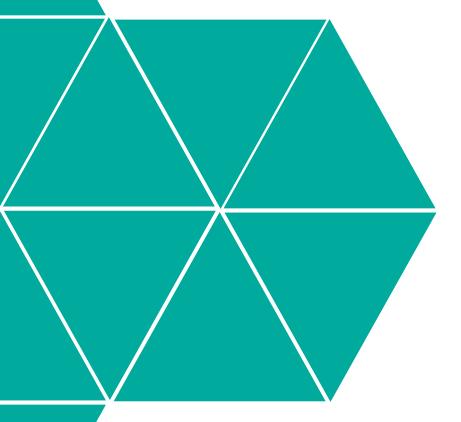
### A summary of the research:

# **«Assessment of the economic potential of Donbas universities»**











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#### **INTRODUCTION**

The current situation at the Donbas labor market can be defined as critical. Changes in the structure of demand and supply that have arisen in the military conflict background have caused an exacerbation of the existing problems and the emergence of new ones that haven't been known in management practice before. One of these problem lies in an insufficient level of satisfying employers needs by the personnel, which is largely due to the following factors: the ineffectiveness of the youth professional self-determination; the lack of systematic information as for professions in demand on the labor market; low level of interaction between employers and the educational sphere, the imperfection of the existing educational system, the quality of students' training decrease due to the growth of the number of private higher education institutions, etc. All these exacerbate the problem of higher educational labor force excess, at poor quality of young specialist training, reduce the return on investment in human capital and hinder the development of the economy. The key point in this process is the employment of young people, both on the one hand, the most promising part of the population, and on the other, the most vulnerable one. The solution of the youth unemployment problem lies in the cooperation between educational institutions and employers. The creation of Career Development Centers in the regional universities is one of the variant of such interaction.

The main goal of the research is to assess the current and future potential of the Donbas Universities in terms of their place and role in preparing a competitive skilled workforce, the realization of employment opportunities and the expansion of public-private partnerships in the educational sphere.

To achieve the goal, the statistical and sociological methods were used in the research. The statistical research involved carrying out the assessment of the labor market development level in the region, determining the existing level of pressure on it and the structure of the supply-demand ratio. In addition, the statistical survey included an assessment of the market development level for educational services in the region, assessment of the training structure and rankings of the Donbas universities. The sociological study included carrying out a quantitative survey (interviewing students and employers in the region on the basis of pre-created and approved questionnaires using the Google-form tool) and a qualitative survey that included focus group interviews among student activists and university leaders and university professors in the region, and also conducting in-depth interviews among the key employers in the region.

The conducted research made it possible to identify the main problems existing in the field of professional training at the region universities, to evaluate the level of employers and students satisfaction with the quality of the acquired knowledge, skills and abilities; identify the most critical competencies that are least developed by graduates; explore the current state and prospects of expanding cooperation between business and educational institutions; evaluate the effectiveness of Career Centers activities at universities and the level of additional services provided by universities in the field of employment and improve the practical component of learning.

Research results can be of interest to representatives of the regional authorities, state and non-state bodies of population employment promotion, managers of educational institutions, employers. It is also of interest to domestic and foreign public organizations

as an information resource for the creation of regional policy, implementation of individual measures and projects in the field of improvement labor market functioning in the region, overcoming unemployment, consolidating the youth in the region and expanding the prospects for its employment.

#### 2. Key indicators of economic activity in the region

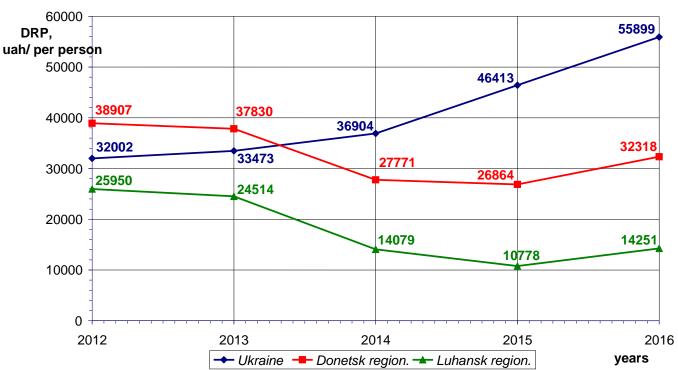
#### **Macroeconomic Indicators**

#### Domestic regional product per capita

According to the statistical data provided in the statistics digest "Regions of Ukraine", the gross regional product (GRP) per capita for the period from 2012 to 2016 in Ukraine as a whole grew from 32002 UAH. to 55899 UAH, that is, in 1,75 times. At the same time, in Donetsk region this indicator has decreased by 17%, and in Luhansk region - almost twice (by 45%). The dynamics of the GRP's changes is shown in the diagram:

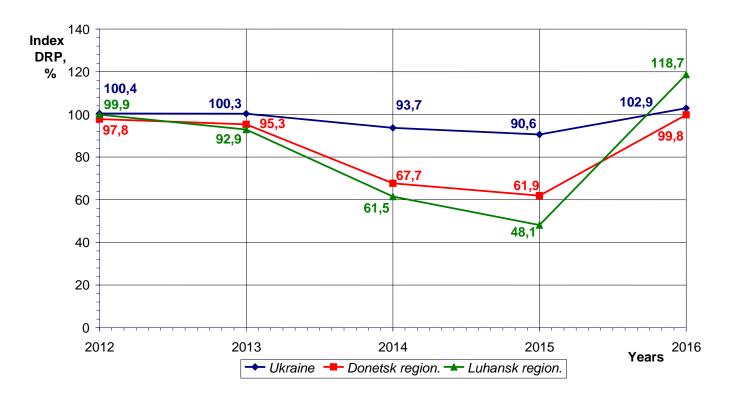
#### Внутрішній регіональний продукт у фактичних цінах

Domestic regional product in actual prices per person

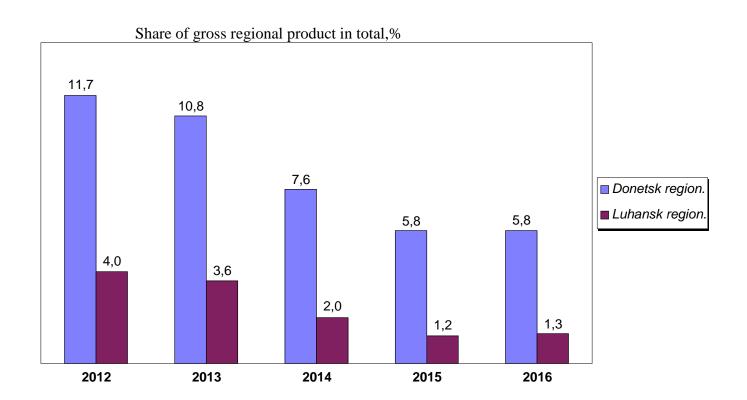


If we consider the indices of the gross regional product (as a percentage to compare with previous year), in Luhansk region it was an increase of 118% in 2016, and in Donetsk it is almost 100%, as shown in the diagram below:

The index of the domestic regional product per capita in the prices of the previous year

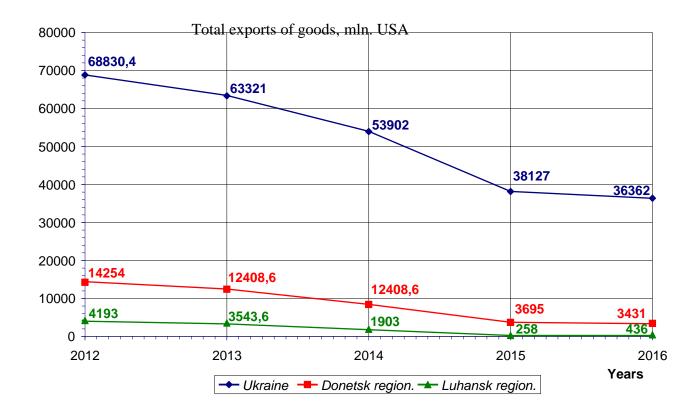


The share of gross product, as a percentage of the total volume for the period from 2012 to 2016 in Ukraine, decreased twice in Donetsk region, three times in Luhansk:

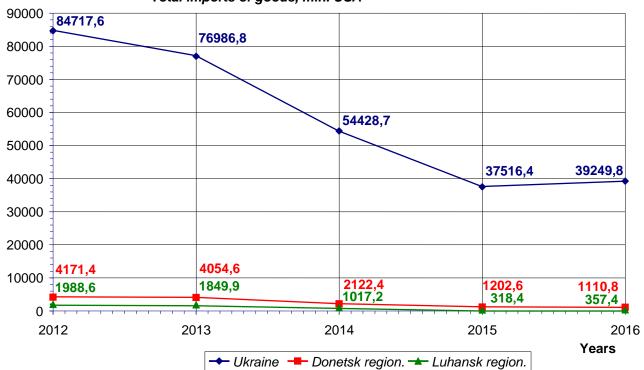


#### Total export and import of products

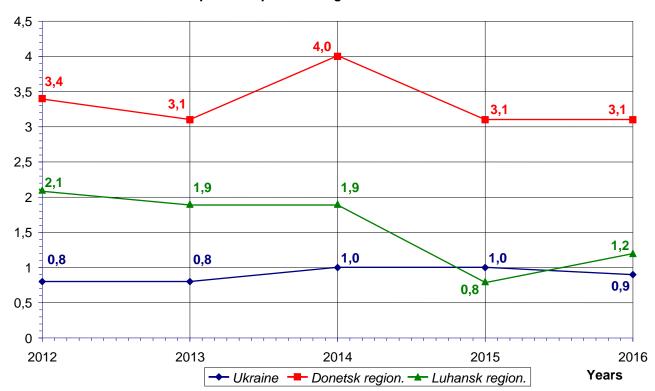
From 2010 to 2016, the volume export of products from Ukraine has declined by 30% and imports by 35%. In Donetsk region, the decline in exports during these years is 74%, and in Luhansk - by 87%. The decrease in import volumes in these areas is 64% and 68%.



#### Total imports of goods, mln. USA



#### Export to import coverage ratio



#### **Enterprise development**

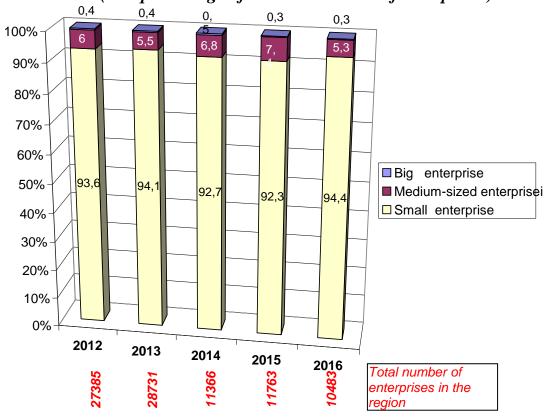
#### Structure of enterprises by types of economic activity

One third of enterprises in Donetsk and Luhansk region are engaged in wholesale and retail trade. Among other types of activities, there is an industry (about 14%) and agriculture. The percentage of an industry increased from 7% to 11% from 2014 in Donetsk region and from 13 to 29% in Luhansk due to the percentage share reduction of enterprises in other types of economic activity.

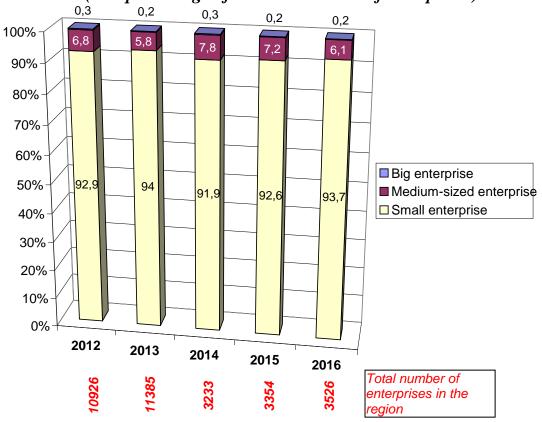
#### The structure of enterprises by size

In 2013, there were about 30 thousand enterprises in Donetsk region, and more than 11 thousand were in Luhansk In the next 2014, the number of enterprises in these regions decreased almost three times, by the reason of occupation of these territories and loosing control over them by Ukraine. Subsequently, the number of enterprises has remained almost the same, with the division of enterprises by size, as a percentage of the total, almost has not change, as compared to 2010; this indicates a uniform location of enterprises in the territory of the regions. About 94% of enterprises belong to a small group. The percentage of medium-sized enterprises in Donetsk region is 5.3%, and in Luhansk - 6.1%. The number of large enterprises is not significant: in Donetsk region is 0.3%, and in Luhansk - 0.2%.

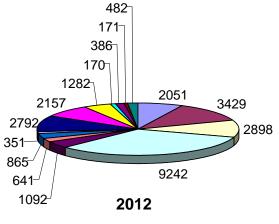
## Distribution of enterprises by size in the Donetsk region by years (as a percentage of the total number of enterprises)

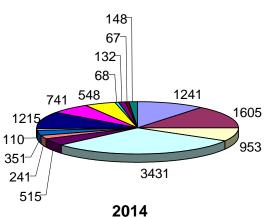


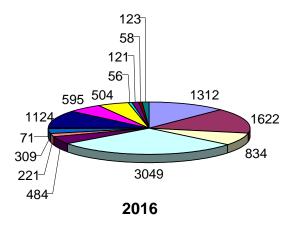
### Distribution of enterprises by size in Luhansk region by years (as a percentage of the total number of enterprises)



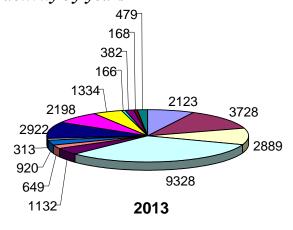
#### Distribution of Donetsk region enterprises by the type of economic activity by years

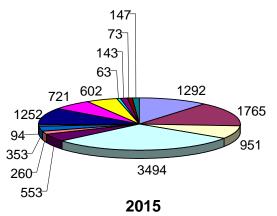


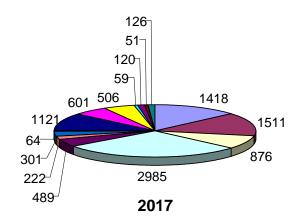




- agriculture, forestry and fisheries
- industry
- construction
- wholesale and retail trade
- transport, postal activity
- temporary placement and catering
- information and telecommunications

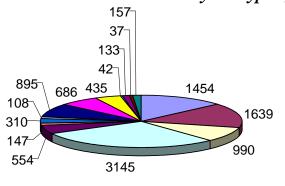


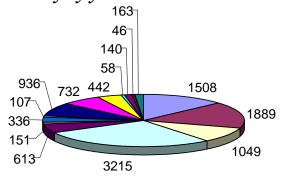




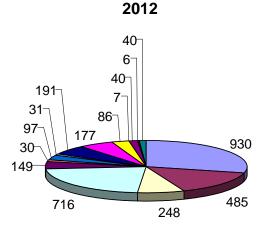
- financial and insurance activities
- real estate transactions
- professional, scientific and technical activities
- administrative service
- education
- health care and social assistance
- art, sports, entertainment and recreation
- provision of other types of services

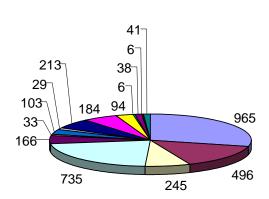
#### Distribution of Luhansk region enterprises by the type of economic activity by years

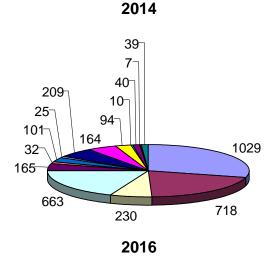


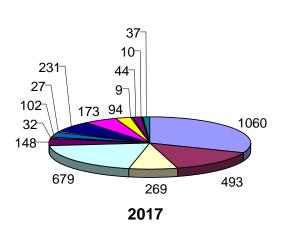


2013









2015

- □ сільське, лісове та рибне господарство
- промисловість
- □ будівництво
- □ оптова та роздрібна торгівля
- транспорт, поштова діяльність
- тимчасове розміщування і організація харчування
- інформація та телекомунікації

- □ фінансова та страхова діяльність
- операції з нерухомим майном
- професійна, наукова та технічна діяльність
- □ адміністративне обслуговування
- □ освіта
- охорона здоров'я та надання соцдопомоги
- мистецтво, спорт, розваги та відпочинок
- надання інших видів послуг

#### 3. The labour market situation in the regions

#### 3.1 General characteristics of the population (in dynamics).

#### Population by age

The age structure of the population is fairly uniform in the region (except the age group from 15 to 24 years old). The population, which is now 15-24 years old, is almost twice as small as the population aged 25-34. In 10-15 years, such a demographic imbalance in the labor market can turn into a real problem of the region's development. The same situation is typical for the entire Ukraine as a whole.

Distribution of the population of Donetsk region by age groups

	Distribution of the population of Doneisk region by uge groups													
Age	2012		2013		2014	•	2015		2016		2017		2018	
0-4	208626	5%	210835	5%	207451	5%	199336	5%	175186	4%	153139	4%	127782	3%
5-9	172799	4%	181849	4%	192491	4%	199983	5%	204966	5%	207177	5%	208560	5%
10-14	161952	4%	157877	4%	156182	4%	158353	4%	162405	4%	171730	4%	180202	4%
15-19	208697	5%	194981	4%	184282	4%	172525	4%	163306	4%	156216	4%	151276	4%
20-24	312485	7%	287621	7%	264456	6%	240716	6%	218696	5%	200758	5%	184070	4%
25-29	374134	9%	378401	9%	367178	8%	351787	8%	333944	8%	311557	7%	283629	7%
30-34	335759	8%	340494	8%	350544	8%	359075	8%	361333	8%	367473	9%	370016	9%
35-39	311109	7%	311287	7%	316858	7%	319507	7%	326364	8%	327824	8%	331907	8%
40-44	286153	7%	291501	7%	293418	7%	297812	7%	298134	7%	302543	7%	302489	7%
45-49	309188	7%	292557	7%	279305	6%	270565	6%	273050	6%	277100	7%	282463	7%
50-54	365482	8%	359852	8%	348545	8%	333679	8%	314755	7%	297208	7%	281573	7%
55-59	323134	7%	324080	7%	331223	8%	333187	8%	345186	8%	346772	8%	342352	8%
60-64	275026	6%	291740	7%	299896	7%	298891	7%	295772	7%	300253	7%	302224	7%
65-69	156668	4%	159208	4%	177469	4%	205504	5%	233458	5%	248197	6%	264656	6%
70-74	265694	6%	234595	5%	196501	5%	164413	4%	141784	3%	136122	3%	140231	3%
75-79	145354	3%	165159	4%	188626	4%	203977	5%	214465	5%	215390	5%	194330	5%
80+	178033	4%	180520	4%	176572	4%	175055	4%	189456	4%	211713	5%	239816	6%
Total	4390293		4362557		4330997		4284365		4252260		4231172		4187576	

Distribution of the population of Luhansk region by age groups

Age	2012		2013		2014		2015		2016		2017	1	2018	
0-4	104983	5%	106446	5%	104828	5%	94742	4%	79210	4%	64631	3%	48662	2%
5-9	87422	4%	91213	4%	95872	4%	99512	4%	102502	5%	103957	5%	104970	5%
10-14	82006	4%	80416	4%	80150	4%	81373	4%	82769	4%	86764	4%	90182	4%
15-19	108501	5%	99521	4%	92716	4%	85478	4%	81299	4%	78792	4%	76542	4%
20-24	161247	7%	149323	7%	138880	6%	125665	6%	113725	5%	102992	5%	91774	4%
25-29	197797	9%	198716	9%	190903	9%	181930	8%	172800	8%	161292	7%	147092	7%
30-34	173036	8%	176767	8%	183763	8%	188426	9%	190165	9%	193876	9%	193637	9%
35-39	159226	7%	159313	7%	161998	7%	165173	7%	168086	8%	169308	8%	172178	8%
40-44	147665	7%	149789	7%	150820	7%	152684	7%	153758	7%	155828	7%	155411	7%
45-49	162985	7%	153758	7%	146342	7%	142238	6%	142639	6%	144120	7%	146002	7%
50-54	197762	9%	194871	9%	188100	8%	178919	8%	167248	8%	157737	7%	149016	7%
55-59	170464	8%	171943	8%	177022	8%	180965	8%	188190	9%	189350	9%	187030	9%
60-64	145587	6%	153182	7%	155669	7%	155279	7%	156495	7%	160442	7%	162074	7%
65-69	75022	3%	77939	3%	90131	4%	109993	5%	125745	6%	133640	6%	141390	7%
70-74	138885	6%	121708	5%	99976	4%	81805	4%	68901	3%	66421	3%	69970	3%
75-79	73026	3%	84332	4%	97953	4%	109104	5%	114944	5%	115620	5%	104129	5%
+08	82465	4%	82717	4%	79753	4%	82268	4%	92316	4%	105923	5%	123146	6%
Total	2268079		2251954		2234876		2215554		2200792		2190693		2163205	

#### Migration balance

In 2010-2013, the migratory turnover of the Ukrainian population as a whole remained in the range of 4.3 million people. The largest number of people changed their place of residence in 2012 (1.4 million people). In the regional context, the most motivated were residents of Donetsk, Dnipropetrovsk, Kharkiv regions and Kiev, whose migration turnover, on average, in the retrospective period, amounted to 109.0 thousand, 93.2 thousand, 89.0 thousand and 92.0 thousand persons respectively. The population of Sevastopol city was the least active in the migration plan (9.3 thousand people for 2010-2013). Relatively high intensity of migration was specific to the Vinnytsia, Luhansk, Lviv and Odessa regions.

The peculiarity of the migration movement of young population of Ukraine is its orientation towards the highly developed regions, and the displacement of population from the periphery region to the centers and their suburban areas remains the main direction. This trend not only causes demographic imbalances such as aging populations in rural areas and towns, but also accelerates the processes of certain territories depopulation.

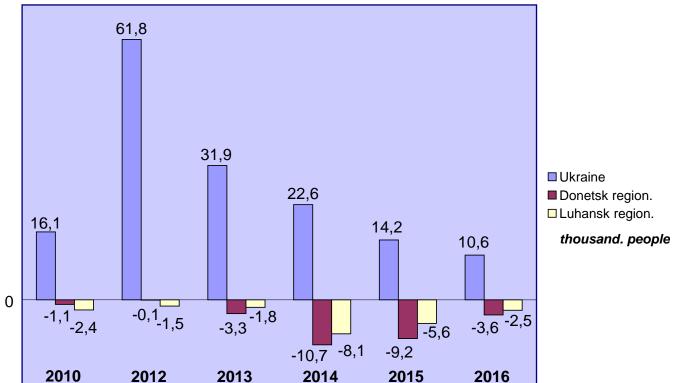
The migration situation of the Ukrainian population in 2014-2015 has changed as a result of the political and economic crisis, the occupation of the Autonomous Republic of Crimea and the anti-terrorist operation (ATO) in the East of Ukraine. Thus, it is necessary to talk about a certain redistribution of intra-state migration flows (both intra-regional and interregional), as well as changes in the volumes of external migration.

According to the latest information of the Interdepartmental Coordination Cell on Social Security of Ukrainian Citizens (http://www.mns.gov.ua), which have been transferred from the ATO areas and the temporarily occupied territory created under the State Emergency Services, as of September 17, 2015 - 949 thousand 631 persons, including 928 702 persons from Donetsk, Luhansk regions . have been resettled from temporarily occupied territory and districts of ATO to other regions. These data are official but unfortunately very approximate because of the impossibility of accurate counting in conditions of armed conflict.

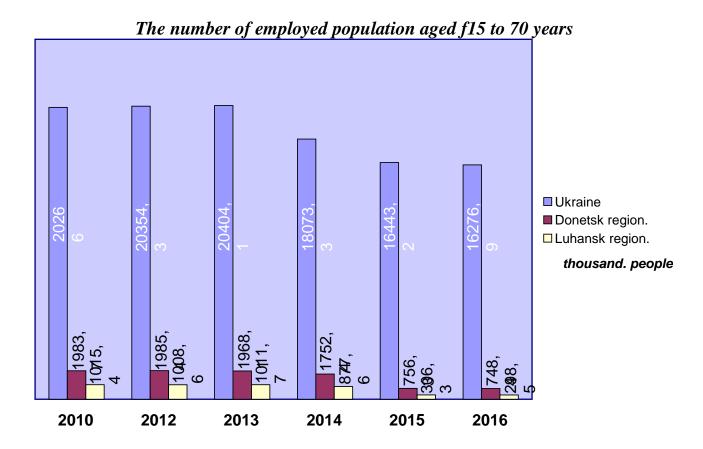
Kharkiv (190.4 thousand people), Luhansk (220.9 thousand people), Donetsk (113.1 thousand people), Dnipropetrovsk (84.5 thousand people), Zaporizhzhya (65.7 thousand people), Kiev (43.6 thousand people) and Kyiv (39.1 thousand people) became the largest receiving regions of internally displaced persons (IDP). The smallest number of IDPs was resettled in Ternopil (3.0 thousand), Chernivtsi (2.7), Ivano-Frankivsk (3.6), Transcarpathian (4.0), Volyn (4.2) and Rivne (3.5) regions.

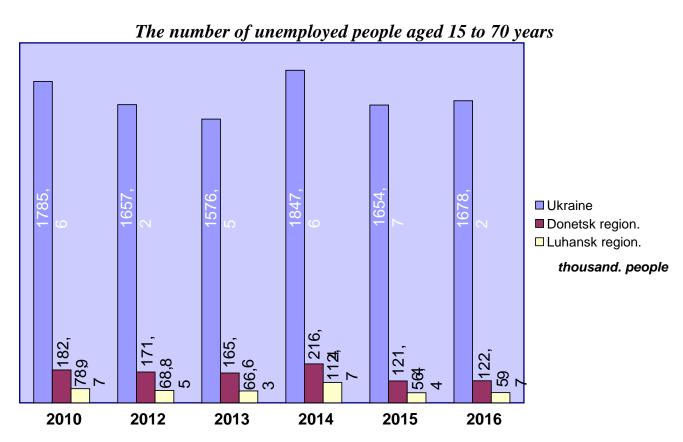
#### Migration increase (reduction)

Migration reduction is typical for Donetsk and Luhansk regions. For the period from 2010 to 2016, it was the largest in 2014, which amounted to 10,7 thousand people in Donetsk region this year, and in Luhansk region - 8,1 thousand people. In 2016, the migration reduction was 3.6 thousand people and 2.5 thousand, respectively, only slightly more than in 2013.



The number of the employed population after 2014 decreased in Donetsk region by about 1 million people, and in Luhansk by 0.5 million people compared with the period from 2010 to 2014. Unemployment reached its peak in 2014 (its growth amounted to about 20%), but in subsequent years it dropped by half to 15% lower than in the period from 2010 to 2013. The decrease in unemployment was mainly due to the internal migration of displaced persons.





