

Regional Assessment of Small Business Development Favourability

Ihor M. Boshynda^{1*}, Vasyl Ya. Popfalushi¹, Heorhii H. Bilak²

¹Mukachevo State University
89600, 26 Uzhhorodska Str., Mukachevo, Ukraine

²Mukachevo Cooperative College of Trade and Economics
89600, 40 Ya. Mudryi Str., Mukachevo, Ukraine

(Received: 05.02.2020, Revised: 06.03.2020, Accepted: 07.04.2020)

*Corresponding author

Abstract. In the context of economic development, the importance of small businesses as a factor of competitiveness of the regional economy is growing. The paper provides a rating assessment of the regions of Ukraine in the favourability of their socio-economic development for the functioning of small businesses. The issue of providing a rating assessment to the regions of Ukraine in terms of favourable regions for the functioning of small businesses is relevant and necessary for in-depth study. The purpose of the paper is to calculate the favourability of regions for the functioning of small businesses and provide a rating assessment for all regions of Ukraine. Calculation of the indicator for assessing the level of favourability of the country's regions in ensuring the effective functioning of small businesses is carried out based on summing up the rank values of each indicator studied, which affects the functioning and development of small businesses in the region. Due to these indicators, it is possible to provide a rating assessment of the favourability of the regions of Ukraine in the functioning of small businesses. After the calculations of 2018, the regions were divided into three structural economic blocks: those with great opportunities, sufficient, and underdeveloped regions. The first block includes 9 regions and the city of Kyiv, the second – 10 regions, and the third economic block – 5 regions. According to these indicators, it can be concluded that the most favourable regions for the functioning of small businesses are: the city of Kyiv, Kyiv, Kharkiv, Odesa, and Lviv regions. Transcarpathian region entered the second economic block with further prospects for socio-economic development. The most problematic regions are the Luhansk and Donetsk regions, which is caused by the military operations that began in this territory in 2014 as a result of the deepening political crisis that is taking place on the territory of Ukraine. The results presented in this study show a real picture of the socio-economic development of the regions, which will help in the future in finding ways for the possible development of all economic and social components of the regions

Keywords: socio-economic development, small business, competitiveness index, regional ranking, regional development

The Problem Statement

In the context of economic development, the importance of small businesses as a factor of competitiveness of local and regional economies is growing. It is important to study the impact of the potential of small businesses on the regions of the country, based on the results of studying the impact of such structural components as innovation, socio-economic, and infrastructure. Achieving these purposes will allow

forming a mechanism for exploring the potential of small businesses in the regions, which will embody the possibility of using all the components of the region as efficiently as possible to ensure its development. Small businesses are much more flexible than medium and large ones, which is why their innovation in the process of functioning, freedom of action, and high productivity in the process of production and circulation of goods are of great importance.

Suggested Citation:

Boshynda, I.M., Popfalushi, V.Ya., & Bilak, H.H. (2020). Regional assessment of small business development favourability. *Scientific Bulletin of Mukachevo State University. Series "Economics"*, 7(1), 140-146.

Analysis of Recent Research and Publications

Considering the research of many scientists on the socio-economic development of regions, the functioning of small businesses in the regions, it is worth noting that this area requires further study. Among the scientists who study this subject and whose scientific papers were considered in the research process, the following can be distinguished: V. Klochkovska, O. Khaietska, A. Broyaka [1], O. Liuta, B. Mershchii [2].

Such scientists as I. Irtysheva, M.I. Stehnei, K. Zavhorodnij, O. Gurina [3-5], whose works were used in the research process, were also engaged in the study of socio-economic development of the regions. However, despite the research of many scientists on the subject of socio-economic development of regions, the issue of providing a rating assessment to the regions of Ukraine in terms of the favourability of regions for socio-economic development and functioning of small businesses in these regions is relevant and requires in-depth study. This is the reason why the paper is devoted to this subject.

Purpose of the Study

The purpose of the paper is to calculate the favourability of regions for socio-economic development and provide a rating assessment of this indicator for all regions of Ukraine.

Research Results

The implementation of the strategic goal of socio-economic growth of the country will be maximum possible, provided that the regions adhere to the strategy of absolute application of the capabilities of their territory, which includes resource, investment, and innovation opportunities [6].

Considering all the specific features of regional development and the impact of small businesses on their development, it is advisable to conduct a comprehensive study of this market segment. The study uses the methodology of research to assess the favourable environment of regions for the functioning of small businesses, using a set of indicators that have an impact on the objects of the research.

