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## **ANALYSIS OF SOCIO-ECONOMIC CONDITIONS OF UKRAINE WESTERN BORDERS COMPETITIVENESS**

*Abstract. Effective management of cross-border cooperation is possible only under the condition of deep analysis of the socio-economic condition of the actual border areas. The authors made an attempt to achieve it through the synthesis rate of socio-economic development - the competitiveness of regions. For this purpose, for comparative characteristics of the border regions and the level of their competitiveness in the article it is proposed to use the indicators of socio-economic integration applied by the European Commission. On the basis of the research of the western border regions of Ukraine authors made relevant conclusions and suggestions.*

*Keywords:* cross-border cooperation, competitiveness, cross-border region, integration, indexes, indicators.

Despite the fact that minimally adequate, fairly stable organizational and legal mechanism for regulation of cross-border cooperation have been formed, European norms and principles are enshrined in documents of the Council of Europe<sup>1</sup> and the list of bilateral and multilateral agreements, we can say that cross-border cooperation at the new eastern borders of the EU and Ukraine is not in the best time of its development. This situation is such primarily due to the existing political and economic realities in the nature of the European continent and because of the socio-economic condition in participating countries. However, we think that the main problems

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<sup>1</sup>Європейська Рамкова Конвенція про транскордонне співробітництво між територіальними общинами або властями (ETSNo106) – Мадрид, 21 травня 1980 р. European Outline Convention on trans-frontier cooperation between territorial communities or authorities from Madrid, 21.05.1980

which do not stimulate the dynamic development of cross-border cooperation lie in the sphere of its management moreover it results in stagnation of cross-border cooperation.

In our opinion to improve the effectiveness of cross-border management in the sphere of economics it is important to implement the comparative analysis of border regions competitiveness. This happens because of the fact that nowadays the information on goods movement, capital, services, and labor is not available. To explore the condition, problems, prospective, to work out programs of its dynamism by traditional methods is practically impossible. The results of this analysis can be a good starting point, scientific and methodological basis for the implementation of joint programs in cross-border cooperation. It concerns modern forms of cooperation and mainly formation of international special economic territories between two or more neighboring countries.

In modern economic literature, the competitiveness of individual regions mainly measured by analysis of several competitive factors, or application a theoretical model of competitiveness. We in our study used several key regional indicators used in determining the cost-effectiveness of regional economies and interregional analysis of socio-economic integration, which are used in the European Commission.

Regional indicators of socio-economic integration which are fully available and which are used in analyzing the socio-economic processes in each EU country and the border countries at its Eastern border are used for comparative characteristics of socio-economic development for border countries.

These indicators include the following:

- Gross regional product per 1 person (GRP pers.)
- Retail turnover of trade per 1 person (RTT people.)
- Exports of goods and services (EGS) per 1 national currency GRP;
- Foreign direct investment (FDI) per 1 national currency GRP;
- Distribution of economic agents (DEA) per 1000 persons of economically active population (EAP);
- Scientific and technical work performed on own (STW) per 1 national currency GRP;

- Unemployment rate (UR);
- The average monthly salary of employees (AMSR);
- The number of students in higher education institutions per 10 thousand people;
- Index of regional human development (IRHD);
- The condition of the environment, which is calculated as the unit divided by the number of harmful emissions into the air from stationary sources by 1 inhabitant;
- Access to housing resources, which is calculated by dividing the amount of housing per capita of population.

Comparative analysis of the competitiveness of the border regions should be determined at two levels: national and international. At the national level the comparative analysis of border regions was conducted by comparing regional indicators of a single border region to the average in the country as a reference.

$$\text{Index Mapping} = \frac{\text{Value indicator in the border region}}{\text{The average value of the indicator in the country}}$$

In order to determine the competitiveness of border regions on two or more levels of adjacent countries it is reasonable to accept its appropriate value as a basic indicator of one or two countries-participants of cross-border cooperation with the highest rating of competitiveness.

$$\text{Index Mapping} = \frac{\text{Value indicator in the border region}}{\text{The average value of the indicator in the country with highest rate of competitiveness}}$$

As a result, the competitive position of a border region is defined as the sum of all calculated indexes of comparing regional indicators to benchmark value. This applies to the aggregate index for competitiveness of border region at both national and international levels.

**Aggregate index of regional competitiveness (RCI) =  $\Sigma$  indexes comparison.**

Using the above mentioned method we analyzed the competitiveness of the western border regions of Ukraine. In

particular, in Table 1 presented statistics on the value of gross domestic product and gross regional product per capita in Ukraine in general and in the border regions. This parameter characterizes mostly the economic development of the region.

