

SPATIAL POTENTIAL IN THE STRUCTURE OF LOGISTIC POTENTIAL IN UKRAINIAN REGIONS¹

Bilovodska Olena

**PhD in Economics, Associate Professor at Department of Marketing and Innovative
Activity Management
Sumy State University**

World experience convincingly shows that one of the main preconditions for the development of commodity markets and integration into the global supply chain is the rational use of the existing potential of not only producers of products but also regions. Indeed, the effective growth of economic activity, the development of innovations, and the increase of investment attractiveness, both at the level of the individual organization and the industry, the region or the state as a whole, depend on the effective use of the existing advantages or the levelling of the disadvantages of the economic and geographical situation, the efficiency of export-import operations, transportation, etc.

Rationally built regional system taking into account the features of its economic and geographical position in the structure of logistics potential (proposed by the author in work [2]) improves the flow of business processes and quality of life of the population, provides sustainable development of the territory. Accordingly, the definition of indicators and their assessment in terms of making sound decisions in the system of regional development management are important.

The potential of the attractiveness of the economic and geographical location (spatial potential) is an integrated indicator that combines the convenience and features of the climatic and geographical location (population, export and import of goods and services, the length of the state border, the distance to the largest industrial cities, and the provision of territories). The dynamics of indicators of this potential by regions of Ukraine in 2010-2015 is shown in fig. 1-7.

So, according to fig. 1 the population according to the regions of Ukraine remains almost unchanged.

¹ The publication contains the results of studies conducted by President's of Ukraine grant for competitive projects F70 of the State Fund for Fundamental Research ("Formation of the management mechanism of products' distribution at the industrial enterprises on the innovative basis", № SR 0117U001682)

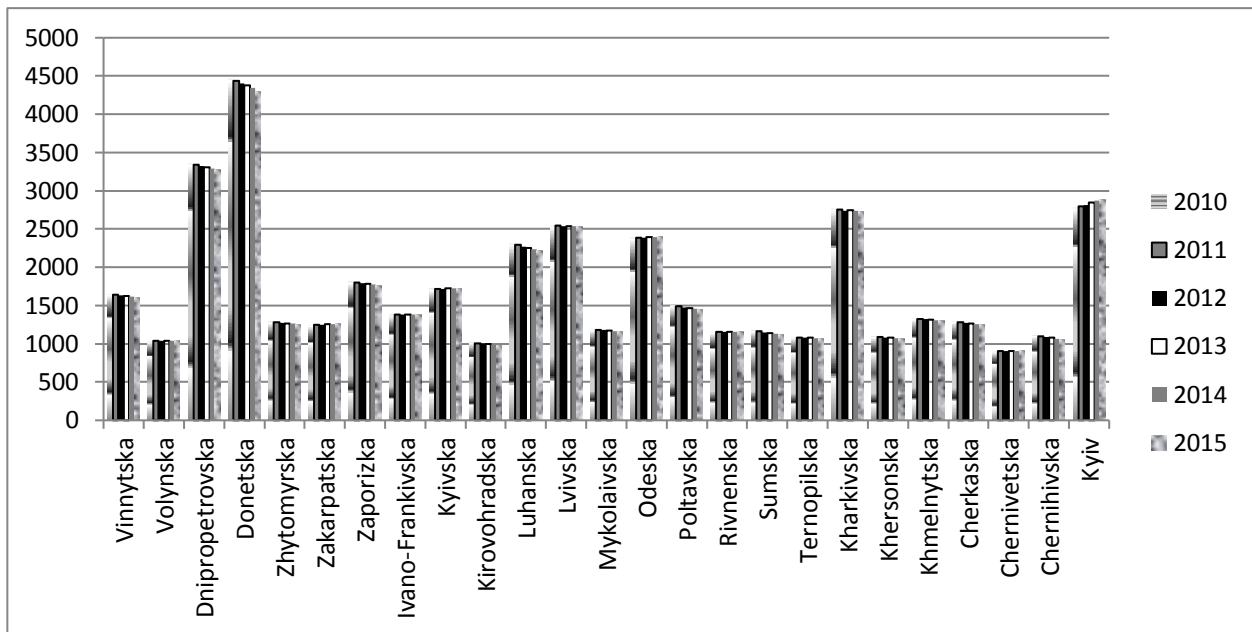


Figure 1 – The population in Ukrainian regions, thousand people, 2010-2015 (based on [31])

Indicators of exports of goods and services by regions of Ukraine from 2010 to 2015 fluctuate. However, comparing volumes of export of goods at the beginning and the end of the analyzed period, we observe an increase in the indicators only in Vinnytsya, Volyn, Zhytomyr, Kyiv, Kirovohrad, Lviv, Odesa, Ternopil, Khmelnytsky , Chernivtsi, Chernihiv regions and Kyiv (fig 2), while exports of services is growing in Vinnytsya, Volyn, Zhytomyr, Zakarpattia, Kirovohrad, Lviv, Mykolaiv, Poltava, Ternopil, Kharkiv, Khmelnytskyi, Cherkasy, Chernivtsi and Chernihiv regions (fig. 3).

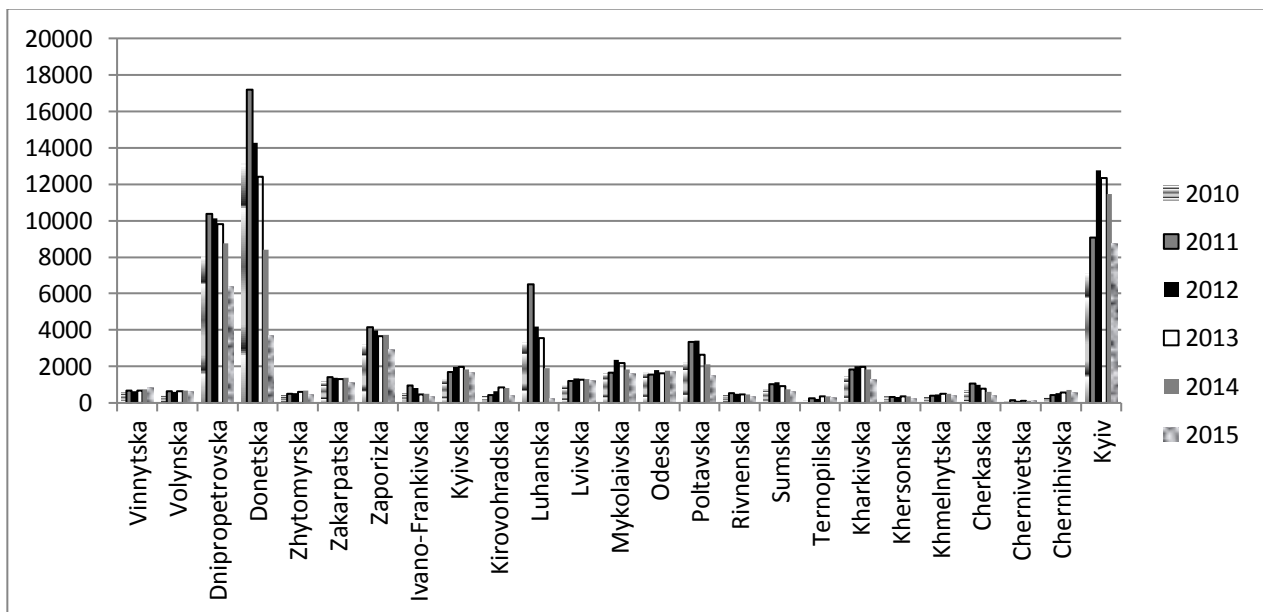


Figure 2 – Export of goods in Ukrainian regions, USD mln., 2010-2015 (based on [30])