The authors propose a methodology for assessing the favourability of regions for the functioning of small businesses using the following indicators: I_1 – the number of small businesses per 10 thousand people of the population in the region; I_2 – share of products sold by small businesses; I_3 – innovative potential; I_4 – innovative business environment; I_5 – gross regional product; I_6 – market size; I_7 – number of employed people in small businesses; I_8 – labour costs at small enterprises in the region; I_9 – infrastructure.

Indicators and data used in the study are combined from such sources as: Office of national statistics of Ukraine (gross regional product, number of employed population at small enterprises, labour costs at small enterprises in the region) [7]; department for Regional Development; Ministry of community and territory development of Ukraine (number of small businesses per 10 thousand people of the population in the region, share of products sold by small businesses) [8]. The regional competitiveness index was also used for calculations [9].

Indicators for calculating the competitiveness index, which were taken to study the favourability of regions for small businesses, are complex and include the following components (Table 1).

Table 1. Components of the competitiveness index that were used to calculate the favourability of regions in the development of small businesses

Innovative potential (development of innovation potential)	• number of innovatively active small and medium-sized enterprises; • number of employees involved in research and development; • the share of products sold that were new to the market, percentage of the total volume of products sold by enterprises with technological innovations; • number of invention patents issued to legal entities and individuals during the reporting year; • cooperation of enterprises with higher educational institutions in the field of research and development; • creation and development of high tech production facilities enterprises
Innovative conditions for conducting business (development of innovation potential)	• number of business entities; • requirements of banks for long-term loans granted to the regional economy; • level of development of entrepreneurship support infrastructure; • ease of conducting business
Infrastructure	• density of paved public roads; • passenger turnover of motor transport (buses); • cargo turnover of motor transport; • quality and accessibility of transport infrastructure
Market size (efficiency booster)	• volume of goods exported per person of the population; • retail trade turnover; • income of the population; the level of business activity and competition in the region; • the level of purchasing power of the population

Source: [10]

Indicators were taken for the purpose that they are relevant to the development and establishment of a favourable environment for the functioning of small businesses in the regions [11]. Road infrastructure has an impact due to the possibility of developing the small business sector in various areas of the regions, including small rural settlements, where appropriate transport infrastructure must be available in these areas to conduct business effectively.

The size of the market was taken through such indicators included in it as: retail trade turnover, where small businesses are largely involved; income of the population since this indicator affects the ability to use goods and services provided by small businesses [12]; as well as the level of purchasing power of the population of the region.

Innovation potential is also important in the functioning of small businesses since the introduction of innovations in the processes of activity at small businesses can ensure rapid dynamics of economic growth in the regions.

Innovative methods adapt small businesses to market conditions and make them competitive in the process of innovation. Adding to the indicators shown in Table 1, data on small businesses from the Office of national statistics of Ukraine and the Department for regional development of the Ministry of regional development, housing and communal services of Ukraine, a comprehensive assessment of the regions' favourability for the development of small businesses on their territory was provided.

When calculating the indicator of the number of small businesses per 10 thousand people of the population in the region (I_1) and the share of products sold by small businesses (I_2),

the ratio of the regional indicator according to these criteria to the average indicator in Ukraine was calculated (1)

$$I_{(1.2)} = \frac{A_{p(1.2)}}{A_{c(1.2)}} \quad (1)$$

where: A_p – indicator by region; A_c – average indicator in Ukraine.

To calculate indicators for the number of employed people in the region (I_7) and labour costs (I_8), the share of these indicators by region was taken to the value of the indicator by country, and divided by the population indicator by region to country (2)

$$I_{7.8} = \frac{A_{p(7.8)} / A_{k(7.8)}}{H_p / H_k} \quad (2)$$

where: A_p – indicator value by region; A_k – indicator value by country; H_p – population of the region; H_k – population of the country.

This calculation was taken from formulas for the methodology for calculating the regional competitiveness index [10] and is appropriate because it covers both the data of particular indicators and their ratio to the share of the existing population in the region to the All-Ukrainian, which allows better assessing the economic favourability of regions, covering not only the economic but also the social component of regional development, which is also one of the concepts of sustainable development and is relevant for further research. The results are shown in Table 2.