### 3.2 The structure of the employed population.

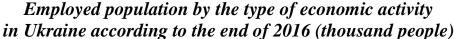
Economic activity of the population by sex and place of residence in 2017 in Donetsk region

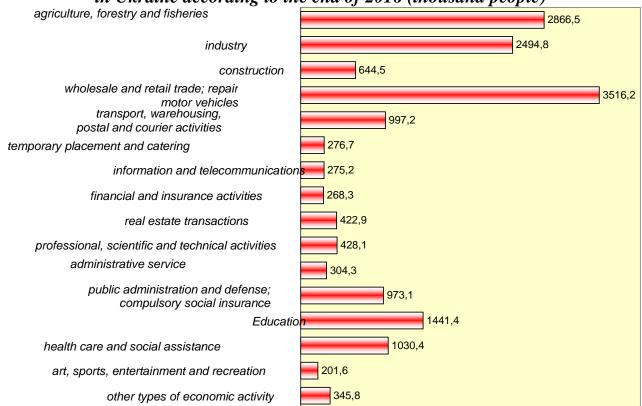
in 2017 in Donetsk region											
	Unit	The whole population	Women	Men	Urban population	Rural population					
Economically active population	thousand people										
at the age of 15-70											
years		859,6	394,1	465,5	720,4	139,2					
Employable age		831	377,8	453,2	695,6	135,4					
The level of	% of the										
economic activity	corresponding age group population										
at the age of 15-70											
years		57,9	50,2	66,5	57,1	62,3					
Employable age		68,6	61	76,5	67,6	74,3					
Employed population	thousand people										
at the age of 15-70											
years		734,3	364,8	369,5	623,5	110,8					
Employable age		705,7	348,5	357,2	598,7	107					
Employment level	% of the corresponding age group population										
at the age of 15-70											
years		49,4	46,5	52,8	49,4	49,6					
Employable age		58,2	56,3	60,3	58,2	58,7					
Unemployed population (according to the methodology)	thousand people		,		,	·					
at the age of 15-70											
years		125,3	29,3	96	96,9	28,4					
Employable age		125,3	29,3	96	96,9	28,4					
Unemployed population (according to the MOII methodology)	% of the corresponding age group population										
at the age of 15-70											
years		14,6	7,4	20,6	13,5	20,4					
Employable age		15,1	7,8	21,2	13,9	21					
Economically inactive population	thousand people										
at the age of 15-70			_								
years		625,4		234,9	541,2	84,2					
Employable age		380,6	241,5	139,1	333,7	46,9					

Economic activity of the population by sex and place of residence in Lugansk region in 2017

Depulation   Depulation   Caconomically   Economically   Economically   Cacitive population   at the age of 15-70   Cacitive population   At the age of 15-70   Cacitive population   Caconomic activity   Cacitive population   Cacconding age group population   Cacconomic activity   Cacitive population   Cacconomic activity   Cacconom	Г	· ·	ansk region i				
Industrial people   Indu		Unit	The whole population	Women	Men	Urban population	Rural population
at the age of 15-70 years   350,4   171,6   178,8   234,3   116,1   Employable age   330,7   161   169,7   228   102,7   The level of economic activity   corresponding age group population   at the age of 15-70 years   65,6   61,1   70,5   60,8   78   Employable age   76,1   72,8   79,5   72,8   84,7   Employable age   76,1   72,8   79,5   72,8   84,7   Employable age   76,1   72,8   79,5   72,8   84,7   Employable age   292,1   147,6   144,5   189,6   102,5   Employable age   272,4   137   135,4   183,3   89,1   Employment level corresponding age group population   at the age of 15-70 years   54,7   52,6   57   49,2   68,8   Employable age   62,7   61,9   63,4   58,5   73,5   Employable age   55,3   24   34,3   44,7   13,6   Employable age   58,3   24   34,3   44,7   13,6   Employable age   76,1   70,5   60,8   78   Employment level   70,5   70,5   70,8   Employment level corresponding age group population   40,2   Employable age   70,5   70,5   70,5   Employable age   7	Economically	41					
at the age of 15-70 years	active population	tnousana people					
Search   S							
Employable age         330,7         161         169,7         228         102,7           The level of economic activity         % of the corresponding age group population         330,7         161         169,7         228         102,7           at the age of 15-70 years         65,6         61,1         70,5         60,8         78           Employable age         76,1         72,8         79,5         72,8         84,7           Employade age of 15-70 years         292,1         147,6         144,5         189,6         102,5           Employment level         % of the corresponding age group population         272,4         137         135,4         183,3         89,1           Employable age         272,4         137         135,4         183,3         89,1           Unemployate age group population         40,2         68,8         40,2			350,4	171,6	178,8	234,3	116,1
## Corresponding age group population at the age of 15-70 years   65.6   61.1   70.5   60.8   78	•						
at the age of 15-70 years		% of the	,				,
group population   group popul	v	corresponding age					
at the age of 15-70 years							
Semployable age   Content   Conten	at the age of 15-70	0 111					
Employable age	=		65.6	61.1	70.5	60.8	78
Employed population at the age of 15-70 years   292,1   147,6   144,5   189,6   102,5	· ·					,	
Deputation   at the age of 15-70   years   292,1   147,6   144,5   189,6   102,5			,	. ,-	, .	, , , ,	- ,
292,1   147,6   144,5   189,6   102,5		thousand people					
Semployable age   Semployabl	at the age of 15-70						
Employable age			292.1	147.6	144.5	189.6	102.5
### Table 2015	· ·						
Corresponding age group population   Start the age of 15-70		% of the	272,1	107	100,1	100,0	37,1
group population at the age of 15-70 years	Zmproyment teret						
at the age of 15-70 years							
Sear	at the age of 15-70	group population					
Employable age 62,7 61,9 63,4 58,5 73,5    Unemployed population (according to the methodology) at the age of 15-70 years 58,3 24 34,3 44,7 13,6    Employable age 58,3 24 34,3 44,7 13,6    Employable age 60 fb	=		54.7	52.6	57	49.2	68.8
Unemployed population (according to the methodology)         thousand people         at the age of 15-70 years         58,3         24         34,3         44,7         13,6           Employable age         58,3         24         34,3         44,7         13,6           Unemployed population (according to the MOP methodology) at the age of 15-70 years         % of the corresponding age group population         16,6         14         19,2         19,1         11,7           Employable age         17,6         14,9         20,2         19,6         13,2           Economically inactive population at the age of 15-70 years         183,9         109,2         74,7         151,1         32,8	•						
Population (according to the methodology)   at the age of 15-70   years   58,3   24   34,3   44,7   13,6   Employable age   58,3   24   34,3   44,7   13,6   Unemployed population (according to the MOP methodology)   at the age of 15-70   years   16,6   14   19,2   19,1   11,7   Employable age   17,6   14,9   20,2   19,6   13,2   Economically inactive population at the age of 15-70   years   183,9   109,2   74,7   151,1   32,8			02,7	01,5	03,1	30,3	73,3
(according to the methodology)       thousand people         at the age of 15-70 years       58,3       24       34,3       44,7       13,6         Employable age       58,3       24       34,3       44,7       13,6         Unemployed population (according to the MOP methodology)       % of the corresponding age group population       9       16,6       14       19,2       19,1       11,7         Employable age       17,6       14,9       20,2       19,6       13,2         Economically inactive population at the age of 15-70 years       183,9       109,2       74,7       151,1       32,8							
methodology)         at the age of 15-70         years         58,3         24         34,3         44,7         13,6           Employable age         58,3         24         34,3         44,7         13,6           Unemployed population (according to the MOP methodology)         % of the corresponding age group population         16,6         14         19,2         19,1         11,7           Employable age         17,6         14,9         20,2         19,6         13,2           Economically inactive population at the age of 15-70 years         183,9         109,2         74,7         151,1         32,8		thousand people					
at the age of 15-70 years							
Semployable age   Semployabl							
Employable age         58,3         24         34,3         44,7         13,6           Unemployed population (according to the MOP methodology)         % of the corresponding age group population         34         19,2         19,1         11,7           Employable age         17,6         14,9         20,2         19,6         13,2           Economically inactive population at the age of 15-70 years         183,9         109,2         74,7         151,1         32,8	•		58.3	24	34 3	44 7	13.6
Unemployed population (according to the MOP methodology) at the age of 15-70 years 16,6 14 19,2 19,1 11,7 Employable age 17,6 14,9 20,2 19,6 13,2 Economically inactive population at the age of 15-70 years 183,9 109,2 74,7 151,1 32,8	<u> </u>						
Population (according to the MOP methodology)   MOP methodology	Unemployed		30,3	21	3 1,3	11,7	15,0
(according to the MOP methodology)       Corresponding age group population       Corresponding age group population         at the age of 15-70 years       16,6       14       19,2       19,1       11,7         Employable age       17,6       14,9       20,2       19,6       13,2         Economically inactive population at the age of 15-70 years       183,9       109,2       74,7       151,1       32,8							
MOP methodology)         group population           at the age of 15-70         16,6         14         19,2         19,1         11,7           Employable age         17,6         14,9         20,2         19,6         13,2           Economically inactive population at the age of 15-70 years         183,9         109,2         74,7         151,1         32,8		1 00					
at the age of 15-70 years		group population					
years         16,6         14         19,2         19,1         11,7           Employable age         17,6         14,9         20,2         19,6         13,2           Economically inactive population at the age of 15-70 years         183,9         109,2         74,7         151,1         32,8							
Employable age 17,6 14,9 20,2 19,6 13,2  Economically inactive population at the age of 15-70 years 183,9 109,2 74,7 151,1 32,8	_		16.6	14	19.2	19.1	11.7
17,6   14,9   20,2   19,6   13,2	,		- , -		- ,	- ,	, ,
Economically inactive populationthousand peopleat the age of 15-70 years183,9109,274,7151,132,8	Emproyuere age		17,6	14,9	20,2	19,6	13,2
inactive population         thousand people           at the age of 15-70         183,9         109,2         74,7         151,1         32,8	Economically	.1 1 1	, ,	,-	ĺ	<b>,</b> -	,
at the age of 15-70 years 183,9 109,2 74,7 151,1 32,8	_	thousand people					
years 183,9 109,2 74,7 151,1 32,8							
	•		183.9	109,2	74,7	151.1	32.8
	Employable age		104			85,4	18,6

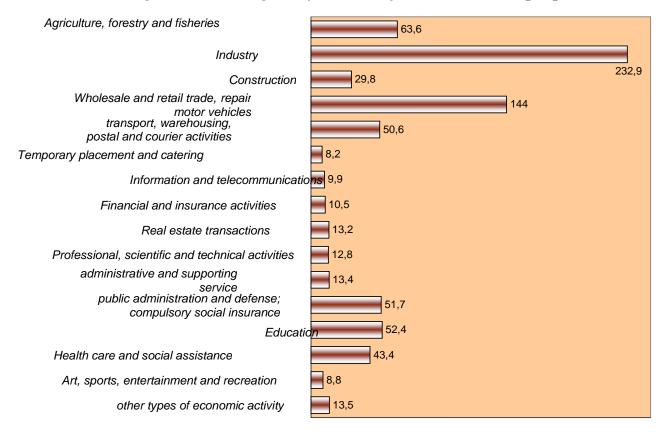
According to the indicators of 2017, the employment rate of the working-age population of Luhansk region amounted to 62.7%, which corresponds to the average employment rate in Ukraine as a whole (62.2%), while in Donetsk it is little less, namely 58.2%. The distribution of the employed population by gender does not differ from that in the distribution in Ukraine, that is, the employment of men is about 20% higher than the employment of women. If we compare the employment rates of the urban and rural population, it will turn out that in the rural areas this indicator in Donetsk region is almost the same as in the cities (58.7% and 58.2% respectively), and in Luhansk region, the employment rate of the rural population is about a quarter higher than in cities (73.5% and 58.5% respectively).



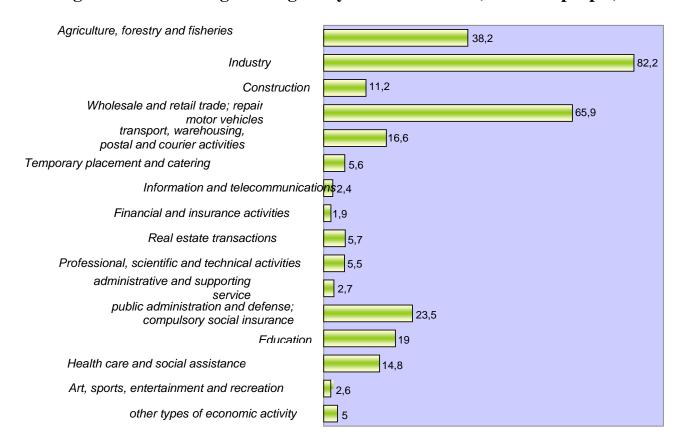


The overwhelming majority of the employed population of Ukraine (3516.2 thousand people) is employed in the retail trade, as well as a significant number of people are employed in agriculture (2866.5 thousand people) and in industry (2494.8%). The distribution of the employed population in the eastern regions of Ukraine is fundamentally different. Industry takes the first place here. The share of wholesale and retail trade is also high and takes the second place, agriculture occupies the third place in terms of employment. So in Donetsk region, the number of employed people in these types of activities is 232.9 thousand people, 144 and 63.6 thousand people respectively, and in Luhansk 82.2 thousand people, 65.9 and 38.2 thousand people.

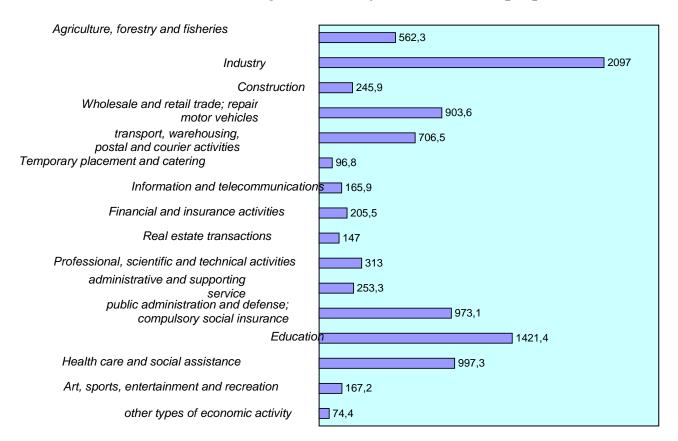
### Employed population by the type of economic activity according to Donetsk region by the end of 2016 (thousand people)



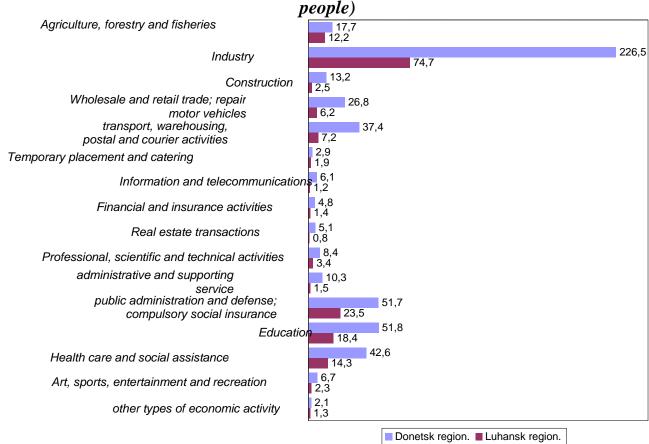
### Employed population by the type of economic activity according to the data of Lugansk region by the end of 2016 (thousand people)



### Staff by type of economic activity in Ukraine according to the end of 2016 (thousand people)



# Staff by the type of economic activity in Luhansk and Donretsk region according to the data by the end of 2016 (thousand



Despite the high level of employment in the retail and agricultural sector in Donetsk and Luhansk region, by the number of full-time employees, these activities occupy only the fifth and sixth places, indicating a high level of engaging seasonal workers in these areas and a high level of informal employment.

#### The number of unemployed people by the age groups and sex

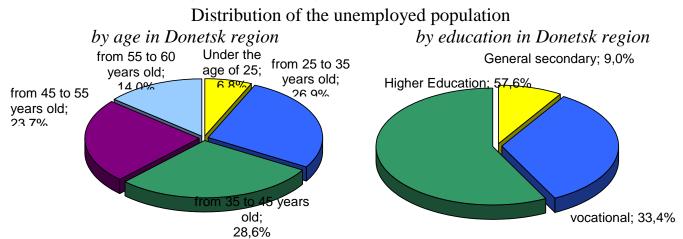
The structure of unemployed registered by the data of Donetsk regional employment center as of November 1, 2018 is as follows:

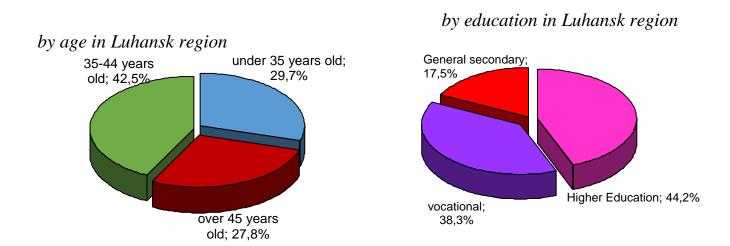
- by gender: in the total number of registered unemployed, men made up 3.7 thousand people (or 34.6%), women 7.0 thousand people (or 65.4%).
- according to age groups: 33.7% of registered unemployed were under the age of 35; 28.6% at the age from 35 to 45 years old; 37.7% at the age of 45 years.
- by education: 57.6% of the registered unemployed had higher education; 33.4% vocational; 9.0% general secondary education.

According to the data of Luhansk region Employment Center in Luhansk region as of November 1, 2018, the distribution is as follows:

- by gender: in the total number of registered unemployed, men made up 2,4 thousand people (or 39,6%), women - 3,6 thousand people (or 60,4%).

- according to age groups: 29.7% of registered unemployed were under the age of 35; 27.8% at the age from 35 to 45 years old; 42.5% at the age of 45 years.
- by education: 44,2% of the registered unemployed had higher education, 38,3% vocational and 17,5% general secondary education.



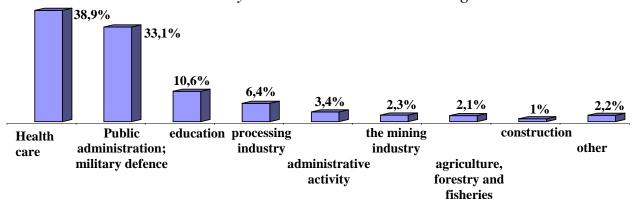


#### 3.3 Unemployment due to the lack of job opportunities

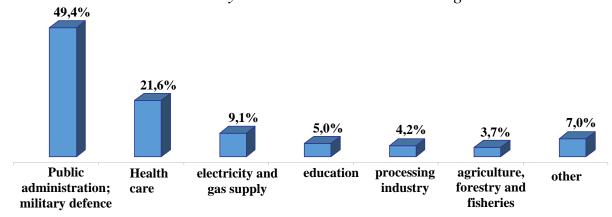
A significant proportion of the causes of unemployment is the collective resignation of workers because of the staff reduction or the liquidation of the enterprise. During January-October 2018 Donetsk region employers announced information about the planned collective resignation of 5.2 thousand employees, which is 81.1% less than in January-October 2017. There were such specialist as: health care workers and social assistance providers - 38.9%; public administration and defense - 33.1%; education-10.6%; processing industry-6.4%; administrative and supporting services activities-3.4%; mining industry-2.3%; agriculture, forestry and fisheries-2.1%. In Luhansk region during January-October 2018, employers announced the planned collective resignation of 2044 employees, which is 21.4% less than in the same period of 2017. There were such specialist as: public administration and defense, compulsory social insurance - 49.4%;

health care and social assistance-21.6%; distributional servise of electricity, gas, steam and air-conditioned - 9.1%; educators - 5.0%; processing industry - 4.2%; agriculture, forestry and fisheries-3.7%.

The structure of the number of people warned about the planned collective resignation in January-October 2018 in Donetsk region

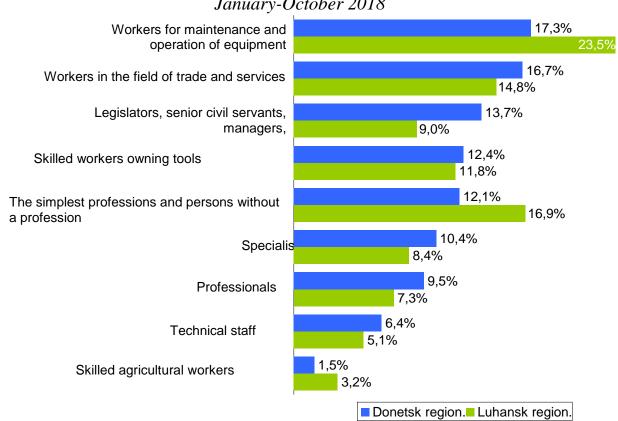


The structure of the number of people warned about the planned collective resignation in January-October 2018 in Luhansk region



#### Unemployed people by professional groups

According to professional groups (according to the administrative data of the state employment service), among the registered unemployed people in Donetsk region, the prevailed one are: workers for maintenance and operation of equipment; workers in the sphere of trade and services; legislators, senior civil servants, managers.



The structure of registered unemployed people in Donetsk and Luhansk regions

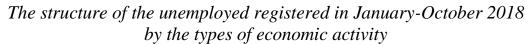
January-October 2018

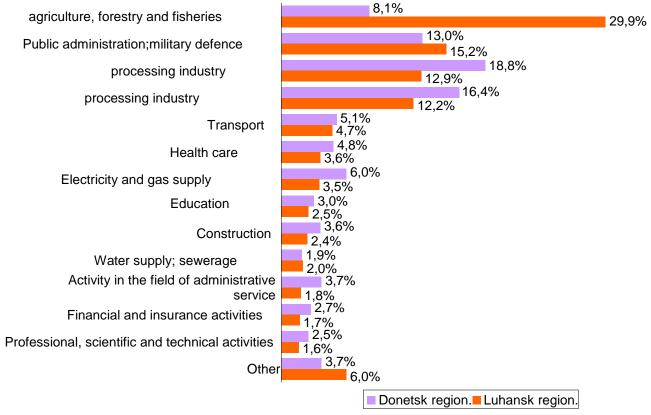
In Luhansk region, according to professional groups, among the registered unemployed are prevailed such spesialities as: workers for maintenance and operation of equipment (23.5%), representatives of the simplest professions and persons without a profession (16.9%), trade and services (14.8%) and skilled workers with tools (11.8%).

#### Unemployed population by the types of economic activity

During January-October 2018, 38.5 thousand unemployed citizens took the services of Donetsk region Employment Service. By types of economic activity, among the unemployed who had professional experience, almost one in five unemployed worked in the processing industry in the past; 16.4% worked in wholesale and retail trade; 13.0% worked in the field of public administration and military defense, compulsory social insurance; 8.1% worked in agriculture, forestry and fisheries.

In Luhansk region during January-October 2018 20.6 thousand unemployed citizens took advantage of the services of the regional employment service. By types of economic activity, there are 29.9% of the unemployed, who had professional experience, worked in agriculture, forestry and fisheries; 15.2% worked in the sphere of public administration and defense; 12,9% worked in the sphere of processing industry; 12.2% worked in the wholesale and retail trade.

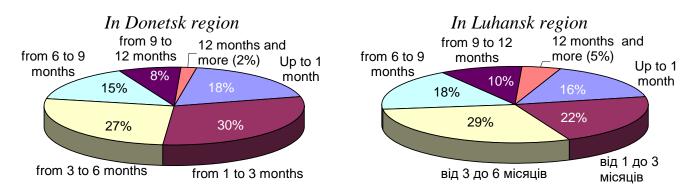




#### Average job search time

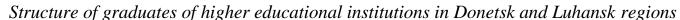
According to the Donetsk Regional Employment Center, the number of registered unemployed at the end of 2017 amounted to 1,670 people. The average job search time for 2016 and 2017 in Donetsk region was 4 months. In Luhansk region, according to the Luhansk Region Employment Center, by the end of 2017, 6,102 people were registered. Average length of job search for Luhansk Region in 2016 and 2017 was 5 months.

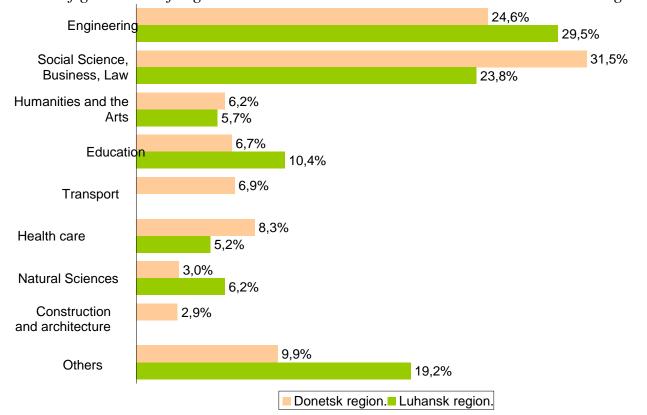
#### Distribution of the unemployed by the duration of the job search



#### Number of employed graduates

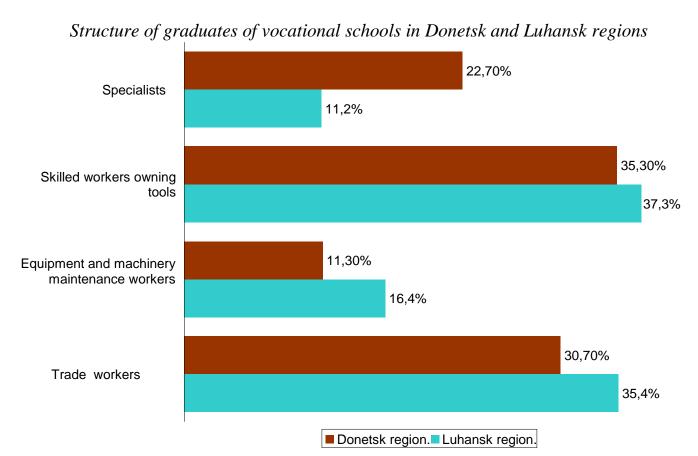
During January-October 2018, the status of the unemployed person had 14.1 thousand of young people (36.7% of the total unemployed number), unemployment benefits received 9.0 thousand of young people. Among the unemployed persons under the age of 35, 69.6% had professional experience before registering with the employment service; 20.4% of them previously worked in trade and repair; 17.3% - in the field of public administration and defense; 17.5% in the processing industry and 5.5% in financial and insurance activities. The rest of the citizens for various reasons were not employed for more than 1 year or belonged to graduates of various types of educational institutions that did not have professional experience. During January-October 2018, the number of graduates receiving employment services was 0.8 thousand of people (including 0.6 thousand graduates of higher educational institutions and 0.2 thousand graduates of vocational schools). With the help of the employment service in January-October 2018, 9.8 thousand of young people found work, 44.0% of them were employed promptly until they became unemployed.





In Luhansk region, during January-October 2018, 7,0 thousand of young people (34,0% of the total number of unemployed) were unemployed, 4,300 of young people received unemployment assistance. Among the unemployed under the age of 35, 63.7% had professional experience before being registered with the Luhansk Regional

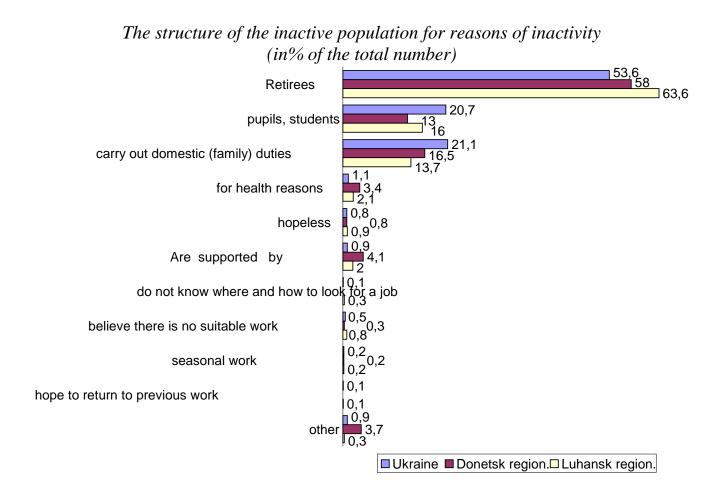
Employment Service. There are 23.6% of them previously worked in public administration and defense; 16.6% - in trade and repair; 13.1% - in agriculture, forestry and fisheries; 11.6% - in the processing industry. The rest of the citizens for various reasons were not employed for more than 1 year or belonged to graduates of various types of educational institutions that did not have professional experience. During January-October 2018, the number of graduates who received the services of the Luhansk Region Employment Service was 327 people (including 193 graduates of higher education institutions and 134 graduates of vocational education institutions). With the assistance of the Luhansk Region Employment Service in January-October 2018, 5,300 of young people found work, 45.4% of them were employed promptly until they became unemployed.



