1.34		
24 Luhansk	1.00		

7.2 Migration of residents

Region	Score	1	6
1 Poltava	4.40		
2 Zakarpattia	4.30		
3 Rivne	4.29		
4 Volyn	3.90		
5 Chernivtsi	3.70		
6 Ivano-Frankivsk	3.61		
7 Lviv	3.51		
8 Odessa	3.26		
9 Ternopil	2.97		
10 Kyiv	2.84		
11 Kherson	2.81		
12 Khmelnytsk	2.74		
13 Mykolaiv	2.67		
- Country average	2.65		
14 Vinnytsia	2.61		
15 Zhytomyr	2.60		
16 Dnipro	2.47		
17 Kharkiv	2.42		
18 Zaporizhia	2.41		
19 Kropyvnytsky	2.30		
20 Cherkassy	2.29		
21 Sumy	1.96		
22 Chernihiv	1.41		
23 Luhansk	1.20		
24 Donetsk	1.05		

7.3 Unemployment

Region	Score	1	6
1 Odessa	5.83		
2 Kharkiv	5.25		
3 Kyiv	5.15		
4 Dnipro	5.09		
5 Ivano-Frankivsk	5.08		
6 Zaporizhia	4.84		
7 Lviv	4.75		
8 Chernivtsi	4.40		
9 Mykolaiv	4.36		
10 Zakarpattia	4.23		
11 Khmelnytsk	4.12		
12 Sumy	4.00		
- Country average	3.69		
13 Volyn	3.67		
14 Kherson	3.60		
15 Cherkassy	3.26		
16 Vinnytsia	2.94		
17 Rivne	2.75		
18 Donetsk	2.23		
19 Kropyvnytsky	1.92		
20 Chernihiv	1.91		
21 Ternopil	1.64		
22 Luhansk	1.52		
23 Zhytomyr	1.36		
24 Poltava	1.27		

7.4 Perception of unemployment*

Region	Score	1	6
1 Kharkiv	3.83		
2 Kyiv	3.32		
3 Zakarpattia	3.25		
4 Lviv	3.20		
5 Zaporizhia	3.00		
6 Zhytomyr	3.00		
7 Cherkassy	3.00		
8 Odessa	2.95		
9 Vinnytsia	2.89		
10 Volyn	2.78		
11 Ivano-Frankivsk	2.77		
12 Chernivtsi	2.75		
- Country average	2.66		
13 Rivne	2.55		
14 Mykolaiv	2.43		
15 Dnipro	2.38		
16 Kherson	2.37		
17 Khmelnytsk	2.35		
18 Kropyvnytsky	2.29		
19 Sumy	2.29		
20 Chernihiv	2.15		
21 Donetsk	2.08		
22 Ternopil	2.06		
23 Poltava	2.05		
24 Luhansk	1.78		

7.5 Average age of unemployed persons

Region	Score	1	6
1 Luhansk	5.74		
2 Odessa	5.38		
3 Kharkiv	4.77		
4 Sumy	4.28		
5 Vinnytsia	4.28		
6 Kherson	4.28		
7 Khmelnytsk	4.15		
8 Poltava	3.90		
9 Chernivtsi	3.90		
10 Zakarpattia	3.90		
11 Chernihiv	3.90		
12 Cherkassy	3.77		
13 Zaporizhia	3.77		
14 Kropyvnytsky	3.64		
15 Donetsk	3.64		
16 Mykolaiv	3.64		
- Country average	3.56		
17 Ternopil	3.38		
18 Dnipro	3.12		
19 Kyiv	2.33		
20 Zhytomyr	1.92		
21 Ivano-Frankivsk	1.65		
22 Lviv	1.51		
23 Volyn	1.51		
24 Rivne	1.23		