Table 2. Calculated indicators of small business favourability by region, 2018

Region	I_1	I_2	I_3	I_4	I_5	I_6	I_7	I_8	I_9
Vinnitsia	1.026	1.506	0.310	0.121	0.831	0.365	0.84	0.7695	0.314
Volyn	0.955	0.815	0.058	0.123	0.712	0.441	0.71	0.602	0.505
Dnipro	1.035	0.759	0.320	0.156	1.383	0.641	1.07	1.004	0.190
Donetsk	0.339	0.454	0.047	0.145	0.561	0.345	0.27	0.256	0.141
Zhytomyr	0.949	1.526	0.106	0.112	0.708	0.463	0.79	0.665	0.267
Transcarpathian	0.976	1.888	0.072	0.126	0.487	0.374	0.574	0.463	0.593
Zaporizhzhia	1.056	0.968	0.291	0.173	1.072	0.578	1	0.828	0.166
Ivano-Frankivsk	0.852	1.586	0.101	0.153	0.659	0.305	0.64	0.533	0.312
Kyiv	1.294	1.137	0.228	0.214	1.282	0.633	1.41	1.47	0.256
Kirovograd	0.892	1.819	0.112	0.156	0.786	0.457	1	0.829	0.246
Luhansk	0.229	1.518	0.032	0.092	0.198	0.243	0.197	0.162	0.277
Lviv	1.032	1.474	0.206	0.161	0.829	0.534	1	0.974	0.377
Mykolaiv	1.116	1.333	0.157	0.148	0.862	0.525	1.04	0.796	0.251
Odesa	1.264	1.458	0.164	0.134	0.893	0.523	1.23	1.104	0.363
Poltava	1.004	0.879	0.201	0.206	1.513	0.555	0.94	0.816	0.176
Rivne	0.773	1.711	0.102	0.116	0.599	0.372	0.67	0.546	0.393
Sumy	0.851	1.378	0.197	0.150	0.732	0.351	0.73	0.625	0.186
Ternopil	0.805	1.691	0.163	0.132	0.549	0.298	0.68	0.582	0.317
Kharkiv	1.341	1.598	0.583	0.167	0.989	0.451	1.11	1.0041	0.256

Table 2, Continued

Region	I ₁	I ₂	I ₃	I ₄	I ₅	I ₆	I ₇	I ₈	I ₉
Kherson	1.025	2.008	0.106	0.123	0.648	0.359	0.88	0.684	0.324
Khmelnyskyi	1.075	1.534	0.075	0.123	0.711	0.422	0.77	0.661	0.354
Cherkasy	1.013	1.305	0.131	0.145	0.849	0.413	0.897	0.761	0.258
Chernivtsi	1.135	2.317	0.100	0.101	0.449	0.393	0.62	0.504	0.410

Calculation of the indicator for assessing the level of favourability of the country's regions in ensuring the effective functioning of small businesses is carried out based on summing up the rank values of each of the above list of components that affect the functioning and development

of small businesses in the region. These indicators allow providing a rating assessment of the favourability of the regions of Ukraine in the functioning of small businesses (Table 3).

Table 3. Rating assessment of regions in favourability of small business development, considering the studied indicators, 2018

Region	I ₁	I ₂	I ₃	I ₄	I ₅	I ₆	I ₇	I ₈	I ₉	ΣI	Region rating
Vinnitsia	11	12	4	20	10	19	14	11	10	111	11
Volyn	16	22	23	17	15	12	18	18	2	143	17-18
Dnipro	9	23	3	7	3	2	5	5	21	78	6
Donetsk	24	25	24	12	21	22	24	24	25	201	25
Zhytomyr	17	10	15	23	17	9	15	15	14	135	15-16
Transcarpathian	15	3	22	16	23	17	23	23	1	143	17-18
Zaporizhzhia	8	20	5	4	5	4	7	8	24	85	7
Ivano-Frankivsk	20	8	18	9	18	23	21	21	12	150	22
Kyiv	3	19	6	2	4	3	2	2	16	57	2-3
Kirovograd	19	4	14	8	12	10	9	7	20	103	10
Luhansk	25	11	25	25	25	25	25	25	13	199	24
Lviv	10	13	7	6	11	6	8	6	5	72	5
Mykolaiv	6	16	12	11	8	7	6	10	18	94	8
Odesa	4	14	10	14	7	8	3	3	6	69	4
Poltava	14	21	8	3	2	5	10	9	23	95	9
Rivne	23	5	17	21	20	18	20	20	4	148	21
Sumy	21	15	9	10	14	21	17	17	22	146	19
Ternopil	22	6	11	15	22	24	19	19	9	147	20
Kharkiv	2	7	2	5	6	11	4	4	16	57	2-3
Kherson	12	2	16	18	19	20	12	14	8	121	13
Khmelnyskyi	7	9	21	19	16	13	16	16	7	124	14
Cherkasy	13	18	13	13	9	14	11	12	15	118	12
Chernivtsi	5	1	19	24	24	15	22	22	3	135	15-16
Chernihiv	18	17	20	22	13	16	13	13	19	151	23
Kyiv	1	24	1	1	1	1	1	1	10	41	1