#### 3.4 Economically inactive population.

#### Causes of economic inactivity of the population

According to the State Statistics Service of Ukraine (Statistical Digest, Economic activity of Ukrainian population, 2017), the total economically inactive population at the age of 15-70 in 2017 is 10,945 thousand of people in Ukraine, including 625.4 thousand of people in Donetsk region and in Luhansk is 183.9 thousand of people. The most common causes of economic inactivity of the population are retirement, education or state of health.



# Number of potential labor force among economically inactive population

According to statistics that was published by the State Statistics Service of Ukraine (Statistical Digest, Economic activity of Ukrainian population 2017), the potential labor force among the economically inactive population is about 1.5% of the inactive registered population. It means that, the potential labor force in Donetsk region is approximately 9 thousand of people, and in Luhansk region it is 2,8 thousand of people.

Number of potential labor force among economically inactive population of Ukraine for unemployment reasons

	The whole	Women	Men	Urban	Countryside
	population			population	
total, thousand persons	171,2	70,9	100,3	76,6	94,6
including the reasons for	unemployment,	as a perce	entage o	of the total	
dismissed for economic reasons	15,1	17,5	13,5	20	11,2
dismissed for their own will, by agreement					
of the parties	22,3	28,2	18,1	26,6	18,8
dismissed due to the end of the contract					
term or employment contract	11,9	7,5	15,1	9,1	14,2
not employed after graduation from					
general education and higher educational					
establishments	12,6	10,4	14,1	8,9	15,5
Seasonal job	11,2	6,5	14,6	9,5	12,6
not occupied due to fulfillment of home					
(family) obligations	12,3	20,5	6,6	9,9	14,3
retired for health reasons, through					
registration of a pension	2,2	1,1	2,8	2,6	1,8
Other reasons	12,4	8,3	15,2	13,4	11,6

Number of potential labor force among the economically inactive population of Ukraine for the duration of unemployment

		Among to	ho had						
	Total	previou work	•		includ	ing the dura	ation of une	employment	
				up to 1	from 1 to 3	from 3 to 6		from 9 to 12	12 months or
	thousand	thousand		month	months	months	months	months	more
	people	people	%			у відсотка	ах до підсу	мку	
Total	171,2	113,2	66,1	6,4	14,3	15,3	8,3	5,5	50,2
Women	70,9	46,4	65,4	3,9	8	12,7	8,8	6,7	59,9
Men	100,3	66,8	66,6	8,1	18,7	17,1	7,9	4,6	43,6
Urban									
population	76,6	56,5	73,8	5,1	11,2	14	8,3	5	56,4
Countryside	94,6	56,7	59,9	7,6	17,5	16,6	8,3	6	44

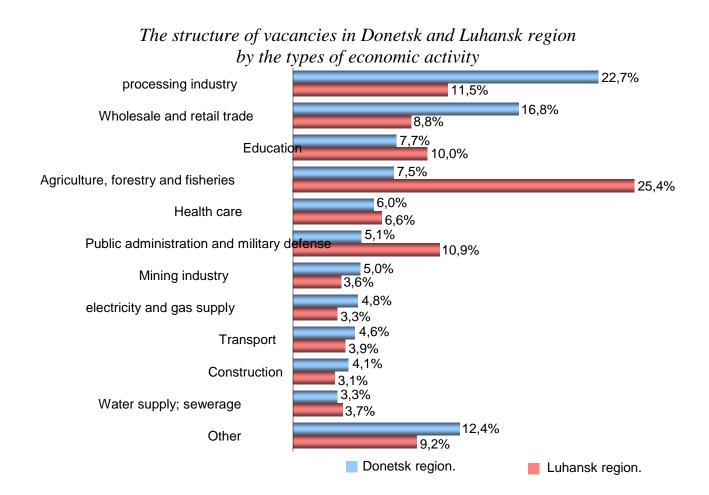
#### 3.5 Labor demand

#### The number of registered vacancies

According to the administrative data of the State Employment Service during January-October 2018, employers informed employment centers of Donetsk region about 35.1 thousand vacancies, which is 13.2% more than in January-October 2017. In Luhansk region during January-October 2018 employers informed the employment centers of the availability of 18.1 thousand vacancies, which is also 13.2% more than in January-October 2017.

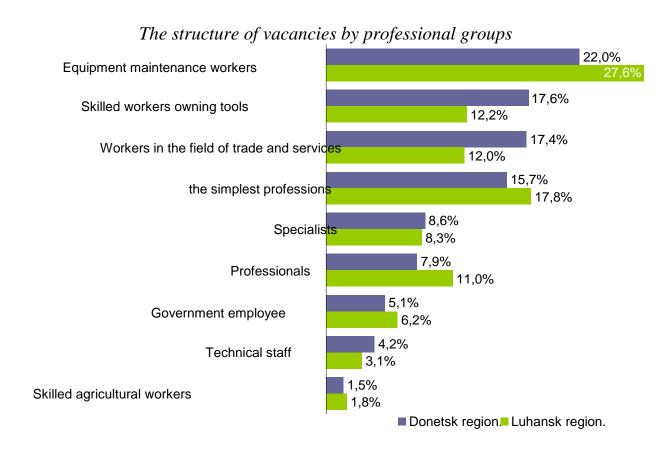
#### The number of registered vacancies by the type of economic activity

By the type of economic activity in Donetsk region, every fourth vacancy is offered at enterprises and institutions of the processing industry, in wholesale and retail trade (16.8%), in education (7.7%), agriculture, forestry and fisheries (7.5%), health care (6.0%), public administration and military defense (5.1%), mining and quarrying (5.0%). In Luhansk region, the largest number of vacancies is offered at the enterprises of agriculture, forestry and fisheries (25.4%), processing industry (11.5%), public administration and military defense (10.9%).



#### The number of registered vacancies by professional groups

The greatest demand of Donetsk region employers is observed for workers in servicing, exploiting equipment, skilled workers owning tools, workers in the sphere of trade and services, and representatives of the simplest professions. The greatest demand is observed on skilled workers such as: drivers, operators and engineers of the boiler house, workers of underground professions, electricians, locksmiths, electric and gas welder, gas cutter, turners, tailoress, etc. There are also demand for service workers (sellers, cooks, guards, younger nurses, hairdressers, assistant educators, waiters, barmen, etc.). In the agricultural sector - tractors, workers in forestry work, operators of pig farms and mechanized farms. There is a high demand for professionals and specialists with experience of accountants, government employee, managers, economists, teachers, engineers of various industries, lawyers, IT specialists. Among the simplest professions the most requested are general labourer, loaders, cleaners, wipers, watchmen, kitchen workers and storekeepers.

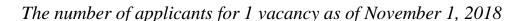


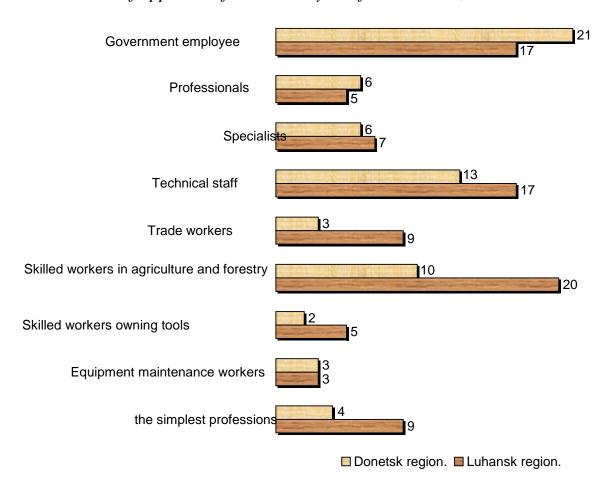
Among employers of Luhansk region, the greatest demand is observed for workers of servicing and operation equipment (27.6%), representatives of the simplest professions (17.8%) and skilled workers owning tools (12.2%). In terms of occupations, the greatest demand of employers was observed on tractor drivers of agricultural (forestry) production,

drivers of motor vehicles, general labourers, foodstuff sellers, watchmen, boiler operators, government employee, cleaners of office premises, accountants, etc.

#### Workload per one vacancy

As of November 1, 2018, 4 unemployed persons applied for one vacancy in Donetsk region (as of November 1, 2017 - 8 persons). The imbalance between demand and supply of labor is deepened in professional terms. By types of economic activity, the highest number of applicants for one vacancy was observed in financial and insurance activities (26 people), public administration and defense (11 persons) and professional, scientific and technical activities (9 persons), and the least was in education (1 person). By professional groups, the most candidates for one vacancy are legislators, managers, top managers (21 persons), technical staff (13 people), and the least are among skilled workers owning a tool (2 persons).





As of November 1, 2018, 6 unemployed persons (on November 1, 2017 - 8 persons) applied for one vacancy in Luhansk region. The imbalance between demand and supply of

labor is deepened in professional terms. By types of economic activity, the largest number of applicants for one vacancy is observed in the field of financial and insurance activities (88 persons), and the least in the field of electricity, gas, steam and education (1 person). According to professional groups, the highest number of applicants for one vacancy is among the skilled workers of agriculture and forestry (20 persons), and the least is workers for servicing, exploitation of equipment and machinery (3 persons).

### The real labor market

#### Number of registered vacancies and resume

In the period from December 1 to December 8, 2018, on the site https://www.work.ua 211 vacancies and 85270 CVs were registered in Donetsk region and 43 vacancies and 17235 CVs in Luhansk region.

By field and professions, vacancies and CVs were distributed as follows:

	Donetsk r	egion	Luhansk regio		
Field of activities	vacancies	CVs	vacancies	CVs	
IT, computers, internet	29	3 520	4	809	
Administration	22	11 846	9	2 353	
Accounting, audit	17	9 061	7	1 735	
Hotel and restaurant business, tourism	12	3 575		317	
Design, creativity	5	1 667	1	354	
Beauty, fitness, sports	1	1 395		231	
Culture, music, show business	1	1 213	1	202	
Logistics, warehouse	15	6 086	6	1 150	
Marketing, advertising	14	3 703	1	833	
Medicine, pharmaceuticals	7	1 834	0	372	
Real estate	2	258	0	39	
Education, science	11	3 742	3	903	
Security, safety	2	2 469	0	412	
Sale, purchase	53	10 627	10	3 103	
Workers specialty, production	23	9 568	3	1 576	
Retail	11	8 321	2	1 687	
Secretariat, clerical work	23	10 403	6	2 185	
Agriculture, agribusiness	3	427	1	146	
Media, publishing, printing	9	3 403	1	908	
Insurance		167		36	
Construction, architecture	5	6 297	1	1 015	
Service sector	11	4 824	0	632	
Telecommunications and communications	24	2 578	6	415	
Top management	4	2 462	4	529	
Transport, autobusiness	11	7 672	1	1 363	
Staff management	9	2 029	2	410	
Finance, Bank	4	6 107	2	1 343	
Jurisprudence	3	2 223		528	
Other areas of activity		288		53	

## 3.6 Labor payment in the region

## Average salary

The average salary of vacancies in Donetsk region in November 2018 was 5,0 thousand UAH (by the corresponding date of 2017 it was 4.2 ths. UAH), the salary of 80.0% vacancies are higher than the minimum.

In Luhansk region, the average salary in vacancies is 4.3 thousand UAH (in November, 2017 - 3.6 thousand UAH), the salary of 78.9% vacancies are higher than the minimum salary.

The average salary in the vacancies according to the professional groups in Donetsk region for legislators, senior government employee, managers is 6,2 thousand UAH, for skilled workers owning the tool is 6,0 thousand UAH, for workers for the maintenance and operation of equipment and machinery is 5.7 thousand UAH, for professionals is 5.2 thousand UAH, for specialists is 4.8 thousand UAH, for representatives of the simplest professions, for skilled agricultural workers, technical staff and workers in the sphere of trade and services average salary is from 4.0 to 4.8 thousand UAH.

The highest salary is offered in vacancies for the head of the production department (24.1 thousand UAH), a slaughterer (18.0 thousand UAH), chief technologist (17.4 thousand UAH), district mechanics (17,0 thousand UAH), energy engineer (16,5 thousand UAH) and steelmaker of electric furnaces (16,0 thousand UAH). Also, a high level of wages is offered to knives and drivers of a self-propelled roller coaster with equal rolls (15.0 thousand UAH), turners (14.0 thousand UAH) and turnaround turners (13.3 thousand UAH).

In Luhansk region, according to professional groups, the average salary in vacancies for legislators, senior government employees, top managers, managers is 5,3 thousand UAH, for professionals is 5,0 thousand UAH, for skilled workers owning the tools is 4,6 UAH thousand, for specialists is 4,5 thousand UAH, for skilled agricultural workers is 4,3 thousand UAH, for servicing and maintenance of equipment and machinery, and for technical servants is 4,2 thousand UAH, for workers in the sphere of trade and services is 3.9 thousand UAH, for workers on the simplest professions is 3.8 thousand UAH.

The highest salary is offered in vacancies of the shop forehead (15,0 thousand UAH), hydrotechnical engineer (10,0 thousand UAH), teleoperator (9,5 thousand UAH), computer system engineer (9,0 (9.0 thousand hryvnias), a police officer (9.0 thousand hryvnias), chief power engineer (8.8 thousand hryvnias), an agronomist (8.8 thousand hryvnias)), correspondent (8,3 thousand UAH), state registrar of rights to real estate (8,2 thousand UAH).

According to the data published on the site https://www.work.ua, the average salary, by the vacancies offered in Donetsk region on December 1, 2018 is 10 483 UAH. In Luhansk region, the average salary for vacancies registered on the site is 12 029 UAH.

Average salary by the type of activity, profession (UAH) according to the site https://www.work.ua as of December 1, 2018

Field of activity	Donetsk region	luhansk region
IT, computers, internet	12 181	5 000
Administration	11 800	6 250
Accounting, audit	4 500	11 000
Hotel and restaurant business, tourism	11 500	
Design, creativity	9 500	15 000
Beauty, fitness, sports	20 000	
Culture, music, show business	20 000	
Logistics, warehouse	10 057	15 000
Marketing, advertising	9 180	
Real estate	30 000	
Education, science	9 333	12 000
Security, safety	5 500	
Sale, purchase	10 191	7 500
Workers specialty, production	9 000	20 000
Retail	8 500	4 000
Secretariat, clerical work	10 469	17 700
Media, publishing, printing	8 000	15 000
Construction, architecture	6 000	
Service sector	11 325	
Telecommunications and communications	9 946	7 500
Top management		6 667
Transport, autobusiness	7 833	
Staff management	12 500	5 000
Finance, Bank	4 000	7 000

Fields of activity that are not mentiond at the table have no vacancies on site work.ua.

#### 3. The situation on the educational services market.

#### **General characteristics of universities**

## 4.1 The rating position of the regional educational institutions in the ranked list of Ukraine and the world

In June 2018, the Center for International Projects "EUROOSVITA", in partnership with the international expert group IREG Observatory on Academic Ranking and Excellence, presented the academic rating of the higher education institutions "Top 200 Ukraine 2018" (http://osvita.ua/vnz/rating / 60985 /), it was compiled according to the method, supplemented and improved during 2006-2018. According to expert opinions, 13 universities of Donetsk and Luhansk regions entered the list of this rating.

Universities of Donetsk and Luhansk regions, which are included in the rating

Top 200 Ukraine 2018

HEIs	Assesment of the	Rank					
(Universities)	integral activity	2018	2017	2016	2015	2014	2013
	indicator in 2018						
Vasyl' Stus Donetsk National University	31,51	27	27	32	25	20	17
Donetsk National Technical University	30,01	34	25	23	20	16	18
Volodymyr Dahl East Ukrainian National University	26,31	50	41	37	34	27	30
Donbass State Engeneering academy	23,69	70	71	71	71	72	72
Luhansk Taras Shevchenko national university	23,68	71	64	49	33	25	21
Donetsk National University of Economics and Trade named after Mykhailo Tugan-Baranovsky	22,45	87	74	61	58	52	57
Donetsk National Medical University	21,22	96	85	65	30	23	23
Donetsk State University of Management	20,39	114	112	94	66	64	64
Luhansk State Medical University	16,96	153	154	145	67	61	60
Luhansk National Agrarian University	16,25	162	162	153	123	118	90
Donbass State Pedagogical University	15,66	167	163	163	159	166	167
Donbas National Academy of Civil Engineering and Architecture	15,10	172	173	172	169	151	164
Donetsk Law Institute of Ministry of Internal Affairs of Ukraine	12,49	189	_		_	_	_

The founders of the rating note that the vast majority of Ukrainian universities improve their performance in all areas of their activity. Under the condition of growing competition in the market for educational services, they are increasingly introducing innovative approaches to the educational process and scientific work. At the same time, the position of the higher educational institutions of Donetsk and Luhansk regions, in comparison with the previous years achievements (2017-2013) is stable (Donbas State Engineering Academy and Donbas State Pedagogical University) but not high. Most of the universities in these areas have lost their former positions. This can be explained by the fact that the

ranking "Top 200 Ukraine 2018" includes universities of Donetsk and Luhansk regions, which are moved from uncontrolled territories of Ukraine. Therefore, such universities have lost their material base and part of the qualified teaching staff.

The ranking possition of Donetsk and Luhansk HEIs in international rating 2017

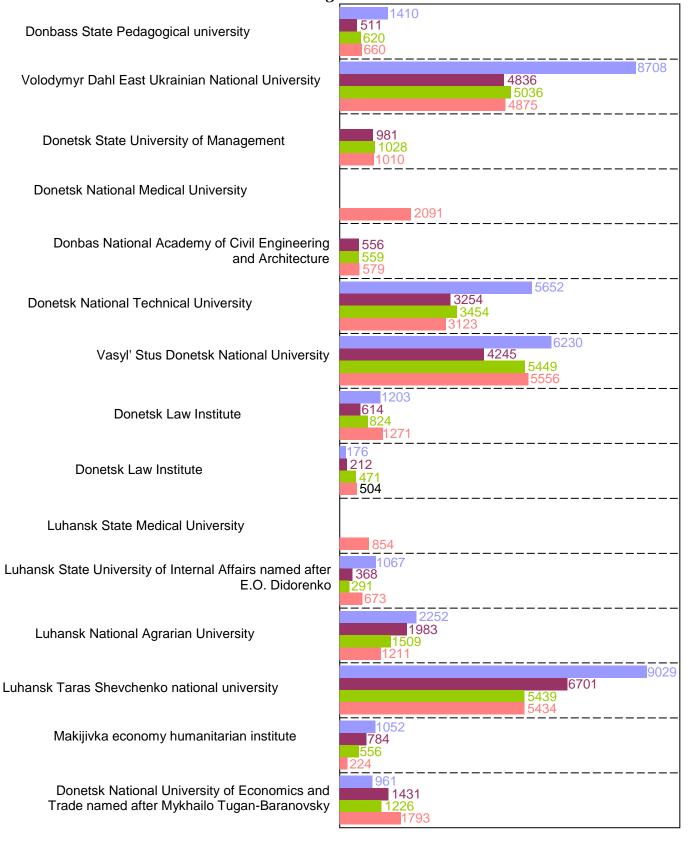
HEIs	Webometrics	Scopus
Vasyl' Stus Donetsk National University	32	17
Donetsk National Technical University	25	23
Volodymyr Dahl East Ukrainian National University	30	54
Luhansk Taras Shevchenko national university	40	64
Donetsk National University of Economics and Trade	291	137
named after Mykhailo Tugan-Baranovsky		
Donetsk Law Institute	171	137

#### The quantaty of universities

According to the information-analytical portal on higher education in Ukraine (http://vnz.org.ua/statti/10477-merezha-vyschyh-navchalnyh-zakladiv-na-pochatok-2017-2018-navchalnogo-roku) at the beginning of 2017-2018 academic year in Ukraine there were 661 higher educational institutions. Including 29 in Donetsk region and 13 in Luhansk region. As a result of the antiterrorist operation in Donetsk and Luhansk regions, 17 universities were displaced from occupied territories (http://vnz.org.ua/statti/9793-peremischenni-vnz-try-roky-na-novomu-mistsi), three of them (Donetsk National University, Luhansk State Academy of Culture and Arts and Luhansk National Agrarian University) left Donetsk and Luhansk regions. Fourteen internally displaced institutions have found refuge within the region.

# 4.2 The total number of students in higher educational institutions of Donetsk and Luhansk

regions



**■** 2014 **■** 2015 **■** 2016 **■** 2017

The total number of students in Donetsk region is 32.1 thousand people, and in Luhansk region is 19.1 thousand people (as of 2017/18 academic year), including 29.9 thousand people studying at the displaced higher educational institutions, which is 20 % less than in 2014/15

## The number of students by courses at higher educational institutions of Donetsk and Luhansk regions

## Donbass State Pedagogical University

	2014	2015	2016	2017
1 year bachelor's degree	114	34	150	223
2 year bachelor's degree	312	78	61	173
3 year bachelor's degree	380	138	55	60
4 year bachelor's degree	245	162	116	56
Specialist	335	79	210	13
Master	6	5	13	123
Postgraduate students	18	15	15	12
Total	1410	511	620	660

## Volodymyr Dahl East Ukrainian National University

	2014	2015	2016	2017
1 year bachelor's degree		282	465	519
2 year bachelor's degree		514	370	644
3 year bachelor's degree		1180	963	797
4 year bachelor's degree		1185	1025	908
5 year bachelor's degree	6603	0	0	0
1 year Specialist		581	520	0
2 year Specialist	1014	6	4	11
1 year Master		790	883	1058
2 year Master	924	131	694	823
Postgraduate students	157	157	99	100
Doctoral students	10	10	13	15
Total	8708	4836	5036	4875

## Donetsk State University of Management

	2015	2016	2017
1 year bachelor's degree	41	98	122
2 year bachelor's degree	136	107	153
3 year bachelor's degree	152	129	120
4 year bachelor's degree	207	147	136
5 year bachelor's degree	148	106	1
1 year Specialist	89	107	0
2 year Specialist		7	5
1 year Master	129	181	241
2 year Master	53	119	202
Postgraduate students	25	25	29
Doctoral students	1	2	1
Total	981	1028	1010

## Donbas National Academy of Civil Engineering and Architecture

	2015	2016	2017
1 year bachelor's degree	59	75	61
2 year bachelor's degree	40	74	90
3 year bachelor's degree	142	160	132
4 year bachelor's degree	221	119	136
5 year bachelor's degree	0	13	47
1 year Master	0	50	53
2 year Master	94	68	60
Total	556	559	579

## Donetsk National Technical University

	2014	2015	2016	2017
1 year bachelor's degree	479	355	730	628
2 year bachelor's degree	1062	499	375	745
3 year bachelor's degree	1265	693	611	398
4 year bachelor's degree	780	630	485	463
5 year bachelor's degree	137	166	137	95
Specialist	841	397	514	0
1 year Master	346	220	351	420
2 year Master	684	256	202	316
Postgraduate students	44	29	43	50
Doctoral students	14	9	6	8
Total	5652	3254	3454	3123

## Vasyl' Stus Donetsk National University

	2014	2015	2016	2017
1 year bachelor's degree	557	1221	1277	1241
2 year bachelor's degree	1649	380	1185	1217
3 year bachelor's degree	1442	685	500	964
4 year bachelor's degree	866	672	590	443
5 year bachelor's degree	144	37	33	56
Specialist	508	287	219	
1 year Master	719	651	759	651
2 year Master	0	0	553	698
Postgraduate students	192	210	244	189
Doctoral students	12	16	16	11
Total	6230	4245	5449	5556

## Donetsk Law University

	2014	2015	2016	2017
1 year bachelor's degree	16	263	361	431
2 year bachelor's degree	403	14	241	331
3 year bachelor's degree	375	180	12	206
4 year bachelor's degree	220	93	72	12
5 year bachelor's degree	107	0	0	16
1 year Master	12	30	80	162
2 year Master	27	12	25	74
Postgraduate students	43	22	33	34
Doctoral students	0	0	0	5
Total	1203	614	824	1271

## DONETSK UNIVERSITY OF ECONOMICS AND LAW

	2014	2015	2016	2017
1 year bachelor's degree	53	26	74	80
2 year bachelor's degree	29	44	66	79
3 year bachelor's degree	15	55	117	123
4 year bachelor's degree	51	48	107	113
5 year bachelor's degree	28	39	107	109
Total	176	212	471	504

## Luhansk State University of Internal Affairs named after E.O. Didorenko

	2014	2015	2016	2017
1 year bachelor's degree	0	117	40	363
2 year bachelor's degree	335	0	73	30
3 year bachelor's degree	286	103	0	75
4 year bachelor's degree	110	69	69	0
5 year bachelor's degree	212	14	37	40
1 year Master	0	50	21	133
2 year Master	106	0	42	18
Postgraduate students	18	15	9	14
Total	1067	368	291	673

## Luhansk National Agrarian University

	2014	2015	2016	2017
1 year bachelor's degree	658	757	505	158
2 year bachelor's degree	680	494	158	319
3 year bachelor's degree	203	173	292	254
4 year bachelor's degree	122	134	234	268
5 year bachelor's degree	36	71	120	105
1 year Master	356	205	137	53
2 year Master	170	130	43	42
Postgraduate students	27	19	20	11
Doctoral students	0	0	0	1
Total	2252	1983	1509	1211

## Luhansk Taras Shevchenko national university

	2014	2015	2016	2017
1 year bachelor's degree	1174	749	1139	1239
2 year bachelor's degree	1652	890	545	809
3 year bachelor's degree	1942	1641	850	646
4 year bachelor's degree	1622	1901	1036	959
Specialist	1323	538	513	0
1 year Master	1027	669	1038	550
2 year Master	0	131	172	1116
Postgraduate students	269	163	133	108
Doctoral students	20	19	13	7
Total	9029	6701	5439	5434

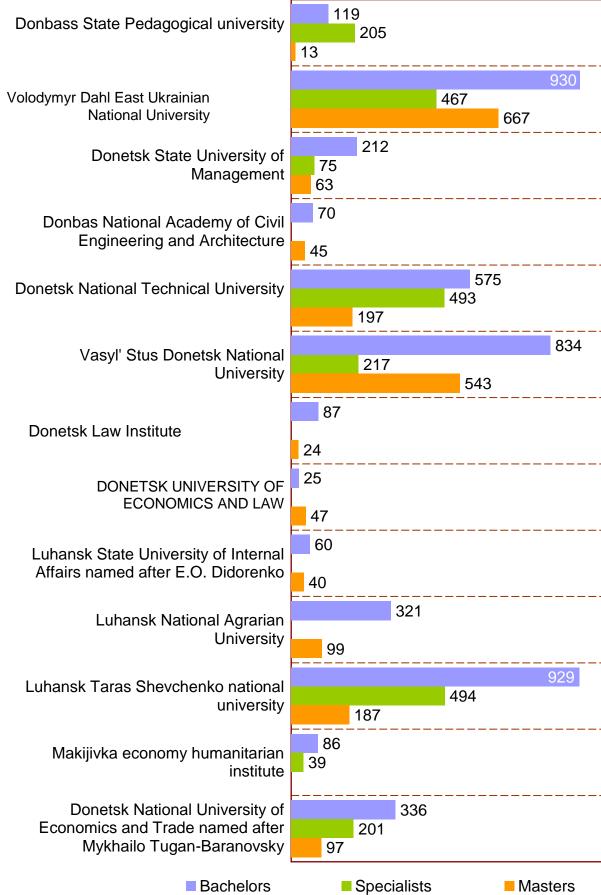
Makijivka economy humanitarian institute

Transferred Contonly Turner terr institute				
	2014	2015	2016	2017
1 year bachelor's degree	124	107	107	0
2 year bachelor's degree	204	145	128	45
3 year bachelor's degree	244	192	131	48
4 year bachelor's degree	274	196	103	51
1 year Specialist	83	57	42	0
1 year Master	117	85	48	45
2 year Master				35
Postgraduate students	6	2	0	0
Doctoral students	0	0	0	0
Total	1052	784	556	224

## Donetsk National University of Economics and Trade named after Mykhailo Tugan-Baranovsky

	2014	2015	2016	2017
1 year bachelor's degree	83	291	190	424
2 year bachelor's degree	130	245	249	347
3 year bachelor's degree	249	107	213	448
4 year bachelor's degree	195	260	96	215
5 year bachelor's degree	43	151	101	23
1 year Master	101	98	124	188
2 year Master	13	73	92	116
Specialist	136	198	156	22
Postgraduate students	11	8	5	10
Total	961	1431	1226	1793

The number of graduates from universities in Donetsk and Luhansk region



There were 8.8 thousand of graduates from educational institutions of Donetsk region in the 2017/2018 academic year and 5.3 thousand of graduates were in Luhansk region. The total number of graduates of the Donbas Universities is 14.1 thousand. The displaced universities of Donetsk and Luhansk region graduated 8797 people (with the exception of medical schools that did not provide statistical information), that is, about two thirds of all graduates of the region.