7.6 Perception of age structure of unemployment*

Region	Score	1	6
1 Ivano-Frankivsk	3.45		
2 Sumy	3.35		
3 Chernihiv	3.35		
4 Poltava	3.15		
5 Dnipro	3.10		
6 Zakarpattia	3.00		
7 Kyiv	3.00		
8 Lviv	3.00		
9 Zhytomyr	2.94		
10 Donetsk	2.92		
- Country average	2.90		
11 Vinnytsia	2.89		
12 Volyn	2.89		
13 Odessa	2.85		
14 Ternopil	2.83		
15 Cherkassy	2.80		
16 Kherson	2.79		
17 Zaporizhia	2.78		
18 Kharkiv	2.78		
19 Rivne	2.70		
20 Khmelnytsk	2.70		
21 Mykolaiv	2.57		
22 Luhansk	2.56		
23 Kropyvnytsky	2.53		
24 Chernivtsi	2.25		

7.7 Average duration of unemployment

Region	Score	1	6
1 Odessa	5.79		
2 Kherson	5.23		
3 Khmelnytsk	5.03		
4 Vinnytsia	4.82		
5 Ternopil	4.60		
6 Kharkiv	4.37		
7 Zaporizhia	4.14		
8 Zakarpattia	4.14		
9 Lviv	4.14		
10 Volyn	3.89		
11 Poltava	3.89		
12 Sumy	3.63		
13 Ivano-Frankivsk	3.63		
- Country average	3.59		
14 Chernihiv	3.35		
15 Cherkassy	3.35		
16 Mykolaiv	3.35		
17 Dnipro	3.35		
18 Kyiv	2.75		
19 Luhansk	2.75		
20 Chernivtsi	2.75		
21 Donetsk	2.43		
22 Rivne	1.70		
23 Kropyvnytsky	1.30		
24 Zhytomyr	1.30		

7.8 Perception of long-term unemployment*

Region	Score	1	6
1 Chernivtsi	4.13		
2 Ternopil	3.94		
3 Mykolaiv	3.67		
4 Poltava	3.65		
5 Kropyvnytsky	3.59		
6 Luhansk	3.56		
7 Kherson	3.53		
8 Zaporizhia	3.45		
9 Chernihiv	3.40		
10 Zhytomyr	3.40		
11 Cherkassy	3.35		
12 Khmelnytsk	3.15		
13 Kyiv	3.14		
- Country average	3.10		
14 Lviv	3.10		
15 Donetsk	3.00		
16 Sumy	3.00		
17 Rivne	2.95		
18 Odessa	2.85		
19 Volyn	2.83		
20 Ivano-Frankivsk	2.82		
21 Dnipro	2.75		
22 Zakarpattia	2.67		
23 Vinnytsia	2.57		
24 Kharkiv	2.22		

7.9 Vacant working positions

Region	Score	1	6
1 Kyiv	5.35		
2 Zhytomyr	5.19		
3 Poltava	4.99		
4 Ternopil	4.98		
5 Dnipro	4.66		
6 Mykolaiv	4.41		
7 Odessa	4.32		
8 Kharkiv	4.13		
9 Chernihiv	3.89		
10 Volyn	3.88		
11 Rivne	3.55		
12 Kropyvnytsky	3.40		
13 Sumy	3.39		
- Country average	3.38		
14 Lviv	3.27		
15 Chernivtsi	3.21		
16 Kherson	2.78		
17 Cherkassy	2.73		
18 Ivano-Frankivsk	2.51		
19 Donetsk	2.25		
20 Vinnytsia	2.15		
21 Zakarpattia	2.13		
22 Khmelnytsk	2.11		
23 Zaporizhia	1.54		
24 Luhansk	1.46		

7.10 Availability of free labor*

Region	Score	1	6
1 Chernivtsi	5.00		
2 Kherson	4.74		
3 Chernihiv	4.50		
4 Luhansk	4.44		
5 Poltava	4.40		
6 Mykolaiv	4.14		
7 Cherkassy	4.10		
8 Odessa	3.90		
9 Khmelnytsk	3.90		
10 Zaporizhia	3.89		
11 Kropyvnytsky	3.88		
12 Donetsk	3.77		
- Country average	3.74		
13 Zhytomyr	3.69		
14 Ternopil	3.61		
15 Lviv	3.60		
16 Sumy	3.59		
17 Kyiv	3.58		
18 Ivano-Frankivsk	3.50		
19 Vinnytsia	3.44		
20 Zakarpattia	3.25		
21 Rivne	3.25		
22 Volyn	3.17		
23 Kharkiv	3.11		
24 Dnipro	3.10		