**Table 1**  
**Dynamics of GRP (UAH) and indexes of IGRP  
in the western border regions of Ukraine**

Years	Regions											
	Ukraine in general		Zakarpattya		Ivano-Frankivsk		Lviv		Chernivcy		Volyn'	
	GDP	IGRP	GDP	IGRP	GDP	IGRP	GDP	IGRP	GDP	IGRP	GDP	IGRP
2000	2788	1.0	1677	0,602	2142	0,768	2159	0,774	1411	0,506	2077	0,745
2001	3766	1.0	2208	0,586	2756	0,732	2768	0,735	2015	0,535	2257	0,599
2002	4239	1.0	2557	0,603	3213	0,758	3277	0,773	2321	0,548	2671	0,630
2003	5114	1.0	3207	0,627	3958	0,774	4049	0,792	2771	0,542	3339	0,653
2004	7273	1.0	4238	0,583	5238	0,720	5396	0,742	3589	0,493	4771	0,656
2005	9372	1.0	5373	0,573	6916	0,738	6657	0,710	4654	0,497	6285	0,671
2006	11630	1.0	6576	0,565	8157	0,701	8351	0,718	5650	0,486	7397	0,636
2007	15496	1.0	8452	0,545	10055	0,649	10915	0,704	7369	0,476	9711	0,627
2008	20495	1.0	10626	0,518	12940	0,631	13902	0,678	9771	0,477	12340	0,602
2009	19832	1.0	10081	0,508	12485	0,630	14093	0,711	9383	0,473	11796	0,595
2010	23600	1.0	12278	0,520	14814	0,628	16353	0,693	10939	0,464	13916	0,590
2011	24598	1.0	12695	0,516	15984	0,650	18912	0,769	11300	0,459	14878	0,605

From the data in Table 1 shown that during the 2000-2011 in the border regions there was steady growth of GRP per capita. However IGRP comparison to the average in Ukraine during this period in the border regions is usually declined.

Generally, in all the border regions IGRP is low and within 0,459-0,792.

An effective mechanism for increasing the competitiveness of the region is to create favorable conditions for registration and operation of entities having a positive impact on the socio-economic

development of the region. Table 2 provides statistics on the number of economic operators and the number of economically active population (EAP) in Ukraine and in the border regions, and in Table 3 - the number of subjects per 1000 and corresponding matching data region to the average in Ukraine in the context of border areas, which the authors calculated on the basis of statistical data presented in the Table. 2 is presented.

**Table 2**  
**Dynamics and the number of EAP (in thousands)**  
**in the western border regions of Ukraine**

Years	Regions											
	Ukraine in general		Zakarpattya		Ivano-Frankivsk		Lviv		Chernivcy		Volyn'	
	DEA	EAP	DEA	EAP	DEA	EAP	DEA	EAP	DEA	EAP	DEA	EAP
2000	834886	22830,8	15572	569,6	19565	653,3	45085	1249,5	11338	354	17988	463,1
2001	889330	22426,5	16253	448,3	20567	670,2	47149	1205,6	11741	346,2	19566	465,8
2002	935578	22231,9	16728	483,9	20855	581,1	49470	1192,4	12012	331,6	18267	471,6
2003	981054	22171,3	16823	551,2	21372	537,8	51696	1192,4	12433	359,8	19112	457,6
2004	1023396	22202,4	17124	537,8	21714	571,9	53454	1174,5	12919	402,5	19369	440,4
2005	1070705	22280,8	17871	592,3	22469	572,8	55421	1167	13593	401,2	21698	436,6
2006	1133200	22245,9	18979	584,6	23331	569,3	58163	1166,9	14687	400,7	21561	438,1
2007	1187020	22322,3	19852	584,6	23775	582,5	60391	1167,7	15484	411,2	17965	438,7
2008	1228888	22397,4	20513	590	24055	588,4	62190	1182,2	16026	415,9	18558	441,4
2009	1286554	22150,3	20747	582,6	24969	578,1	62115	1090,5	17159	415,2	19163	436,3
2010	1314732	22051,6	21399	582,2	25314	577,8	63999	1100,5	17121	418	19812	435,7
2011	1326559	22056,9	21376	577,9	25637	580,2	65668	1104,2	17219	419,6	20480	440,4

According to the data in the table 2, in all the border areas there was an increase in number of economic activities. If we compare 2000 and 2011, the largest increase occurred in the Chernivtsi DEA (34.2%) and Lviv (31.3%) regions, somewhat less - in Transcarpathia

(27.1%), but this figure in Ukraine in general is increasing the most (36.2%). The number of EAN decreased in Ivano-Frankivsk (-12,6%) and Lviv (-13.2%), while Chernivtsi (16%) and in Transcarpathia (1.4%) it has grown.

An important indicator that has the positive effect on aggregate indicator of regional competitiveness is the volume of sales of goods (retail turnover) in per capita. Trade holds a special place in the market economic system. As a form of commodity-money exchange, it mediates the economic cycle and provides an extended type of reproduction process.

