

## Social and geographical features of the formation of the modern labour market of Ternopil region

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Received: 19.02.2019 Received in revised form: 06.03.2019 Accepted: 30.07.2019 **Abstract.** The article gives a detailed analysis of the processes of formation of the labour resource potential of Ternopil region as a labour excess region. The influence of the demographic component on the formation of quantitative and qualitative characteristics of labour potential is highlighted there. The study of patterns and factors in the formation of labour

potential is inextricably linked with research on the labour market, which is the most important element of the market economy. Availability of labour potential brings a certain social and economic sense to the development of labour market, its effective functioning and improvement of the employment system of the population. Since the natural basis of labour potential is the population, a vital component in guaranteeing the stable and safe development of the state, the problems of optimal demographic development are extremely relevant. The article outlines current problems of unemployment of the population of Ternopil region, in particular young people; the causes of its occurrence are investigated there. It was established that the labour resource potential of Ternopil region is characterized by a high proportion of able-bodied persons, but a low level of employment. The main features of the labour resource potential are the decrease in its quantity due to the natural reduction of population and migration of able-bodied persons, deterioration of the age structure of the population as a result of "ageing", changes in the structure of employment in economic activity, narrowing professional structure of workers and imbalance in the labour market. This is a sign of exhaustion of the labour resource potential, which may negatively affect the development of certain sectors of the economy in the future. The research analyzes changes that took place in the structure of employment in the economy, starting from the 1940s up to the present; the consequences of stagnation of a significant number of enterprises in industry, construction and other industries (narrowing professional structure of workers in the economy, etc.) are shown there. The main reasons for the discrepancy between the supply and demand of the labour force in the region (unwillingness to work outside one's specialty, low salary, low level of qualification of employees) are indicated. Particular attention is paid to the migration of people of working age beyond the region, the main reasons that cause it, as well as the possible consequences for further development of the economy of Ternopil region.

Key words: population, labour resource potential, labour market, labour resources, economically active population, unemployment, employment of the population

## Суспільно-географічні особливості формування сучасного ринку праці в Тернопільській області

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Анотація. У статті подано докладний аналіз процесів формування працересурсного потенціалу Тернопільської області як праце надлишкового регіону, висвітлено вплив демографічної складової на формування кількісних і якісних характеристик трудового потенціалу. Вивчення закономірностей та факторів формування трудового потенціалу невід'ємно пов'язано із дослідженнями на ринку праці - найважливішого елементу ринкової економіки. Наявність трудового потенціалу вносить певний соціальний і економічний сенс в питання розбудови ринку праці, його ефективного функціонування, поліпшення системи зайнятості населення. Оскільки природною основою трудового потенціалу є населення, важливою складовою визначальних для гарантування стабільного й безпечного розвитку держави, а проблеми оптимального демографічного розвитку є надзвичайно актуальними. У статті окреслено актуальні проблеми безробіття населення Тернопільської області, зокрема молоді, досліджено причини його виникнення. Встановлено, працересурсний потенціал Тернопільської області характеризується високою часткою працездатних людей, але невисоким рівнем зайнятості населення. Головними ознаками працересурсного потенціалу є зменшення його кількості через природне скорочення населення і міграцію працездатних людей, погіршення вікової структури населення внаслідок «старіння», зміна структури зайнятості у господарській діяльності, звуження професійної структури працівників, незбалансованість на ринку праці. Це є ознакою виснаження працересурсного потенціалу, що може негативно відбитися в майбутньому на розвитку певних галузей господарства. У дослідженні проаналізовано зміни, які відбулися у структурі зайнятості населення у галузях господарства, починаючи від 40 років XX ст. до нашого часу, показано наслідки стагнації значної кількості підприємств промисловості, будівництва та інших галузей (звуження професійної структури працівників господарства та ін.). Вказано основні причини невідповідності між пропозицією та попитом робочої сили в області (небажання працювати не за спеціальністю, низька зарплата, низький рівень кваліфікації працівників). Окрему увагу звернено на міграцію людей у працездатному віці за межі області, основні причини, які її зумовлюють, а також можливі наслідки для подальшого розвитку господарства Тернопільської області.