7.11 Average monthly salary

Region	Score	1	6
1 Donetsk	5.81		
2 Dnipro	5.18		
3 Zaporizhia	4.87		
4 Kyiv	4.87		
5 Mykolaiv	4.56		
6 Odessa	4.25		
7 Poltava	4.15		
8 Kharkiv	4.00		
- Country average	3.86		
9 Luhansk	3.75		
10 Lviv	3.71		
11 Rivne	3.68		
12 Sumy	3.26		
13 Ivano-Frankivsk	3.17		
14 Khmelnytsk	3.11		
15 Vinnytsia	3.06		
16 Cherkassy	3.01		
17 Zakarpattia	2.93		
18 Kropyvnytsky	2.78		
19 Zhytomyr	2.71		
20 Volyn	2.69		
21 Chernihiv	2.65		
22 Kherson	2.04		
23 Chernivtsi	1.70		
24 Ternopil	1.36		

7.12 Wage expectations of jobseekers*

Region	Score	1	6
1 Kherson	3.33		
2 Vinnytsia	3.00		
3 Ternopil	3.00		
4 Sumy	3.00		
5 Poltava	3.00		
6 Mykolaiv	2.94		
7 Kharkiv	2.89		
8 Kropyvnytsky	2.88		
9 Donetsk	2.86		
10 Zhytomyr	2.83		
11 Ivano-Frankivsk	2.82		
12 Kyiv	2.75		
- Country average	2.74		
13 Lviv	2.73		
14 Volyn	2.71		
15 Luhansk	2.67		
16 Cherkassy	2.64		
17 Khmelnytsk	2.64		
18 Zakarpattia	2.63		
19 Dnipro	2.56		
20 Chernihiv	2.56		
21 Zaporizhia	2.53		
22 Odessa	2.46		
23 Rivne	2.38		
24 Chernivtsi	2.25		

7.13 Migration of skilled labor*

Region	Score	1	6
1 Kharkiv	3.06		
2 Zaporizhia	2.72		
3 Dnipro	2.67		
4 Odessa	2.65		
5 Mykolaiv	2.62		
6 Vinnytsia	2.61		
7 Kyiv	2.47		
8 Zhytomyr	2.44		
9 Volyn	2.33		
10 Lviv	2.20		
- Country average	2.19		
11 Kropyvnytsky	2.18		
12 Rivne	2.15		
13 Poltava	2.15		
14 Sumy	2.12		
15 Kherson	2.11		
16 Khmelnytsk	2.10		
17 Cherkassy	2.00		
18 Chernihiv	1.95		
19 Ivano-Frankivsk	1.86		
20 Zakarpattia	1.80		
21 Chernivtsi	1.75		
22 Donetsk	1.46		
23 Ternopil	1.44		
24 Luhansk	1.33		

7.14 Discipline and diligence of employees*

Region	Score	1	6
1 Zakarpattia	4.30		
2 Zaporizhia	4.06		
3 Sumy	4.00		
4 Vinnytsia	3.94		
5 Kharkiv	3.94		
6 Chernivtsi	3.88		
7 Zhytomyr	3.88		
8 Mykolaiv	3.81		
9 Volyn	3.78		
10 Lviv	3.75		
11 Ivano-Frankivsk	3.73		
12 Kropyvnytsky	3.71		
13 Dnipro	3.62		
- Country average	3.58		
14 Luhansk	3.56		
15 Poltava	3.40		
16 Chernihiv	3.35		
17 Ternopil	3.33		
18 Khmelnytsk	3.30		
19 Odessa	3.25		
20 Donetsk	3.23		
21 Kherson	3.21		
22 Rivne	3.20		
23 Kyiv	3.16		
24 Cherkassy	3.05		