**Table 3**  
**Dynamics of DEA (per 1 thousand EAP) and indexes of DEA  
in the western border regions of Ukraine**

Years	Regions											
	Ukraine in general		Zakarpattyia		Ivano-Frankivsk		Lviv		Chernivcy		Volyn'	
	DEA	IDEA	DEA	IDEA	DEA	IDEA	DEA	IDEA	DEA	IDEA	DEA	IDEA
2000	36,6	1	27,3	0,748	29,9	0,819	36,1	0,987	32,0	0,876	38,843	1,062
2001	39,7	1	36,3	0,914	30,7	0,774	39,1	0,986	33,9	0,855	42,005	1,059
2002	42,1	1	34,6	0,821	35,9	0,853	41,5	0,986	36,2	0,861	38,734	0,920
2003	44,2	1	30,5	0,690	39,7	0,898	43,4	0,980	34,6	0,781	41,766	0,944
2004	46,1	1	31,8	0,691	38,0	0,824	45,5	0,987	32,1	0,696	43,980	0,954
2005	48,1	1	30,2	0,628	39,2	0,816	47,5	0,988	33,9	0,705	49,698	1,034
2006	50,9	1	32,5	0,637	41,0	0,805	49,8	0,978	36,7	0,720	49,215	0,966
2007	53,2	1	34,0	0,639	40,8	0,768	51,7	0,973	37,7	0,708	40,951	0,770
2008	54,9	1	34,8	0,634	40,9	0,745	52,6	0,959	38,5	0,702	42,043	0,766
2009	58,1	1	35,6	0,613	43,2	0,744	57,0	0,981	41,3	0,712	43,922	0,756
2010	59,6	1	36,8	0,616	43,8	0,735	58,2	0,975	41,0	0,687	45,472	0,763
2011	60,1	1	37,0	0,615	44,2	0,735	59,5	0,989	41,0	0,682	46,503	0,773

**Table 4**  
**Dynamics of RTOs (UAH) per person and indexes of RTO  
in the western border regions of Ukraine**

Years	Regions											
	Ukraine in general		Zakarpattya		Ivano-Frankivsk		Lviv		Chernivcy		Volyn'	
	RTO	IRTO	RTO	IRTO	RTO	IRTO	RTO	IRTO	RTO	IRTO	RTO	IRTO
2000	585	1	590	1,009	413	0,706	683	1,168	515	0,880	552	0,944
2001	707	1	720	1,018	466	0,659	779	1,102	607	0,859	657	0,929
2002	823	1	855	1,039	512	0,622	938	1,140	733	0,891	764	0,928
2003	1046	1	1164	1,113	615	0,588	1185	1,133	952	0,910	967	0,924
2004	1424	1	1655	1,162	793	0,557	1546	1,086	1208	0,848	1287	0,904
2005	2003	1	2139	1,068	1124	0,561	2141	1,069	1578	0,788	1764	0,881
2006	2777	1	2332	0,840	1636	0,589	2675	0,963	1991	0,717	2311	0,832
2007	3832	1	2949	0,770	2264	0,591	3694	0,964	2960	0,772	3014	0,787
2008	5338	1	4267	0,799	3270	0,613	5018	0,940	4052	0,759	4140	0,776
2009	5020,8	1	3932	0,783	3275	0,652	8270	1,647	3992	0,795	3740	0,745
2010	6106	1	4782	0,783	3521	0,577	9904	1,622	4578	0,750	4538	0,743
2011	7610	1	5990	0,787	4620	0,607	12304	1,617	5427	0,713	5680	0,746

The main indicator of the level of commercial public service is sale of goods per person. In Ukraine its average in 2011 was 7610 USD per year. Table 4 shows the statistics on retail turnover of trade for 1 person (RTOs) in USD and related indices Irto matching it in the border areas to the average for Ukraine for 2000-2011.

An important factor in increasing the level of competitiveness of border regions is to increase the exports of goods and services. The above promotes the growth of national income, accelerating the development of scientific and technical progress raises the living standards of the population and thus the competitiveness of the

region. Therefore, the increasing of exports guarantees that Ukraine and its regions will quicker overcome the economic crisis; promote stable and rapid development of the productive forces and the growth of the living standards level.

In Table 5 the statistics on the dynamics of exports of goods and services (EGS) and gross regional product is shown, and Table 6 presents the ratio of EGS to GRP and related indices Iegs comparison to the average for Ukraine in the border areas, which the authors calculated on the basis of statistical data presented in Table 5.