The largest class was provided by the Volodymyr Dahl East Ukrainian National University, there were 2064 graduates. It became possible due to the joining of Donbass State Technical University. The second highest number of graduates is in Luhansk Taras Shevchenko National university- 1610 graduates. The third highest number of graduates is in Vasyl 'Stus Donetsk National University - 1594 graduates. The fourth largest class is in Donetsk National Technical University - 1265 graduates. The rest of Donetsk and Luhansk universities have significantly lower graduate degrees. Therefore, in order to optimize universities can be restructured by joining to major higher education institutions in the region, that training in the same curriculars.

#### 5. INVESTIGATION DESCRIPTION

In November-December 2018, at the request of the Czech organization "Man in Trouble", the Center carried out two quantitative and qualitative studies, the main purpose of which was to identify the problems of the labor market in the Donbas and the prospects for increasing the available employment opportunities for university graduates in the region.

#### 5.1 Qualitative research

The qualitative study involved holding ten focus group interviews in the cities of Pokrovsk, Kostyantynivka, Kramatorsk, Mariupol, Severodonetsk, Rubizhne (Table 1, 2) and thirty in-depth interviews with the most progressive representatives of employers in the city (region) (Table 3)

Table 1. Focus group discussions among student assets

№ focus	Region	City	Type of tasks performed	Number of
group			by the	participants
			target audience	
1	Donetsk region	Pokrovsk	Group discussion	20
2	Donetsk region	Mariupol	Group discussion	23
3	Donetsk region	Kramatorsk	Group discussion	15
4	Donetsk region	Gorlovka	Group discussion	7
5	Donetsk region	Sievierodonetsk	Group discussion	10
6	Donetsk region	Starobilsky	Group discussion	10
7	Donetsk region	Rubizhne	Group discussion	10

Table 2. Focus group discussions among managers and professors of universities

№ focus group	Region	City	Type of tasks performed by the target audience	Number of participants
1	Donetsk region	Pokrovsk	Group discussion	15
2	Donetsk region	Mariupol	Group discussion	20
3	Donetsk region	Kramatorsk	Group discussion	12
4	Donetsk region	Gorlovka	Group discussion	6
5	Donetsk region	Sievierodonetsk	Group discussion	10
6	Donetsk region	Starobilsky	Group discussion	10
7	Donetsk region	Rubizhne	Group discussion	10

The methodology included holding focus groups in two target audiences, among representatives of the student's assets and among the leaders and teachers of the universities of the region, separately in each city. The cities for the study were selected on

the basis of a definite concentration of leading higher education institutions in the region and taking into account the representation of the largest number of students in the areas of training.

The following higher educational establishments were included in the sample: Gorlovka Institute of Foreign Languages, Donetsk State University of Management, Donetsk National Medical University, Donetsk national technical university, Donetsk Law Institute of Ministry of Internal Affairs of Ukraine, Luhansk State University of Internal Affairs named after E.O. Didorenko, Taras Shevchenko National University of Luhansk, Volodymyr Dahl East Ukrainian National University.

Table 3. In-depth interviews description of the sample

Region	City	Number of enterprises
Donetsk region	Pokrovsk	3
Donetsk region	Kramatorsk	2
Donetsk region	Mariupol	3
Donetsk region	Sievierodonetsk	3
Donetsk region	Rubizhne	2
Donetsk region	Starobilsky	3

Also, the methodology provided for a series of in-depth interviews among the key employers in the region, for which three employers were selected in each of the studied cities. The structure of the interview included a set of open and closed questions aimed at identifying the prospects for business development, estimating the current state of the labor market in the region, the level of quality of training of young specialists and the prospects for developing public-private partnership in the field of education, predicted by employers. As respondents were executives, first deputy heads of enterprises and specialists (managers) of the personnel of the enterprise.

### 5.2. Quantitative research

A quantitative study envisaged conducting an e-sociological survey of two groups of respondents - employers and graduate students of the universities of the region.

The purpose of the survey of employers was to assess the effectiveness of the implementation of the existing system of higher education in the region, the level of satisfaction of employers with the quality of training in higher education institutions in the

region and the prospects for implementing graduate employment programs compatible with universities.

The survey covered enterprises located in all cities controlled by Donetsk and Luhansk regions, giving preference to cities with the most developed economic infrastructure. The sample was formed by randomly selecting an enterprise in every type of economic activity to which it belongs. Recruitment of participants was carried out on the basis of direct contacts with the Chamber of Commerce and Industry of the region. The total survey covered 93 enterprises. The detailed structure of the surveyed employers by types of economic activity is given in Table 4.

Table 4. Employers covered by electronic poll

No	Amount of staff	% of the total number of respondents
1	Up to 50 people	67,8%
2	From 51 to 100 people	16,7%
3	From 101 to 500 people	8,9%
4	From 501 to 1000 people	4,4%
5	Above 1001 people	2,2%

The main goal of the survey of university graduates was to assess the effectiveness of the implementation of the existing system of higher education in the region and the level of satisfaction with the educational and professional expectations of graduate students.

During the formation of the sample respondents were enrolled students of the 4th year of bachelor's degree and 1-2 courses of the master's degree in all areas of preparation for which higher education institutions in Donetsk and Lugansk region (by selected key universities) are being trained. The coverage of only these courses is due to the research objectives, as it is the graduate students who are most likely to fully appreciate the quality of the education they receive and the prospects of employment. The total number of respondents was 961 persons.

The detailed structure of the students surveyed by the educational institutions is presented in Table 5.

Table 5. Graduate students enrolled in an electronic survey

No	The institution of education in which the respondent learns	% of the total number of respondents
1	Gorlovka Institute of Foreign Languages	0,62%
2	Lugansk State Medical University	6,77%
3	Donetsk State University of Management	8,33%
4	Donetsk National Medical University	5,2%
5	Donetsk National Technical University	32,7%
6	Donetsk Law Institute of Ministry of Internal Affairs of Ukraine	8,33%
7	Luhansk State University of Internal Affairs named after E.O. Didorenko	4,89%
8	Taras Shevchenko National University of Luhansk	16,66%
9	Volodymyr Dahl East Ukrainian National University	16,45%

One of the tasks of the quantitative survey was to: assess the level of satisfaction of employers with the existing training system and build a perfect, in their view, portrait of a young specialist, that is a set of qualities that a graduate should possess in order to allow unrestricted free competition in the labor market. To this end, an adapted Marketing Technique, ServQual, was used for which each employer had to determine the following assessment units according to the competent criteria. The "Expectations" block - defines the views of employers on how they would like to see an ideal young specialist, the level of his knowledge, skills and skills acquired during his studies at a higher education institution. The purpose of the "Perception" block is to identify employers' thoughts about the level of knowledge and skills of a modern graduate with economic education. The "Importance" block is intended to assess the importance of certain knowledge, skills and abilities in the work of a specialist with higher education.

The estimation method involves calculating the quality coefficient, which has a mathematical expression:

$$Q_i = P_i - E_i,$$

where  $Q_i$  – the coefficient of quality (quality) by i-M criterion;

 $P_i$  – consumer perception (perception) of quality according to the i-M criterion;

 $E_i$  – consumer expectation of quality by i - M criterion.

In this case, the negative quality coefficients that are as close as possible to zero value are considered satisfactory. The positive value of the coefficients indicates "superquality" and is very rare.

A similar technique was used when interviewing students (graduates), for them the essence of the blocks "Expectation", "Perception" and "Importance" was expressed in the following: the "Expectations" block was intended to determine the expectations of the specialist regarding the adequacy of the level of knowledge acquired during the training of student's skills; The "Perception" block - to assess the compliance of the presented criteria with the expert's current level of knowledge, skills and abilities; The "Importance" block allows you to determine the extent to which certain knowledge, skills and abilities are affected by the work process.

The criteria and orientations for assessing employers and graduates were identical, which made it possible to compare existing perceptions of employers and specialists with regard to the competences required for work and assess the perceptions of the quality of educational services by the two main consumers (households and enterprises).

Regular supervision of data collection was carried out by two supervisors. Quality control included automatic monitoring of email addresses, to avoid multiple responses by one person. The research also included logical checks and warnings of respondents about allegorical responses.

#### 6. **PERSONAL CAPACITY OF REGIONAL AND ENTERPRISES** PROSPECTS FOR ITS EXPANSION

Despite the current geopolitical state and economic downturn in the region, related to military actions and loss of production potential, most of the region's research enterprises are in need of highly skilled labor, about 19.4% of respondents said that they had a significant need for personnel, and as many as 69.9% who are more likely to feel need than they are (Figure 1). The presence of high demand for professionals is confirmed, confirmed by employers who were interviewed. Most of them indicate that in the present situation in the city (region) to find suitable labor, which corresponds to the quantitative and qualitative characteristics of jobs is quite difficult.



Figure 1. The presence in the region, in the opinion of employers, of a shortage of skilled labor

no, I don't fell

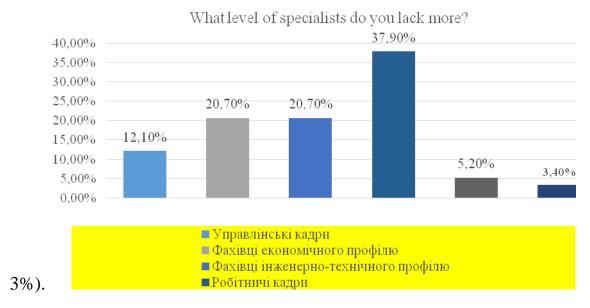
The main reasons for the shortage of personnel in certain spheres of economic activity are:

the outflow of a whole range of the most competitive skilled labor outside the region, in connection with the approaching zone of the military conflict;

the presence of structural imbalance in the labor market due to the discrepancy of demand for specialists in professions, the existing structure of the unemployed population by professions;

mismatch of the quantitative structure of training to the needs of employers; inert population attitude towards work and reluctance to work effectively; low quality of work places (wages, working conditions, etc.)

The key professional groups that, in the opinion of employers, are the most disadvantaged ones, are skilled workers with tools, maintenance and repair technicians (38.6%), engineering and technical specialists (21.1%) and specialists in the economic field (19,



Managerial staff

Specialists of the economic profile

Specialists of the engineering-technical profile

Workers

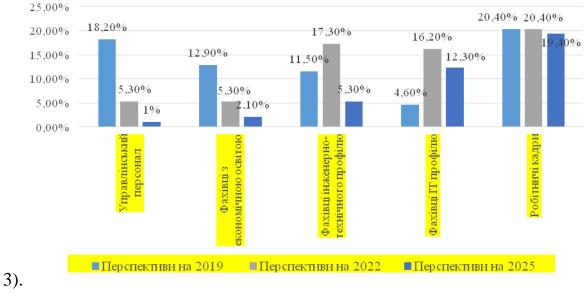
Figure 2. Professional structure of the deficit in skilled labor (according to employers)

The demand for personnel with technical qualifications is connected, first of all, with the industrial-industrial orientation of the structure of the region's economy, which needs precisely the workforce. Secondly, current demand emphasizes the existing imbalance of the labor market in the region in terms of prevailing in the structure of the population of people with a humanitarian education. Thirdly, the unsatisfactory demand for active labor supply suggests a high level of employers' dissatisfaction with the competency characteristics of the workforce.

Forecast estimates of employers regarding changes in labor demand are dispersed, depending on the prediction period and the professional group. Most employers were not able to give some estimates of change after 7 years, although they readily noted the perspectives they expect in the short run (1-2 years). The main reason for such actions is the lack of stability in the region, which makes it impossible to plan for the future.

In the near term (until 2019), employers see an opportunity to increase demand for representatives of labor specialties and managers. In the longer term (2022), there is also expected growth in demand for specialists in engineering and technical specialties and IT specialists (although in the current period, the demand for specialists in these specialties

was indicated by only 3% of the polled). For the next seven years, only 25% of respondents were able to identify demand growth, most of which indicated an increase in demand for specialists in the labor specialties and in some cases for IT specialists (Figure



Managerial staff

Specialists of the economic profile

Specialists of the engineering-technical profile

IT specialists

Workers

Prospects for 2019 Prospects for 2022 Prospects for 2025

Figure 3. Percentage of employers, which predict an increase in demand for personnel, according to individual professions.

According to employers, the main difficulty in recruiting staff is low wages (58%), poor knowledge and skills of job applicants (42.4%), high demands from the job

applicants (37.9%) (Figure 4). The results, on one hand, highlight the existence of the problems related to the quality of the job positions and in some cases high demands of the applicants towards the conditions of the work, on the other hand, the low level of competitiveness of the work force, which manifests itself in a lack of competence.

Most employers want to see a highly skilled specialist with modern knowledge and skills, but it is not ready to change the existing working conditions and wages, which leads to migration of a layer of competitive personnel outside the region.



With low salary

With unattractive content and working conditions

With changes and requirements to the work place

With a shortage of personnel in a particular profession

With inconsistency of skills and abilities of job applicants

With aging skills

With overrepresented requirements for job applicants

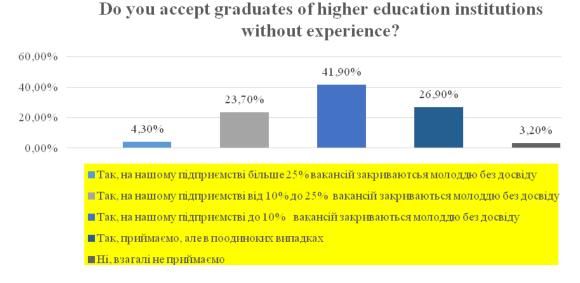
With the inability of the population to find work

Figure 4. Difficulties to which the recruiting staff is exposed to

When organizing the selection of personnel at the enterprise, most employers use the recommendations of friends and relatives (4 points out of 5 possible), online resources (points) and applying directly to educational institutions (points). At the same time, almost do not use the services provided by the State Employment Centers and private recruitment agencies. The alleged reason for this, is the insufficient level of business confidence in the institution and the low level of quality of workforce appealing to employment centers. For

others, the reason is the insufficient level of development of the network of recruiting agencies and the high level of value of their services.

Considering the readiness to consider young professionals (graduates) as new staff, most employers argue that in their enterprises fill 10% of vacancies are filled with young professionals without experience; approximately the same are options of 10 to 25% coverage of youth vacancies and isolated cases of youth use as staff. The current situation characterizes the inadequate level of business openness to employing the labor force, while the main reason for this is the lack of professional experience.



Yes, in our company more than 25% of vacancies are filled with young people without experienced

Thus, in our company, from 10% to 25% of vacancies young people with no experienced are closed

So, in our company about 10% of vacancies are filled with young people without experienced

Yea, we accept but in rare cases

No, we don't accept at all

## Figure 5. Attitudes of respondents regarding the employment of graduates of universities without experience

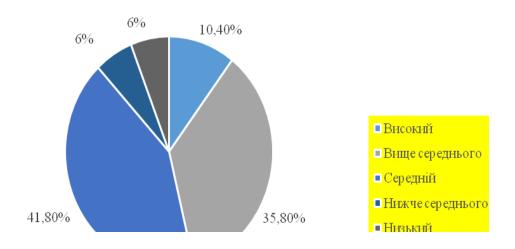
When selecting between graduates of private and public institutions of higher education, the majority of respondents indicate that they have no difference regarding of the institution that the graduate graduated from (57%), the importantce is in the level and quality of his knowledge. At the same time, almost 42% prefer to receive graduates of state-run educational institutions.

# 7. RELATIONSHIP BETWEEN HIGHER EDUCATION INSTITUTIONS TO EMPLOYEE REQUIREMENTS

In order to identify the most problematic places in the field of training specialists in the region and to assess the possibilities for maximizing the competent capacity of the training process for employers, the following assessment unit was conducted.

## 7.1. Advantages and disadvantages of modern young professionals

Most surveyed employers assess the level of competitiveness of modern graduates of higher education institutions, both average and higher, respectively 41.8% and 35.8% (Figure 6). About 10% determine the level of competitiveness, as high and only 6%, as low. That is, the situation is not critical and balanced set of actions in this area can produce the most possible positive results.

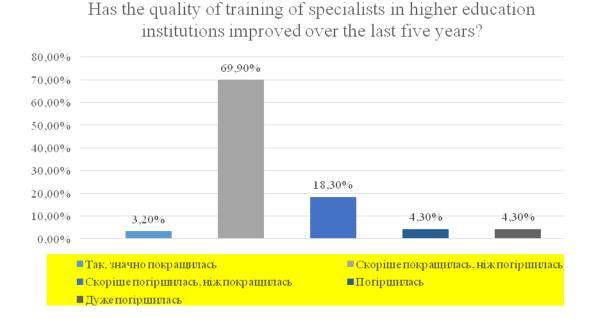


High Above average Average Below average low

# Figure 6. The level of competitiveness of modern graduates of higher education institutions in the region

A positive result is that almost 70% of those polled indicate that the quality of training of specialists in higher education institutions has improved rather than deteriorated in the last five years (Figure 7). A maximum positive result of a significant improvement in quality is indicated by 3.2%. Others, accounting for 25% of employers,

indicate different levels of deterioration in the quality of training, suggesting that there is a certain reserve of resources for improving the overall quality of education in the region.



Yes, so much improved Rather deteriorated than improved Very worse rather improved than deteriorated deteriorated

Figure 7. Respondents' assessment of existing improvements in the training of specialists in higher education institutions

Despite the lower level of competitiveness of graduates compared to older generations with experience, most employers identify a range of positive and negative features that are characteristic of young professionals (Table 6).

Thus, among the positive features of young people, the greatest respondents consider: knowledge of PCs and applications (73.1% of respondents); knowledge of a foreign language (65,6%); ability to learn quickly (29%); ability to work in a team (26,9%). It should be noted that the smallest number of respondents acknowledged the superiority of the young specialist to have strategic thinking (6.5%), which is necessary in work in the current dynamic conditions of economic development and production, and the lack of skills of non-standard approach to solving the set professional tasks.

Lack of practical experience is seen as the main drawback of graduates (69.9%), which hinders the free competition of young people in the workplace. In addition, among the key disadvantages is an insufficient level of professional competence (52.7%) and a

high degree of ambition (14.3%), which prevents individuals from objectively assessing their skills and knowledge, and this holds back her professional, intellectual, career development and gradually reduce competitiveness. The problem of ambition is exacerbated by the fact that, due to lack of experience and knowledge, a specialist is not able to adequately assess his level of competence, because "he does not know what he does not know". This situation is confirmed by comparing the information obtained by personal assessment of their qualities by employees and their assessment by employers..

Table 6. Advantages and disadvantages of modern graduates

Advantages of modern graduates		Disadvantages of modern graduates	
Graduate student characteristic	% of respondents	Graduate student characteristic	% of respondents
Quality level of theoretical knowledge	12,9	Low level of theoretical knowledge	32,3
Qualitative amount of practical knowledge	11,8	Lack of practical knowledge	69,9
Creative potential	24,7	Insufficient professional competence	52,7
Sociability High adaptability	24,7 18,3	Stereotypes of thinking	28
Ability to learn	29	Low degree of professional adaptability	34,4
Ability to work in a team	26,9	Lack of external	
Knowledge of PC and applications	73,1	communication skills	30,1
Non-standard approach to professional solutions tasks	9,7	Ambition	34,4
Strategic thinking	6,5	Insufficient level of knowledge of modern technologies	26,9
Foreign language knowledge	65,6	Insufficient level of knowledge of a foreign language	10,8

## 7.2. The profile of the ''ideal'' graduate from the point of view of employers

An analysis of the expectations about the qualities that a "perfect" young specialist should possess has shown that the modern employer puts high expectations on the training system and wants to get an intellectually developed worker who is a perfect specialist in his professional field capable of self-development, rational interaction in the team. and effective activity according to the strategy of development of the company taking into account its corporate interests. This is evidenced by the fact that the average expectations estimates are quite high and range from 4.54 points to 4.03 points (the average waiting time for 27 evaluation criteria is 4.24 points).

The chief characteristics of the "ideal" young specialist managers of enterprises consider the ability to work on a computer, knowledge of foreign languages, possession of skills in the collection, processing, analysis, generalization of information and presentation of results, the ability to apply the acquired theoretical knowledge in professional activities, discipline. These five criteria were highest in the course of the survey (4.54, 4.49, 4.33, 4.32, 4.32, respectively). Average and similar marks (4.28 points) received the following characteristics: the ability to perform basic professional functions on the profile, knowledge of the legislative and regulatory framework in the field of professional activity, the ability to work in a team, the ability to take corporate interests into work. The least important for a graduate-the criteria for achieving its benchmark are: loyalty to management and staff, ability to innovate and innovate, ability to take initiative in professional activities, leadership skills and possession of related skills and knowledge not on the professional profile (they have grades 4, 15, 4.13, 4.1, 4.06 and 4.03 points).

It is also interesting that the fact that only 35% of respondents mentioned practical skills as a very important indicator, 47% consider the importance of the criterion higher than the average (4 points) and 16% - average (3 points), therefore the average score of the criterion is 4, 28 points. As for theoretical training, its high level requires 45% (score 5), another 34.4% (score 4) are sufficiently above the average, the average weighted score of the criterion is 4.22 points and 12th in the rating of competencies. That is, according to employers, proper theoretical training is less important for a young specialist and needs education from the educational system to bring education closer to acquiring more practical skills.

Among the criteria characterized by a sharp difference in opinion about their need is the knowledge of a foreign language and the possession of a related profession: the need or lack of these criteria depends on the specifics of enterprises. Thus, large multinational and leading Ukrainian companies pay a lot of attention to the level of knowledge of the language by the staff, therefore they consider the high level of knowledge of the language of graduates to be very important. The opposite is the situation at small, state and some industrial Ukrainian enterprises. In addition, the requirements for the level of knowledge of languages vary depending on the position, which claims a young specialist. The profile of "ideal", according to employers, graduate is given in Table 7.

Table 7. Profile of "ideal" graduate with economic education (according to employers)

№ Ra nk	Competence	Grade value for an ideal graduate	Grade of the importance of the criterion in labor activity
1	2	3	4
1.	Ability to work on the computer	4,54	4,60
2.	Foreign language knowledge	4,49	4,51
3.	Possessing skills in gathering, processing, analyzing, summarizing information and presenting results	4,33	4,34
4.	Ability to apply the acquired theoretical knowledge in professional activity	4,32	4,33
5.	Discipline	4,32	4,42
6.	Ability to perform basic professional functions by profile	4,28	4,35
7.	Awareness of the legislative and normative basis in the field of professional activity	4,28	4,33
8.	Ability to work in a team	4,28	4,40
9.	Ability to take into account corporate interests in labor activities	4,28	4,5
10.	Knowledge of the main technological processes of professional activity	4,25	4,42
11.	Owning skills of interpersonal communication (communicative)	4,23	4,35
12.	General theoretical training by profile	4,22	4,29
13.	Knowledge of specialized applications necessary for professional activity	4,21	4,36
14.	Ability to search and use new information	4,19	4,41
15.	Ability to cope with new and unpredictable situations	4,19	4,25
16.	Ability to adequately assess the situation, recognize and take into account most of the external and internal factors	4,19	4,45
17.	Ability to organize their own activities (to determine the purpose and tasks of	4,18	4,39

	their own activities, the order of the tasks, etc.)		
18.	Loyalty to management and staff	4,15	4,42
19.	Creative potential (ability to innovate and innovate)	4,13	4,34
20.	Ability to take initiative in professional activities	4,10	4,33
21.	Leadership Qualities	4,06	4,29
22.	Possession of related knowledge and skills (not in the main direction of professional activity)	4,03	4,28

Thus, based on the analysis of the block of expectations of employers from graduates, one can conclude that employers pay more attention to the personal qualities of the graduate, assessing his potential, sociability and development opportunities, while expecting him to have practical skills gained in the education system that the current system education is not fully satisfied. That is, while preserving the existing level of education and the degree of the relationship between educational institutions and business entities, young specialists will not be able to meet the requirements of employers and freely compete in the labor market.

# 7.3. Compliance of available competencies of graduates with the needs of employers

An assessment of the level of development of competences, skills and abilities of a modern young specialist is given by the data obtained in the analysis of employers' perception unit. Thus, during the analysis it is determined that the total average assessment of the quality of the characteristics of a modern graduate is 3.28 points (from the maximum possible five). The highest score (3.81 points) was computer skills, the least (3.1 points) - the skills of possession of related knowledge and skills (not the main direction of professional activity). In general, according to enterprise executives, the best features of modern graduates are: ability to work on a computer; knowledge of foreign language, discipline, skills in gathering, processing, analysis, synthesis of information and presentation of results, knowledge of specialized applications required for professional activities. The least characteristic for current graduates is: the possession of related skills and knowledge (not the main direction of professional activity), knowledge of the

legislative and regulatory framework in the field of professional activity, the ability to take corporate interests into account in labor activities, general theoretical training on the profile, the ability to perform basic professional functions by profile.

Low ratings of graduates' quality will once again highlight the fact of the low level of competitiveness of modern youth with higher education in the labor market. The main reason for the current situation is the imperfection of the existing training system in the country, as evidenced by low assessments of the level of theoretical knowledge and practical skills of graduates.

According to the results of the research on the correspondence of the level of skills and knowledge of modern young specialists with the views of employers on the "ideal" graduate, it is determined that by twenty two defined quality criteria they are characterized by negative values of the coefficient of quality, ranging from -0.41 to -1.23. That is, there is a rather high degree of dissatisfaction with the requirements of employers by young professionals.

The highest quality ratios were obtained according to the following criteria: computer skills ( $Q_i$ =-0,41); knowledge of a foreign language ( $Q_i$ =-0,65) and leadership qualities ( $Q_i$ =-0,76). The smallest coefficients of quality have (that is, the most inappropriate) criteria: knowledge of specialized applied programs necessary for professional activity ( $Q_i$ =-1,23); knowledge of the legislative and normative base in the field of professional activity ( $Q_i$ =-1,2); possession of the skills of collecting, processing, analyzing, summarizing information and presenting the results ( $Q_i$ =-1,16) and the ability to cope with new and unforeseen situations ( $Q_i$ =-1,07).

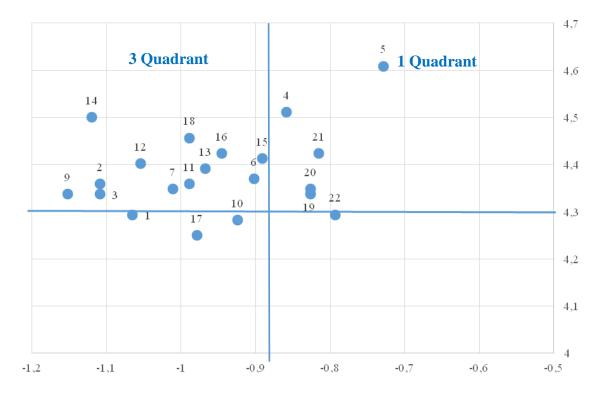
However, the most representative quality analysis and identification of existing problems is the ratio of the quality factor of the criterion and the importance of this criterion in the professional activity of a specialist. Graphically, this ratio is shown in Figure 8.