7.15 Employee motivation for productivity increase*

Region	Score	1	6
1 Kharkiv	4.44		
2 Zhytomyr	4.44		
3 Kherson	4.26		
4 Kropyvnytsky	4.18		
5 Zaporizhia	4.06		
6 Vinnytsia	4.00		
7 Ivano-Frankivsk	4.00		
8 Volyn	3.94		
9 Sumy	3.94		
10 Lviv	3.90		
11 Chernihiv	3.90		
12 Zakarpattia	3.85		
- Country average	3.76		
13 Mykolaiv	3.76		
14 Odessa	3.65		
15 Kyiv	3.63		
16 Dnipro	3.62		
17 Khmelnytsk	3.55		
18 Donetsk	3.54		
19 Poltava	3.50		
20 Rivne	3.40		
21 Ternopil	3.39		
22 Chernivtsi	3.25		
23 Luhansk	3.22		
24 Cherkassy	3.20		

7.16 Fairness in employee selection*

Region	Score	1	6
1 Kharkiv	3.56		
2 Zaporizhia	3.44		
3 Chernivtsi	3.38		
4 Dnipro	3.19		
5 Zhytomyr	3.13		
6 Sumy	3.12		
7 Rivne	2.75		
- Country average	2.68		
8 Ternopil	2.67		
9 Odessa	2.65		
10 Kropyvnytsky	2.65		
11 Kherson	2.63		
12 Vinnytsia	2.61		
13 Kyiv	2.58		
14 Mykolaiv	2.57		
15 Chernihiv	2.50		
16 Poltava	2.45		
17 Luhansk	2.44		
18 Lviv	2.40		
19 Donetsk	2.31		
20 Ivano-Frankivsk	2.27		
21 Volyn	2.22		
22 Cherkassy	2.20		
23 Zakarpattia	2.10		
24 Khmelnytsk	2.05		

8.1 Level of education*

Region	Score	1	6
1 Dnipro	4.67		
2 Lviv	4.55		
3 Kharkiv	4.50		
4 Chernivtsi	4.38		
5 Zaporizhia	3.89		
6 Ivano-Frankivsk	3.45		
- Country average	3.34		
7 Ternopil	3.33		
8 Volyn	3.22		
9 Zakarpattia	3.10		
10 Zhytomyr	3.06		
11 Sumy	3.06		
12 Kherson	3.05		
13 Khmelnytsk	3.00		
14 Odessa	3.00		
15 Kyiv	3.00		
16 Donetsk	3.00		
17 Mykolaiv	2.95		
18 Chernihiv	2.95		
19 Vinnytsia	2.94		
20 Kropyvnytsky	2.82		
21 Cherkassy	2.70		
22 Rivne	2.45		
23 Poltava	2.30		
24 Luhansk	2.22		

8.2 Mother language skills*

Region	Score	1	6
1 Ternopil	5.78		
2 Chernivtsi	5.75		
3 Volyn	5.72		
4 Ivano-Frankivsk	5.50		
5 Lviv	5.35		
6 Rivne	5.05		
7 Zakarpattia	4.40		
8 Kyiv	4.21		
9 Chernihiv	4.15		
10 Vinnytsia	4.06		
11 Zhytomyr	3.88		
12 Poltava	3.85		
13 Cherkassy	3.70		
- Country average	3.43		
14 Khmelnytsk	3.40		
15 Kharkiv	2.89		
16 Kropyvnytsky	2.82		
17 Dnipro	2.81		
18 Sumy	2.65		
19 Odessa	2.55		
20 Mykolaiv	2.48		
21 Zaporizhia	2.33		
22 Kherson	2.00		
23 Donetsk	1.85		
24 Luhansk	1.67		

8.3 Foreign language skills*

Region	Score	1	6
1 Zakarpattia	4.75		
2 Volyn	3.17		
3 Lviv	3.05		
4 Chernivtsi	2.88		
5 Rivne	2.80		
6 Dnipro	2.67		
7 Ternopil	2.44		
8 Ivano-Frankivsk	2.27		
9 Odessa	2.15		
- Country average	2.15		
10 Kharkiv	2.11		
11 Kyiv	1.95		
12 Vinnytsia	1.94		
13 Khmelnytsk	1.90		
14 Kherson	1.89		
15 Zaporizhia	1.89		
16 Chernihiv	1.85		
17 Kropyvnytsky	1.71		
18 Cherkassy	1.70		
19 Poltava	1.70		
20 Zhytomyr	1.69		
21 Sumy	1.65		
22 Mykolaiv	1.62		
23 Donetsk	1.46		
24 Luhansk	1.33		