Ключові слова: населення, працересурсний потенціал, ринок праці, трудові ресурси, економічно активне населення, безробіття, зайнятість населення

Introduction. The change in economic relations in Ukraine, transition of society to the market economy has forced workers to adapt to a new system of labour relations, and to the transformation of the labour market. An important feature of the labour market in Ternopil region, a territory which is marked by agrarian - industrial development, is the increase in the disproportion between the supply and demand for labour (increase in the reserve of the able-bodied population and reduction in the need for workers in the economy). This is the consequence of crisis in the economy, the lack of real reforms in most industries. The stagnation of production, the decay of all its branches has led to the emergence of unemployment and changes in employment, changes in the quality of labour and resource potential. The greatest changes have occurred in the level and structure of employment of workers. If under the planned socialist economy the emphasis was placed on full employment of the able-bodied population, currently under conditions of crisis the employment level is low, and there is real and hidden unemployment. So, in 2018, the employment rate was 51.0% of the population aged 15-70. Due to the closure and reprofiling of enterprises, optimization of enterprises in the sphere of services is constantly increasing the number of unemployed persons.

**Materials and methods of research.** Study of characteristics of the labour market today is one of the key tasks of modern geographic and economic science. Social geography today has significantly developed, is based on theoretical aspects, conceptual terminology apparatus and methodological developments, and can conduct a territorial-time analysis of labour and resource potential for assessing the real situation and forecasting the development of the economy and the social sphere.

Theoretical and methodological aspects of studying labour resource potential and the labour market are formed in the works of the following social geographers and economists: M. Baranovskyi, V. Brych, A. Holikov, M. Dnistrianskyi, K. Mezentsev, Ya. Oliinyk, A. Stepanenko, O. Topchiiev, O. Shablii and others.

The study of labour resource potential geography of the population at regional and state levels is reflected in the scientific work of: S. Bandura, D. Bohynia, I. Hudzeliak, S. Zlupko, E. Libanova, A. Dotsenko, M. Fashchevskyi, O. Khomra, and others.

In carrying out the research on demographic characteristics of the labour market of the region, the general scientific methods of research were used: analysis and synthesis, comparison, deduction; and specific-scientific: comparative-geographical, classification and typology, etc.

**Results and their analysis.** Labour resource potential includes a combination of social and economic relations that create the basis for the formation of a new productive, targeted force that arises from the application of certain conditions by society (Shablii, O.I., 2001). Labour resource potential is based on labour resources, which are determined not only by quantitative indicators but also by qualitative ones (age, level of education, qualification, etc.). Therefore, the same number of people of working age can produce different quantities of products that will differ in quality. This, in turn, affects the socio-economic development of the region.

The territorial structure of the economy, the development of the main and auxiliary sectors directly depends on the quantity and quality of labour resources, the peculiarities of the formation of the labour resource potential (Baranovskyi, 2009). In regions with a high population density, it is expedient to develop labour-intensive sectors of the economy, whose products can satisfy both intra-regional demand and the national economy.

The basis of the formation of labour resources potential is the total potential workforce in the population, that is, the able-bodied population. Under current conditions, the total potential workforce of the region is constantly declining. This is occurring through natural population decline and due to the negative migration surplus. The signs of depopulation began to emerge in the mid-1970s, but were especially pronounced at the end of the twentieth - early twentyfirst century. (Fig. 1). So, if up to 1993 the population of the region was still increasing (1,180.3 thousand people in 1993), then by the end of the century it had decreased to 1,152 thousand people, and as of January 1, 2018, it was 1,046. 2 thousand people. This is a consequence of a decline in fertility rates and an increase in mortality rates.