To study the impact of small businesses on regional development [13; 14], it is necessary to rank by integral indicators and give each region a rating for each criterion from 1 to 25, where 1st place is the best indicator, and 25th is the worst. Then sum up the indicators where the region with the lowest number of points scored will be considered the most favourable environment for the functioning of small businesses [15].

After making calculations using this methodology, it will be possible to assess the favourability of regions in conducting small business for all indicators that affect the activities of small businesses in the regions and to graduate the regions of Ukraine, dividing these regions into three economic blocks (Fig. 1): 1) with high opportunities for small businesses functioning (green); 2) with sufficient opportunities for conducting small business (yellow); 3) with

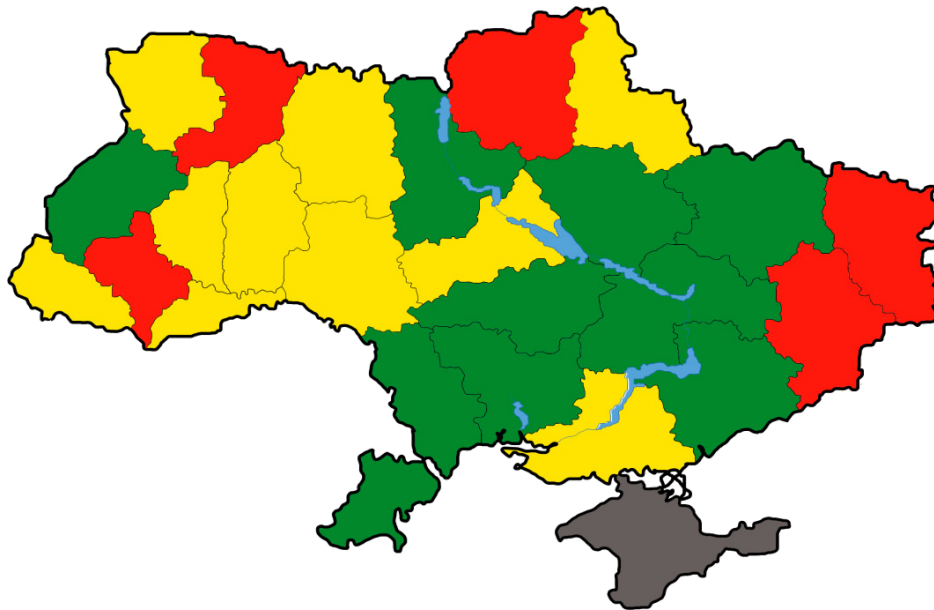


Figure 1. Map of Ukraine on the favourability of regions in the process of functioning of small businesses

underdeveloped conditions for conducting a small business (red). Based on the results of the study, it is advisable to divide regions according to the above structural blocks. The first block includes 9 regions and the city of Kyiv, the second – 10 regions, and the third economic block – 5 regions: 1) 1-10: Kyiv, Kyiv region, Kharkiv region, Odesa, Lviv, Dnipro, Zaporizhzhia, Mykolaiv, Poltava, Kirovohrad regions; 2) 11-20: Vinnytsia, Cherkasy, Kherson, Zhytomyr, Khmelnytskyi, Chernivtsi, Volyn, Transcarpathian, Ternopil, Sumy; 3) 21-25: Rivne, Ivano-Frankivsk, Chernihiv, Luhansk, Donetsk.