To Quadrant 1, which contains criteria that are of a high degree of importance and relatively high with other levels of their quality and because of this are the most successful in the current state, include:

the ability to work on a computer, this skill was recognized by employers as one of the key characteristics required in the activities of a modern specialist in economic education (the assessment of importance is equal to 4.6), in addition, it has the best quality factor ( $Q_i$ =-0,72);

discipline ranks seventh in the ranking of the importance of the criteria with an estimate of 4.42 and a coefficient of quality -0.82;

creative potential ranks fifth among the key characteristics of a modern young specialist and has a fairly high level of significance of 4.35 and a coefficient of assessment with a value ( $Q_i$ =-0,83);



- 1-General theoretical training by the profile
- 2 Ability to perform basic professional functions by profile
- 3 Ability to apply the acquired theoretical knowledge in professional activities
- 4 Knowledge of foreign languages
- 5. Ability to work on a computer
- 6 Knowledge of specialized applications necessary for professional activities
- 7 Owning skills in gathering, processing, analyzing, summarizing information and presenting results.

- 12 Ability to work in a team
- 13 Ability to organize their own activities (to determine the purpose and tasks of their own activities, the order of the tasks, etc.)
- 14 Ability to take into account corporate interests in labor activities
- 15 Ability to search and use new information
- 16 Loyalty to management and staff
- 17 Ability to cope with new and unpredictable situations
- 18 Ability to adequately assess the situation, recognize and take into account most of the external and internal factors

- 8 Knowledge of the main technological processes of professional activity
- 9 Awareness of the legislative and regulatory framework in the field of professional activity
- 10 Possession of related knowledge and skills (not in the main direction of professional activity)
- 11 Ownership skills of interpersonal communication (communicative)
- 19 Ability to take initiative in professional activities
- 20 Creative potential (ability to innovate and innovate)
- 21 Discipline
- 22 Leadership

Figure 8. Balance matrix of employer requirements for graduates and available competency characteristics

The ability to take initiative in professional activities has almost the marginal significance of moving one to two and three to the quadrant, and therefore falls into the risk and critical area that needs some kind of educational intervention to improve its quality. The importance of this criterion is 4.34, and the coefficient of quality  $Q_i$ =-0,83.

In general, all the quadrant criteria 1 are positive in terms of meeting the needs of employers, but there are some reserves for their development, since the degree of deviation of the quality of graduates from the benchmark is rather high. In addition, there are criteria found in the problem transition zone, which makes it necessary to pay more attention to them when formulating proposals for improving the competitiveness of youth.

To Quadrant 2, which includes criteria that are characterized by a low value of an indicator of importance and a low quality factor, that is, they are not key and their current level almost satisfies the needs of employers, include:

eadership qualities, the level of importance of which is the lowest among all indicators and is 4.29 points. At the same time, the satisfaction index remains fairly high  $Q_i$ = -0.79. This suggests that most employers do not see young leaders and consider these staff only in the format of professional executives.

The most problematic and widespread criterion found in it, when assessing the level of competitiveness of graduates from, is Quadrant 3: it included thirteen of the twenty two competencies that were identified for analysis. It is these characteristics of the workforce that need to be improved as soon as they are, according to employers, key to work and have the lowest quality factor today. The quadrant "three" got the following qualitative characteristics of the young work force:

knowledge of the foreign language is almost at the intersection of the first and third quadrants, it says on the one hand the high importance of this criterion and the almost satisfactory character of the quality of skills. At the same time, it should be noted that this criterion was chosen as one of the greatest advantages of the modern young workforce. The significance of the criterion of importance is equal to 4.51 points, ranked second among the general ranking and the sixth place by the coefficient of quality ( $Q_i = -0.86$ );

ability to search and use new information is one of the key characteristics of the staff in the modern world of active development of information society. This is confirmed by the data obtained by the assessment of employers of its importance in the professional activities of professionals (4.41). However, it is not a competitive advantage of modern graduates: the difference between a realistic estimate of its level and ideal (coefficient of quality) is -0.89;

knowledge of specialized programs for use in professional activities is characterized by an average degree of importance (4.37 points) and has a coefficient of quality  $Q_i$ = -0.9, which is controversial in terms of comparing its criticality with the indicator of knowledge of the PC (which occupies the leading position in terms of satisfaction), this suggests that it is relevant to deepen existing knowledge by specialized training on the background of providing general knowledge of computer technologies;

knowledge of the legislative and regulatory framework for the organization of professional activities: knowledge of the bases of labor, administrative and economic lawall this is a necessary and objective requirement of our time. Taking this into account, employers felt the presence of legal knowledge among graduates was very important and desirable during the survey (importance of 4.34). Existing educational programs today include legal disciplines that provide basic knowledge of the organization of labor and economic legislation, but surveys have shown that the quality of this knowledge is very low (the lowest quality indicator among all components) ( $Q_i = -1,15$ ) and does not meet modern requirements;

the ability to organize its activities as a component of collective activity: one of the key socio-personal competencies that is formed at the stage of secondary and vocational education, provides an opportunity to provide effective team teamwork and enable the company to function as a coherent structure. However, the existing educational system is not able to provide a sufficient level of this competence, this is confirmed by the low value of the coefficient of quality  $Q_i = -0.96$  at an indicator of 4.39 out of 5;

the ability to take into account corporate interests in the labor activity: ranks third among twenty two criteria for the degree of importance for employers with an importance indicator of 4.5, which is quite objective, because the management of the company wants its employees to be loyal to their company and have worked, taking into account its strategic goals and objectives. But according to the definition of employers, the degree of formation of this competence among graduates is too low, dissatisfaction with its quality is -1.12 (twentieth place in the satisfaction rating);

the availability of practical skills: is one of the competitive advantages of professionals who have sufficient work experience in the specialty, which enables them to engage in work without additional training and retraining, which is why employers consider this criterion to be very important (indicator of significance 4,36) and wish, that the level of his representation in young specialists was rather high. However, the modern system is not able to provide a sufficient level of development of this skill due to the specificity and the more theoretical orientation of the Ukrainian education system, therefore, the quality factor for this criterion is very low (-1.08) and is one of the four indicators with the worst quality;

general theoretical training by the profile: its proper level is the main task of the education system. But today it is not able to perform it at the proper level. The coefficient of the theoretical training of graduates is equal to -1.06 and is at the eighteenth place of twenty-two;

the ability to work in the team is the sixth place among the characteristics, the level of development which does not meet the requirements of employers (quality factor  $Q_i$ = -1,05). In addition, it is characteristic and of high importance (4.4 points), which emphasizes the criticality of the state of this indicator and requires prompt action to improve it;

Knowledge of the skills of processing, analysis and presentation of information is a competence that characterizes the professional level of a specialist in terms of assessing the possibilities of using his knowledge. This competence gained an average indicator of importance and an average quality indicator that is not critical, but still submits them to a group of critical and needy revisions

communication skills - is not a positive feature of modern youth, which complicates the processes of building interaction in the organization of the production process, both between the leader and subordinates, and among colleagues, this reduces the effectiveness of general activities and negatively affects the process of formation and implementation of tasks. The quality of this indicator is at -0.99, and the importance of 4.36 points out of 5.

To the 4 Quadrant, the indicators having the least important level, but having critical performance indicators by employers, were included:

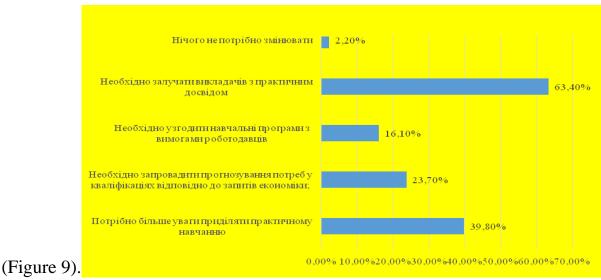
the ability to cope with new and unpredictable situations, the low level of importance of which (4.25 points) indicates the sustainability of production processes and tasks that may arise in the professional activity of a young specialist, and the low level of quality - the lack of ability to develop these skills within the system education and life ( $Q_i$ =-0,98);

possession of related knowledge and skills, ranks twenty-first on the importance level - 4.28 points and the ninth place in terms of quality ( $Q_i$ =-0,92).

The analysis revealed high level of unsatisfaction of employers with the level of qualitative characteristics of graduates. Young professionals are not able to compete freely on the job market for decent jobs, so they can not completely replace the redundant workforce. The main reasons for the current situation are the critical importance of the quality of practical training of graduates and a complex of social and personal competences, which suggests the need to strengthen these components of educational activity.

Employers see opportunities to increase the level of competence of graduates, through the following ways: more than 63% of respondents indicate the effectiveness of introducing the practice of using teachers with practical experience; almost 40% note the need to expand the methods of practical training, including directly on production; the

fourth part emphasizes the necessity of introducing the practice of forecasting the needs of the labor market in skilled labor, not only quantitatively, but also in qualitative terms



Nothing needs to be changed

It is necessary to involve teachers with practical experience

It is necessary to coordinate the training programs with the requirements of employers

It is necessary to introduce forecasting needs in qualifications in accordance with the demands of the economy

More attention needs to be paid to practical training

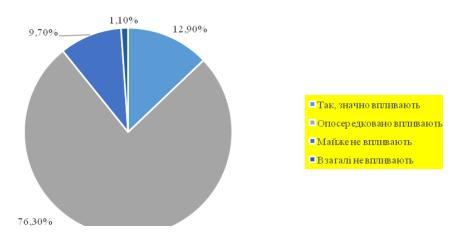
Figure 9. Ways of meeting the needs of graduates with the requirements of the economy (according to employers)

#### 8. AVAILABLE PATENT OF HIGHER EDUCATION STAFF

Universities are not only institutions that provide education services, but also act as certain centers that affect the social and economic life of the population. They form the labor potential of the region by preparing a skilled workforce that in the future will create a social product, provide opportunities for the scientific and technological development of the region and create opportunities for the productive development of the already employed labor force. This is confirmed by the results of the survey; about 12.5% of surveyed employers believe that universities have a significant influence on the development of the region, and another 76.3% indicate mediated effects, and only 1% say

they are not affected (Figure

Does the high education influences the regional development level?

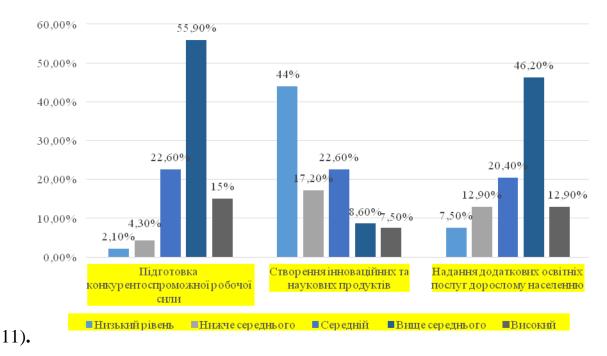


10).

Yes, they have a lot of influence Indirectly influenced Almost no effect Generally not affected

Figure 10. The impact of universities on the development of regions

In general, it is possible to distinguish three main areas of activity of universities, which they can influence the development of the region: the first is the training of skilled competitive labor for the region; the second is the creation of scientific and innovative products; the third is the provision of additional educational business services (Figure



Preparation for a competitive labor force

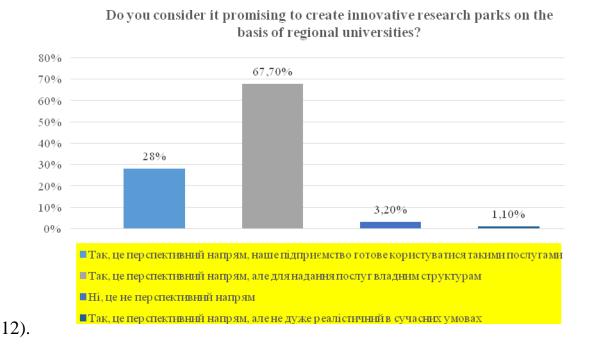
Creation of innovative and scientific product
Providing additional educational service to the adult population
Low level below average average above average high

Figure 11. Quality assessment by universities of the region for individual services

According to employers, the scope of the job of preparing a competitive labor force is almost complete, but there are certain reserves for improvement. More than 55% of the respondents estimate the activity in this area as above the average, another 15% - as high. Negative evaluations were determined by 6.4% of employers.

Regarding the scientific and innovation sphere of activity, the situation is negative, about 44% are determined at a low level and 17.20% below the average. Only 7.5% determine the high level of development of this kind of activity. The obtained results confirm the general tendency that exists today in the country, postponing to the secondary side the scientific activity of universities, although this is not true from the standpoint of the European experience of universities, where educational institutions, in addition to educational functions, function as research and innovation centers.

Regarding the prospects of developing this area of activity of the universities of the region, they exist and will be in demand, about 28% of the surveyed employers see they are ready to use such services, and almost 68% consider this direction promising in the sphere of providing services to the authorities and state bodies (Figure



Yes, this is a promising direction our company is ready to use such services Yes, this is a promising direction but to provide services to the authorities No, this is not a promising direction

Yes, this is a promising direction but not very realistic in modern condition

Figure 12. Prospects for development on the basis of universities of scientific parks

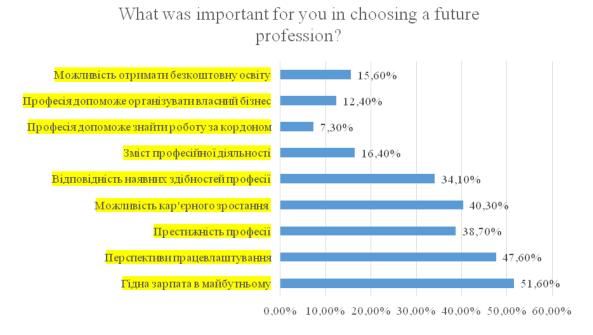
The assessment of the quality of providing additional services by universities (conducting trainings, advanced training), shows the average indicators of the development of this area. More than 60% of them noted above the average development level, and about 13%, as high. In spite of this, the expansion of the range of additional services and attracting more consumers, by informing the community of the region, about the possibilities of universities to provide such services, is seen.

### 9. EDUCATIONAL AND PROFESSIONAL LEVELS OF UNIVERSITY LEADERS

One of the reasons for the imbalance in the development of the labor market in the region is the lack of desire of young people to obtain a profession that is in demand among employers. Modern youth in the selection of professions in most cases is not oriented, almost, to the current demand for the received specialty, focusing on the possibility of financial well-being after receiving a job. Moreover, due to the low level of labor market awareness, young people mistakenly believe that one or another profession will bring them decent wages.

According to a survey conducted by students (graduates), most of them, when choosing their profession, were guided by the possibility of obtaining decent wages in the future (51.6%). Positive is the fact that almost half of the respondents in the profession chooses to consider the prospects for future employment. The ambition and orientation of young people for development in the future confirms the assessment of career development opportunities by professional self-determination (40.3% determine the priority of this criterion). Only 7.3% of students are oriented abroad for choosing a profession, which indicates the positive intentions of young people and the possibilities for

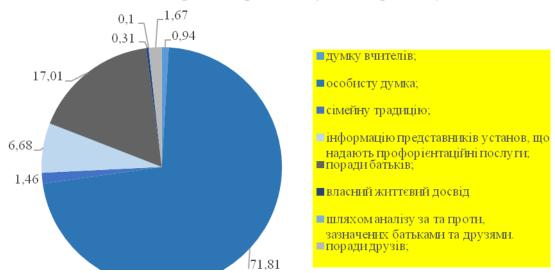
their maintenance in the region in creating favorable conditions for self-development and implementation.



Ability to get free education
The profession will help to organize own business
The profession will help you to find a job abroad
Contents of professional activity
Compliance with existing skills of the profession
Ability to carrier growth
The prestige of the profession
Prospects for employment
Worthy of the future

Figure 13. Priorities of youth in choosing a profession

Modern youth has a rather high level of autonomy and focuses on the majority in their own opinion when determining the direction of professional activity, about 70%. Based on the opinion of parents choosing a profession, 16.7% of students, and 7.3% of information from representatives of institutions providing services for professional orientation (Figure 14).



When choosing a future profession you were guided by?

The opinion of teachers Personal opinion

Family tradition

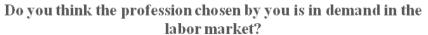
Information of representatives of agencies providing vocational guidance services Parents advice

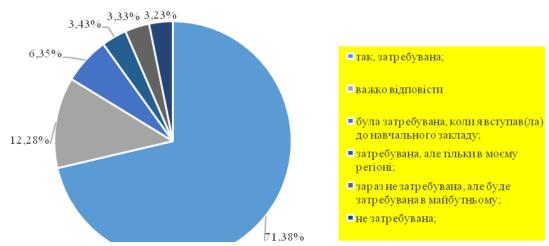
Figure 14. Youth orienteering when choosing a future profession

The results indicate that it is necessary to focus on the activities of youth involvement and informatization, programs of professional self-determination and popularization of individual professions.

Confirms the fact that the level of development of professional information in the region is insufficient, and the results of the survey on the evaluation of the demand for the profession, which students receive, are obtained. Most of them 71.38% consider their profession to be highly sought after in the labor market, although most of them study in specialties that are, on the contrary, redundant in the labor market of the region. The weakness of this vision is due to insufficient understanding of the processes of professional activity and the actual state of the youth labor market, as well as the prospects of employment. Confirms the previous thesis and 11% of respondents' answers, who determined that it is difficult for them to answer this question, and therefore their level of

awareness is rather low (Figure





15).

Yes, in demand
Difficult to answer
Was in demand when I entered the university
Demanded, but only in my region
Is not in demanded now, but will be in demand in the future
Not in demand

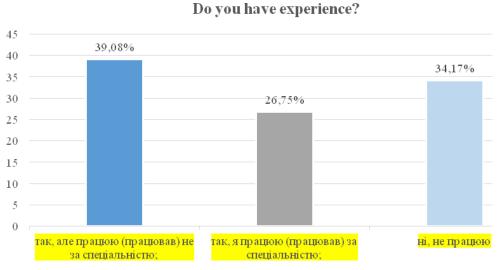
Figure 15. Estimation of the demand for the profession at the risk of labor in the opinion of students

Summarizing the conducted research block, we can conclude that there are gaps in the current system of professional orientation of the population of the region. The introduction of a set of measures for the diagnosis of professional identification and awareness of youth in relation to the world of professions and their demand will contribute to bringing the labor market to a more balanced state by correcting and building the vocational and educational trajectories of youth.

#### 10. LEVEL OF STUDENTS 'SATISFACTION WITH EDUCATION

#### 10.1 Professional experience of students (graduates)

The conditions of socio-economic nature, as well as military actions in the region, changed the general attitude of young people to life, artificially accelerated the process of their maturing and caused the need for the beginning of professional activity by students before the completion of their studies. According to the results of the survey, about 66% of students of senior graduation courses have experience, and only 26% work in a specialty that is positive and says that it is possible to improve and consolidate the acquired theoretical knowledge and skills in practice



(Figure 16).

Yes, but I worked not in the specialty

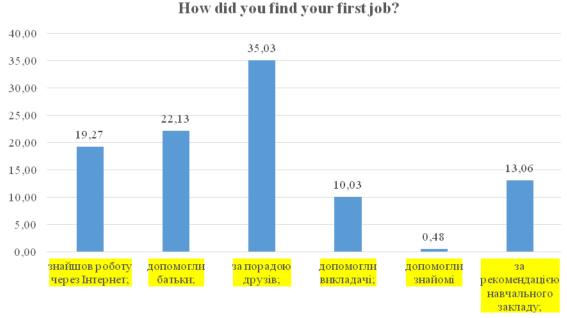
Yes, I work in the specialty

No. I don't work

Figure 16. Experienced students (graduates)

Most graduates seek their first jobs using advice from friends and acquaintances (mainly for work not for work and work for short-term earnings), the second place in the ranking of job search sources is the assistance of parents (22.13%), and the third place - modern internet resources (19.27%). Such a distribution of respondents' answers suggests that the educational institutions have a low impact on the employment process and requires the search for tools to expand job opportunities in the specialty, as well as the

prospects for organizing study placements for further employment (Figure



17).

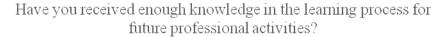
Found work through the internet Parents helped On the advice of friends Teachers helped Helped by friends

On the recommendation of the educational institution

Figure 17. The main sources of search for the first workplace by students

Students with experience indicate that most of them had sufficiently received at the university skills and knowledge in employment (57%), however, to fully assert the adequacy of this result, in terms of quality assessment of education can not be, because more than 60% of people, who gave a positive answer had experience of unskilled work not on specialty. About 40% of respondents say that they lacked practical knowledge, skills and abilities in their employment, while 20% of the respondents claim they lack knowledge, but they do not expect to receive them from educational institutions, relying solely on personal self-development and self-

#### education(Figure 18).





I tried to get knowledge I need independently Completely dissatisfied with the quality of education The theoretical knowledge I have received is outdated The theoretical knowledge I have received is almost... I will lack of practical knowledge, skills and abilities enough

# Figure 18. Assessment of the level of knowledge adequacy for students in employment

Studying the main reasons for the abandonment of employment received by the students (graduates) of educational institutions from employers, it is determined that almost all of them are among the problems of lack of relevant work experience (49.7%) and lack of professional knowledge and skills (25.2%), which students can not fully obtain due to the high level of theoretical knowledge of the learning process and the lack of appropriate professional training. Affected by students and age discrimination in the labor market, more than 13% of respondents say they were denied employment due to age

What difficulties did you encounter when looking for a job?

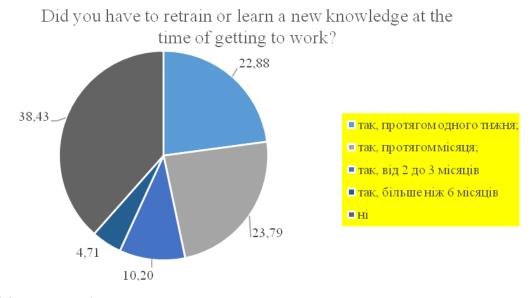


mismatch.

I found it easy to find a job
No work experience
Graduates of my university are not in demand
My specialty is not in demand on the labor market
Lack of necessary educational level
Age mismatch
Lack of professional knowledge and skills

# Figure 19. The main difficulties hindering the law the arrangement of graduates in the opinion of students

Despite the presence of a complex of difficulties in finding a job, one third of working students did not retrain when entering the job, another 22.88% of the respondents studied during the week and 23.79% during the month (figure 20).

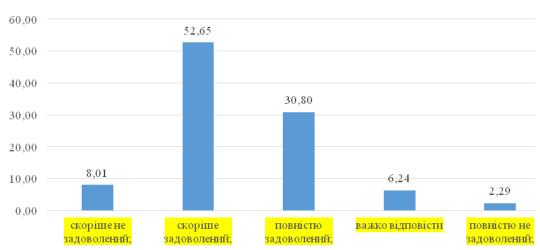


Yes, within one week Yes, within one month Yes, from 2 to 3 month Yes, more than 6 months No

#### Figure 20. Necessity of retraining in employment

#### 10.2 Satisfaction with the quality of the knowledge gained

The positive factor in the results of the student survey results is that most of them are satisfied with the overall quality of education they receive. Thus, 30.8% of respondents indicate that they are completely satisfied and 52.65% more satisfied. Only 10% of the polled indicate negative attitude to the received education



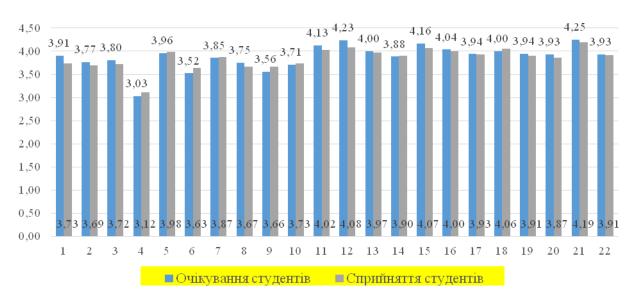
(Figure 21).

Rather dissatisfied Rather satisfied Completely satisfied Difficult to answer Completely dissatisfied

Figure 21. Overall level of satisfaction of students with the quality of education

Assessment of the quality of education by individual skills, knowledge and skills showed a high level of satisfaction with the knowledge gained, in most cases, the expectations of education formed and accumulated knowledge according to the students coincide, the average difference between the two criteria is 0.1 points. There are even criteria that are observed over quality, that is, the knowledge gained exceeded expectations, is the knowledge of foreign languages, the ability to work on a computer, knowledge of specialized applications required for professional activities, knowledge of the legislative and regulatory framework in the field of professional activity, ability to adequately to evaluate the situation, to recognize and take into account the majority of external and internal factors (Figure 22). The greatest disappointment is the students' quality of such skills as: general theoretical training on the profile, knowledge of the main

technological processes of professional activity, the skills of interpersonal communication, teamwork skills, the ability to search and use new information.

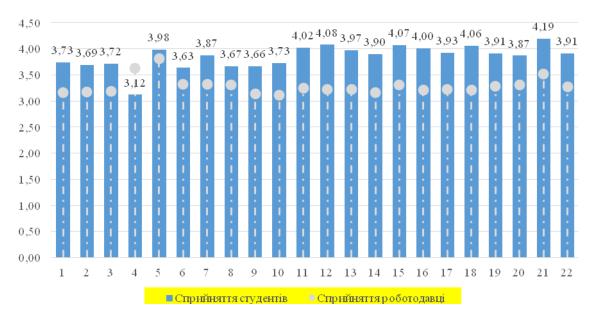


Expectation of students perception of students

Figure 22. Assessment by students of the quality of certain skills, knowledge and skills within the education system

However, to conclude that the real high quality of education is not entirely correct, because, firstly, the rates of assessment of students themselves are rather low (the average level of knowledge gained is 3.85 points out of 5 possible); secondly, ignorance of young people with special features of professional activity (only one third of them had experience of professional activity in the specialty), which did not allow them to objectively evaluate existing skills; thirdly, negative assessments of quality on the key indicators of the activity of the educational institution, namely, theoretical and applied training and individual social competences, were obtained.

In therm of assessing the quality of training in the education system, comparing the level of development of individual skills and competences in young people, according to employers and students (graduates) (Figure 23).



perception of students perception of employers

Figure 23. Comparison of the level of development of knowledge, skills and abilities of students (graduates) in the opinion of employers and students themselves

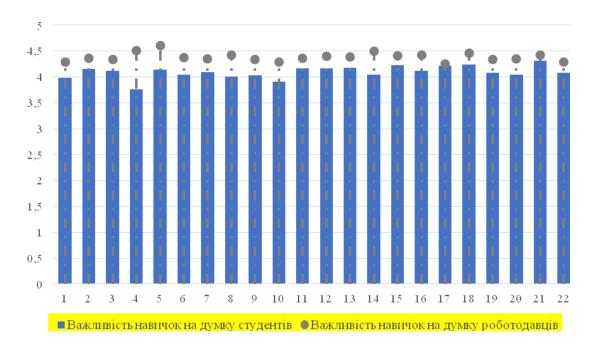
So, if, according to employers, the average overall level of assessment of the quality of the selected criteria is 3.29 points, then students assessed their knowledge of skills and abilities at 3.85 points out of 5. Most graduates overestimate themselves in: levels of ability to work in a team (difference by 0.85 points); the ability to adequately assess the situation, recognize and take into account the majority of external and internal factors (0.85 points); possession of interpersonal communication skills (0.77 points); the ability to search and use new information (0.77 points); ability to determine the purpose and tasks of their own activities, the order of tasks (0.76 points); ability to take into account corporate interests in labor activity (0.74 points); the ability to cope with new and unpredictable situations (0.71 points); discipline (0.68 points); leadership qualities (0.64 points).