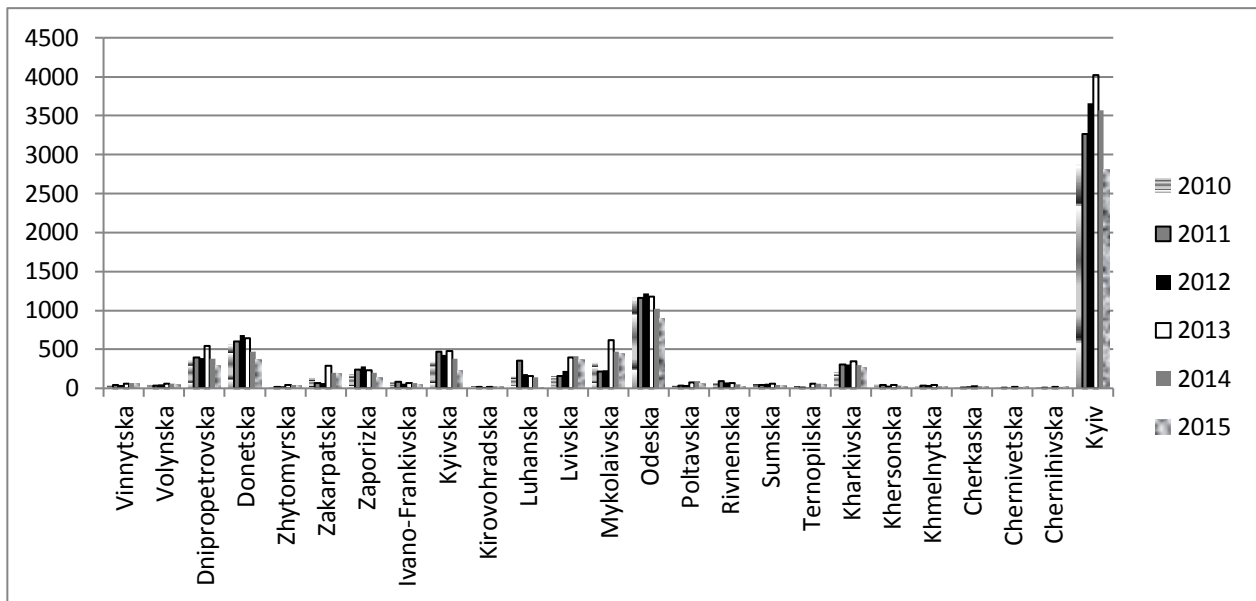


Figure 3 – Export of services in Ukrainian regions, USD mln., 2010-2015 (based on [30])

Analyzing volumes of import of goods across all regions of Ukraine, we find that only by 2012-2013 this indicator was growing, and then there are steady downward trends (fig. 4). However, in the market of services for this indicator there is no such dynamics. However, this indicator is increasing again in Dnipropetrovsk, Sumy, Ternopil, Kherson and Chernivtsi regions in 2015 (fig. 5).

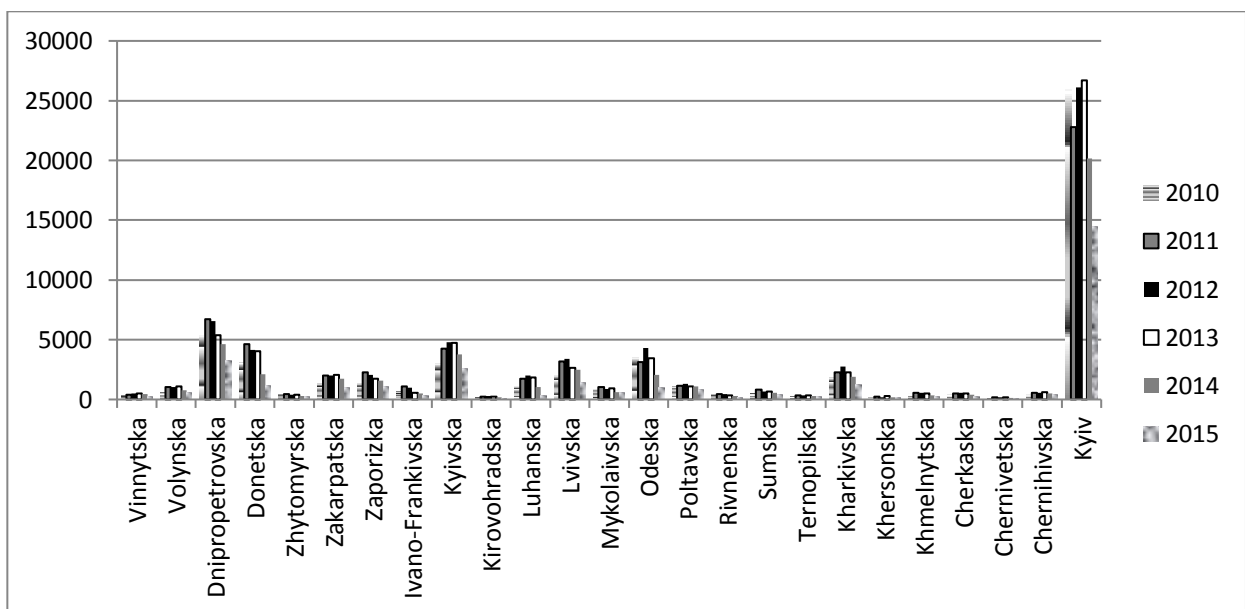


Figure 4 – Import of goods in Ukrainian regions, USD mln., 2010-2015 (based on [30])

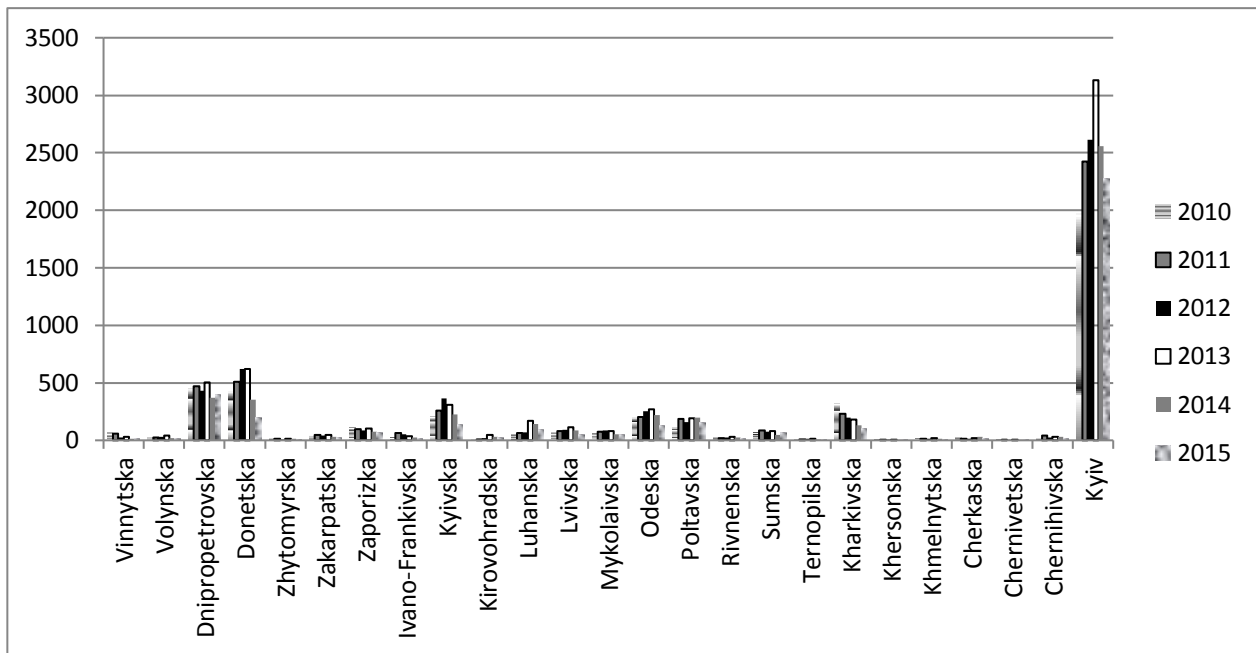


Figure 5 – Import of services in Ukrainian regions, USD mln., 2010-2015 (based on [30])