8.4 Natural science skills*

Region	Score	1	6
1 Zaporizhia	3.78		
2 Kharkiv	3.71		
3 Dnipro	3.50		
4 Chernivtsi	3.50		
5 Kyiv	3.22		
6 Volyn	3.20		
7 Donetsk	3.17		
8 Chernihiv	3.14		
9 Mykolaiv	3.10		
10 Sumy	2.89		
11 Kropyvnytsky	2.88		
- Country average	2.88		
12 Kherson	2.86		
13 Lviv	2.78		
14 Zakarpattia	2.75		
15 Odessa	2.67		
16 Ternopil	2.67		
17 Ivano-Frankivsk	2.43		
18 Poltava	2.38		
19 Rivne	2.33		
20 Khmelnytsk	2.29		
21 Luhansk	2.20		
22 Cherkassy	2.00		
23 Vinnytsia	2.00		
24 Zhytomyr	2.00		

8.5 Connection of vocational schools and labor market*

Region	Score	1	6
1 Chernivtsi	3.25		
2 Kharkiv	2.56		
3 Chernihiv	2.45		
4 Donetsk	2.38		
5 Kherson	2.32		
6 Zaporizhia	2.28		
7 Dnipro	2.24		
8 Volyn	2.22		
9 Ternopil	2.17		
- Country average	2.08		
10 Poltava	2.00		
11 Luhansk	2.00		
12 Zakarpattia	2.00		
13 Sumy	2.00		
14 Odessa	1.95		
15 Vinnytsia	1.94		
16 Ivano-Frankivsk	1.91		
17 Mykolaiv	1.90		
18 Cherkassy	1.90		
19 Khmelnytsk	1.85		
20 Rivne	1.80		
21 Lviv	1.75		
22 Kropyvnytsky	1.59		
23 Zhytomyr	1.50		
24 Kyiv	1.42		

8.6 Qualification of employees*

Region	Score	1	6
1 Kharkiv	4.06		
2 Dnipro	3.81		
3 Chernivtsi	3.63		
4 Chernihiv	3.55		
5 Lviv	3.40		
6 Zaporizhia	3.22		
7 Sumy	3.18		
- Country average	3.11		
8 Volyn	3.06		
9 Kyiv	3.05		
10 Odessa	3.05		
11 Khmelnytsk	3.05		
12 Ternopil	3.00		
13 Rivne	2.95		
14 Kherson	2.95		
15 Ivano-Frankivsk	2.91		
16 Vinnytsia	2.89		
17 Zhytomyr	2.88		
18 Poltava	2.85		
19 Mykolaiv	2.81		
20 Donetsk	2.77		
21 Kropyvnytsky	2.71		
22 Zakarpattia	2.60		
23 Cherkassy	2.60		
24 Luhansk	2.56		

8.7 Qualification of jobseekers*

Region	Score	1	6
1 Chernivtsi	3.38		
2 Kharkiv	3.28		
3 Dnipro	2.95		
4 Volyn	2.72		
5 Kyiv	2.68		
6 Kherson	2.63		
7 Odessa	2.50		
8 Zaporizhia	2.50		
- Country average	2.42		
9 Cherkassy	2.40		
10 Zakarpattia	2.35		
11 Lviv	2.35		
12 Ternopil	2.33		
13 Ivano-Frankivsk	2.32		
14 Donetsk	2.31		
15 Rivne	2.25		
16 Chernihiv	2.15		
17 Khmelnytsk	2.15		
18 Zhytomyr	2.06		
19 Sumy	2.06		
20 Luhansk	2.00		
21 Vinnytsia	2.00		
22 Kropyvnytsky	2.00		
23 Mykolaiv	1.90		
24 Poltava	1.80		