The managers and employees' attitudes towards criteria are almost identical: knowledge of specialized applications; ability to work on a computer. In general, according to a subjective assessment by experts of the level of sufficiency of professional and personal qualities, the level of competitiveness of graduates is low and does not allow to compete on an equal footing on an equal footing on the labor market with a workforce with sufficient professional experience.

Existing labor quality problems are exacerbated by the lack of clear information and representations of students and graduates regarding the importance of the various personal and professional characteristics necessary for work. It does not allow an individual to form a true strategy of self-education and self-improvement in order to increase his competitiveness in the labor market. Emphasize this data obtained on the basis of a comparison of the criteria of the importance of the qualities of a specialist

Almost all of the evaluation criteria have shown a lower representation of employees compared with employers regarding the importance of certain personal characteristics in the process of work.

There are criteria, the importance of which is roughly equally assessed by two sides of the survey, that is: ability to cope with new and unpredictable situations and discipline. The greatest difference is in the perceptions of criteria as a knowledge of a foreign language (the deviation of the average score is 0.75); ability to work on a computer (0.47); ability to take into account corporate interests in labor activity (0.45); knowledge of the main technological processes of professional activity (0.42); possession of related knowledge and skills (not in the main direction of professional activity) - 0,38; knowledge of specialized applied programs necessary for professional activity (0.33) and others (Figure 24).



Importance of skills according to students 
Importance of skills according to employers

### Figure 24. The ratio of the assessment of the importance of professional skills in the opinion of employers and students

It should also be noted that, as well as employers, among the key skills of a modern specialist students identified: discipline, ability to adequately assess the situation, recognize and take into account most of the external and internal factors, the ability to search and use new information and skills to work on a computer that emphasizes their importance and needs constant development and improvement. This is especially the ability to adequately assess the situation, recognize and take into account the majority of external and internal factors, which, according to the quality assessment, fell into the problem segment.

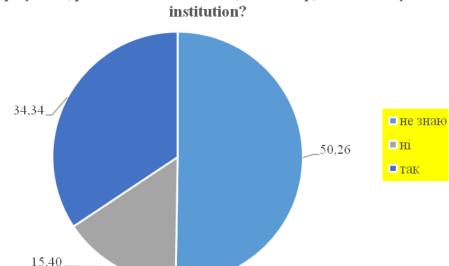
### 11. EFFICIENCY OF THE ACTIVITIES OF UNIVERSITY SPECIAL DEPARTMENTS AND THE PROSPECTS OF EMPLOYMENT

## 11.1 Career cents and their functioning. Additional directions of activity of the University for the promotion of employment

Career Development Centers are university-wide units that help create conditions for career development and employment of students, support their entrepreneurial initiatives through advisory and information services, non-formal learning, training, seminars, and higher education for students to carry out entrepreneurial activities.

The main task of most centers is to create a platform for the cooperation of universities with enterprises, public organizations, mass media, research institutes, business, government and local self-government in ensuring the implementation of the principles of sustainable human capital development.

These centers or functions similar in almost all universities of the region, however, unfortunately, most students are not aware of their functioning (50.26% of respondents), another 15.4% say they are absent, which means that these activities are not very effective. Centers in terms of informing students about their availability and the list of services they provide (Figure



Does your Career Center or any other body dealing with employment, professional orientation, internship, etc. exist in your institution?

25).

Don't know

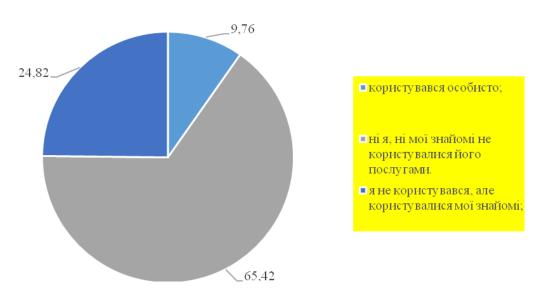
No

yes

Figure 25. Awareness of students about the availability of Career Centers at universities,%

Confirms the lack of knowledge of students about the functioning of Career Centers and the activity of using the services they are implementing. Thus, among the respondents, only about 10% of undergraduate students used his services, and another 24.82% indicated that they did not use them, but used their friends. All others, and more than 65% say they are not their friends, have not used the Career Centers' services (Figure 26). The presence of this fact underlines the necessity of carrying out a complex of actions on expanding the boundaries of consumers of the services of the Career Center and its marketing promotion, as a separate important structural unit of the





University.

Used personally

Neither me no my friends used his service

I don't used, but my friends used

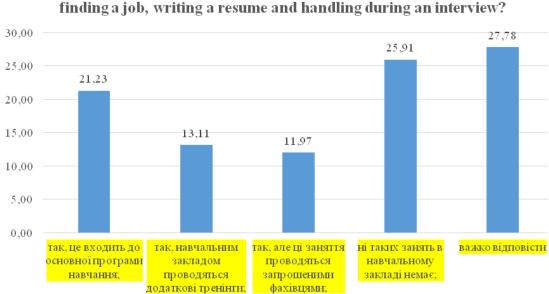
Figure 26. Students 'Activities to Use Career Centers' Services,%

Conducted focus groups among student assets of universities have shown that the establishment of career centers is supported by virtually all students, through cooperation with employers. However, some people want to attend such a center after graduating from the university if they could not afford to work independently.

There are examples in 3 universities where the Career Center is already in place. However, his main task is not employment, professional orientation and internship, but campaigning and establishing communication with the business, the Employment Center.

There are examples in 3 universities where the Career Center is already in place. However, his main task is not employment, professional orientation and internship, but campaigning and establishing communication with the business, the Employment Center.

The activity of the universities in terms of conducting classes for the formation of skills for job search, summarizing and handling during the interview is quite low. More than half of respondents say that such classes are not held (25.91%) or it is difficult for them to answer this question (27.78%), which says subjectively that students are not aware of their availability, and therefore, that they do not visit them (because of their absence or simply the reluctance to rebuild them). Of those who claim their presence, 21.23% say they are part of the core curriculum; 13.11%, which is carried out as additional trainings, and almost 12%, that the classes of such a plan are conducted by invited specialists (Figure 27). The lack of specialized knowledge and job search skills reduces the likelihood of their rapid employment, and therefore directly affects the growth of unemployment among



Are there any lessons in your school for the formation of skills for

graduates.

Yes, this is part of the core curriculum

Yes, additional training is provided by the educational institution

Yes, but this classes are held by invited specialist

No such classes in the educational institutions

Difficult to answer

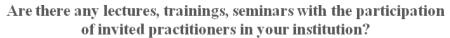
## Figure 27. Prevalence of additional training in universities for the formation of skills for job search and summary writing,%

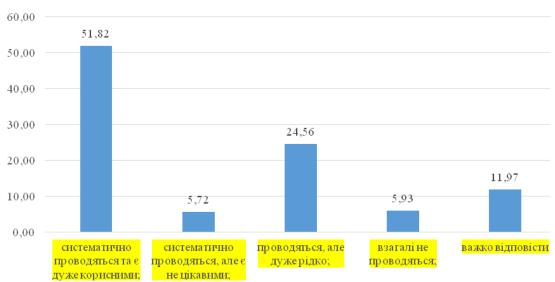
According to the students at the university, in separate institutes, additional lessons on writing a resume are conducted, from interviewing. However, such measures are not enough. Respondents noted the need for their conducting in different directions, mostly outside the university. In addition, for some specialties (management, public administration and administration) the summary is included in the curriculum. But at the university level, this work is not foreseen.

When creating such courses, some students expressed their desire to attend. Several students are doubtful about this, referring to the fact that they attended such trainings and did not receive anything positive for them.

As to the teachers' perception of the process of conducting occupations for the formation of job search skills and self-presentation, they note that in most universities, "There are academic circles, at the meeting of which teachers provide relevant information and inoculate the skills that are needed in the work. Legal clinics have been established in law schools. On a regular basis, meetings of company employees with students, lectures, seminars are held. Students will learn how to present themselves, how to gather information about the employer, how to work with vacancies, how to communicate with the employer. Conducted trainings on writing a business plan, forming a team. Students are interested in these meetings, but this is not enough.

"The most widespread among the additional services of the university that promote the creation of greater opportunities for the employment of students and the formation of additional professional competences in them is the holding of sections, training sessions and seminars with the participation of invited practitioners. More than half (51.82%) of respondents during the student survey noted systematic and usefulness of such measures, another 5.72%, that measures are carried out systematically, but are not interesting, and almost one fourth (24.5%) reported rare cases of such measures (Figure 29). In general, this sector of university activities can be noted as a positive and one that needs to stabilize the conduct and expansion of the subject.





Are systemically conducted and are very useful Are systemically conducted but are not interesting Conducted but very rarely Generally not conducted Difficult to answer

### Figure 29. Conducting additional trainings with the participation of practitioners at universities

Emphasize the results of quantitative research and focus groups, most of whose participants state the importance and curiosity of these classes and express their full readiness to attend.

A separate area of the activity of each university is the organization of the practice and internship of students, these measures themselves maximally affect the opportunities for the student to acquire practical skills, see the production process of their work directly and identify the gaps in personal training. Very often a properly conducted internship can be an impetus for the realization of employment opportunities at this enterprise. The study showed that most students enrolled in practical training programs (as this is a compulsory part of the education in accordance with educational standards) (Figure 28), however, the problem is finding places for internships and the quality of the internship process itself. So the students of the student focus groups note that in most cases, students of classical higher schools have to find the bases of practice themselves. However, there is also the possibility of passing the practice on the bases for the direction of universities, but this happens rarely (in most universities of departmental subordination). The main problem of the internship process is its formal nature, enterprises are often uninterested in this process, so they do not fully fulfill their function of providing students with practical knowledge and skills.

One of the problems of job placement noted by the teachers and the leadership of the universities is the "loss of practice bases in connection with the transfer of universities, sometimes they have to send students to other cities for internships that require additional financial costs to organize their relocation."

Consequently, we can draw a key conclusion about the formalities of passing the practice and reducing their effectiveness, which requires not only the intensification of the work of educational institutions in this area, but also the activation of enterprises in the region for participation in this

Are there any training programs for students in your university, at the enterprises/organizations of the region?



#### process

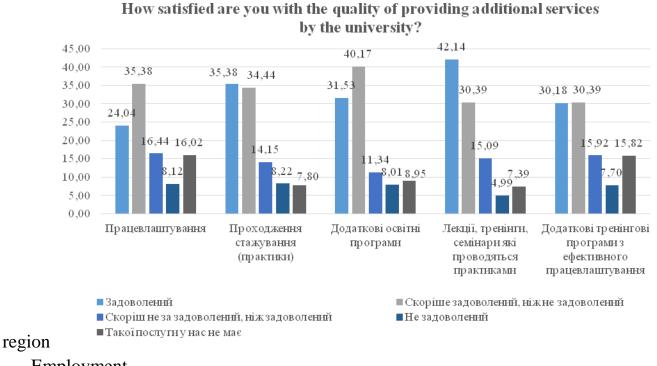
Yes, exist and are obligatory for all students Yes, but they are available only for some students No, we have not such program in our ubiversity

#### Figure 28. Prevalence of internship programs at universities,%

Student surveys, regarding the level of student satisfaction with the quality of additional services provided by the university, showed that the highest level of student satisfaction is lectures and trainings conducted at the university with the participation of practitioners (42.4% satisfied and 30.39% more satisfied than not satisfied). ) The second place in the quality assessment is the "Additional Educational Programs" service that can be obtained by students in the learning process (31.53% expressed their satisfaction and 40.17% partial satisfaction). The worst quality assessments are provided by the organization of facilitating employment by the university and conducting additional training programs for effective employment (roughly one fourth of students are dissatisfied with their quality).

Based on the study of additional services provided by the university for students, one can conclude that they are inadequate in terms of development and a high level of demand among students, which suggests the need for their active promotion, dissemination and

increase in overall quality. All this is possible by activating the Career Centers activity at the universities of the



Employment

passing internship

Additional educational program

Lectures, seminars, trainings conducted by practitioners additional training programs for effective employment

satisfied more dissatisfied we have not such service more satisfied than not not safisfied

Figure 30. Assessment of student satisfaction with the quality of additional educational services provided by universities,%

# 11.2. Prospects for expanding employment opportunities through the eyes of students and faculty

As part of a qualitative study on the prospects of youth employment, the following results were obtained by focus group method:

Teachers of medical and departmental universities do not see employment problems for students, due to the fact that they are employed according to the state distribution and the need of the region in these personnel. Only if a narrow specialization, then personally pick up a place of work.

According to the teachers of classical universities in the cities where they are located there is a significant problem of employment of graduates of higher educational institutions in the region, which is connected with the lack of infrastructure, investments, workplaces, support measures for small and medium-sized businesses, enterprises engaged in innovation development; low wages and so on. The city is not intended for a comfortable standard of living (outdated buildings, poor quality of services, lack of transport links, etc.). That's why alumni of regular universities and contractors are engaged in employment on their own. But many of them work not on the specialty because low wages in public institutions and the need for the region in the frames. In the process of training students do not receive a sufficient number of practical tasks. Commercial enterprises are not hired without experience, therefore, the best graduates from the regions go to the big cities of Ukraine and abroad.

Teachers note that most universities do not deal with employment at all, referring to the current legislation and internal regulations, after granting autonomy to universities. In their view, there are more urgent issues: security, provision of hostels and provision of quality education. In these universities, graduates decide on their own job placement issues.

The Donetsk Law Institute (DUI) and the Luhansk State University of Internal Affairs (LSUI) work through the placement of graduates according to the already established profile ministries.

The project "Implementation of quality of education at the expense of government, business and education synergy" was launched in Donetsk State University of Management on 2018-2022. Mastering foreign studies, applying to your university, your conditions. But the teachers are worried that this project was not just on the letter. The employment of university students also depends on his prestige. The university is not centrally staffed. However, companies sometimes turn to lecturers in order to recommend high-level students. No one leads the statistics of the currently employed.

In general, graduate students decide their own employment issues on their own. Some students plan to work in specialties. However, concrete actions on finding a job have not yet been committed. They outline the issue of possible employment difficulties in the specialty.

In addition, a significant number of students already at the previous stage (during the period of study) plan to work not in the specialty.

The main place of job search is carried out using various methods. The most common are job search through specialized sites - work.ua; rabota.ua, hh.ua, social networks - facebook or through friends.

The vast majority of graduates still do not see perspectives and desire for employment in the region while studying at the university, and therefore they plan to go to large cities of Ukraine, as well as abroad.

The main factors of moving to big cities of Ukraine and abroad are respondents who say: the possibility to work remotely, low wages (average wages in the region from 2 to 6 thousand UAH), the inability to work for a "normal position" in the absence of work experience, as well as the lack of infrastructure (places for leisure outside the university: fitness halls, cinemas, swimming pools, shopping malls, supermarkets, etc.).

A significant number of such students are planning to return home (on the occupied territory of Donetsk region). But this was stated by graduates of the Ministry of Internal Affairs, which are not related to departmental universities of the Ministry of Internal Affairs.

Most students of classical ZOOs see an ideal employment system through drawing up contracts for graduating employment between universities and enterprises at the stage of training.

Special programs need to be developed for the recruitment of young professionals.

Students see the main obstacle is the lack of practical experience, since businesses put one of the requirements to have hands-on experience.

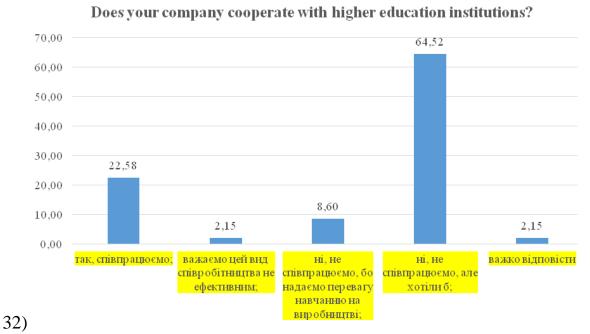
Graduate students outline the following problems with employment in the region: low wages; lack of career opportunities; mismatch of some specialties to the needs of the labor market of the region; lack of prospects for the region's development (according to

respondents); lack of grant support for the development of small and medium-sized businesses, as well as limited knowledge of the organization of their own business; the low level of university co-operation with employers who offer a broader rather than a highly specialized list of employment specialties; absence of interest of the local employment center in the employment of graduates;

Students are not given a clear answer "ready" or "not ready" they work according to the target direction, they discuss the positive and negative aspects of this type of employment. However, no clear answer has been given.

### 12. PERSPECTIVES OF COOPERATION OF BUSINESS AND EDUCATION INSTITUTIONS

The organization of close cooperation between educational institutions and business today is seen as one of the key tools to overcome the existing gap as a labor force and employer requirements, as well as overcoming the unemployment among the younger generation. However, a sociological survey has shown an inadequate level of social partnership programs of this kind in the region. Almost 72% of surveyed employers acknowledge that they do not cooperate with the universities of the region, but most of them (75.76%) acknowledged their willingness to organize such cooperation on parity conditions of interest to them (Figure 31,



Yes, we cooperate

We consider this way of cooperation ineffective

No, we don't cooperate, to give preference to training at work

No, we don't cooperate but would like to

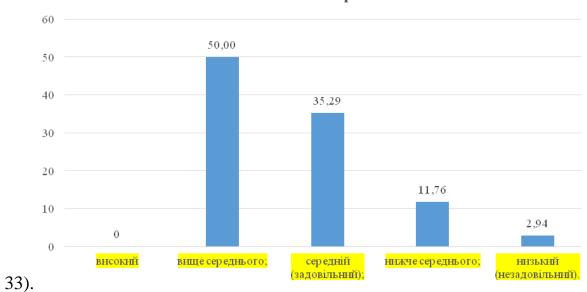
Difficult to answer

Figure 31. Cooperation of employers with educational institutions,%

Among the respondents who noted the presence of such partnerships, which is almost 23%, half assess the quality of this form of cooperation as higher than the average, and another third as the average. Negative is the fact that none of the respondents noted the high quality of the organization in explicit cooperation, and about 13% recognized this cooperation ineffective. The results suggest the need to improve the existing systems of interaction, by bringing them closer to ensuring full satisfaction of all parties to such

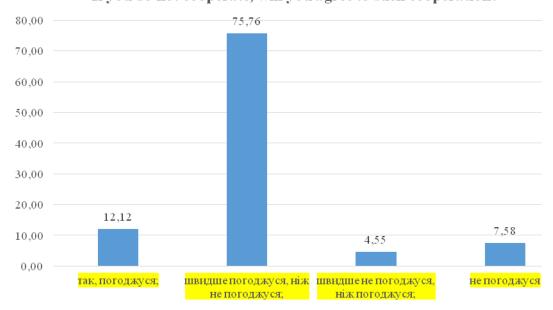
partnership (Figure 32,

### If you collaborate, how can you rate the level of these relationships?



High above average average below average low Figure 32. Assessment by employers of the quality of cooperation with educational institutions,%

If you do not cooperate, will you agree to such cooperation?



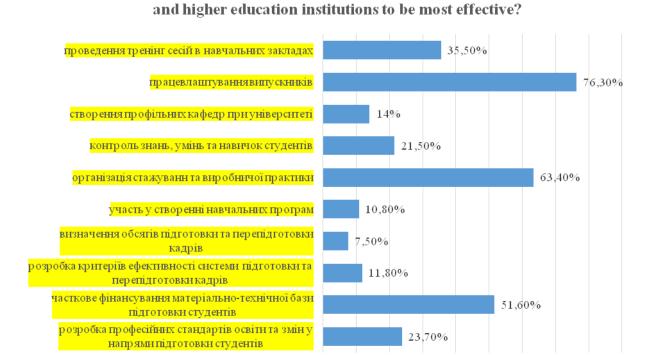
Agree more agree, than not more disagree disagree

Figure 33. Readiness of employers to cooperate with educational institutions,%

Among the most promising areas of partnership between educational institutions and business, employers recognize the organization of graduates employment (76.3% of respondents), which again speaks of their readiness to accept youth for work, but subject to improving the quality of their training. The second city among promising areas of

cooperation is the organization for students of internship and production practice (63.4%); the third place is the partial financing of the material and technical base of students' training (51.6%), but on the condition of realization of training programs for the accumulation of professional skills and priority employment opportunities for students prepared for equipment (software products) that were financed by the enterprise. The least effective form of cooperation employers see their participation in determining the amount of training and retraining of staff (7.5%), although in-depth interviews have shown, on the contrary, the openness of key employers in participating in this process, especially for large enterprises.

They do not see a great prospect of cooperation between employers and in the sphere of participation in the writing of educational programs and the development of criteria for the effectiveness of the system of training and retraining of personnel in the region, while expressing their readiness to participate in the creation of professional standards (23.7% of respondents).



 $0,00\% \\ 0,00$ 

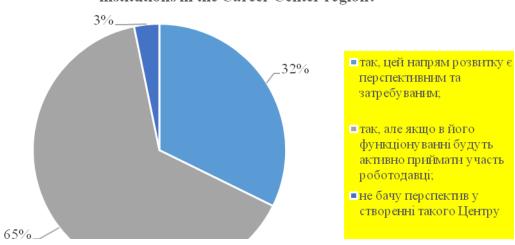
In what areas of activity do you consider cooperation between business

conducting training sessions in educational institutions employment of graduates creation of profile departments at the university control of knowledge and skills of students
organization of internship and work practice
participating in the creation of educational programs
definition of training and retraining of personnel
development of criteria for the effectiveness of the training and retraining system
partial financing of the material and technical base of student training

development of professional standards for education and changes in the direction of student training

### Figure 34. Perspective directions of organization of cooperation between enterprises and educational institutions in the opinion of employers

Regarding the prospects of the establishment of Careers Career Centers by employers, both quantitative and qualitative sociological research recognized the full effectiveness and appropriateness of this process (97% of respondents). However, most of them indicate that an obligatory condition for its operation is the active involvement of employers in its operation and implementation of individual projects (65% of all respondents) (Figure



How can you assess the prospects for creating higher education institutions in the Career Center region?

35).

Yes, this direction of development is promising and demanded if employers are actively involved in its functioning I do not see the prospect of creating such a center

# Figure 35. An assessment of the prospects for the creation of Career Centers in the opinion of employers

Thus, the analysis shows a high level of understanding by employers of the need to organize cooperation between business and educational institutions, but with the full partnership and parity of benefits and investments in this process of interaction.

### 13. FORMING STANDING CONTINENT AND STORAGE OF INTELLECTUAL POTENTIAL OF THE REGION.

The conducted social study showed that the imbalance between the demand and supply of personnel in the labor market is to a certain extent due to the lack of effective interaction between the activities of the ZOE and the needs of the real sector of the economy. Today, the business is one of the most important and real customers for professionals. In the absence of skilled personnel, including in narrow specialized areas of knowledge, business begins to actively fill the shortage of knowledge "by their own efforts" or through new forms of additional education - second higher education, advanced training courses, seminars, business schools, etc. These educational forms are much more oriented towards the needs of modern society, the emergence of new industries and productions than traditional five-year education. Therefore, work on student contingent formation and intellectual potential preservation should start with the establishment of close cooperation between the ZOO and the employers of the region.

The orientation of the modern education of the region for the training of specialists in humanities, in particular legal, social, economics and management, led to a sharp shortage of personnel in engineering, construction specialties, working professions, etc. (Table 1).

Table 1 Disparities in the labor market and educational services market

Disproportionate	Problem Description	Causes			
The gap between	Insufficient offer of working	In the structure of the regional economy the			
demand and the supply	construction specialists, drivers of	predominant position is occupied by the			
of skilled workers in	vehicles and installations, working	branches of mechanical engineering, chemical			
quantitative and	utilities, light industry workers	and coal industry, and electricity.			
qualitative terms		Popularization of higher education violates t			
		balance of training of specialists at different			
		levels of education.			
The gap between	Insufficient supply of livestock,	Undeveloped socio-cultural sphere in the			
demand and supply of	agronomists, mechanics, livestock	countryside, low wages			
specialists of					
agroindustrial complex					
The surplus of		Re-qualification of specialists with higher			
specialists in the	Insufficient demand for accountants,	professional education.			
financial, economic	financiers, economists, lawyers	The customer of higher education services is			
and legal fields		the population, which does not take into			
		account the regional demand for specialists			
Youth unemployment	The labor market requires specialists	Low competitiveness of graduates of ZOO;			
	with experience	lack of information on market needs at the time			
		of the accession to the law and real			
		employment opportunities; the labor market is			
		characterized by an over-supply of highly			

		skilled professionals				
Increased demographic burden on the able- bodied population	Dynamics of the ratio of able-bodied and disadvantaged population	Negative demographic trends; when quantitative imbalances (attraction of migrants) are filled - qualitative inconsistency of				
		educational levels				
Rural unemployment	Territorial mismatch of the vacancy	Undeveloped socio-cultural sphere and				
	rate by the supply of labor	infrastructure in rural areas				

The lack of quality education and suitable work (with competitive pay and working conditions, etc.) is a catalyst for the migration of young people (in particular, both students and young scientists) to seeking education / work abroad. The approach to the zone of military conflict will further activate the above-mentioned process.

According to UNESCO, an important - almost two-fold - increase in the number of Ukrainian students abroad occurred after 2013 and in 2015 reached its peak (66.7 thousand people). As of 2016, the number of Ukrainian students abroad has decreased somewhat, but this may be due to incomplete data (Figure 2).

80,0 70,0 60,0 48,8 58,5 50,0 40,0 33.4 32,2 31,5 31,4 25,6 26,7 30,0 30,2 16,5 <sup>16,9</sup> 16.4 20,0 23,3 17,2 10,0 0,0 2015 2016 2000 2002 2003 2004 2006 2008 2009 2010 2013 001 2007 2012 2014

Fig. 2. Number of Ukrainian students abroad (thousand persons), 1999-2016

Source: According to UNESCO.

It should be noted that Ukraine does not have statistics on citizens studying abroad, as well as information on the number of them returning home after graduation.

In the course of the focus groups for students of displaced IDUs, almost half of respondents indicated their desire to study and work abroad. The youth of Luhansk and Donetsk oblasts consider educational migration, mainly as one of the ways of emigration, a kind of social lift, which gives an opportunity to enter the labor market of the EU countries.

Popularization of studying abroad is actively pursued by foreign ZOO and intermediary firms in the region in the schools, public transport, educational exhibitions. This is accompanied by the general spread of confidence in a better life abroad. As a result, foreign education becomes something desirable, despite the advantages and disadvantages associated with it.

By 2014, the Russian Federation was the leader among the countries that host students from Ukraine. It is clear that since the beginning of the armed conflict a reorientation took place, and Poland came first, although Russia holds the second place with a large margin from Germany, ranked third in the number of Ukrainian students (Table 3).

Table 3. Countries with the largest number of students from Ukraine (thousand people), 2013-2016

Year/C ountry	Poland	Russia	Germany	Czech Republic	Italy	USA	France	Hungary	Austria
2013	9,5		5,4	1,8	1,9	1,4	1,1	1,3	1,0
2014	14,7	12,0	5,6	2,1	2,1	1,4	1,1	1,2	0,9
2015	22,5	21,8	5,8	2,3	2,4	1,5	1,2	0,9	1,1
2016	29,2	22,4	•••	•••	•••	•••	•••	1,1	1,2

Source: According to UNESCO.

Statistics on Ukrainian citizens studying in postgraduate studies abroad (PhD programs) are limited. According to CEDOS, in the 2015/2016 academic year, the number of Ukrainian PhD students was 1,600. The main countries for obtaining a degree for Ukrainians were Germany (525 persons), Poland (380 persons), Czech Republic (223 persons), France (201 persons), Switzerland (105 persons). However, postgraduate data in the U.S., U.K. and Canada remained unknown due to paid access to information.

The issue of leaving Ukrainian youth for studying abroad has only recently begun to focus on Ukraine. There is a lack of qualitative research in this area and relevant statistical information.