In addition to the Donetsk and Luhansk regions, the number of enterprises of export and import trade in the regions of Ukraine from 2010 to 2015 is increasing. However, in the Kirovohrad region, the situation with the export trade enterprises is the opposite, and in the Zakarpattia, Luhansk, Odesa and Chernihiv regions the import is decreasing (fig. 6-7).

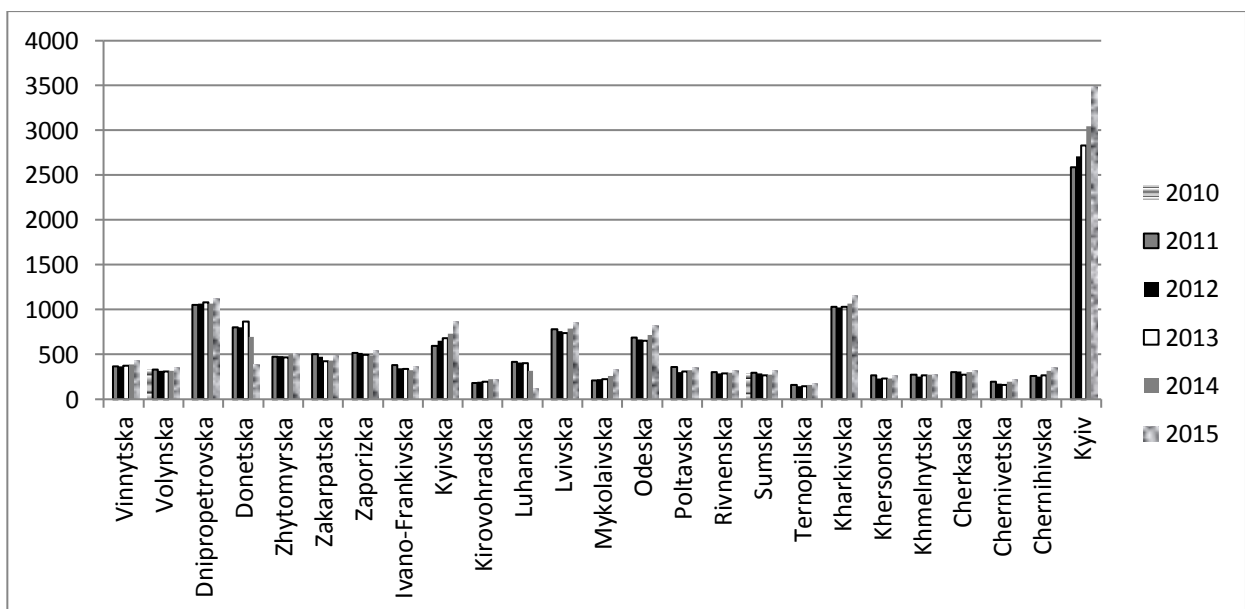


Figure 39 – Number of enterprises engaged in export trade of goods in Ukrainian regions, units, 2010-2015 (based on [6])

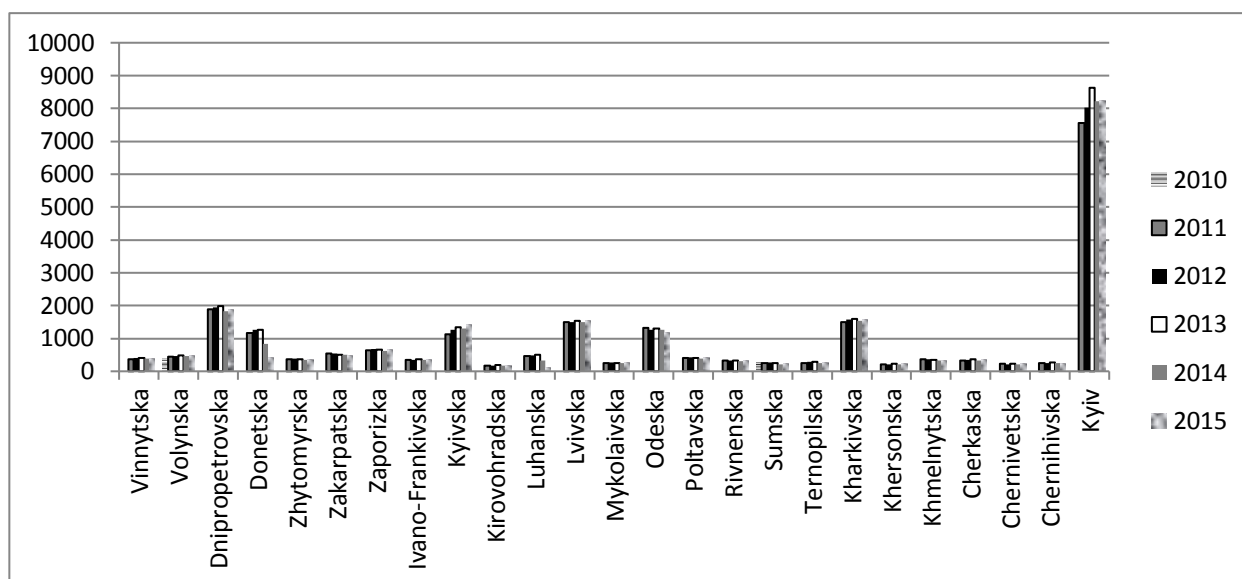


Figure 7 – Number of enterprises engaged in import trade of goods in Ukrainian regions, units, 2010-2015 (based on [30])

Table 5 - Components of transport and geographical position in the structure of spatial potential in Ukrainian regions* (developed by the author on the basis of [1, 3-29, 31, 32-40])