8.8 Availability of highly skilled workforce*

Region	Score	1	6
1 Dnipro	3.81		
2 Kyiv	3.47		
3 Mykolaiv	3.33		
4 Zaporizhia	3.33		
5 Chernihiv	3.25		
6 Odessa	3.20		
7 Sumy	3.18		
8 Poltava	3.15		
9 Kropyvnytsky	3.12		
10 Kharkiv	3.11		
11 Lviv	3.10		
12 Rivne	3.05		
- Country average	3.05		
13 Zakarpattia	3.00		
14 Cherkassy	3.00		
15 Kherson	3.00		
16 Khmelnytsk	2.90		
17 Zhytomyr	2.88		
18 Ivano-Frankivsk	2.86		
19 Vinnytsia	2.83		
20 Ternopil	2.78		
21 Donetsk	2.77		
22 Volyn	2.67		
23 Luhansk	2.44		
24 Chernivtsi	2.13		

8.9 Availability of partially skilled workforce*

Region	Score	1	6
1 Chernihiv	4.95		
2 Poltava	4.90		
3 Kyiv	4.79		
4 Kherson	4.79		
5 Rivne	4.70		
6 Luhansk	4.56		
7 Khmelnytsk	4.55		
8 Donetsk	4.54		
9 Odessa	4.40		
10 Vinnytsia	4.28		
- Country average	4.25		
11 Dnipro	4.24		
12 Volyn	4.22		
13 Kharkiv	4.17		
14 Zakarpattia	4.10		
15 Mykolaiv	4.10		
16 Lviv	4.00		
17 Kropyvnytsky	4.00		
18 Zaporizhia	3.94		
19 Ternopil	3.94		
20 Cherkassy	3.75		
21 Zhytomyr	3.63		
22 Chernivtsi	3.63		
23 Sumy	3.47		
24 Ivano-Frankivsk	3.27		

8.10 Availability of unskilled workforce*

Region	Score	1	6
1 Donetsk	5.54		
2 Chernihiv	5.40		
3 Luhansk	5.33		
4 Kherson	5.32		
5 Chernivtsi	5.25		
6 Khmelnytsk	5.20		
7 Cherkassy	5.05		
8 Poltava	5.00		
9 Rivne	5.00		
10 Kyiv	5.00		
11 Mykolaiv	4.95		
12 Zaporizhia	4.94		
- Country average	4.92		
13 Volyn	4.89		
14 Kropyvnytsky	4.88		
15 Zakarpattia	4.80		
16 Lviv	4.80		
17 Dnipro	4.76		
18 Odessa	4.75		
19 Kharkiv	4.67		
20 Vinnytsia	4.61		
21 Zhytomyr	4.44		
22 Ternopil	4.39		
23 Ivano-Frankivsk	4.14		
24 Sumy	4.06		

8.11 Density of secondary schools

Region	Score	1	6
1 Lviv	5.82		
2 Ternopil	5.67		
3 Chernivtsi	5.22		
4 Ivano-Frankivsk	5.20		
5 Zakarpattia	5.14		
6 Khmelnytsk	4.18		
7 Volyn	4.13		
8 Rivne	3.75		
9 Vinnytsia	3.73		
10 Dnipro	3.56		
- Country average	3.46		
11 Cherkassy	3.45		
12 Donetsk	3.14		
13 Zhytomyr	3.06		
14 Kharkiv	3.04		
15 Odessa	3.03		
16 Kyiv	3.03		
17 Poltava	2.80		
18 Sumy	2.58		
19 Mykolaiv	2.57		
20 Zaporizhia	2.54		
21 Kropyvnytsky	2.50		
22 Chernihiv	2.14		
23 Luhansk	1.80		
24 Kherson	1.78		

8.12 Secondary schools students

Region	Score	1	6
1 Rivne	5.45		
2 Zakarpattia	5.18		
3 Volyn	4.94		
4 Chernivtsi	3.84		
5 Ivano-Frankivsk	3.82		
6 Zhytomyr	3.55		
7 Kyiv	3.53		
8 Ternopil	3.43		
9 Lviv	3.43		
10 Odessa	3.35		
11 Kherson	3.34		
12 Khmelnytsk	3.26		
13 Vinnytsia	3.04		
14 Mykolaiv	3.01		
- Country average	2.94		
15 Kropyvnytsky	2.86		
16 Dnipro	2.82		
17 Zaporizhia	2.69		
18 Poltava	2.60		
19 Cherkassy	2.60		
20 Chernihiv	2.52		
21 Sumy	2.27		
22 Kharkiv	2.23		
23 Donetsk	1.39		
24 Luhansk	1.19		