However, it is already clear that it is the lack of jobs and decent wages that promotes the outflow of young people and the search for employment opportunities abroad. That is why, strategic education policy should provide young professionals with jobs, according to the level of their professional training and taking into account the

possibilities of the national economy. However, the priority of the role of demand in the labor market in achieving this goal is not unconditional. Achieving a market equilibrium is possible in an ideal market economy. In real conditions, there are various exceptional factors that make their own adjustments and which should be considered.

Thus, the relative surplus of specialists with higher education in the labor market in terms of objective economic laws requires a reduction in the number of universities, a set of students, and the cost of education. However, the socio-cultural analysis of this problem suggests that such actions will reduce the intellectual potential of society, negatively affect its quality, become a constraining fact of economic growth and, finally, it will contradict the objective processes of social progress - the formation of the information society and knowledge economy. *In view of the above, it is not necessary to reduce, but to reorient the development of higher education, to create mechanisms for coordinating the supply of educational services and labor market needs, to engage in strategic planning of the development of this sphere.* 

The labor market, in particular in the Donbass, formulates modern requirements for the market of educational services, therefore the effectiveness of educational policy should be measured by the indicators of the quality of education, its accessibility and the needs of the labor market. The urgency of this problem becomes even more evident on the background of the expansion of the sphere of paid education.

In analyzing these problems it is important to take into account that the structure of the modern labor market is represented by constant and variable determinants. Permanent determinants have relative stability, they are not difficult to predict, and the offer for these determinants, as a rule, exceeds the demand that provides competition for jobs and the ability to choose from employers.

These include specialties related to the development of the most important industries of any country, and therefore have a steady demand in the labor market.

The peculiarity of the temporary determinants is the leap-like appearance of increased demand, and the same rapid decline after satisfaction of the offer.

The problem of disturbance of the equilibrium in the labor market in the region is aggravated by the low level of youth awareness about the state and dynamics of demand

for a particular specialty, the formation of public opinion about the prestige or lack of prestige of different professions, and more often, the effect of temporary advantages in choosing a specialty. Thus, a lot of professions are offered to young people, but there are no objective criteria (or information access to them) for assessing the future effectiveness of today's professional choices. And this, in turn, exacerbates the problem of investing in human capital.

Turning to the experience of Western countries, we can state that in the most developed of them, the forecast of the dynamics of the labor market is paid much attention. In particular, in the United States, such forecasts are developed at the federal and state level, and are available to any interested person.

At the international level, institutions such as:

☐ Bureau of Labor Statistics, which maintains regular statistics on the state of the labor market, and calculates forecasts for occupations and branches of economy every two years;

☐ Ministry of Education;

□ National Science Foundation - Center for Personnel Research providing research and development activities in the country; The professional formation of the personnel, starting with the students of the senior classes of schools, the student contingent, postgraduate students, doctoral students and, finally, graduates of high schools of different levels of qualification (bachelor, master or doctor) is monitored.

The statistical data and analytical reports of these institutions contain the most reliable information that allows forecasting the dynamics of the labor market using the tools of mathematical statistics and probability theory.

Of course, such forecasts are not always accurate, given the specificity of the dynamic and influential factors of multilevel factors - from global and world to regional and local - the labor market. For example, the magnitude and consequences of the end of the conflict in the East of Ukraine can hardly be foreseen and reflected in similar projections.

Meanwhile, the growth of private investment in the higher education system, an increase in the proportion of students studying on a pay-as-you-go basis, increase in

population spending for additional competencies, raise the issue of the economic efficiency of these investments.

The growing interest in the services of higher professional education without taking into account the needs of the labor market is explained by the social value of higher education as a factor in the sustainable social status of the individual in society.

The lack of young people's confidence in the prospects for employment, leads to the restoration of the latest non-standard strategies for selection from the general mass. So, one of the popular strategies of "mass individualization" is to combine learning with the work of the 3BO.

Studies related to studying the employment experience and labor mobility of graduates of the region's 3BO show an extremely high scale of mass re-profiling of young graduates.

Prospects for the progressive development of modern society are determined primarily by the availability of postgraduate higher professional education. Therefore, it is no accident that programs for the development of such education are being implemented in many countries of the world - the USA, France, Germany, Great Britain, Japan and others.

Consequently, in modern conditions, it is necessary to intensify the processes of supporting youth initiatives in post-graduate vocational training and employment, encouraging them to actively seek employment and obtain a specialty or occupation that is in demand in the labor market. For this very important information is given on the prospects of professional growth of young people.

Promotional and educational activities should be the main measures to be taken to reduce youth unemployment both in the region and in the whole of Ukraine. This requires:

to create Youth Centers / Labor Office (like international experience);

to implement projects aimed at financing employment promotion measures among young people in the region;

On a regular basis (at least once a year) to analyze the specialties, professional skills and the level of qualifications required for graduates;

to include compulsory internship in the curricula;

to introduce a mechanism of propaganda among students of work in combination with time-free training and the organization of experimental enterprises in 3BO;

to develop and implement a mechanism for financial and other support of enterprises, institutions and organizations of the region involved in providing internships for students, as well as their employment, including part-time work;

conduct trainings, trainings on job search technology, employment opportunities, as well as intensifying their own efforts in solving employment problems and increasing self-esteem;

to distribute materials on: employment issues; I will be in the regional labor market; potential employers in order to create conditions for self-determination of the person;

organize meetings with employers and former unemployed who have successfully found a job or established their own business. Ensure wide coverage of positive experiences by the media;

to introduce in the programs of educational institutions courses on technology of job search and optional lessons on organization of own business;

To coordinate international activities: in the exchange of students for the purpose of internship, volunteer and temporary work;

To implement programs of self-employment of young people, in particular allocation of budget funds for the organization of their own business with legal support in the first year of business start-ups (such as a pilot project on attracting members of low-income families and internally displaced persons to the CMU Decree No. 1154 dated December 2, 2015);

organize trainings with practice in business (step-by-step instruction), features of fraichanzinga, etc.

The main measures within the reform of the education system should be: creation of an effective and effective system of continuous education;

the introduction of discipline in all educational institutions, which would be taught by a practicing psychologist. The purpose of such discipline should be the formation of positive motivational behavior among young people in relation to work, self-confidence, etc.; creation of graduates (Career Centers) employment units in all educational institutions:

realization of forecasting of volumes of professional training of youth in educational institutions of different types taking into account demand in the labor market. Increase of state orders and MES scholarships for specialties that are in demand in accordance with the region;

increasing the availability of postgraduate education.

Additionally, it seems appropriate to pay attention to the problem of migration of scientists / teachers to the Donbass. It should be noted that such migration is an all-Ukrainian problem, because mainly scientists move not on the territory of the country, but beyond its borders.

Currently, in many countries, where the field of science began to experience the negative effects of the outflow of scientists, many measures aimed at their return are being implemented. It should be noted that domestic legislation does not pay enough attention to this. There are no measures aimed at preventing migration of scientists and in Strategy 2025. However, given the negative effects of this process, in particular the reduction of the country's innovation potential, it seems appropriate to create the preconditions for improving the situation in this area.

In particular, it is advisable to identify among the goals of the Strategy 2025 the implementation of measures aimed at preventing the migration of domestic scientists. To achieve this goal, it is expedient to provide the following tasks:

1. Allocation of grants to own scientific developments. In particular, increase budget expenditures to the State Fund for Fundamental Research for this purpose, facilitate the attraction of funds to domestic funds of this entity, envisaging at the legislative level the possibility of reducing their taxes, fees and compulsory payments by this amount).

This practice has successfully proven itself at the domestic level. For example, in the UK, for five years, the government has allocated \$ 6 million annually to return from the United States about 50 leading English scholars. In Canada, the government has allocated \$ 205 million to create 2000 new proposals from leading research staff - again

for those currently working in the United States. Each scholar who returned was granted a grant for a term of 5-7 years with the possibility of its further extension.

2. Creation of industrial parks for specialists who have received education abroad, as well as provision of their employment (allocation of budget funds for job creation and establishment of competitive wages, depending on availability of appropriate qualification requirements and professional skills). Due to the implementation of such measures, many scientists, engineers and businessmen from China and India who went abroad to work at universities and research institutions returned home.

The Government of the People's Republic of China also seeks to increase transparency in the recruitment process and establishes a competitive salary for researchers from abroad. At present, an on-line information platform and a database of Chinese graduates are available to facilitate their return.

An interesting experience in this case is Taiwan, where the Government approved in 2005 a plan for the liberalization of the existing rules for the recruitment of foreign professionals.

Among the measures planned by the Government of Taiwan, it is anticipated:

Granting scholarships to students studying abroad;

dismissal of military service of young students, students abroad;

creating incentives for second-generation students to return and work at home;

expanding the field of attracting foreign specialists at the expense of India, Russia, Eastern European countries;

creation and development of "single window service" for foreign staff arriving in the country.

3. Reduction of income tax for the corresponding categories of domestic scientists. International sociological studies indicate that this fact is crucial for many highly paid scholars when changing their place of work. Thus, according to the Austrian Research Center (ARC), 400 Austrian scientists and researchers travel abroad annually due to the high level of taxation.

That is why, at the legislative level, it should be foreseen, for example, by the decision of the Minister of Education and Science to make decisions / dismissals of

relevant categories of foreign and domestic scholars (migrants) from income tax for a term of three years.

This practice is typical of many countries. In particular, in Denmark, foreign experts receive tax benefits during the first three years of residence. More preferential tax rules for foreign researchers and other experts have been proposed by the Dutch Ministry of Taxation, where foreign highly skilled workers receive a 30% discount to the income tax for a period of 10 years. In turn, non-residents in the UK receive tax benefits until they change their place of residence.

4. Facilitating the strengthening of relations with scientific diasporas.

In particular, in the absence of the possibility of returning scholars, it is useful to hold meetings of scientists and familiarize them with scientific or academic work of each other, as does AsciNA in Australia. Several organizations of the Australian Scientific Diaspora have recently emerged to establish contacts with Australian researchers around the world (for example, Network for Expatriate Australian Researchers (NEAR)).

It is also interesting that Switzerland's open-ended Swiss Talent web platform for the communication of Swiss scholars abroad and foreign scholars working in Switzerland. It offers various services such as personal and professional information about network members, job offers, etc. Additionally, we note that the Internet Directory (Swiss-List.com) has been created in the United States for the purpose of providing communication between Swiss scholars and graduate students working in the USA with colleagues in their homeland.

The attention and experience of France, in particular, the Ministry of Foreign Affairs, pays for meetings between French doctors of sciences, working in American research institutions and French companies, and so on. A similar practice should be introduced in Ukraine.

Concluding the analysis, it should be noted that Ukraine is gradually moving towards solving problems in the area of preserving the intellectual potential of the population and preventing its migration. Undoubtedly, such actions require appropriate improvement on the principles presented in this study. Particular attention is being paid to the programmatic approach in solving a number of problems in the field of migration

policy. In particular, it seems expedient to develop programs for facilitating the return and reintegration of migrants in the Luhansk and Donetsk oblasts covered by the most massive labor and intellectual migration. It is the programmatic method that should be used as the basis for the legal mechanism for promoting the preservation of the intellectual potential of the region.

#### 14. RETURN OF MATERIAL TECHNICAL BASIS AND PERSONNEL PROVIDING LANGUAGE SCHOOLS

The problems of displaced higher education institutions, which are 16 in Ukraine, are similar. The geography of the resettlement of the university covers the whole country: Kharkiv, Vinnitsa, Kryvy Rih, Severodonetsk, Starobelsk, Mariupol, Krasnoarmeysk and others. The problem is relevant, given the scale of resettlement: four thousand teachers, almost 35,000 students throughout Ukraine.

As the branch of educational services is becoming more and more marketable, universities in the exile have faced an urgent need for the introduction of their educational services into new markets.

An educational institution, as a producer of educational programs, offers in the education market its products and services through its graduates. Education as a specific product (service) has a dual nature, which consists in the fact that the university functions simultaneously in two interconnected markets: firstly, in the market of educational services; secondly, in the labor market.

However, the main feature of educational services is the creation of spiritual values, the formation of human capital, which can not only provide space, but the leading, skilled and conscious scientific and pedagogical staff.

In the conditions of the transfer of the educational institution to another geographical area to the specified features, it is necessary to include a certain list of problems that need to be further resolved through:

- lack of own funds for placement of students;
- necessity of renting a home by teachers;
- Insufficient size of the auditor's fund;
- Significant losses of students during moving;
- practical loss of the material and technical base of universities (research and training laboratories);
  - loss of library funds;
  - loss of part of the documentation;

- psychological stress, the need for a period of adaptation;
- changes in the structure of higher education;
- the lack of its own market niche among consumers in the new territory.

In addition, the critical condition in times of crisis is the ability and speed of educational institutions and their staff to respond to challenges of the external and internal environment.

For example, the development of information technology, has brought to the market the programs of distance learning, which combine the independence of correspondence education with the possibilities of individual consultations with teachers. In the conditions of the territorial separation of students, part of teachers and educational institutions, the availability of such forms of education can be considered as a way to fulfill obligations to clients of educational programs (students).

The introduction of marketing in the activities of educational establishments necessitates significant changes in the management of their activities based on the application of strategic management and planning, the main directions of which are:

- the formation of a new type of citizen with an indelible civic position and level of consciousness:
  - formation of high aesthetic and intellectual tastes of the population;
  - identification of personnel problems and training of relevant specialists;
- development of new types of services and technology of their production. Flexible response to market demand;
  - Formation of funding sources;
  - development of new relationships with patrons and sponsors;
- establishment of international relations, search for investors for educational programs;
  - a combination of science and education;
  - commercialization of scientific and educational programs.

All these directions together constitute a marketing strategy, on the basis of which determines the tactics and ways of its transformation into specific tasks of the educational

institution of a new type and its implementation, achieve social and social effect and minimize socio-economic risk.

In fact, we are talking about the latest marketing technologies in the field of education.

It is known that a difficult problem for displaced institutions is to restore the material and technical base to ensure their quality work. Today, the various types of voluntary donations, contributions, deductions from private individuals, enterprises and firms for their intended purpose for educational needs play an important role in strengthening the financial and material base of education in the exile. That is, it is about sponsorship and patronage, which in Ukraine almost only began to develop. However, the implementation of each major project, and the activities of the university of national level is a major project, can only happen with the active sponsorship of commercial firms, large industrial and agrarian enterprises, commercial banks.

Recently, in Ukraine there were new forms of cooperation between enterprises and commercial structures in order to combine material and financial resources. Such cooperation deserves all kinds of support in order to further develop these relations in Ukraine. First of all, the regulatory and legal framework for the development of cooperation between enterprises of all forms of ownership and management with educational institutions, changes in forms with their taxation needs to be improved. From the institutions of science and education, such cooperation should be widely advertised and promote the creation of a special "image" for these enterprises and structures.

Such cooperation between the transferred university and the international donor is an example among the displaced Ukrainian universities, which is likely to be useless in hopes of obtaining sufficient amounts of public funds to restore.

The problem of creating and improving the material and technical base at least to the level that was before moving can be solved through the cooperation of internally displaced universities with international donors. So, new chemical and physical laboratories, modern computer classes, a library, a press center and production studio - all of this was earned in the transferred Donetsk National University thanks to support from the International Renaissance Foundation. 350 thousand dollars within the framework of

the project "European Development of Donetsk National University", which is completed by the end of this year, are designed not only for the purchase of equipment, but also for support of the hardware functioning of distance learning, as well as the introduction of new distance courses, the development of student and teacher mobility.

The strategic goal of the personnel policy is to ensure an optimal balance of the processes of restoration and preservation of the numerical and qualitative composition of the teaching staff in its development in accordance with the directions and requirements of the society, the system of higher and secondary vocational education, the requirements of the current legislation, the state of the economy of the country. The foundation of this provision is the right choice and selection of the teaching staff. So, our goal is to identify the right strategy for selecting qualified staff at universities and ways to save them.

Insufficient rotation of staff increases the crisis of professional and qualification structures of the university sector, because it holds back the influx of young, trained specialists who have knowledge of new technologies that are exploring new areas of science. A significant percentage among the leaders of the research units of the older age group forms corporate interests, hampering the development of science, especially in the humanities. This raises new problems in the personnel policy of universities, the solution of which would lead to the consolidation of the most talented teachers in higher educational institutions, which in most cases depends on their demand, satisfaction with their work.

The peculiarity of modern personnel policy in the field of education is due to its spontaneity and the absence of any clear principles for the selection of teaching staff. Meanwhile, the negative tendencies that have appeared especially recently, such as the aging of the faculty, the outflow of young teachers in commercial structures, abroad; the breakdown of the heredity of generations, caused the need to develop a concept of personnel policy in the system of higher and secondary vocational education.

The problem of preserving and restoring the personnel structure is characterized by both positive trends and crisis processes. The positive trends include the following: the restoration of the legal framework for the functioning, training and improvement of the qualifications of the scientific and pedagogical staff of the higher school; tendency to increase the number of staff (regular) personnel, working part-time; an absolute and relative increase in the number of teachers having a Ph.D. degree and a professor's rank; increase in the total admission of postgraduates; reduction of administrative and bureaucratic pressure on teachers; wide development of the process of formation of professional academic societies such as unions, associations, public academies of sciences, etc.

In our opinion, the crisis processes that need to be addressed include: the fall of the prestige of the profession by a lecturer in higher education; physical aging of the faculty of higher education; outflow of prospective and young people abroad; low salary and lack of teacher's social protection; catastrophic deterioration of material and technical and scientific and informational conditions of teaching work; reduction of research and methodical components in the activity of teachers; raising the motivation factor.

Proceeding from the analysis of the practice of activity, publications of scientists, we suggest that the main tasks of personnel management policy of higher educational institutions be as follows:

- Activation and qualitative transformation of the innovative capacity of the teaching staff of higher educational institutions;
- Careful attitude towards the senior generation of teachers, support of their professional activity;
  - support of the corporate culture of solving scientific and educational problems;
- ensuring transparency of the rights and responsibilities of all subjects of the higher education system, planning and control methods of their activities, clearly integrated into the cycle of management of the system of higher education at any level;
- observance of the rights of autonomy of educational institutions in solving personnel issues.

An important issue in the recruitment process is salary issues. Salaries, working conditions and all issues related to the conditions of employment of teaching staff at universities, in our opinion, should be determined through a voluntary process of negotiations between organizations representing the interests of teaching staff of higher

educational institutions, and employers of university teachers. In market conditions, much attention is paid to the motivation of labor. One of its methods is the additional surcharges and allowances.

Therefore, the selection of staff should be more detailed, to plan this selection, to conduct continuous monitoring. For optimal selection of staff, you should use several recruitment strategies.

At the present stage, with the spontaneous formation of human resources, it is necessary to form an optimal model of management of higher educational institutions, as well as to more closely relate to the issue of motivation of the teaching staff of universities.

#### **CONCLUSIONS**

Donbas Universities has always played a powerful role in the field of science, education and innovative development of the state. It is not the best times for them due to the conflict in the East and the difficult socio-economic situation. That is why they have to work in new conditions, and most importantly, time we live in makes new needs necessary. This is a serious test on our ideals, values and guidance that each of us has supported in 2014. This requires us to be one step ahead in order to identify trends and formulate a new approach to higher education actively. In this regard, it makes sense to renew our vision for consolidating joint efforts to make the image of the future university and the place a modern one should take in the context of the growing complexity and uncertainty of the environment. That has caused the necessity to formulate the following strategic goal of the Donbas Universities development: "To improve the quality of highly skilled specialists training in research and professional fields and educate the harmoniously developed personalities, in the main areas of university education. It will enable them to work successfully in the occupation they are qualified to develop a Ukrainian society based on the global knowledge economy".

The segmentation of the strategic goal of regional universities makes it possible to highlight the following sub-goals of strategic development:

to form the highly skilled professionals whose professional competence corresponds to the actual needs of the environment;

to form the intellectual elite of society in the main directions of university education; to develop fundamental and applied scientific schools in the main fields of university education at their synergy cooperation with academic institutions, industry and the public sector to ensure their harmonious convergence within the framework of innovative processes, which is a necessary condition for the socio-economic development of Ukraine in a global economy based on knowledge.

Systemic and situational approaches should be used as the methodological basis for managing regional universities.

When developing conceptual recommendations for the strategic development of regional universities, it is necessary to take into account the main principles that outline their general content, the variety of possible objective external factors, tasks and activities. When variety of specific objectives and measures to achieve the strategic goal is formed, it is necessary to carry out the monitoring as for their accordance to the main principles. It is proposed to include such principles:

competency principle of training;

continuity of professional training organization;

humanization of the educational process;

innovative content of education;

the unity of the fundamental and applied component of education; partnership of all participants in educational activities at the university; flexibility of educational activity;

degree of higher education;

taking into account the region and state needs in future specialists.

Principles content is simply to be interpreted based on their names.

The development of the Donbas Universities, which also includes a society based on the knowledge-based economy, has to go through a certain trajectory, and its variability should be within the limits determined by external factors, which form the appropriate conditions for which regional universities must adapt using mechanisms of active and passive adaptation. At the present stage of the regional universities development, the following external factors should be distinguished which directly or indirectly influence its activities:

overproduction in the field of educational services.

According to the State Statistics Committee in Ukraine, the network of higher education institutions has more than 650 institutions of all accreditation levels and forms of ownership, almost half of which belong to the universities. For example, in Europe, this coefficient is the following: in Spain (46 million population) 1.5 million students study at 60 universities, in the UK (62 million population) 3 million students study in 166 universities and colleges, in France (64 million population) 2.3 million students study at almost 100 higher education institutions. An adequate response to this situation is a policy of optimizing and regulating the educational institutions network. The implications of this policy for the region under research include both the potentials (eliminating duplication of training, the probability of absorbing other universities and expanding its own infrastructure) and certain threats (the transition of some specialties to other universities);

As a result of a difficult demographic, military-political and socio-economic situation in Ukraine we have decline in demand for educational services. The consequences of this factor for the regional universities include both opportunities (shifting the emphasis on the research component of the university, developing consulting and training activities, university structures supporting innovative processes) and certain threats (reducing the amount of scheduling, set aside certain specialties, departments, faculties);

lumpenization of the total and partial unemployment growth and the growth of population with low income who is not able to pay for education, which is primarily due to the military conflict and the difficult socio-economic situation. In European countries with a single Higher Education Area, there exist two conceptually different approaches to higher education: scholarships or grants (Norway, Sweden, Ireland, Germany) or a long-term loan (the UK). Grants exempt students from paying tuition and allow them to cover part of their living expenses. The amount of a grant depends on various criteria, in particular on the income of parents or the number of children in the family. Loans—are direct subsidies for students to be returned. Students pay only their tuition fees through loans partially. Adaptation of the national system of higher education to one of the listed models for the Donbas includes both certain opportunities and threats;

Competition between higher education institutions for the relevant segments of the educational services market, the struggle for the potential contingent of students, the growth of services and expenses for advertising activities of the university. Massive diversification of pedagogical and technical universities due to the opening of economic, law and other trend (popular) specialties, which is a tendency not always associated with qualitative changes in the results of educational activities. For example in Kyiv economists, managers and lawyers are trained by each university except a medical one. The training of humanities in Donbass unfortunately is becoming the main activity of most universities:

increasing the educational consumers requirements to the quality, the reason is increased awareness to choose an institution that provides high quality educational processes, which is the result of the above-mentioned factor. The Ministry of Education and Science of Ukraine should review the norms of the educational scheduling of scientific and pedagogical staff, especially for those who are actively engaged in real scientific work, to consider the issue of limited number of disciplines taught by one teacher, etc. Implementation of this regulation for universities at a legal level includes both opportunities (improving the quality of the educational process, activating research activities), and certain threats (increasing the quantity of teaching staff, reducing the economic efficiency of the processes through the increasing payroll);

discreteness of demand, which is expressed in the change in the volume of demand for education services consumer, which threatens the stability of the university; diversification of educational services due to the increase of educational services level and the development of related and service types of educational service; the dynamic changes in the educational process, which focuses on reducing the time to introduce new educational services in connection with the reduction of its cycle;

Innovations in the educational process are expressed in the improved organizational, technical and methodological possibilities of providing educational services (distance education, Internet, etc.).

listed environmental factors target the regional universities to take into account and use the existing competitive advantages and potential of their own universities in developing strategies as planned and adaptive actions aimed at adapting to the external environment characterized by increasing complexity and uncertainty.

The functioning of any university is carried out under the influence of two complementary processes. On the one hand, the process of forming society's needs in specialists of the

corresponding profile and quality; on the other hand, the process of forming a plurality of opportunities, stipulated by the legislative base, departmental normative base, the availability of all types resources (material, financial, labor, information).

In terms of time formation of needs is conditioned not only by the current orders, but also by the requirements of development society strategy. This strategy should determine the structure and quantitative characteristics of the professional's needs in the near future, and most importantly to make a prediction of their changes over the next 15-20 years.

In terms of quantity, the formation of needs is due to orders of the economical production sector, but also to the needs of households, the spiritual, creative needs of each citizen. Moreover, the spiritual and creative needs of the individual in a society will play an increasingly important role, because the formation of knowledge will be networking and will not be related to a definite workplace.

We must take into account the trends of quantitative and qualitative changes of the abovementioned needs, in the strategy of the regional universities. It is necessary to take into account the transitional nature of the society development, and to anticipate their own organizational, intellectual and methodological influence on their transformation. University should exist in the external environment and form it actively.

The process of creating a plurality of opportunities should also be guided by the current and strategic time intervals through the impact on the external environment in the formation of the legislative, regulatory and departmental base and obtaining all types of outside resources.

Thus, in general, the main task of university management is the harmonization of the external processes influence with the effective use of its own resources at different intervals of the time for the fulfillment of its mission and achievement of the goal set. In accordance with the results of the research, established goal, principles of strategic development, as well as analysis of the external environment, a list of conceptual recommendations should be formulated.

There are differences in the universities perceptions as for results of their activities and existing needs. They are presented in a specific combination of knowledge and skills expected by regional employers. It is recorded in the comprehensive study of key stakeholders in the regional educational process. On the one hand there is low adaptability of Higher educational institutions, which is caused by existing norms. Strictly regulating activity of universities. On the other hand, inflexibility of the higher institutions to the procedures of reengineering and permanent improvement of their own activities, their conception is "do what we can do! "It is extremely important to correct the competency profile in higher education institutions, based on more flexible curricula, adapted to the needs of the real economic sector. The approximate structure of such plans should consist of two components: a stable core and a flexible (variational) periphery. The training programs will be taken into account and adjusted to the basic needs of employers on the base of a flexible periphery. This will allow to add value-added educational services that focus on customization and diversification.

It should be recognized that changing the approach to providing innovation and relief of the educational process requires the transformation of rather well-established procedures. In particular, the process of selecting teachers with a competence profile that is adequate to the external environment requirements. This requires a metamorphosis from the traditional - Linear to Innovative - Nonlinear in the providing training system with the teaching staff. The teacher should be focused on his specialization, instead of his unification. Only this way the teacher is able to create high value in the audience. The established system loses the last competitive advantages in the educational space.

Providing a wide range of disciplines by a single teacher does not make it possible to put himself in the studied issues, that unlikely cause the interest of the listener and attract him to his own research and development and unlikely form a practicing highest class specialist. In contrast to this approach, it is necessary to involve lectures who are trusted experts in their fields on a temporary basis, located in the external, in relation to the university environment. Finding effective incentives to involve them in the process of forming a relevant competence profile of future specialists and, on this basis, ensure qualitative changes in the socio-economic area of the region.

We realize that such activities are difficult to implement within the framework of traditional educational processes, due to the large number of normative and behavioral difficulties. We have proposed an alternative path that can be supported by foreign donors and sponsors. We oriented Donbas Universities, which are interested in their own development, towards creation a structure that will embody a work platform to provide interaction between the main stakeholders of regional development. It is the community of stakeholders whose interests cross over, will ensure the formation of a relevant image of a perfect educational process and its outcomes reflected in an adequate structure of the competence profile of graduates. Symbiosis of universities, employers, regional authorities and many others is a necessary component of the process of harmonizing the functions of

universities with the basic needs of socio-economic development of the region, in particular, and the country as a whole.