A significant proportion of the total potential workforce is taken up by the unemployed. The unemployed are considered to be able-bodied citizens in the period 2000-2018 was observed in 2001 and amounted to 78.7 thsd. persons (Fig. 2) of the number of the able-bodied population in the region.

It should be noted that in Ternopil region there is a significant quantitative imbalance between demand for labour and its supply. In particular, the load of registered unemployed per one vacancy in region as a whole increased by 4 persons, and by the end of December 2016 it was 9 persons, and in 2018 – 13 persons. The indicator varied from 2 persons in the city of Ternopil to 232 persons in Shumsk district, 210 in Monastyrysk district, 104 in Husiatyn district (Derzhavna sluzhba statystyky Ukrainy, 2018).

As of December 31, 2018, 10,782 unemployed persons were registered at the Employment Centres, among them the share of women was 46.7%, young

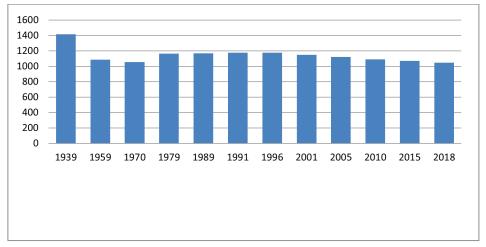


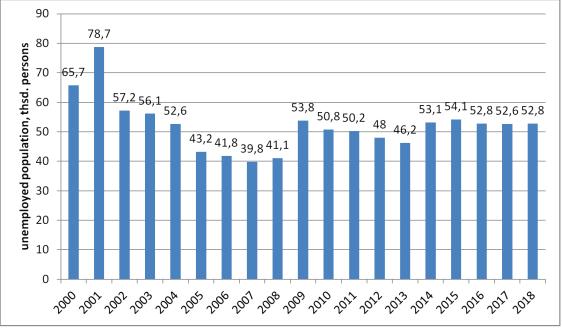
Fig. 1. The population of the Ternopil region from 1939 to 2018, thsd. people

in our country who are in search of a job, do not have sources of income as envisaged by the legislation of the country and are registered with the state employment service. The number of unemployed in 2005 was 42.3 thsd. persons, in 2018 - 53.1 thsd. persons. Accordingly, the level of unemployment was the highest at the end of the twentieth century, when the stagnation of industrial production came, and then, taking into account the "hidden" unemployment (part-time employment), this level reached 30% of the workingage population, in 2018 it was 11.9% (Table 1). This level would be significantly higher if the rural population was taken into account, people who have a yard/ kitchen garden, but do not have any steady income from working there (except for providing for own consumption), but this population does not fall into the category of unemployed.

In the last three years, from 2016 to 2018, the number of unemployed in the region has declined somewhat. At the end of 2018, it was 1.3 thousand fewer than in 2015. The highest unemployment rate people under 35 years old – 36.9%, workers – 41.9%, people in government/local government service – 40.9%, persons who have additional guarantees for obtaining employment – 39.6%. An interesting and at the same time alarming fact is that among the unemployed persons, the largest category of people is those with higher education – 44% of their total, while in Ternopil Employment Centre – 80.9%.

The ongoing problem of the modern labour market is youth unemployment. Analysis of the labour market conjuncture shows, unfortunately, the social insecurity of young people, which is characterized by significant volumes, levels and duration of unemployment. In Ukraine, at present, there are not suitable conditions to attract young people to work and thus become involved in the field of economic employment. This reduces the level of social protection and generates a marginalization of a proportion of young people, resulting in incomplete use of its labour and creative potential (Libanova, 2007).