**Dynamics of EGS and GRP, (mil. of UAH)  
in the western border regions of Ukraine**

Years	Regions											
	Ukraine in general		Zakarpattya		Ivano-Frankivsk		Lviv		Chernivcy		Volyn'	
	EGS	GRP	EGS	GRP	EGS	GRP	EGS	GRP	EGS	GRP	EGS	GRP
2000	99116	137993	1243	2151	1117	3117	1720	5850	329	1313	591	2195
2001	106458	183296	1419	2781	1704	3901	1661	7305	339	1864	684	2895
2002	113954	204342	1569	3211	2129	4518	1932	8578	378	2135	592	3112
2003	141597	244497	2230	4016	3626	5544	2749	10547	379	2539	820	3512
2004	196790	345113	3257	5297	4573	7311	3542	13992	451	3277	1364	4994
2005	204016	441452	2949	6700	4176	9622	3429	17192	525	4234	1405	6553
2006	222798	544153	3422	8185	4383	11316	4262	21486	553	5126	1680	7687
2007	284937	720731	5801	10508	5014	13916	5523	27987	787	6672	2110	10072
2008	407306	948056	6650	13208	3871	17883	5838	35534	875	8833	2325	12784
2009	423564	913345	7830	12542	2688	17241	7111	35955	958	8484	2552	12225
2010	549365	1082569	9640	12990	4608	20446	8676	41655	832	9892	3472	14429
2011	657491	1126859	11724	13432	7536	22061	10885	40956	1093	10118	5168	13689

But the main indicator of the level of exports of goods and services is their export per UAHGRP (GDP - for Ukraine). On average in the Ukraine in 2011, the figure is 0.583 USD. In Transcarpathian region in 2008 EGS per one hryvniaof GRP amounted to 0.873 USD.This is the highest among the border regions, and its higher than average in Ukraine (Table 6).

**Table 6**  
**Dynamics of EGS per one UAH of GRP and Indexes of EGS**  
**in the western border regions of Ukraine**

Years	Regions											
	Ukraine in general		Zakarpattyia		Ivano-Frankivsk		Lviv		Chernivcyl		Volyn'	
	EGS/GRP	IEGS	EGS/GRP	IEGS	EGS/GRP	IEGS	EGS/GRP	IEGS	EGS/GRP	IEGS	EGS/GRP	IEGS
2000	0,718	1	0,578	0,805	0,358	0,499	0,294	0,409	0,251	0,349	0,269	0,375
2001	0,581	1	0,510	0,879	0,437	0,752	0,227	0,391	0,182	0,313	0,236	0,407
2002	0,558	1	0,489	0,876	0,471	0,845	0,225	0,404	0,177	0,317	0,190	0,341
2003	0,579	1	0,555	0,959	0,654	1,129	0,261	0,450	0,149	0,258	0,233	0,403
2004	0,570	1	0,615	1,078	0,625	1,097	0,253	0,444	0,138	0,241	0,273	0,479
2005	0,462	1	0,440	0,952	0,434	0,939	0,199	0,432	0,124	0,268	0,214	0,464
2006	0,409	1	0,418	1,021	0,387	0,946	0,198	0,484	0,108	0,263	0,219	0,534
2007	0,395	1	0,552	1,396	0,360	0,911	0,197	0,499	0,118	0,298	0,209	0,530
2008	0,430	1	0,503	1,172	0,216	0,504	0,164	0,382	0,099	0,231	0,182	0,423
2009	0,464	1	0,624	1,346	0,156	0,336	0,198	0,426	0,113	0,243	0,209	0,450
2010	0,507	1	0,742	1,462	0,225	0,444	0,208	0,410	0,084	0,166	0,241	0,474
2011	0,583	1	0,873	1,496	0,342	0,585	0,266	0,456	0,108	0,185	0,378	0,647

**Table7**  
**Dynamics of DFI and GRP  
in the western border regions of Ukraine**

Years	Regions											
	Ukraine in general		Zakarpattya		Ivano-Frankivsk		Lviv		Chernivey		Volyn'	
	DFI	GRP	DFI	GRP	DFI	GRP	DFI	GRP	DFI	GRP	DFI	GRP
2000	21220	137993	505	2151	220	3117	821	5850	49	1313	171	2195
2001	24492	183296	578	2781	249	3901	906	7305	54	1864	196	2895
2002	28343	204342	661	3211	362	4518	1141	8578	78	2135	195	3112
2003	35241	244497	942	4016	498	5544	1581	10547	107	2539	268	3512
2004	43262	345113	1265	5297	626	7311	1813	13992	126	3277	431,5	4994
2005	82693	441452	1320	6700	681	9622	1931	17192	151	4234	487	6553
2006	104882	544153	1432	8185	891	11316	2500	21486	179	5126	567	7687
2007	144127	720731	1688	10508	1882	13916	4112	27987	250	6672	1362	10072
2008	184884	948056	1841	13208	2488	13429	4817	35534	311	8833	1962	12784
2009	284931	913345	2846	12542	4003	17241	7663	35955	481	8484	2153	12225
2010	320424	1082569	2840	12990	5080	20446	9588	41655	495	9892	2659	14429
2011	358447	1126859	2901	13432	4100	22061	10036	40956	495	10118	1749	13689

Table 7 presents statistics on DFI and GRP in border regions for 2000-2011 biennium, and in Table 8 indicators of the level of the ratio of DFI to the GRP and the corresponding indices IDFI comparison to the average for Ukraine in terms of border areas for 2000-2011, which the authors calculated on the basis of statistical data presented in Table 7.