Regions of Ukraine	The length of the state border on the land, km										Distance by highway to the largest industrial cities, km				Provision of territories (area)				General ranking**	Integral ranking
	Ranking	Total, incl.	Poland	Slovakia	Hungary	Romania	Moldova	Belarus	Russia	Ranking	Kyiv	Ranking	Kharkiv	Ranking	Land, thsd hect	Ranking	Water, thsd, hect	Ranking		
Vinnitska	13	202	0	0	0	0	202	0	0	1-20	268	5	744	17	2649,2	12	11834,9	4	52-71	5
Volynska	6	395	190	0	0	0	0	205	0	1-20	388	12	876	20	2014,4	19	3384,2	19	77-96	16-17
Dnipropetrovska	16-25	0	0	0	0	0	0	0	0	1-20	447	15	234	4	3192,3	2	7594,2	14	52-80	8
Donetska	7	312	0	0	0	0	0	0	312	24	693	24	290	6	2651,7	11	2501,5	22	94	21
Zhytomyrska	11	280	0	0	0	0	0	280	0	1-20	131	3	616	15	2982,7	5	2861,1	21	56-75	7
Zakarpatska	3	467,3	33,4	98,5	130	205,4	0	0	0	1-20	782	25	1285	25	1275,3	23	9439,0	7	84-103	19
Zaporizka	16-25	0	0	0	0	0	0	0	0	1-20	544	21	296	7	2718,3	9	1170,8	24	78-106	20
Ivano-Frankivska	15	50	0	0	0	50	0	0	0	1-20	552	22	1079	24	1392,7	21	15688,7	2	85-104	23
Kyiv	16-25	0	0	0	0	0	0	0	0	1-20	0	1-2	478	10-11	83,6	25	1992,4	23	76-106	18
Kyivska	14	137	0	0	0	0	0	137	0	1-20	0	1-2	478	10-11	2812,1	8	9013,6	8	42-63	2
Kirovohradska	16-25	0	0	0	0	0	0	0	0	1-20	302	9	379	9	2458,8	13	10100,8	5	53-81	9
Luhanska	2	776	0	0	0	0	0	776	25	711	23	254	5	2668,3	10	3376,4	20	85	14	
Lvivska	10	280	280	0	0	0	0	0	0	1-20	537	17	1016	23	2183,1	16	16434,1	1	68-87	11
Mykolaiivska	16-25	0	0	0	0	0	0	0	0	1-20	472	19	559	14	2458,5	14	3399,6	18	82-110	24
Odeska	1	1362	0	0	0	572	790	0	0	1-20	489	20	704	16	3331,4	1	8106,8	12	51-70	4
Poltavska	16-25	0	0	0	0	0	0	0	0	1-20	339	7	144	2	2875,0	6	13286,4	3	35-63	1
Rivnenska	12	234	0	0	0	0	0	234	0	1-20	318	11	805	19	2005,1	20	7719,0	13	76-95	15
Sumska	9	298	0	0	0	0	0	298	22	333	8	183	3	2383,2	15	8490,0	11	68	10	
Ternopil'ska	16-25	0	0	0	0	0	0	0	0	1-20	438	13	896	21	1382,4	22	6125,6	17	90-118	25
Kharkivska	8	307,5	0	0	0	0	0	307,5	23	479	14	0	1	3141,8	4	6552,6	15	65	6	
Khersonska	16-25	0	0	0	0	0	0	0	0	1-20	538	18	548	13	2846,1	7	990,2	25	80-108	22
Khmelnytska	16-25	0	0	0	0	0	0	0	0	1-20	306	10	800	18	2062,9	18	9697,2	6	69-97	13

Cherkaska	16-25	0	0	0	0	0	0	0	0	1-20	189	6	371	8	2091,6	17	6129,2	16	64-92	12
Chernivetska	5	404,4	0	0	0	226,4	178	225	0	1-20	540	16	1003	22	809,6	24	9007,4	9	77-96	16-17
Chernihivska	4	408	0	0	0	0	0	0	183	21	41	4	542	12	3190,3	3	8584,4	10	54	3

* - the cell's bold boundaries highlighted the best integral values of the region's indicators, and shading is the worst;

** - calculated as the sum of the values of ratings for each indicator

According to the results of ranking of regions of Ukraine in terms of the development of transport and geographical position in the structure of spatial potential, Poltava, Kyiv and Chernihiv regions are leaders (highlighted in the bold cell borders in table 1), and Ternopil, Mykolayiv and Ivano-Frankivsk regions are outsiders (highlighted by shading in table1).

As we see, the leaders in terms of population and volumes of export of goods are Donetsk, Dnipropetrovsk regions and Kyiv, according to the volume of import of goods - Kyiv, Dnipropetrovsk and Kyiv regions, the volume of export and import of services - Kyiv, Odesa and Donetsk regions, according to the number of enterprises engaged in export and import trade in goods - Kyiv, Dnipropetrovsk and Kharkiv regions. Among the leaders of the total length of the state border on the land are Odesa, Luhansk and Zakarpattia regions, but considering the military aggression of Russia, Lugansk, Donetsk and Kharkiv regions are outsiders because they have the longest length of the adjacent border. According to the distance of the highways to the largest industrial cities as to Kyiv, the leaders are Kyiv, Kyiv and Zhytomyr regions, to the city of Kharkiv - Kharkiv, Poltava and Sumy regions, with the provision of land plots - Odessa, Dnipropetrovsk and Chernihiv regions, and water objects - Lviv, Ivano-Frankivsk and Poltava regions.

We propose to determine the rating of the regions of Ukraine for the spatial potential by the average values for the analyzed period of each indicator (table 2).

Table 2 - Average values of spatial potential indicators (without taking into account transport and geographical position) in Ukrainian regions for 2010-2015 and their ranking* (developed by the author)

Regions of Ukraine	Population, thsd	Ranking	Export of goods, USD mln	Ranking	Import of goods, USD mln	Ranking	Export of services, USD mln	Ranking	Import of services, USD mln	Ranking	Enterprises, export, units	Ranking	Enterprises, import, units	Ranking	General ranking**	Integral ranking
Vynnytska	1630,3	10	691,5	15	403	19	51,5	16	34,7	16	388	11	393	12	99	15
Volynska	1039,5	23	605,5	16	853,8	12	50,5	17	26,8	17	327	15	469	10	110	16
Dnipropetrovska	3314,9	2	8909,7	3	5315,8	2	393,0	4	437,5	4	1079	2	1908	2	19	2
Donetska	4386,6	1	11513,9	1	3206,9	4	555,6	3	455,4	3	713	5	988	7	24	3

Zhytomyrska	1270,9	15	528,5	19	364,9	20	364,9	7	12,7	7	488	9	363	14	91	13
Zakarpatska	1252,3	16	1286,1	11	1694,0	8	157,3	12	37,9	12	463	10	518	9	78	10
Zaporizka	1788,6	8	3614,4	4	1682,2	9	211	10	89,1	10	513	8	647	8	57	8
Ivano-Frankivska	1381,2	12	600,6	17	676,5	14	66,7	13	35,3	13	351	12	356	15	96	14
Kyiv	2833,4	3	10248,4	2	22698,2	1	3363,6	1	2495,3	1	2934	1	8136	1	10	1
Kyivska	1722,6	9	1749,9	8	3859,1	3	389,0	5	249,9	5	706	7	1295	5	42	5-6
Kirovohradska	998,9	24	582,8	18	208,3	23	21,5	22	22,6	22	204	23	177	25	157	24
Luhanska	2265,3	7	3287,7	5	1339,2	10	167,4	11	98,8	11	333	13	377	13	70	9
Lvivska	2542,0	5	1220,3	12	2530,1	6	283,9	9	81,8	9	786	4	1518	4	49	7
Mykolaivska	1176,2	17	1872,9	7	823,0	13	387,2	6	67,6	6	251	21	261	20	90	12
Odeska	2392,7	6	1694,3	10	2909,2	5	1106,0	2	212,6	2	709	6	1267	6	37	4
Poltavska	1473,3	11	2540,1	6	1090,7	11	56,1	15	166,0	15	330	14	410	11	83	11
Rivnenska	1155,9	18	462,9	21	356,9	21	61,6	14	22,4	14	299	17	329	18	123	17
Sumska	1147,6	19	859,3	13	594,2	15	48,6	18	69,8	18	289	18-19	248	22	123-124	18
Ternopil'ska	1079,0	22	270,8	24	297,3	22	34,4	20	9,8	20	158	25	271	19	152	22
Kharkivska	2746,6	4	1736,9	9	2050,6	7	287,1	8	192,9	8	1061	3	1562	3	42	5-6
Khersonska	1080,6	21	330,5	23	201,5	24	38,0	19	5,0	19	247	22	223	23-24	151-152	23
Khmelnyska	1317,2	13	423,7	22	445,3	17	30,5	21	12,6	21	268	20	352	16	130	20
Cherkaska	1273,1	14	761,3	14	434,3	18	20,1	23	20,2	23	302	16	346	17	125	19
Chernivetska	906,6	25	121,4	25	133,2	25	13,8	25	1,7	25	190	24	223	23-24	172-173	25
Chernihivska	1082,8	20	515,5	20	497,2	16	14,3	24	26,8	24	289	18-19	250	21	143-144	21