Under current conditions, the number of persons



**Fig. 2.** Dynamics of the unemployed population of Ternopil region age from 15-70 years in 2000-2018, thsd. persons (according to the ILO methodology)

employed in the region slightly increased (in 2000 - 305.6 thsd. persons, in 2018 - 396.0 thsd. persons), which indicates the transformation processes in the economy, development of new types of economic activity, some modernization of production. Mostly these are people of working age. The non-active workforce (more than 315.6 thsd. persons), which can be added to economic activity in the future, is also a certain reserve for labour resource potential.

the XX century – at the beginning of the XXI century – they were employed in the service sector. Thus, in 1990, 165.1 thsd. persons worked in the manufacturing sector, and 148.4 thsd. persons in the service sector (in 1995, respectively 131.2 thsd. persons and 145.9 thsd. persons, and already in 2014 – 182.2 thsd. persons and 231.9 thsd. persons). With the general reduction of workers in both spheres, by 2000, the rate of decline was significantly higher in

	2000	2005	2010	2014	2018
Economically active population	475.1	467.4	482.1	469.1	453.0
Employed	409.4	425.1	431.3	416.0	399.1
Unemployed	65.7	43.2	50.8	53.1	53.9
Economically inactive population	342.1	340.3	313.0	318.0	315.6

Table 1. Population by economic activity (at the age of 15-70 years, thsd. persons) \*

\* According to the data of the Main Department of Statistics in Ternopil Region

The employment of the young population (aged 15-35) is low in the region, it amounts to 29.8% of the number of full-time employees, many young people cannot find a job after graduation (more than 12%). However, in some sectors (information and telecommunications, financial and insurance activities, trade and repair of motor vehicles, etc.), the proportion of young people is rather high (more than 30%).

There have been significant changes in the structure of employment in the economy (Table 2).

Thus, if in the pre-crisis period most workers were employed in production, then at the end of the branches of production, which led to a significant reduction in its share in the economy of the region (in 1980 - 52.5%, in 1995 - 48. 6%, in 2018 - 43.8%). The largest reductions were observed in industry and transport (Table 2), somewhat lower in the sphere of services, and in some of its branches there was even an increase in workers (trade and catering, financial activity, public administration and agriculture and forestry).

As a result of different rates of change in the number of employees in the sectors of the economy, their share in the structure also changed.

This was also facilitated by a certain increase in

		Years								
	1940	1960	1970	1980	1992	1995	2000	2005	2010	2018
Total	78.7	138.5	132.6	313.5	327.5	284.5	305.6	425.1	422.1	396.0
Industry	73.1	29.6	65.6	92.4	87.8	73.0	59.9	50.8	46.1	38.8
Agriculture, hunting, forestry, fish farming	10.7	12.3	15.6	27.0	30.3	19.3	102.5	107.2	111.2	130.0
Construction	3.0	13.9	22.9	26.4	23.0	17.3	11.3	15.3	17.1	30.0
Transport	9.9	16.0	25.0	29.3	31.9	19.6	17.4	18.9	19.1	19.0
Communication	2.1	2.2	4.8	5.9	6.1	6.0	2.4	1.5	3.6	3.6
Trade, catering, material and technical supply and sales	13.4	16.0	28.1	34.2	32.8	23.9	21.2	62.2	84.9	77.0
Real estate operations	1.2	3.5	5.9	11.4	16.2	12.9	6.6	9.1	15.2	3.3
Health care and social assistance	3.2	13.5	19.3	25.4	34.8	33.6	31.7	30.3	30.1	30.2
Education	10.6	21.0	30.6	40.4	50.8	53.7	39.8	47.1	46.5	46.3
Governance	9.5	5.7	8.2	10.0	9.0	11.6	11.9	21.0	24.5	23.0
Financial activities	1.2	1.2	1.7	2.6	3.3	3.7	2.6	3.6	4.8	3.5
Science and scientific service	0.1	1.0	0.4	1.9	1.9	1.5	5.4	5.8	6.2	6.0
Other types of economic activity	9.3	2.6	4.5	9.6	7.4	8.4	10.1	12.3	12.8	15.3

Table 2. Employment in Ternopil region by types of economic activity, thsd. persons \*

\* Calculated according to the data of the Main Administration of Statistics in Ternopil Region