**Table 8**  
**Dynamics in ration between DFI and GRP  
in the western border regions of Ukraine**

Years	Regions											
	Ukraine in general		Zakarpattya		Ivano-Frankivsk		Lviv		Chernivey		Volyn'	
	DFI/GRP	IDFI	DFI/GRP	IDFI	DFI/GRP	IDFI	DFI/GRP	IDFI	DFI/GRP	IDFI	DFI/GRP	IDFI
2000	0,154	1	0,235	1,527	0,071	0,459	0,140	0,913	0,037	0,243	0,078	0,507
2001	0,134	1	0,208	1,555	0,064	0,478	0,124	0,928	0,029	0,217	0,068	0,507
2002	0,139	1	0,206	1,484	0,080	0,578	0,133	0,959	0,037	0,263	0,063	0,452
2003	0,144	1	0,235	1,627	0,090	0,623	0,150	1,040	0,042	0,292	0,076	0,529
2004	0,125	1	0,239	1,905	0,086	0,683	0,130	1,034	0,038	0,307	0,086	0,689
2005	0,187	1	0,197	1,052	0,071	0,378	0,112	0,600	0,036	0,190	0,074	0,397
2006	0,193	1	0,175	0,908	0,079	0,409	0,116	0,604	0,035	0,181	0,074	0,383
2007	0,200	1	0,161	0,803	0,135	0,676	0,147	0,735	0,037	0,187	0,135	0,676
2008	0,195	1	0,139	0,715	0,185	0,950	0,136	0,695	0,035	0,181	0,153	0,787
2009	0,312	1	0,227	0,727	0,232	0,744	0,213	0,683	0,057	0,182	0,176	0,565
2010	0,296	1	0,219	0,739	0,248	0,839	0,230	0,778	0,050	0,169	0,184	0,623
2011	0,318	1	0,216	0,679	0,186	0,584	0,245	0,770	0,049	0,154	0,128	0,402

Another important factor in the competitiveness of the border areas are the results of scientific research in the region.

Table 9 present statistics on the dynamics of scientific and technical works (STW), done by authors, and GRP in the border regions and in the whole of Ukraine for 2000-2011, and in Table 10 are calculated the dynamics data value STW to 100 UAH of GRP and related indices matching intro to average in Ukraine in the context of border regions for 2000-2011 biennium, which the authors calculated on the basis of statistical data presented in Table. 9.

From the data in Table 9 shows that the level of STWat 100UAH. GDP growth in Ukraine in 2011 amounted to 0.918 UAH and compared to 2000 decreased by 0.516 UAH. The highest level of STW among border regions is in the Lviv region, where their amount per \$ 100. GRP is the 2011 0.753 Uah. It is lowest in the Volyn region - 0.167 UAH.

**Table 9**  
**Dynamics of STW and GRP (mil. UAH)**  
**in the western border regions of Ukraine, 2000-2008**

Years	Regions											
	Ukraine in general		Zakarpattya		Ivano-Frankivsk		Lviv		Chernivcy		Volyn'	
	STW	GRP	STW	GRP	STW	GRP	STW	GRP	STW	GRP	STW	GRP
2000	1978,4	137993	4,7	2151	11,5	3117	70	5850	5,9	1313	4,5	2195
2001	2275	183296	5,6	2781	13	3901	81	7305	6,5	1864	6,4	2895
2002	2496,8	204342	7	3211	14	4518	98,5	8578	8,2	2135	7,4	3112
2003	3319,8	244497	8,2	4016	18,6	5544	119,2	10547	12,5	2539	7,9	3512
2004	4112,4	345113	7,7	5297	23,8	7311	135,4	13992	11,5	3277	7,7	4994
2005	4818,6	441452	15	6700	31,1	9622	179,2	17192	14,9	4234	11,8	6553
2006	5354,6	544153	15,5	8185	36	11316	199,2	21486	19,6	5126	14	7687
2007	6700,7	720731	15,2	10508	44,7	13916	252,9	27987	24,5	6672	12,3	10072
2008	8538,9	948056	20,6	13208	50,9	13429	288,7	35534	29,8	8833	17,1	12784
2009	8653,7	913345	21,6	12542	53	17241	274,9	35955	36,4	8484	20,4	12225
2010	9867,1	1082569	25,7	12990	56,8	20446	299,6	41655	36,5	9892	20,6	14429
2011	10349,9	1126859	31,9	13432	65,4	22061	308,3	40956	41,1	10118	22,8	13689