* - the cell's bold boundaries highlighted the best integral values of the region's indicators, and shading is the worst;

** - calculated as the sum of the values of ratings for each indicator

Thus, according to the results of rating of the regions of Ukraine according to the level of development of spatial potential (without taking into account transport and geographical position), Kyiv, Dnipropetrovsk and Donetsk regions are leaders (highlighted in the bold cell borders in table 2), while Chernivtsi, Kirovohrad and Kherson regions are outsiders (highlighted by shading in table 2).

For the results, we identify leaders by the level of development of spatial potential in the logistic providing (Table 3):

Table 3 – Ranking of regions in Ukraine by the level of spatial potential

Regions of Ukraine	Ranking of transport and geographical position	Ranking of export-import trade	General ranking	Integral ranking
Vinnyska	5	15	20	8-9
Volynska	16-17	16	32-33	18
Dnipropetrovska	8	2	10	3
Donetska	21	3	24	11-12
Zhytomyrska	7	13	20	8-9
Zakarpatska	19	10	29	15
Zaporizka	20	8	28	13-14
Ivano-Frankivska	23	14	37	22
Kyiv	18	1	19	7
Kyivska	2	5-6	7-8	1
Kirovohradska	9	24	33	19-20
Luhanska	14	9	23	10
Lvivska	11	7	18	6
Mykolaivska	24	12	36	21
Odeska	4	4	8	2

Poltavska	1	11	12	5
Rivnenska	15	17	32	17
Sumska	10	18	28	13-14
Ternopilska	25	22	47	25
Kharkivska	6	5-6	11-12	4
Khersonska	22	23	45	24
Khmelnyska	13	20	33	19-20
Cherkaska	12	19	31	16
Chernivetska	16-17	25	41-42	23
Chernihivska	3	21	24	11-12

Thus, the analysis of the spatial potential in the regions of Ukraine according to the proposed set of indicators showed that the best support is provided by Kyiv, Odesa and Dnipropetrovsk regions (highlighted in the bold cell borders in table 3), and the lowest is Ternopil, Kherson and Chernivtsi regions (highlighted by shading in table 3).

Using the rating results (see Table 3) the matrix of potentials was formed. Five zones have been allocated on the matrix. Zone 1 combines the best rating indices; it consolidates the leaders of the rating assessments. The zone is determined by the coordinates [1; 5] on the X axis (transport and geographical position) and the [1; 5] on the Y axis (export-import trade). Accordingly, Zone 2 is limited to the coordinates (5; 10] on both axes; Zone 3 - (10; 15] on both axes; Zone 4 - (15; 20] on both axes; Zone 5 - (20; 25] on both axes.

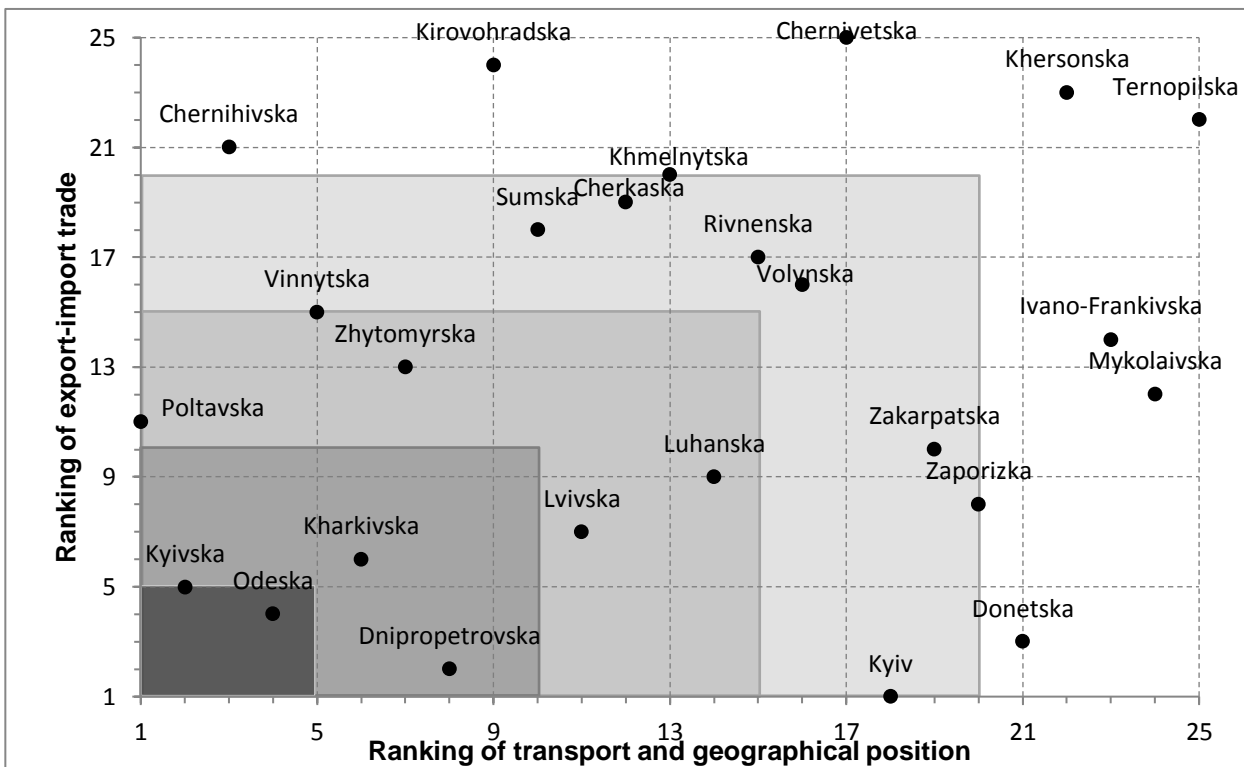


Figure 8 – Ukrainian regions on the matrix of spatial potential

□ - very low level of spatial potential (20-25 position in the ranking);

7. Дніпропетровська область / Матеріал з Вікіпедії, 2017. – Режим доступу: https://uk.wikipedia.org/wiki/%D0%94%D0%BD%D1%96%D0%BF%D1%80%D0%BE%D0%BF%D0%B5%D1%82%D1%80%D0%BE%D0%B2%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

8. Донецька область / Матеріал з Вікіпедії, 2017. – Режим доступу: https://uk.wikipedia.org/wiki/%D0%94%D0%BE%D0%BD%D0%B5%D1%86%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