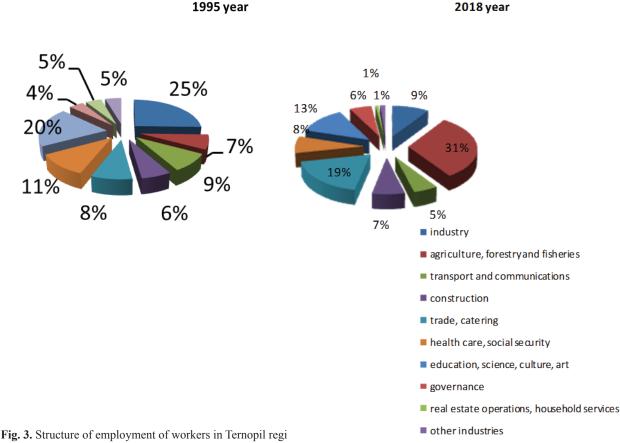
the number of workers in the region's economy, mainly due to transformations in agriculture, construction, education, trade and financial activities. The increase is not entirely justified (in comparison with 1990, by 2 times) in public administration, indicating the absence of reforms in the administrative and managerial sphere, a situation which may be changed as a result of decentralization in the field of governance of the country (Brych, 2003).

Another feature of labour and resource potential is the narrowing of the professional structure of workers of the economy, which occurred as a result of

	Number of registered unemployed			Nun	nber of wo	rkers	Load on one vacant workplace			
Districts				requi	red by emp	oloyers				
	2005	2010	2018	2005	2010	2018	2005	2010	2018	
In region	43,832	15,260	15,742	1,835	1,053	1,251	24	14	14	
Berezhany	1,536	768	850	64	17	33	24	45	28	
Borshchiv	3,918	976	1,050	33	34	20	119	29	53	
Buchach	3,628	1,055	728	45	14	24	78	75	32	
Husiatyn	3,768	1,545	1,378	88	47	21	43	33	64	
Zalishchyky	1,857	365	458	26	15	16	71	24	28	
Zbarazh	3,519	1,106	1,029	83	40	50	42	28	48	
Zboriv	2,962	764	813	75	27	25	39	28	20	
Kozova	2,322	742	716	20	14	15	116	53	23	
Kremenets	3,992	1,445	1,439	57	70	54	70	20	25	
Lanivtsi	1,757	493	534	23	32	22	76	15	18	
Monastyryska	1,318	339	323	54	25	22	24	14	28	
Pidvolochysk	1,184	500	607	87	31	14	14	16	23	
Pidhaitsi	892	338	299	57	45	33	16	8	16	
Terebovlia	2,023	555	819	36	44	47	56	13	8	
Ternopil	5,507	2,920	3,177	999	539	811	28	8	8	
Chortkiv	1,729	510	799	57	20	24	30	26	36	
Shumsk	2,020	839	723	31	36	20	65	23	28	

Table 3. Demand and supply of workforce in districts of Ternopil region, persons \*

\*According to the data of the Main Administration of Statistics in Ternopil Region



economic activity, in % (Source: Derzhavna sluzhba statystyky Ukrainy)

stagnation of many enterprises of industry, construction and other branches (Fedunchyk, 2016). The low capacity of employers in the region, as well as the low labour cost, make migrant workers more or less concentrated in other regions of the country or abroad. Predominantly, these people do not work at their professional level, gradually losing their skills. This contributes to the exhaustion of labour resources, both in terms of physical and qualitative characteristics.

Due to the crisis in the economy and lack of real reforms, the region has a low degree of flexibility in supply and demand in the labour market. With a total load of 15 persons per 1 vacant workplace (in Ukraine 11 persons) there is a discrepancy between the demand for workers of different qualifications and professional level and their availability in the region. Among the sectors that show the greatest burden on one job, are agriculture (28 people), as well as forestry and fisheries (27-28 people), although this indicator has decreased by 6.6 times in the last 10 years (Table 4). The highest load is in Husiatyn, Chortkiv, Shumsk, Monastyrysk, Berezhany districts.