Conclusions

The most favourable regions in socio-economic development are: the Kyiv, Kyiv region, Kharkiv, Odesa, and Lviv

References

- [1] Klochkovska, V., Khaietska, O., & Broyaka, A. (2017). Ensuring of the socio-economic development of regions of Ukraine on the basis of methods of indicative planning. *Problems and Perspectives in Management*, 15(4), 62-71. doi: 10.21511/ppm.15(4).2017.06.
- [2] Liuta, O., & Mershchii, B. (2019). Assessment of the social and economic development of a region: Essence, methodology and correlation with transparency of local authorities. *Public and Municipal Finance*, 8(1), 83-93. doi: 10.21511/pmf.08(1).2019.07.
- [3] Irtysheva, I., Stehnei, M., & Zavorodnij, K. (2018). Innovative approaches to estimation of logistic potential and the purpose of logistic regional outsourcing development. *Baltic Journal of Economic Studies*, 4(2), 86-92. doi: 10.30525/2256-0742/2018-4-2-86-92.
- [4] Stehnei, M., Irtysheva, I., & Gurina, O. (2018). Financial mechanism of the socio-oriented economic development of the Black Sea region. *Baltic Journal of Economic Studies*, 4(4), 202-208. doi: 10.30525/2256-0742/2018-4-4-202-208.
- [5] Nesterchuk, Yu.O. (Ed.). (2017). *Socio-economic aspects of infrastructure of rural areas and agro-industrial complex. Agroindustrial complex of Ukraine: Current state and problems of development*. Uman: Sochinskyi.
- [6] Stehnei, M., Boshynda, I., & Popfalushi, V. (2019). Role of the state in the system of regulation of small business in the transcarpathian region. In M. Krelowska-Kulas, A. Stankevičs (Eds.), *Management mechanisms and development strategies of economic entities in conditions of institutional transformations of the global environment* (pp. 279-288). Riga: ISMA University.

- [7] Official website of the State Statistics Service of Ukraine. (n.d.). Retrieved from <http://www.ukrstat.gov.ua>.
- [8] Official website of the Ministry of Development of Communities and Territories of Ukraine. Department of Regional Development. (n.d.). Retrieved from <http://www.minregion.gov.ua>.
- [9] Romanko, O. (2018). Methods and methods for assessing competitiveness region: World practice and Ukrainian experience. *Ekonomika ta Derzhava*, 4, 42-45.
- [10] Development of scientifically sound proposals on the procedure and methods of calculating the competitiveness index of regions. (n.d.). Retrieved from <https://www.minregion.gov.ua/wp-content/uploads/2017/01/Zvit-indeks-konkurentnospromozhnosti-regioniv.pdf>.
- [11] Buriak, L.D. (2007). *Financial management in small business*. Kyiv: KNEU.
- [12] Krysak, A., & Musiatovska, O. (2018). Current problems and development of small enterprises in Ukraine. *Ekonomika ta Derzhava*, 12, 68-73.
- [13] Britchenko, I.G. (2011). The impact of small business on the development of the region. *Ekonomika ta Derzhava*, 1, 14-15.
- [14] Gordei, O.D., & Cherevko, Yu.L. (2017). Specifics strategies business development in Ukraine. *Global and National Economic Problems*, 17, 266-270.
- [15] Voronkova, V.G. (2010). *Regional and administrative management*. Kyiv: Professional.