9. Житомирська область / Матеріал з Вікіпедії, 2017. – Режим доступу: https://uk.wikipedia.org/wiki/%D0%96%D0%B8%D1%82%D0%BE%D0%BC%D0%B8%D1%80%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

10. Закарпатская область / Украина сегодня, 2017. – Режим доступу: <http://www.rada.com.ua/rus/RegionsPotential/Zakarpattya/>

11. Закарпатська область / Матеріал з Вікіпедії, 2017. – Режим доступу: https://uk.wikipedia.org/wiki/%D0%97%D0%B0%D0%BA%D0%B0%D1%80%D0%BF%D0%B0%D1%82%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

12. Запорізька область / Матеріал з Вікіпедії, 2017. – Режим доступу: https://uk.wikipedia.org/wiki/%D0%97%D0%B0%D0%BF%D0%BE%D1%80%D1%96%D0%B7%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

13. Земельний фонд України станом на 1 січня 2010 року та динаміка його змін з 2006 по 2010 роки / Аграрний сектор України. [Аграрні новини та оперативна статистика](#), 2017. – Режим доступу: http://agroua.net/news/news_28605.html

14. Земельний фонд України станом на 1 січня 2011 року та динаміка його змін / Аграрний сектор України. [Аграрні новини та оперативна статистика](#), 2017. – Режим доступу: http://www.agroua.net/news/news_34235.html

15. Земельний фонд України станом на 1 січня 2012 року та динаміка його змін порівняно з даними попередніх років // Землевпорядний вісник. – 2012. – №4. – С. 46.

16. Информация о городе, селе. Ивано-Франковская область. – Режим доступу: http://sity.com.ua/IvanoFrankovskaya_oblast/

17. Івано-Франківська область / Матеріал з Вікіпедії, 2017. – Режим доступу: <https://uk.wikipedia.org/wiki/%D0%86%D0%B2%D0%B0%D0%BD%D0%BE->

%D0%A4%D1%80%D0%B0%D0%BD%D0%BA%D1%96%D0%B2%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

18. Київ / Матеріал з Вікіпедії, 2017. – Режим доступу:
<https://uk.wikipedia.org/wiki/%D0%9A%D0%B8%D1%97%D0%B2>

19. Київська область / Матеріал з Вікіпедії, 2017. – Режим доступу:
https://uk.wikipedia.org/wiki/%D0%9A%D0%B8%D1%97%D0%B2%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

20. Кіровоградська область / Матеріал з Вікіпедії, 2017. – Режим доступу:
https://uk.wikipedia.org/wiki/%D0%9A%D1%96%D1%80%D0%BE%D0%B2%D0%BE%D0%B3%D1%80%D0%B0%D0%B4%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

21. Луганська область / Матеріал з Вікіпедії, 2017. – Режим доступу:
https://uk.wikipedia.org/wiki/%D0%9B%D1%83%D0%B3%D0%B0%D0%BD%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

22. Львівська область / Матеріал з Вікіпедії, 2017. – Режим доступу:
https://uk.wikipedia.org/wiki/%D0%9B%D1%8C%D0%B2%D1%96%D0%B2%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

23. Львівська область / Україна сьогодні, 2017. – Режим доступу:
<http://www.rada.com.ua/ukr/RegionsPotential/Lviv/>

24. Миколаївська область / Матеріал з Вікіпедії, 2017. – Режим доступу:
https://uk.wikipedia.org/wiki/%D0%9C%D0%B8%D0%BA%D0%BE%D0%BB%D0%B0%D1%97%D0%B2%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

25. Одеська область / Матеріал з Вікіпедії, 2017. – Режим доступу:
https://uk.wikipedia.org/wiki/%D0%9E%D0%B4%D0%B5%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

26. Паспорт Житомирської області – Режим доступу:
<http://agroprom.zt.gov.ua/images/pdf/pasport.pdf>

27. Полтавська область / Матеріал з Вікіпедії, 2017. – Режим доступу:
https://uk.wikipedia.org/wiki/%D0%9F%D0%BE%D0%BB%D1%82%D0%B0%D0%B2%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

28. Рівненська область / Матеріал з Вікіпедії, 2017. – Режим доступу:
<https://uk.wikipedia.org/wiki/%D0%A0%D1%96%D0%B2%D0%BD%D0%B5%D0%BD%D1>

%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

29. Соціально-економічне становище м. Івано-Франківська за 2015 рік / Івано-Франківський регіональний центр зайнятості / Державна служба статистики України, 2017.

– Режим доступу: http://www.dcz.gov.ua/ifr/control/uk/publish/article?art_id=57520&cat_id=1015573

30. Статистичний збірник «Зовнішня торгівля України товарами та послугами» 2010-2015 рр. / Державна служба статистики України, 2016. – Режим доступу: <http://www.ukrstat.gov.ua/>

31. Статистичний збірник «Регіони України» 2010-2015 рр. Частина 1 / Державна служба статистики України, 2016. – Режим доступу: <http://www.ukrstat.gov.ua/>

32. Сумська область / Матеріал з Вікіпедії, 2017. – Режим доступу: https://uk.wikipedia.org/wiki/%D0%A1%D1%83%D0%BC%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

33. Тернопільська область / Матеріал з Вікіпедії, 2017. – Режим доступу: https://uk.wikipedia.org/wiki/%D0%A2%D0%B5%D1%80%D0%BD%D0%BE%D0%BF%D1%96%D0%BB%D1%8C%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

34. Харківська область / Матеріал з Вікіпедії, 2017. – Режим доступу: https://uk.wikipedia.org/wiki/%D0%A5%D0%B0%D1%80%D0%BA%D1%96%D0%B2%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

35. Херсонська область / Матеріал з Вікіпедії, 2017. – Режим доступу: https://uk.wikipedia.org/wiki/%D0%A5%D0%B5%D1%80%D1%81%D0%BE%D0%BD%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

36. Хмельницька область / Матеріал з Вікіпедії, 2017. – Режим доступу: https://uk.wikipedia.org/wiki/%D0%A5%D0%BC%D0%B5%D0%BB%D1%8C%D0%BD%D0%B8%D1%86%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

37. Черкаська область / Матеріал з Вікіпедії, 2017. – Режим доступу: https://uk.wikipedia.org/wiki/%D0%A7%D0%B5%D1%80%D0%BA%D0%B0%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

38. Чернівецька обласна рада / Паспорт області, 2017. – Режим доступу:

<http://oblrada.cv.ua/passport/9/>

39. Чернівецька область / Матеріал з Вікіпедії, 2017. – Режим доступу: https://uk.wikipedia.org/wiki/%D0%A7%D0%B5%D1%80%D0%BD%D1%96%D0%B2%D0%B5%D1%86%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

40. Чернігівська область / Матеріал з Вікіпедії, 2017. – Режим доступу: https://uk.wikipedia.org/wiki/%D0%A7%D0%B5%D1%80%D0%BD%D1%96%D0%B3%D1%96%D0%B2%D1%81%D1%8C%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C

Transliteration

1. Avtoperevezennya DELLA [Autotransportation DELLA]. (2017). della.tsom.ua. Retrieved from <http://della.tsom.ua/distantse/?tsities=208,5399> [in Ukrainian].