The diversification of the services offered by the University, based on the proposed research and training structure on innovative training of specialists "Career Center", which will include the following stakeholders: a scientific institution - a research institute of the National Academy of Sciences of Ukraine; as an educational institution - university; as consumers (producers) - a bank, an industrial enterprise, a regional administration and others. Within the framework of this center, virtual enterprises and organizations should be set up to conduct cross-cutting laboratory work, teaching practice, short-term advanced training courses, trainings, conferences, workshops focused on the formation of demanded skills, etc. In order to maintain the center's viability, it is necessary to ensure mutual moral and material interest of each element in the chain of "scholars - teachers - employers - practical workers - students".

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Analysis of interviews with university leadership

**Discussion of the main problem -** consideration and discussion of a broad topic:

#### 1. In your opinion, what are the main problems of training today?

The public order does not meet the needs of the labor market, there is no established work between the authorities, universities and employers. Outdated equipment for training students of technical and medical specialties.

Also, the main problems include:

demographic problem

accreditation of high schools

the financial problem of publishing scientific papers in professional journals, personally in the humanitarian sphere

insufficient technical means to organize a full-fledged educational process

didactic material for these technical means

the difference in the quality of knowledge of entrants from rural and urban schools modernization of educational programs, modernization of knowledge

there is no mentoring institute

a limited number of teachers, a significant amount of scientific potential remained in the occupied territory and traveled to other regions of the state

it is necessary to work on the personnel potential: to attract high school graduates to work, to select high-quality professors with experience.

### 2. How can you evaluate the problem of employment of graduates of higher education institutions in the region?

Teachers of medical and departmental universities do not see employment problems for students, due to the fact that they are employed according to the state distribution and the need of the region in these personnel. Only if a narrow specialization, then personally pick up a place of work.

According to the teachers of classical universities in the cities where they are located there is a significant problem of employment of graduates of higher educational institutions in the region, which is connected with the lack of infrastructure, investments,

workplaces, support measures for small and medium-sized businesses, enterprises engaged in innovation development; low wages and so on. The city is not intended for a comfortable standard of living (outdated buildings, poor quality of services, lack of transport links, etc.).

That's why alumni of regular universities and contractors are engaged in employment on their own. But many of them work not on the specialty because low wages in public institutions and the need for the region in the frames. In the process of training students do not receive a sufficient number of practical tasks. Commercial enterprises are not hired without experience, therefore, the best graduates from the regions go to the big cities of Ukraine and abroad.

#### **Specific discussion:**

### 1. How does your university solve the problem of graduating employment? What is the percentage of employed graduates of your institution?

Some universities do not deal with this issue at all, referring to current legislation and internal regulations, after giving autonomy to universities. There are currently more pressing issues: security, providing hostels and providing quality education. In these universities, graduates decide on their own job placement issues.

Part of the universities are trying to maintain contact with employers and the employment center, but the percentage of employment is insignificant for the reasons mentioned in the previous questions.

The Donetsk Law Institute (DLI) and the Luhansk State University of Internal Affairs (LSUIA) work through the placement of graduates according to the already established profile ministries.

The project "Implementation of quality of education at the expense of government, business and education synergy" was launched in Donetsk State University of Management on 2018-2022. Mastering foreign studies, applying to your university, your conditions. But the teachers are worried that this project was not just on the letter. The employment of university students also depends on his prestige. The university is not centrally staffed. However, companies sometimes turn to lecturers in order to recommend high-level students. No one leads the statistics of the currently employed.

### 2. Does the university have a program of cooperation with employers in the region? What is the nature (shape) of this cooperation?

As teachers of Donetsk National Technical University assured us, there is cooperation. Employers themselves turn to the institution in search of specialists. DTEK, Azovstal, Metinvest and others are ready to employ students in the amount they can provide. However, wages are not significant (4-6 thousand and in general it is not enough to pay for housing, food, etc.). Along with this, employers point out that the prospect of career growth in the region - at least 10 years (which is very pushing students).

One of the problems with working with employers is that the latter take the University beyond the bounds and directly try to communicate with students, which indicates little credibility of the universities. Therefore, individual departments independently establish interaction with employers, inviting them to meet with students. Another way is to involve practitioners in the educational process, conclude agreements on practice, conduct trainings, conferences, seminars, round tables.

#### 3. What are the opportunities for expanding university collaboration with employers in the region?

Most universities are constantly working to increase the cooperation of universities with employers in the region. At the moment a lot depends on employers. The practice of involving employer representatives who have practical experience in teaching at the university is applied.

It would be good if employers provided training facilities with their own used equipment to get students skills to work on it. This will significantly improve the level of practical training of specialists.

There is interaction with employers through the organization of practice, preferably the existence of a regional program for contracts between the employer and the student. Take the best students to work on the basis of practice, which is still in the period of study.

### 4. How is the process of taking internship (practice) at work in your university organized?

The applicant may organize the practice independently with the permission of a higher educational establishment, or the place of practice is established by the institution itself in accordance with the concluded agreements. The problem is that the practice may be in another city of Ukraine, and travel costs to the student are not compensated.

# 5. Are there any additional classes in your university to familiarize students with the process of employment and creation of your own business? If so, how can you evaluate their effectiveness? If not, are universities ready to implement such courses?

Most university lecturers directly conduct additional classes to familiarize students with the process of employment and the creation of their own business. There are positive examples of conducting such classes. Business plans of some students were funded by international donors. There are academic circles, at which teachers provide relevant information and instill skills that are needed in the work. Legal clinics have been established in law schools. On a regular basis, meetings of company employees with students, lectures, seminars are held. Students will learn how to present themselves, how to gather information about the employer, how to work with vacancies, how to communicate with the employer. Conducted trainings on writing a business plan, forming a team. Students are interested in these meetings, but this is not enough.

As previously mentioned, there are universities in which students independently find additional trainings, courses and, in practice, get acquainted with everything offered to them. Additional classes are not held. However, teachers are trying to teach students to write a resume within disciplines. In addition, students are constantly involved in trainings and workshops aimed at writing projects.

6. Do you think it would be advisable to create career-based universities, which would deal with issues of employment, development of entrepreneurial competences, professional orientation. What do you see creating the center at your university? What other functions could be perform?

The center is needed because it is a relationship between the employer and the university, it should be the center of the recruitment agency. But he needs a legal framework and separate funding. Career Center, which successfully works with employment centers (but it is so ineffective structure), entrants.

The university has a career center, but it is not possible to evaluate the results of its activities because of its short duration.

7. Does the university provide commercial services? What are these services? How do you see the possibilities of expanding the range of such services?

In the state university, commercial services can only include the training of students on a contractual basis and state-contractual activities.

Some areas and additional services, such as advanced training courses, foreign language and Ukrainian language, practical psychology courses, office work courses. Postgraduates implement the topic of their research at the enterprise on a contractual basis on request. The introduction of certification programs and the expansion of the range of such services to the teacher should reduce the audience load.

Teachers noted the absence and 3BO understanding of the process of commercialization of scientific developments. It would be good to teach the institution how to properly organize and protect the interests of teachers.

If we had a university clinic, then we would of course be able to provide services in terms of diagnosis and treatment. And since there are no clinics, there is a problem of premises for the establishment of such a clinic. And there is also a staff problem. We must attract our graduates. Starting with 5.6 courses, involve them in scientific activities.

Another problem is a small salary. But on the other hand, it is a guaranteed employment and wages.

#### **Conclusions**

The managerial link of the universities of the region very clearly recorded the discrepancy of the state order with the basic needs of the environment, listing the actual problems of the macro and micro environment, forming the conditions for the current activities of the universities of Donbas. This indicates that the problems are common and perceived. However, the question of the employment of graduates and the answers to them remained supposedly "suspended in the air" because of shifting the responsibility for the extremely negative results in this area to external factors that are located outside the area of influence of the university leadership.

Respondents, in addition to representatives of specialized higher education institutions, were generally skeptical of the effectiveness of existing traditional and innovative forms of employment. Subconsciously fixing the need for more effective practices. A very interesting pattern of cooperation between universities in the region and employers has been revealed, which is the attempt of representatives of large enterprises to exclude universities as mediators of this process from the university-employer student cooperation chain and directly to interact with the student.

When considering the possibility of expanding university cooperation with employers in the region, the management responded with some developments in this direction, noting that they are mostly individual and, according to respondents, for the more effective introduction and intensification of them, they need centralized consideration by the authorities of the mezorite.

In terms of rhetoric, the audience, almost unanimously supported the initiative to create an additional structure focused on the development of cooperation in the triangle "university - employer student", noting the additional conditions that allow it to function effectively and not turn into another fiction.

#### Addendum B

#### Analysis of interviews with university students

**Discussion of the main problem -** consideration and discussion of a broad topic:

### 1. How do you decide (or plan to solve) the problem of post-graduate employment?

In general, graduate students decide their own employment issues on their own. Some students plan to work in specialties. However, concrete actions on finding a job have not yet been committed. They outline the issue of possible employment difficulties in the specialty.

In addition, a significant number of students already at the previous stage (during the period of study) plan to work not in the specialty.

The main place of job search is carried out using various methods. The most common are job search through specialized sites - work.ua; rabota.ua, hh.ua, social networks - facebook or through friends.

The vast majority of graduates still do not see perspectives and desire for employment in the region while studying at the university, and therefore they plan to go to large cities of Ukraine, as well as abroad.

The main factors of moving to big cities of Ukraine and abroad are respondents who say: the possibility to work remotely, low wages (average wages in the region from 2 to 6 thousand UAH), the inability to work for a "normal position" in the absence of work experience, as well as the lack of infrastructure (places for leisure outside the university: fitness halls, cinemas, swimming pools, shopping malls, supermarkets, etc.).

A significant number of such students are planning to return home (on the occupied territory of the Donetsk region). But this was stated by graduates of the university, which are not related to departmental universities of the Ministry of Internal Affairs, which are not related to departmental universities of MIA.

### 2. How do you see the ideal employment system for young people after graduation?

Graduates of departmental higher education institutions, such as Donetsk Law Institute and Didorenka Luhansk State University of Internal Affairs, are recruited according to the state distribution.

Similarly, the problems of employing medical students do not exist. At the central server there are vacant seats in the central database of the Ministry of Health. Representatives of the MU come to the university, communicate with the students and offer vacancies. In the Donetsk region vacancies are more than graduates. There is no problem of employment either in state employees or in contract staff. Only if a narrow specialization, then personally pick up a place of work.

Graduates from regular universities and contractors are engaged in employment on their own. But many of them do not work by the specialty because of the low wages in public institutions and the low need for the region work force. The best graduates from the regions go to the big cities of Ukraine and abroad. Commercial enterprises are not hired for work without experience, and the Ministry of Education allocates high schools for some specialties with few budget places. The interest of students in obtaining high-quality knowledge is reduced because they do not see themselves hired in the region. In the process of training students do not receive a sufficient number of practical tasks. Permanent communication (mutual exchange of employment information) with employers, employment center, local authorities.

Most students of classical universities see an ideal employment system through drawing up contracts for graduating employment between universities and enterprises at the stage of training.

Special programs need to be developed for the recruitment of young professionals.

#### **Specific discussion**

#### 1. How is the employment process going on in your university?

The University is trying to maintain contact with employers and the employment center, but the percentage of employment is insignificant for the reasons mentioned in the previous questions.

The Donetsk Law Institute (DIL) and the Luhansk State University of Internal Affairs (LSUIA) work through the placement of graduates according to the already established profile ministries.

In other universities, graduates decide on their own job placement issues. The DSU launched the project "Implementation of the quality of education through the synergy of government, business and education" in 2018-2022. Mastering foreign studies, applying to your university, your conditions. But it is desirable that this project was not just on the letter. The employment of university students also depends on his prestige. The university is not centrally staffed. However, companies sometimes turn to lecturers in order to recommend high-level students. No one leads the statistics of the currently employed. The University invites organizations and enterprises to meet with students for further employment. Every year, a vacancy fair, annual Career Days, where representatives from different businesses gather and offer places of employment, are organized.

Noting the positive impact of the aforementioned measures, respondents noted the need for invitations from employers who would be able to offer jobs for graduates, if not all the specialties of the institution, then at least for their predominant number. Most of the focus groups did not respond specifically to the question raised. It was noted that he hoped to stay at university.

### 2. What, in your opinion, you most do not have enough to increase the opportunities of employment upon graduation?

Employers themselves turn to the institution in search of specialists. DTEK, Azovstal, Metinvest and others are ready to employ students in the amount they can provide. However, wages are not significant (4 -6 thousand and in general it is not enough

to pay for housing, food, etc.). Along with this, employers point out that the prospect of career growth in the region - at least 10 years (which is very pushing students).

One of the problems with working with employers is that they leave the University beyond the bounds and try to communicate directly with students.

There are currently no cooperation programs with employers. Individual departments independently establish interaction with employers, inviting them to meet with students.

Practitioners are involved in the educational process, they conclude agreements on practice, conduct trainings, conferences, seminars, round tables.

Students see the main obstacle is the lack of practical experience, since businesses put one of the requirements to have hands-on experience.

Graduate students outline the following problems with employment in the region:

low wages

lack of career opportunities;

mismatch of some specialties to the needs of the labor market of the region;

lack of prospects for the region's development (according to respondents);

lack of grant support for the development of small and medium-sized businesses, as well as limited knowledge of the organization of their own business;

the low level of university co-operation with employers who offer a broader rather than a highly specialized list of employment specialties;

absence of interest of the local employment center in the employment of graduates.

# 3. Do you have additional skills in your university for developing job search skills, writing a resume, interviewing and creating your own business? If so, How can you evaluate their effectiveness? If not, are you ready to attend such courses?

Some institutions are constantly working to increase the cooperation of universities with employers in the region. At the moment a lot depends on employers.

It would be good if employers provided training facilities with their own used equipment to get students skills at work there. This will significantly improve the level of practical training of Specialists.

The practice of involving employer representatives who have practical experience in teaching at the university is applied.

There is interaction with employers through the organization of practice, preferably the existence of a regional program for contracts between the employer and the student. Take the best students to work on the basis of practice, which is still in the period of study.

According to the students at the university, separate studies on writing a resume, interviewing are held at separate institutes. However, such measures are not enough. Respondents note the need for their conducting in different directions, mostly outside the university. In addition, for some specialties (management, public administration and administration) the summary is included in the curriculum. But at the university level, such work is not foreseen.

When creating such courses, some students expressed their desire to attend. Several students are doubtful about this, referring to the fact that they attended such trainings and did not receive anything positive for them.

### 4. Do you think that university-based Career Centers should be set up to deal with employment, career guidance, internships, etc.?

The applicant may organize the practice independently with the permission of a higher educational institution, or the place of practice is established by the institution itself in accordance with the concluded agreements. The problem is that practice can be in another city of Ukraine, even abroad, but this requires a lot of money. It is impossible for migrant and university students to do this.

The creation of career centers is supported by virtually all students, through collaboration with employers. However, some people want to attend such a center after graduating from the university if they could not independently find a job.

There are examples in 3 universities where the Career Center is already in place. However, his main task is not employment, professional orientation and internship, but agitation and establishing communication with the business, the Employment Center.

### 5. Are you ready to go for a destination? What do you see for yourself as positive and negative in this form of employment?

Students are not given a clear answer "ready" or "not ready". They discuss the positive and negative aspects of this type of employment. However, no clear answer has been given.

The positions of respondents in this issue were divided. Almost half of the graduates of the institution do not plan to work according to the target direction. The focus group supported employment in the targeted direction.

The University directly conducts additional classes to familiarize students with the process of employment and the creation of their own business. There are positive examples of such classes. Some students' business plans were funded at the expense of international donors.

Teachers also try to teach students to write a resume within disciplines. In addition, students are constantly involved in trainings and workshops aimed at writing projects.

There are academic circles, at the meeting where teachers provide relevant information and inoculate the skills that are needed in the work. Legal clinics have been established in law schools. On a regular basis, meetings of company employees with students, lectures, seminars are held. Students will learn how to present themselves, how to gather information about the employer, how to work with vacancies, how to communicate with the employer. Students are interested in these meetings, but this is not enough.

### 6. What kind of additional training, outside the curriculum, would you like to visit? Would they help you in finding a job?

Students want to attend oratorical art courses and courses in psychology and communication to gain experience in communicating with patients. The Career Center has already been set up in the institution, which successfully works with employment centers (but it is so inefficient structure), entrants, but to evaluate the results of its activities is not possible due to its short duration.

Some participants in the focus group consider it unnecessary for additional classes, considering them to be ineffective. Students unanimously noted the need for trainings

outside the curriculum. Especially with regard to the organization and implementation of entrepreneurial activities, in particular franchising, as well as new employment opportunities.

### 7. How does internship (practice) take place at your institution? What do you see enhancing your quality?

The university sends to practice state institutions and other institutions with which they have a cooperation agreement, sometimes students are forced to seek the bases of practice on their own. It is necessary to improve the quality of internship / practice through the increase of the circle of communication with employers, while students have expressed the wish that practice takes more time during basic education.

As a summary of the interview it should be noted that students of medical and departmental universities have a slightly different employment situation than students of classical higher education.

#### Conclusions

Based on the answers received, the connection to the university-employer student value chain is a pressing issue for modern Donbas universities. The separation of universities from the needs of employers, leads to the formation of specialists oriented to another reality. We have a situation where the efforts and time the university spends too much, but it forms within its own educational processes a competency profile that does not coincide with the requirements of employers, this is the first. Secondly, the theoretical and, in most cases, obsolete material, which does not correspond to the empirical business conditions, does not contribute to the formation of a high adaptive potential for future graduates to the conditions of the environment, which is determined by the increasing complexity and uncertainty.

The lack of students' perceptions about their future is also a rather outdated problem, which is explained by extremely artificial conditions of learning, which do not allow to form an integral view of the opportunities that exist in the external environment. Incorporated in the educational process of production practices, are mostly of a formal

nature and do not allow future specialists to test their own abilities, which even reduces even the minimum efforts for productive contact with the future place of work.

All this updates and highlights in a new perspective the idea of practice-oriented learning that can create conditions for building adaptive potential of future graduates, which, according to the results of interviews with students, is highly expected and demanded. The proposed solution to this problem, consisting in the proposal to create Career Centers as a workspace, which creates conditions for the creative interaction of key stakeholders represented by the triumvirate "university - employer student," according to students, will maximize the value created by educators and bring the universities of the region from the phase of stagnation on the trajectory of sustainable growth of its own competitive advantages.

#### Analysis of interviews with employers in the region

### 1. How do you rate the current and prospective (for the next three and ten years) economic situation in the region?

In general, employers assess the current economic situation as satisfactory or unchanged, and prospective for three years without mines or satisfactory, but for the next ten years - there will be improvement, that is, positive changes. Experts believe that the whole country is interested in the economic situation in the region, many of the projects being undertaken in the region are being implemented to improve the environment, since after the decline in 2014, any move forward, it is positive.

### 2. What, in your opinion, should be the vector of economic development of the region?

In the international arena, our state is considered agrarian, but given our specifics of the region, we are still an industrial and agricultural state. According to respondents, the vectors of the region's economic development are: processing industry (mineral fertilizers, oil refining), mining, agriculture, engineering, education and science, services, information technology, defense, food industry (locally).

#### 3. Is structural imbalance in the labor market relevant to the region?

All respondents noted the structural imbalance in the labor market, in particular, both structural and qualitative.

If so, then how is it manifested? Almost completely destroyed vocational education (this is the lack of training required for the region Specialists for the engineering industry, agriculture, etc.). The unemployed, who are finding a job in their specialty, do not correspond to the vacancies offered by the business - the mismatch of the labor market to the specialty of specialists who are looking for work.

A similar situation occurs with higher education. In particular, the preference is given to the humanities (legal, economic, informational, etc.) and the market requires engineers.

**4.** What kind of personnel are most in demand in the labor market of the region? By category of staff: qualified technical staff and labor professions.

By profession: builders, junior engineers, agronomists, veterinarians, farmers, mechanicians, special transport drivers, accountants.

### 5. In your opinion, will the regional economic need in the cadres increase over the next five years?

According to the respondents: will increase significantly with the development of the economy; will increase in part if the economy will develop at the same pace as today. Some respondents believe that the need for personnel will remain unchanged.

#### If it grows up, which ones are specialists?

Need for crisis managers, builders - engineers, engineers - technologists.

#### 6. How, at the level of the region, is a state training order being formed?

Most respondents can not answer the question. In the opinion of some, this is possible with the help of employment centers, departments of education.

#### Clarifying the question:

Are employers involved in this process? Partially employers of participation do not participate in the formation of a public order

Is there an approved, valid methodology for forecasting the needs of the region's economy in the cadres? The approved methodology in forecasting the needs of the region's economy in the staff does not have.

#### **Specific discussion**

### 1. What, in your opinion, is the modern role of universities in shaping the economy of the region?

The University plays one of the most important roles in the region. First, it is the upbringing of the intellectual economic business of the elite of the future managers, the presence of the University of 4 levels of accreditation in the region contributes to the fact that young people do not leave the region because they are "changes," they are the future elite of the region.

Some employers believe that the role of universities lies in the basic training of students in the relevant specialties and in the fundamental scientific substantiation of many economic processes.

Respondents note the positive impact of the internal movement of higher education institutions on the literacy of the host regions concerned.

It was also noted that when employing university graduates, we see weakly trained staff and would very much like to improve the quality of preparation, at least initially, so we are currently trying to take students from 2-3 courses to prepare in advance. Work directly with employment centers and employers while listening to requests from them. It is difficult to plan the requests for specialists, because it is a minimum of 5 years. And with the war it is not possible, so the higher do not get enough students in this region

### .2. How can you assess the quality of higher education institutions (by 5-point scale)? Comment on negative evaluations.

From the perspective of training, respondents were rated at 4 or 4, indicated by the following comments: universities should be more flexible to business needs, curricula in general are torn away from real business life, there are no modern laboratories.

From the point of view of scientific activity, an assessment was made 2, because science needs financing, but it is not sufficiently; have long not heard that the results of the work of scientists at the universities of our region somewhere used in production. The aging of scientific personnel at universities, there is still a Soviet system, according to which the university does not declare itself and does not try to "sell" itself, but this must be done. Researchers need to teach marketing and sell their products.

In terms of social function - rated in four points. The trend has improved, young people have emerged, thanks to the displaced universities that did not go to other cities of the country, but remained in our region. Graduates can not find employment on a specialty, they are looking for another job

#### 3. In your opinion, what are the main problems of the training system today?

1) absence of applied knowledge among students; 2) the absence of teacherspractitioners; 3) Corruption in education. Fakhovet does not satisfy the demand that is in
the labor market, the lack of specialists at the junction of the branch of science, it is
necessary to prepare non-clean producers, not pure project managers, and project
managers in the field of production.

### 4. How do you assess the existing potential of universities in terms of providing lifelong learning opportunities?

Positive practice of providing the possibility of obtaining a second higher education on the basis of a bachelor's degree, but for life-long learning it is necessary to introduce special courses, so that a person who has been able to qualify for a qualification in less than 2 years is short-lived. We need to ask for business needs and flexibly adapt to them. Courses may be superficial, but with the possibility of deepening knowledge. The university provides only theoretical knowledge, and there are no practical skills, so you have to re-learn.

#### 5. Do you see prospects for the development of university-based research and innovation centers?

Prospects for the development of research and innovation centers on the basis of universities is a promising area.

What core functions of such centers would, in your opinion, be relevant and in demand? First, such centers should have the function of a dialogue platform between the industrial enterprises of the region and the university. Secondly, it is a platform on which to demonstrate the achievements of science, to promote itself; It is also a platform that can respond in the future, and what exactly specialists are looking for in the near future. Financing should be equal to the tasks.

#### SECTION 3. PERSPECTIVES FOR DEVELOPMENT OF STATE-PRIVATE PARTNERSHIP IN THE FIELD OF EDUCATION

# 1. Does the practice of co-operation between institutions of higher education and business exist in the region? (State existing examples, name of institution and enterprise)

In the region there is a practice of cooperation between higher education institutions and business.

An example is DTEK, Azovstal, Metinvest. The practice of cooperation of the East Ukrainian National University with the Donetsk Azot Association for training personnel for production and the Lysychansk oil investment campaign, these enterprises were basic

for the practice. they were preparing for their order specialists, who provided the first job, the practice where at the expense of specialists taught.

How can you evaluate the effectiveness of such cooperation?

It is difficult to assess the effectiveness of such cooperation because there were no requirements for the initial level of knowledge of people, it was stated that the company trained its employees' children, and the requirements for the average score of the certificate or the general level of training were not used, that is, knowledge could be better for these students. In the opinion of employers, such cooperation is not very effective, since it is highly specialized.

### 2. What forms of cooperation between educational institutions and city management and the business environment do you see most promising?

This is three-way cooperation - business-power-universities, and therefore a complex program for 3-5 years should be developed - the basis for cooperation, perhaps it is that the enterprise remains the basis of production practice not only on paper, but also of actual production practice, and if earlier some enterprises wanted to receive a salary from the university, then in the absence of resources, it is necessary that enterprises provide it for free. So it is: the creation of research centers with the involvement of ZOOs and employers; order of specialists; agreements on cooperation in attracting students to the internship.

#### 3. Is the government ready to promote cooperation between educational institutions and the business environment?

According to many respondents, the authorities are not ready to promote cooperation between educational institutions and the business environment. For cooperation between educational institutions and the business community, it is necessary to develop a comprehensive program on this issue and approve it at the level of the regional administration of the administration or to consider it at the Regional Development Council, which meets periodically in the region for consideration of such strategic issues, this should be enshrined in the strategy of the region's development.

### 4. What, in your opinion, are there opportunities to solve the problems of employment of graduates of higher education institutions in the region?

Work with enterprises should be conducted not from the 5th year, but firstly, to familiarize young people with the labor market demand, with the opportunities that an enterprise has, so that the young person focuses his education on this for all five years, then it will be qualitatively, thus will raise the responsibility of the young Specialists. Raise salaries to the level of the capital, then there may be a decision on the interest of young people and the possibility of leaving them on the ground, another option for office accommodation or apartments for migrants.

### 5. Is the program of cooperation between educational establishments and business with the purpose of employment of graduates relevant for the region?

According to respondents, programs of cooperation between educational institutions and business for the purpose of employment graduates are very relevant, but they are important to realize in the present. There is a forced reduction of the states of the giants of the industrial regions, even those vacancies that are in the enterprise, are not filled in full due to the lack of production activities of enterprises, not understanding the further development of the industry, but after some time this question becomes relevant.

### 6. How do you see the possibility of employing graduates in employment processes?

To engage with the students to hold thematic business breakfasts in order to get acquainted, to establish contacts, so that the employer could consider the students as their future employees (subject to the involvement of students in practice, in the presence of large production, if possible, master classes)

#### 7. Do you think it is promising to create at University Career Centers?

According to respondents, yes, they are very relevant and can be easily implemented.

### 8. What, in your opinion, could the University Career Center do? *employment promotion (youth employment center);*

- Organization of short-term and long-term internships for students;
- providing advice and conducting trainings on job search, writing a resume, etc.

- organization and conducting of meetings of business representatives and students;
- Organization of training and master classes with business representatives;
- Providing advice to students on the implementation of Startups;

The rest should not be a copy of the employment centers already in the state, because this existing system is in need of reform, because their effectiveness is in question. The promotion of employment needs to be developed in a step-by-step manner, which has been promoted in the most; organizing training and workshops with business - to attract those who are in the region can also be enabling students receive not only formal education, but not formally, an exchange student, both in the country and abroad.

#### 9. Are you ready to participate in the implementation of the Career Center projects?

All interviewed respondents are ready to promote employment, organize internships for students, hold business meetings, as well as trainings and workshops with them.

Some of the employers are ready to participate as a jury in the student start-up competition.