**Table 10**

**Dynamics of STW per 100 UAH of GRP and Indexes of STW  
in the western border regions of Ukraine**

Years	Regions											
	Ukraine in general		Zakarpattya		Ivano-Frankivsk		Lviv		Chernivcy		Volyn'	
	STW/ GRP	ISTW	STW/ GRP	ISTW	STW/ GRP	ISTW	STW/ GRP	ISTW	STW/ GRP	ISTW	STW/ GRP	ISTW
2000	1,434	1	0,219	0,152	0,369	0,257	1,197	0,835	0,449	0,313	0,205	0,143
2001	1,241	1	0,201	0,162	0,333	0,268	1,109	0,893	0,349	0,281	0,221	0,178
2002	1,222	1	0,218	0,178	0,310	0,254	1,148	0,940	0,384	0,314	0,238	0,195
2003	1,358	1	0,204	0,150	0,335	0,247	1,130	0,832	0,492	0,363	0,225	0,166
2004	1,192	1	0,145	0,122	0,326	0,273	0,968	0,812	0,351	0,295	0,154	0,129
2005	1,092	1	0,224	0,205	0,323	0,296	1,042	0,955	0,352	0,322	0,180	0,165
2006	0,984	1	0,189	0,192	0,318	0,323	0,927	0,942	0,382	0,389	0,182	0,185
2007	0,930	1	0,145	0,156	0,321	0,345	0,904	0,972	0,367	0,395	0,122	0,131
2008	0,901	1	0,156	0,173	0,379	0,421	0,812	0,902	0,337	0,375	0,134	0,149
2009	0,947	1	0,172	0,182	0,307	0,324	0,765	0,807	0,429	0,453	0,167	0,176
2010	0,911	1	0,198	0,217	0,278	0,305	0,719	0,789	0,369	0,405	0,143	0,157
2011	0,918	1	0,237	0,259	0,296	0,323	0,753	0,820	0,406	0,442	0,167	0,181

As shown in Table 10 Transcarpathianregion during 2000-2011by the level of STWs bordering regions (except Lviv) significantly inferior the similar index in Ukraine as a whole.

The competitiveness of the border region is largely determined by the level of productive employment and effective development of the labor market. Economic crisis has an ambiguous impact on economic development in the border regions. The above problem situation characterized by inefficient use of human resources and its potential in economic subjects, which leads to low efficiency of all levels of management. The inefficient use of human resources to the

data is cited in Table. 11. In particular, it is proved by certified level of registered unemployed as a percentage of the working age population (UR) and related indexes IUR comparing with the average for Ukraine in terms of border regions for 2000-2011 biennium.

**Table 11**  
**Dynamic in variables of RUR and IUR**  
**in the western border regions of Ukraine**

Years	Regions											
	Ukraine in general		Zakarpattyia		Ivano-Frankivsk		Lviv		Chernivcy		Volyn'	
	RUR	IUR	RUR	IUR	RUR	IUR	RUR	IUR	RUR	IUR	RUR	IUR
2000	4,2	1	6	1,429	5,7	1,357	6	1,429	4,4	1,048	11,6	2,762
2001	3,8	1	5	1,316	4,8	1,263	4,1	1,079	4,1	1,079	10,5	2,763
2002	3,7	1	5,4	1,459	4,7	1,270	4	1,081	5,6	1,514	10,9	2,946
2003	3,6	1	4,4	1,222	4,2	1,167	3,9	1,083	6,2	1,722	13,2	3,667
2004	3,5	1	3,8	1,086	4,3	1,229	4	1,143	5,6	1,600	11,4	3,257
2005	3,2	1	3,5	1,094	4,1	1,281	3,4	1,063	5,2	1,625	9,6	3,000
2006	2,8	1	3,1	1,107	3,5	1,250	2,7	0,964	4,2	1,500	9,4	3,357
2007	2,4	1	2,5	1,042	3,1	1,292	2,1	0,875	3,1	1,292	8,8	3,667
2008	2,1	1	2,4	1,143	3,7	1,762	2,7	1,286	2,8	1,333	9	4,286
2009	2,5	1	2,4	0,960	2,9	1,160	1,7	0,680	2,5	1,000	10,2	4,080
2010	1,6	1	1,6	1,000	1,8	1,125	1,7	1,063	1,7	1,063	9,3	5,813
2011	1,8	1	1,9	1,056	2,1	1,167	1,5	0,833	1,9	1,056	9,1	5,056

From the data presented in Table 11 on 1 January 2012 it is shown that the level of registered unemployed in Ukraine as a whole is 1.8%. Above average in Ukraine RURis in Ivano-Frankivsk (2.1%), and Chernivtsi and Transcarpathian regions (1.9%).

All border regions IUR indexes in 2011 are within 0,90-1,23. IURis highest among border regions during 2000-2011 bienniums seen in Ivano-Frankivsk region.

Important role in the evaluation of regional competitiveness indicator is the cost of labor. In assessing labor costs account for the cost of the work performed, costs paid (not worked) during working hours, bonuses and one-time payments, wages in kind of benefits, benefits in kind and cash, business expenses on housing workers, their social security. Experts estimate that in Ukraine the baseline labor costs is taken directly to the cost of labor, which is based on wages.