8.13 Density of vocational schools

Region	Score	1	6
1 Lviv	5.77		
2 Chernivtsi	4.70		
3 Dnipro	4.55		
4 Ternopil	4.44		
5 Zaporizhia	4.30		
6 Kharkiv	4.29		
7 Donetsk	4.18		
8 Khmelnytsk	4.16		
9 Ivano-Frankivsk	4.04		
10 Poltava	3.81		
- Country average	3.74		
11 Sumy	3.66		
12 Vinnytsia	3.52		
13 Mykolaiv	3.48		
14 Zakarpattia	3.37		
15 Odessa	3.24		
16 Rivne	3.24		
17 Cherkassy	2.99		
18 Kropyvnytsky	2.99		
19 Luhansk	2.86		
20 Volyn	2.70		
21 Zhytomyr	2.64		
22 Kyiv	2.50		
23 Kherson	2.46		
24 Chernihiv	1.41		

8.14 Vocational schools students

Region	Score	1	6
1 Lviv	5.66		
2 Rivne	4.86		
3 Ternopil	4.55		
4 Mykolaiv	4.37		
5 Khmelnytsk	4.25		
6 Vinnytsia	4.25		
7 Volyn	4.14		
8 Sumy	4.14		
9 Zaporizhia	3.86		
10 Kropyvnytsky	3.55		
11 Kherson	3.45		
12 Poltava	3.45		
13 Ivano-Frankivsk	3.45		
14 Zhytomyr	3.40		
15 Dnipro	3.35		
16 Chernivtsi	3.30		
- Country average	3.20		
17 Cherkassy	3.10		
18 Odessa	3.01		
19 Chernihiv	2.51		
20 Kharkiv	2.30		
21 Kyiv	2.21		
22 Zakarpattia	2.17		
23 Donetsk	1.32		
24 Luhansk	1.21		

8.15 Density of institutions of higher education

Region	Score	1	6
1 Kharkiv	5.67		
2 Chernivtsi	5.57		
3 Lviv	5.42		
4 Dnipro	4.92		
5 Ternopil	4.58		
6 Ivano-Frankivsk	4.34		
7 Odessa	4.04		
8 Zakarpattia	3.82		
- Country average	3.57		
9 Khmelnytsk	3.46		
10 Donetsk	3.43		
11 Zaporizhia	3.30		
12 Cherkassy	3.05		
13 Vinnytsia	2.99		
14 Kyiv	2.94		
15 Rivne	2.66		
16 Poltava	2.58		
17 Kropyvnytsky	2.40		
18 Volyn	2.31		
19 Zhytomyr	2.30		
20 Mykolaiv	2.28		
21 Luhansk	2.20		
22 Kherson	2.09		
23 Sumy	2.07		
24 Chernihiv	1.65		

8.16 Higher education students

Region	Score	1	6
1 Kharkiv	5.77		
2 Lviv	4.87		
3 Odessa	4.73		
4 Zaporizhia	4.41		
5 Dnipro	4.28		
6 Ternopil	4.12		
7 Sumy	3.94		
8 Poltava	3.91		
9 Chernivtsi	3.86		
10 Rivne	3.84		
11 Cherkassy	3.73		
12 Mykolaiv	3.58		
- Country average	3.58		
13 Ivano-Frankivsk	3.43		
14 Khmelnytsk	3.37		
15 Zhytomyr	3.21		
16 Volyn	3.15		
17 Vinnytsia	3.11		
18 Kherson	3.11		
19 Chernihiv	2.72		
20 Luhansk	2.46		
21 Kyiv	2.29		
22 Kropyvnytsky	2.24		
23 Zakarpattia	2.21		
24 Donetsk	2.02		