2. Bilovodska, O. A., & Hryshchenko, O. F., & Syhyda, L. O. (2016). Osoblyvosti vrakhuvannia lohistychnoho potentsialu rehionu v protsesi rozroblennia systemy rozpodilu na pidpriemstvi [Specific features of regional logistics potential consideration in the process of the enterprise distribution system development]. *Ekonomichnyi chasopys-XXI – Economic Annals-XXI*, 160(7-8), 105-110.

3. Vinnytska oblast. Vilna entsyklopediia «Vikipediia» [Vinnytsa region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from https://uk.wikipedia.org/wiki/%D0%92%D1%96%D0%BD%D0%BD%D0%B8%D1%86%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8 [in Ukrainian].

4. Volynska oblast. Vilna entsyklopediia «Vikipediia» [Volynska region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from https://uk.wikipedia.org/wiki/%D0%92%D0%BE%D0%BB%D0%B8%D0%BD%D1%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts [in Ukrainian].

5. Derzhavna sluzhba Ukrainy z pytan heodezii, kartohrafii ta kadastru [The State Service of Ukraine for Geodesy, Cartography and Cadastre]. (2017)]. land.gov.ua. Retrieved from <http://land.gov.ua/info/zemelnyi-fond-ukrainy-stanom-na-1-sichnia-2015-roku-ta-dynamika-iohozmin-v-porivnianni-z-danymy-na-1-sichnia-2014-roku/> [in Ukrainian].

6. Derzhavnyi kordon Ukrainy. Vilna entsyklopediia «Vikipediia» [The state border of Ukraine. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from

https://uk.wikipedia.org/wiki/%D0%94%D0%B5%D1%80%D0%B6%D0%B0%D0%B2%D0%BD%D0%B8%D0%B9_%D0%BA%D0%BE%D1%80%D0%B4%D0%BE%D0%BD_%D0%A3%D0%BA%D1%80%D0%B0%D1%97%D0%BD%D0%B8 [in Ukrainian].

7. Dnipropetrovska oblast. Vilna entsyklopediia «Vikipediia» [Dnipropetrovsk region. Free Encyclopedia Wikipedia]. (2017). [uk.wikipedia.org](https://uk.wikipedia.org/wiki/%D0%94%D0%BD%D1%96%D0%BF%D1%80%D0%BE%D0%BF%D0%B5%D1%82%D1%80%D0%BE%D0%B2%D1%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts). Retrieved from https://uk.wikipedia.org/wiki/%D0%94%D0%BD%D1%96%D0%BF%D1%80%D0%BE%D0%BF%D0%B5%D1%82%D1%80%D0%BE%D0%B2%D1%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts [in Ukrainian].

8. Donetska oblast . Vilna entsyklopediia «Vikipediia» [Donetsk region. Free Encyclopedia Wikipedia]. (2017). [uk.wikipedia.org](https://uk.wikipedia.org/wiki/%D0%94%D0%BE%D0%BD%D0%B5%D1%86%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts). Retrieved from https://uk.wikipedia.org/wiki/%D0%94%D0%BE%D0%BD%D0%B5%D1%86%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts [in Ukrainian].

9. Zhytomyrska oblast. Vilna entsyklopediia «Vikipediia» [Zhytomyr region. Free Encyclopedia Wikipedia]. (2017). [uk.wikipedia.org](https://uk.wikipedia.org/wiki/%D0%96%D0%B8%D1%82%D0%BE%D0%BTs%D0%B8%D1%80%D1%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts). Retrieved from https://uk.wikipedia.org/wiki/%D0%96%D0%B8%D1%82%D0%BE%D0%BTs%D0%B8%D1%80%D1%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts [in Ukrainian].

10. Zakarpatskaya oblast. Ukraina sehodnia [Zakarpattia region. Ukraine today]. (2017). www.rada.tsom.ua. Retrieved from <http://www.rada.tsom.ua/rus/RegionsPotential/Zakarpattya/> [in Ukrainian].

11. Zakarpatska oblast. Vilna entsyklopediia «Vikipediia» [Zakarpattia region. Free Encyclopedia Wikipedia]. (2017). [uk.wikipedia.org](https://uk.wikipedia.org/wiki/%D0%97%D0%B0%D0%BA%D0%B0%D1%80%D0%BF%D0%B0%D1%82%D1%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts). Retrieved from https://uk.wikipedia.org/wiki/%D0%97%D0%B0%D0%BA%D0%B0%D1%80%D0%BF%D0%B0%D1%82%D1%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts [in Ukrainian].

12. Zaporizka oblast. Vilna entsyklopediia «Vikipediia» [Zaporizhia region. Free Encyclopedia Wikipedia]. (2017). [uk.wikipedia.org](https://uk.wikipedia.org/wiki/%D0%97%D0%B0%D0%BF%D0%BE%D1%80%D1%96%D0%B7%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts). Retrieved from https://uk.wikipedia.org/wiki/%D0%97%D0%B0%D0%BF%D0%BE%D1%80%D1%96%D0%B7%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts [in Ukrainian].

13. Zemelnyi fond Ukrainy stanom na 1 sichnia 2010 roku ta dynamika yoho zmin z 2006 po 2010 roky. Ahrarnyi sektor Ukrainy. Ahrarni novyny ta operatyvna statystyka [The Land Fund of Ukraine on January 1, 2010 and the dynamics of its changes from 2006 to 2010. Agrarian sector

of Ukraine. Agrarian news and operational statistics]. (2017). www.agroua.net. Retrieved from http://www.agroua.net/news/news_28605.html [in Ukrainian].

14. Zemelnyi fond Ukrainy stanom na 1 sichnia 2011 roku ta dynamika yoho zmin. Ahrarnyi sektor Ukrayiny. Ahrarni novyny ta operatyvna statystyka [The Land Fund of Ukraine on January 1, 2011 and the dynamics of its changes. Agrarian sector of Ukraine. Agrarian news and operational statistics]. (2017). www.agroua.net. Retrieved from http://www.agroua.net/news/news_34235.html [in Ukrainian].

15. Zemelnyi fond Ukrainy stanom na 1 sichnia 2012 roku ta dynamika yoho zmin porivniano z danymy poperednikh rokiv [The Land Fund of Ukraine on January 1, 2012 and the dynamics of its changes compared with the dynamics of previous years]. (2012). Zemlevporiadnyy visnyk – Land survey bulletin, 4, 46. [in Ukrainian].

16. Informatsiia o horode, sele. Ivano-Frankovskaya oblast [Information about the city, the village. Ivano-Frankovskaia region]. (2017). sity.tsom.ua. Retrieved from http://sity.tsom.ua/IvanoFrankovskaya_oblast/ [in Ukrainian].

17. Ivano-Frankivska oblast. Vilna entsyklopediia «Vikipediia» [Ivano-Frankivsk region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from <https://uk.wikipedia.org/wiki/%D0%86%D0%B2%D0%B0%D0%BD%D0%BE-%D0%A4%D1%80%D0%B0%D0%BD%D0%BA%D1%96%D0%B2%D1%81%D1%8Ts%D0%BA%D0%B0%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts> [in Ukrainian].

18. Kyiv. Vilna entsyklopediia «Vikipediia» [Kyiv. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from <https://uk.wikipedia.org/wiki/%D0%9A%D0%B8%D1%97%D0%B2> [in Ukrainian].

19. Kyivska oblast. Vilna entsyklopediia «Vikipediia» [Kyiv region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from <https://uk.wikipedia.org/wiki/%D0%9A%D0%B8%D1%97%D0%B2%D1%81%D1%8Ts%D0%BA%D0%B0%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts> [in Ukrainian].