**Table 12  
Dynamics in AMS (UAH) and Indexes of AMS  
in the western border regions of Ukraine**

Years	Regions											
	Ukraine in general		Zakarpattyia		Ivano-Frankivsk		Lviv		Chernivcy		Volyn'	
	AMS	IAMS	AMS	IAMS	AMS	IAMS	AMS	IAMS	AMS	IAMS	AMS	IAMS
2000	230	1	172	0,748	188	0,817	196	0,852	157	0,683	150	0,652
2001	311	1	238	0,765	259	0,833	272	0,875	218	0,701	201	0,646
2002	376	1	295	0,785	318	0,846	339	0,902	271	0,721	253	0,673
2003	462	1	379	0,820	402	0,870	419	0,907	344	0,745	319	0,690
2004	590	1	479	0,812	510	0,864	523	0,886	438	0,742	412	0,698
2005	806	1	665	0,825	718	0,891	713	0,885	602	0,747	591	0,733
2006	1041	1	868	0,834	923	0,887	923	0,887	790	0,759	773	0,743
2007	1351	1	1091	0,808	1180	0,873	1183	0,876	1016	0,752	1013	0,750
2008	1806	1	1453	0,805	1543	0,854	1570	0,869	1402	0,776	1380	0,764
2009	1906	1	1562	0,820	1627	0,854	1667	0,875	1523	0,799	1427	0,749
2010	2239	1	1856	0,829	1927	0,861	1941	0,867	1772	0,791	1692	0,756
2011	2633	1	2080,6	0,790	2213	0,840	2244	0,852	1985	0,754	1994	0,757

Table 12 presents data on the dynamics of values of the average nominal wage employees (AMS) and related indices IAMS comparison to the average for Ukraine in terms of border regions for 2000-2011 biennium These data show that the average monthly salary of employees in Ukraine in 2011 was 2633 UAH., and in the border regions, it is much lower (from a minimum value of 1985 UAH. in Chernivtsi region to a maximum value of 2244 UAH. in Lviv).

The highest index of ANS among border regions in 2011 in Lviv region - 0.852, but its level was highest in 2003 and amounted to 0.907. Transcarpathia won the 3rd place in terms of ANS. Indexes of ANS in 2010 in the border areas were higher than in 2000, but in 2011 there was a decrease, except in Volyn region.

The quality of human resources in the regions show data cited in Table 13. Number of people trained in universities, per 10 000 population at the end of the year and the corresponding indices of ANS comparison to the average for Ukraine in terms of border regions for 2000-2011 biennium

**Table 13**

**Dynamics in number of persons graduated from High Educational Institutions per 10 000 of inhabitants and indexes of GHEI in the western border regions of Ukraine**

Years	Regions											
	Ukraine in general		Zakarpattya		Ivano-Frankivsk		Lviv		Chernivcy		Volyn'	
	Number of persons in HEI	IGHEI										
2000	395	1	180	0,456	309	0,782	442	1,119	336	0,851	181	0,458
2001	436	1	194	0,445	346	0,794	476	1,092	377	0,865	189	0,433
2002	473	1	206	0,436	380	0,803	507	1,072	402	0,850	191	0,404
2003	512	1	216	0,422	408	0,797	553	1,080	434	0,848	210	0,410
2004	545	1	206	0,378	417	0,765	572	1,050	414	0,760	205	0,376
2005	577	1	217	0,376	435	0,754	615	1,066	433	0,750	238	0,412
2006	597	1	228	0,382	447	0,749	641	1,074	437	0,732	260	0,436
2007	605	1	233	0,385	443	0,732	649	1,073	425	0,702	276	0,456
2008	598	1	226	0,378	443	0,741	659	1,102	429	0,717	274	0,458
2009	488	1	190	0,389	304	0,623	570	1,168	310	0,635	270	0,553
2010	463	1	187	0,404	291	0,629	538	1,162	301	0,650	257	0,555
2011	425	1	178	0,419	257	0,605	521	1,226	278	0,654	236	0,555

The data in Table 13 show the number of people enrolled in universities per 10,000 populations at the end of the relevant year in the border regions in 2011 was 178-521. The lowest number is in the region (178 people).

The highest index IGHEI among western border regions during 2000-2011's been reported in the Lviv region, its level was the highest in 2011 and amounted to 1.226. If the index in 2011 in Zakarpattia, Ivano-Frankivsk and Chernivtsi border areas compared to 2000 decreased, the biggest decline was in the Chernivtsi region - from 0.851 in 2000 to 0.654 in 2012. In Volyn region IGHEI index increased from 0.458 in 2000 to 0.555 in 2011.