Список використаних джерел

- [1] Klochkovska V., Khaietska O., Broyaka A. Ensuring of the socio-economic development of regions of Ukraine on the basis of methods of indicative planning. *Problems and Perspectives in Management*. 2017. No. 15(4). P. 62–71. doi: 10.21511/ppm.15(4).2017.06
- [2] Liuta O., Mershchii B. Assessment of the social and economic development of a region: Essence, methodology and correlation with transparency of local authorities. *Public and Municipal Finance*. 2019. Vol. 8. No 1. P. 83–93. doi: 10.21511/pmf.08(1).2019.07.
- [3] Irtysheva I., Stehnei M., Zavorodnij K. Innovative approaches to estimation of logistic potential and the purpose of logistic regional outsourcing development. *Baltic Journal of Economic Studies*. 2018. Vol. 4, No. 2. P. 86–92. doi: 10.30525/2256-0742/2018-4-2-86-92.
- [4] Stehnei M., Irtysheva I., Gurina O. Financial mechanism of the socio-oriented economic development of the Black Sea region. *Baltic Journal of Economic Studies*. 2018. Vol. 4, No. 4. P. 202–208. doi: 10.30525/2256-0742/2018-4-4-202-208.
- [5] Соціально-економічні аспекти інфраструктурного забезпечення сільських територій та агропромислового комплексу. *Агропромисловий комплекс України: сучасний стан та проблеми розвитку: колективна монографія* / за ред. Ю.О. Нестерчук. Умань: Сочінський, 2017. 220 с.
- [6] Stehnei M., Boshynda I., Popfalushi V. Role of the state in the system of regulation of small business in the transcarpathian region. *Management mechanisms and development strategies of economic entities in conditions of institutional transformations of the global environment*. / Eds. M. Krelowska-Kulas, A. Stankevičs. Riga: ISMA University, 2019. Vol. 1. P. 279–288.
- [7] Офіційний сайт Державна служба статистики України. URL: <http://www.ukrstat.gov.ua> (дата звернення: 15.01.2020).
- [8] Офіційний сайт Міністерство розвитку громад та територій України. Департамент з питань регіонального розвитку. URL: <http://www.minregion.gov.ua>. (дата звернення: 15.01.2020).
- [9] Романко. О.П. Методи та способи здійснення оцінки конкурентоспроможності регіону: світова практика і український досвід. *Економіка та держава*. 2018. 4. С. 42–45.
- [10] Розроблення науково обґрунтованих пропозицій щодо порядку та методики обрахування індексу конкурентоспроможності регіонів. URL: <https://www.minregion.gov.ua/wp-content/uploads/2017/01/Zvit-indeks-konkurentnospromozhnosti-regioniv.pdf> (дата звернення: 15.01.2020).
- [11] Буряк Л.Д. Фінансовий менеджмент в малому бізнесі: навч. посіб. Київ: КНЕУ, 2007. 432 с.
- [12] Крисак А.О., Мусятовська О.С. Проблеми та перспективи розвитку малого бізнесу в Україні. *Економіка та держава*. 2018. № 12. С. 68–73.
- [13] Брітченко І.Г. Вплив малого бізнесу на розвиток регіону. *Економіка та держава*. 2011. № 1. С. 14–15.
- [14] Гордей О.Д., Черевко Ю.Л. Особливості стратегії розвитку підприємництва в Україні. *Глобальні та національні проблеми економіки*. 2017. Вип. 17. С. 266–270.
- [15] Воронкова В.Г. Регіонально-адміністративний менеджмент: навч. посіб. Київ: Професіонал, 2010. 352 с.

Регіональна оцінка сприятливості розвитку малого бізнесу

Ігор Михайлович Бошинда¹, Василь Ярославович Попфалуші¹,
Георгій Георгійович Білак²

¹Мукачівський державний університет
89600, вул. Ужгородська, 26, м. Мукачево, Україна

²Мукачівський кооперативний фаховий торговельно-економічний коледж
89600, вул. Я. Мудрого, 40, м. Мукачево, Україна

Анотація. В умовах економічного розвитку зростає значення малого бізнесу як чинника конкурентоспроможності регіональної економіки. У статті надається рейтингова оцінка регіонам України у сприятливості їх соціально-економічного розвитку для функціонування малого бізнесу. Питання, яке стосується надання рейтингової оцінки регіонам України в плані сприятливості регіонів для функціонування малого бізнесу є актуальним та необхідним для поглибленого вивчення. Метою статті є проведення розрахунків сприятливості регіонів для функціонування малого бізнесу та надання рейтингової оцінки для всіх областей України. Розрахунок показника оцінки рівня сприятливості регіонів країни у забезпеченні ефективного функціонування малого бізнесу здійснюється на основі сумування рангових значень кожного досліджуваного показника, який впливає на функціонування та розвиток малого бізнесу в регіоні. За рахунок даних показників, можна надати рейтингову оцінку сприятливості регіонів України у функціонуванні малого бізнесу. Після проведених розрахунків за 2018 рік був проведений поділ регіонів по трьом структурним економічним блокам: з великими можливостями, достатніми та слаборозвинені регіони. До першого блоку увійшло 9 областей та місто Київ, до другого – 10 областей, та до третього економічного блоку – 5 областей. За даними показниками можна зробити висновок, що найбільш сприятливими регіонами для функціонування малого бізнесу є: місто Київ, Київська, Харківська, Одеська та Львівська область. Закарпатська область увійшла до другого економічного блоку з подальшими перспективами соціально-економічного розвитку. Найбільш проблематичними регіонами є Луганська та Донецька області, що спричинено військовими діями, які почалися на даній території у 2014 році внаслідок поглиблення політичної кризи, яка має місце на території України. Результати, які висвітлені в даному дослідженні, показують реальну картину соціально-економічного розвитку регіонів, що допоможе у майбутньому в пошуку шляхів щодо можливого розвитку всіх економічних та соціальних складових регіонів

Ключові слова: соціально-економічний розвиток, малий бізнес, індекс конкурентоспроможності, ранжування регіонів, регіональний розвиток