20. Kirovohradska oblast. Vilna entsyklopediia «Vikipediia» [Kirovohrad region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from <https://uk.wikipedia.org/wiki/%D0%9A%D1%96%D1%80%D0%BE%D0%B2%D0%BE%D0%B3%D1%80%D0%B0%D0%B4%D1%81%D1%8Ts%D0%BA%D0%B0%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts> [in Ukrainian].

21. Luhanska oblast. Vilna entsyklopediia «Vikipediia» [Luhansk region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from https://uk.wikipedia.org/wiki/%D0%9B%D1%83%D0%B3%D0%B0%D0%BD%D1%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts [in Ukrainian].

22. Lvivska oblast. Vilna entsyklopediia «Vikipediia» [Lviv region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from https://uk.wikipedia.org/wiki/%D0%9B%D1%8Ts%D0%B2%D1%96%D0%B2%D1%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts [in Ukrainian].

23. Lvivska oblast. Ukraina siohodni [Lviv region. Ukraine today]. (2017). www.rada.tsom.ua. Retrieved from <http://www.rada.tsom.ua/ukr/RegionsPotential/Lviv/> [in Ukrainian].

24. Mykolaivska oblast. Vilna entsyklopediia «Vikipediia» [Mykolaiv region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from https://uk.wikipedia.org/wiki/%D0%9Ts%D0%B8%D0%BA%D0%BE%D0%BB%D0%B0%D1%97%D0%B2%D1%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts [in Ukrainian].

25. Odeska oblast. Vilna entsyklopediia «Vikipediia» [Odesa region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from https://uk.wikipedia.org/wiki/%D0%9E%D0%B4%D0%B5%D1%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts

26. Pasport Zhytomyrskoi oblasti [Passport of Zhytomyr region]. (2017). agroprom.zt.gov.ua. Retrieved from <http://agroprom.zt.gov.ua/images/pdf/pasport.pdf> [in Ukrainian].

27. Poltavaska oblast. Vilna entsyklopediia «Vikipediia» [Poltava region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from https://uk.wikipedia.org/wiki/%D0%9F%D0%BE%D0%BB%D1%82%D0%B0%D0%B2%D1%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts [in Ukrainian].

28. Rivnenska oblast. Vilna entsyklopediia «Vikipediia» [Rivne region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from <https://uk.wikipedia.org/wiki/%D0%A0%D1%96%D0%B2%D0%BD%D0%B5%D0%BD%D1>

[%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts](#) [in Ukrainian].

29. Sotsialno-ekonomichne stanovyshche Ivano-Frankivska za 2015 rik. Ivano-Frankivskyi rehionalnyi tsentr zainiatosti. Derzhavna sluzhba statystryky Ukrainy [Socioeconomic situation of Ivano-Frankivsk city in 2015. Ivano-Frankivsk Regional Employment Center. State Statistics Service of Ukraine]. (2017). www.dtsz.gov.ua. Retrieved from http://www.dtsz.gov.ua/ifr/tsontrol/uk/publish/artitsle?art_id=57520&tsat_id=1015573 [in Ukrainian].

30. Statystrychnyi zbirnyk «Zovnishnia torhivlia Ukrainy tovaramy ta posluhamy» 2010-2015 rr. Derzhavna sluzhba statystryky Ukrayiny [Statistical publication «Ukraine's foreign trade in goods and services» 2010-2015. State Statistics Service of Ukraine]. (2016). www.ukrstat.gov.ua. Retrieved from <http://www.ukrstat.gov.ua/> [in Ukrainian].

31. Statystrychnyi zbirnyk «Rehiony Ukrainy» 2010-2015 rr. Chastyna 1. Derzhavna sluzhba statystryky Ukrainy [Statistical publication «Regions of Ukraine» 2010-2015. Part 1. State Statistics Service of Ukraine]. (2016). www.ukrstat.gov.ua. Retrieved from <http://www.ukrstat.gov.ua/> [in Ukrainian].

32. Sumska oblast. Vilna entsyklopediia «Vikipediia» [Sumy region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from https://uk.wikipedia.org/wiki/%D0%A1%D1%83%D0%BTs%D1%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts [in Ukrainian].

33. Ternopilska oblast. Vilna entsyklopediia «Vikipediia» [Ternopil region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from https://uk.wikipedia.org/wiki/%D0%A2%D0%B5%D1%80%D0%BD%D0%BE%D0%BF%D1%96%D0%BB%D1%8Ts%D1%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts [in Ukrainian].

34. Kharkivska oblast. Vilna entsyklopediia «Vikipediia» [Kharkiv region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from https://uk.wikipedia.org/wiki/%D0%A5%D0%B0%D1%80%D0%BA%D1%96%D0%B2%D1%81%D1%8Ts%D0%BA%D0%B0_%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8Ts [in Ukrainian].

35. Khersonska oblast . Vilna entsyklopediia «Vikipediia» [Kherson region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from <https://uk.wikipedia.org/wiki/%D0%A5%D0%B5%D1%80%D1%81%D0%BE%D0%BD%D1%81%D1%82%D1%8Ts>

[81%D1%8T%D0%BA%D0%B0%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8T](https://uk.wikipedia.org/wiki/%D0%A5%D0%BT%D0%B5%D0%BB%D1%8T%D0%BD%D0%B8%D1%86%D1%8T%D0%BA%D0%B0%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8T) [in Ukrainian].

36. Khmelnytska oblast. Vilna entsyklopediia «Vikipediia» [Khmelnytsk region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from <https://uk.wikipedia.org/wiki/%D0%A5%D0%BT%D0%B5%D0%BB%D1%8T%D0%BD%D0%B8%D1%86%D1%8T%D0%BA%D0%B0%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8T> [in Ukrainian].

37. Cherkaska oblast. Vilna entsyklopediia «Vikipediia» [Cherkasy region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from <https://uk.wikipedia.org/wiki/%D0%A7%D0%B5%D1%80%D0%BA%D0%B0%D1%81%D1%8T%D0%BA%D0%B0%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8T> [in Ukrainian].

38. Chernivetska oblasna rada. Pasport oblasti [Chernivtsi Regional Council. Pasport of region]. (2017). obrada.tsv.ua. Retrieved from <http://oblrada.tsv.ua/passport/9/> [in Ukrainian].

39. Chernivetska oblast. Vilna entsyklopediia «Vikipediia» [Chernivtsi region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from <https://uk.wikipedia.org/wiki/%D0%A7%D0%B5%D1%80%D0%BD%D1%96%D0%B2%D0%B5%D1%86%D1%8T%D0%BA%D0%B0%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8T> [in Ukrainian].

40. Chernihivska oblast. Vilna entsyklopediia «Vikipediia» [Chernihiv region. Free Encyclopedia Wikipedia]. (2017). uk.wikipedia.org. Retrieved from <https://uk.wikipedia.org/wiki/%D0%A7%D0%B5%D1%80%D0%BD%D1%96%D0%B3%D1%96%D0%B2%D1%81%D1%8T%D0%BA%D0%B0%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8T> [in Ukrainian].

Bilovodska O. Spatial potential in the structure of logistic potential in Ukrainian regions / O. Bilovodska // National Security & Innovation Activities: Methodology, Policy and Practice: monograph / edited by O. Prokopenko, V. Omelyanenko, Yu. Ossik. – Ruda Śląska: Drukarnia i Studio Graficzne Omnidium, 2018. – P. 64-75.