Based on the regional statistical yearbooks in table 14 there are illustrated regional human development index (HDI) in Kyiv and the border regions of data for 2000-2011's value to the city Kyiv is taken as a reference, as the highest rating in Ukraine. Also in Table 14 are those indices of AHD comparison to the reference value in the cut for 2000-2011 biennium

From the data of Table 14 shows that the highest indices of HDI and IAHD among western border areas in 2011 had Zakarpattia region (0.512 and 0.702, respectively), but compared to 2003, there was a significant reduction in their (0.588 and 0.768).

**Table 14**  
**Dynamics in HDI and IAHD**  
**in the western border regions of Ukraine**

years	regions											
	Ukraine in general		Zakarpattya		Ivano-Frankivsk		Lviv		Chernivtsi		Volyn'	
	HDI	IAHD	HDI	IAHD	HDI	IAHD	HDI	IAHD	HDI	IAHD	HDI	IAHD
2000	0,754	1	0,547	0,725	0,509	0,675	0,555	0,736	0,521	0,691	0,506	0,671
2001	0,766	1	0,524	0,684	0,482	0,629	0,530	0,692	0,511	0,667	0,486	0,634
2002	0,777	1	0,516	0,664	0,49	0,631	0,530	0,682	0,476	0,613	0,482	0,620
2003	0,766	1	0,588	0,768	0,499	0,651	0,534	0,697	0,516	0,674	0,487	0,636
2004	0,774	1	0,557	0,720	0,489	0,632	0,529	0,683	0,513	0,663	0,492	0,636

2005	0,783	1	0,505	0,645	0,482	0,616	0,502	0,641	0,437	0,558	0,488	0,623
2006	0,789	1	0,507	0,643	0,484	0,613	0,521	0,660	0,489	0,620	0,485	0,615
2007	0,796	1	0,492	0,618	0,476	0,598	0,484	0,608	0,471	0,592	0,479	0,602
2008	0,720	1	0,511	0,710	0,494	0,686	0,509	0,707	0,489	0,679	0,483	0,671
2009	0,720	1	0,508	0,706	0,497	0,690	0,502	0,697	0,481	0,668	0,499	0,693
2010	0,725	1	0,51	0,703	0,511	0,705	0,508	0,701	0,479	0,661	0,503	0,694
2011	0,729	1	0,512	0,702	0,498	0,683	0,504	0,691	0,491	0,674	0,492	0,675

**Table 15**  
**Dynamics in meanings of aggregate indexes of regional**  
**competitiveness RCI and its ratio**  
**in the western border regions of Ukraine**

Years	regions											
	Ukraine in general		Zakarpattyia		Ivano-Frankivsk		Lviv		Chernivcy		Volyn'	
	RCI	RCI	Position	RCI	Position	RCI	Position	RCI	Position	RCI	Position	
2000	1	0,820	3	0,714	4	0,922	1	0,644	5	0,832	2	
2001	1	0,833	2	0,718	4	0,877	1	0,637	5	0,816	3	
2002	1	0,835	2	0,746	4	0,894	1	0,689	5	0,811	3	
2003	1	0,840	3	0,774	4	0,899	2	0,713	5	0,902	1	
2004	1	0,854	3	0,764	4	0,887	1	0,665	5	0,878	2	
2005	1	0,742	3	0,727	4	0,841	1	0,645	5	0,838	2	
2006	1	0,713	4	0,727	3	0,828	2	0,637	5	0,869	1	
2007	1	0,716	4	0,744	3	0,828	2	0,617	5	0,900	1	
2008	1	0,705	4	0,791	3	0,852	2	0,623	5	0,968	1	
2009	1	0,703	3	0,676	4	0,868	2	0,596	5	0,936	1	
2010	1	0,727	3	0,685	4	0,906	2	0,580	5	1,117	1	
2011	1	0,732	3	0,678	4	0,902	2	0,577	5	1,040	1	

The dynamics values aggregate indices of regional competitiveness RCI and their ranking in terms of economic regions in 2000-2011 years is presented in Table 15.

These data show the reference values of the aggregate index of regional competitiveness in Ukraine as a whole (1.0) its level in 2011 among the studied regions was the highest in Volyn region (1.040) and the lowest - in Chernivtsi (.577).

To sum up, short general conclusions can be made, including the following:

1. The absence of scientifically proved state regional policy in Ukraine caused the asymmetry in the socio-economic development of regions. Especially noticeable is the gap in development which reaches critical level concerns of border regions.

2. The analysis result of socio-economic development of the western border areas gives reason to conclude that depression there exist and low level of integration in these region.

3. Overcoming the negative effects of depressed border areas, particularly in the western region is the problem on state-level and its solution requires a systematic approach that would include the state targeted comprehensive program to stimulate the socio-economic development of the western border region.

4. It is advisable to conduct a similar study in cooperation with scientists of neighboring countries on the proposed methodology, which will enable a realistic assessment of the socio-economic basis and prospects of cross-border cooperation.

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