Disproportion in the labour market of the region was the highest at the end of the twentieth century, now it was partially offset by a number of reforms in the services sector and the increasing number of workers who migrate abroad for higher earnings. Officially, the difference between the availability and demand for workers for the filling of vacancies in the region was in 2018 (1.4 thsd. persons), the largest one being observed in the city of Ternopil and in Terebovlia district. The most demanded professions in the region are labour professions (almost 500 persons), workers in the services and trade, and the least demanded – workers in agriculture, forestry and fishery. The discrepancy between the availability of labour force and its employment is determined by another factor – the reluctance to work outside one's specialty and for low salary. There are interruptions in the reproduction of the vocational qualification structure of workers necessary for the restructuring of the economy.

Having studied the structure of demand and supply of labour resources and employment of the region's population in various sectors of the economy, we note that the total unemployment in recent decades in the oblast has tended to decline (by 2.8 times in 2018, compared with 2005). Analysis of the demand and supply of workforce among professional groups over the past thirteen years indicates a general tendency to reduction in the number of unemployed in the region (by 2.8 times in 2018, as compared to 2005), the demand for workers in the labour professions is especially increasing. During the period of 2005-2018, the number of unemployed in this category has decreased by almost 3 times (in agriculture and fishery – by 9 times), and demand for them has doubled.

**Conclusion.** Ternopil region was and still remains a manpower-surplus region. Its labour and resource potential is characterized by a high proportion of able-bodied persons, but a low level of employment. The main features of labour resource potential may negatively affect the development of certain sectors of the economy in the future. In the modern period, there have been positive changes in the use of labour and resource potential – increased employment in certain sectors of production, the spread of new professions, etc. This is evidence of certain positive changes in the field of economic activity, which are

Table 4. The structure of o	demand and supply of labour in	n Ternopil region for	employment, persons *
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	Number of registered unemployed				Dema employe workers job wor (vacar	ers for s to fill kplace	Load on one free workplace (vacancy)		
	2005	2010	2018	2005	2010	2018	2005	2010	2018
Total	43,832	15,260	15,742	1,835	1,053	1251	24	14	13
Legislators, senior civil servants, heads, managers	2,067	1,245	1,376	99	77	89	21	16	15
Professionals	2,141	1,417	1,860	355	228	199	6	6	9
Specialists	3,183	1,476	1,718	135	84	131	24	18	13
Technical staff	1,710	777	902	39	33	40	44	24	23
Workers in the field of trade and services	3,782	1,593	2,133	129	109	213	29	15	10
Skilled workers in agriculture and forestry, fish breeding and fishing	1,809	189	193	10	6	7	181	32	28
Skilled workers with tools	4,877	2,528	2,134	446	162	276	11	16	8
Workers on maintenance, operation and control over the work of technological equipment, assembly of equipment and machinery	8,429	3,276	2,917	412	108	201	20	30	15
Unskilled occupations	15,834	2,759	2,509	210	246	95	75	11	26

\* According to the data of the Main Administration of Statistics in Ternopil region

are the decrease in its quantity due to the natural reduction of the population and the migration of ablebodied persons, deterioration of the age structure of population as a result of "ageing", changes in the structure of employment in economic activity, narrowing of the professional structure of workers and imbalance in the labour market. This is the sign of exhaustion of labour and resource potential, which gradually (albeit very slowly) manifested in recent years. Availability of reserves of workforce in the labour market is the basis for further expansion of production and development of new industries. These reserves can also be used on the interregional labour market subject to its regulation. There is a fear that labour migration processes will be strengthened, that the region's labour and resource potential will be used abroad under the conditions of establishment of a visa-free regime with EU countries. Only real social and economic reforms are a key to optimizing the use of labour resource potential in the region, regulation of supply and demand in the labour market.

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