

LABOUR PRODUCTIVITY IN UKRAINE: COMPARATIVE ASPECT

Statement of the problem. Labour productivity is the key factor of the economic competitiveness and the basis for economic growth. The influence of the factor productivity is equally significant both at the macroeconomic level and at the level of competitiveness of individual regions and the businesses. From a macroeconomic point of view labour productivity is one of the major factors in improving the welfare of the country. Improving labour productivity on the level of an individual enterprise (business) allows providing the competitiveness use of labour resources and activities in general. The level of labour productivity as well as the main macroeconomic proportions, international comparisons of Ukraine and countries of the world in terms of the labour productivity should also be a subject to a detailed study.

Analysis of recent research and publications. The scientific researches to determine the content rate of the labour productivity, the study measurement methods of its level and dynamics, the use of different methods to characterize the impact of the factors on the labour productivity are widely covered in the scientific literature. The scientific works of S. Ayvazyan, V. Besedin, D. Bohynia, A. Grishnova, V. Danyuk, G. Zavinovska, T. Kir'yan, P. Krugman, L. Lisogor, K. Marx, M. Meskon, A. Pasyeka, J. Petrovic, P. Samuelson, M. Semykina, M. Sokolyk, S. Strumilin, F. Taylor, A. Faiol, T. Khachaturov and the others stand out the major scientific achievements. However, the problems of international comparisons of Ukraine and countries of the world in terms of the labour productivity, the ratio of the labour productivity and the wages, as well as the factors that affect this proportion remained scarcely explored.

Objective statement. The purpose of the article is to identify the place of labour productivity in productivity theory, to analyze the international comparisons of Ukraine and countries of the world in terms of labour productivity, examine of the correlation of wages and labour productivity, to ground the principles of its further growth.

The main material of the study. As a general approach we understand labour productivity as the correlation of the output and the amount of productive resources, expressed in identical units of measurement. Output is considered to be the total value of the goods and services as a result of the production activity of the economic units or the national economy as a whole. The resources costs are all the factors of production, including labour, capital, land and other factors involved in the production process.

Labour productivity can be estimated at the level of individual businesses, regions and industries or the economy as a whole. It is calculated per unit of a separate factor of production, or in the form of aggregate productivity, it aggregates different kinds of the factors of production.

The labour used to measure productivity more than any other factor. The prerogative of labour productivity over other indicators measuring productivity mainly consists in the fact that the cost of the labour is much easier to measure than any other costs. Therefore, in the practice of the manage, the labour productivity is the main indicator of the efficiency of the production. The simplified approach of measuring of the labour productivity falsified comparability of the pace development of the USSR and other countries and concealed the real trends in the economy. This approach calculating performance, which was conducted only for the key workers in the main production, and exclude all the personnel of auxiliary production of the entire production infrastructure the computation of the labour productivity at the local level was used in the Soviet Union [1, p. 17]. The value of the indicator of the labour productivity is problematic for use in the capital-intensive, the energy-intensive industries.

The classics of political economy researched and attached the great importance to the relationship of the labour productivity and expand production, of efficiency, of full employment and economic growth. The term "labour productivity" is interpreted differently in the modern literature, and the common opinion in defining its essence is not achieved. So, some authors believe that the labour productivity is the summary measure of the workforce, which characterizes the ratio of the results of the labour and its costs [2]. Others recognize that the labour productivity characterizes the results of labour, its effectiveness, the ability of the concrete labour to produce in a given unit of time a certain number of the products [4]. We consider that the labour productivity is a partial factorial indicator of the productivity, characterized by the ratio of the results of the labour and its costs because the labour is one of the factors used to measure the productivity.

There was heightened the attention to the indicator of labour productivity on the part of the public authorities in recent years in Ukraine. In particular, the Ministry of Economy of Ukraine has approved the Temporal methodical recommendations calculating of the labour productivity in the economy and by economic activities in the December 26, 2008 [9]. The labour productivity is calculated at a national level, by economic activities and for international comparisons in accordance with approved recommendations.

The labour productivity is a measure, primarily of, the effectiveness of the human labour. However, the calculation of this index is based on the gross of domestic product, which reveals the influence of other factors - the external and the internal on the macroeconomic level. The analysis of the dynamics of the

labour productivity in relation to GDP and employed population allows revealing the extensive or the intensive economic growth at a certain point despite the influence of these factors.

The level and dynamics of labour productivity, first of all is due to the economic situation in the country, is influenced by the external factors. So, the current economic situation in the world is characterized by the high regional variation in economic growth.

The global economy experienced a decrease as a result of the global financial crisis in 2009, after a period of the strong growth at the beginning of the XXI century (Figure 1 [3]). Its influence varied within wide limits in different regions of the world. 2009 was considered the year of "The Great Recession" in the group of developed countries, the most a severe recession since the Great Depression in the 1930s. The crisis of a public debt and the various austerity measures eventually led to a significant slowdown in economic growth, especially in Europe, although in 2010 the economic recovery has been stronger than expected. The Group of transition economies managed to avoid the indiscriminate recession and kept a higher rate of growth than in the developed countries.

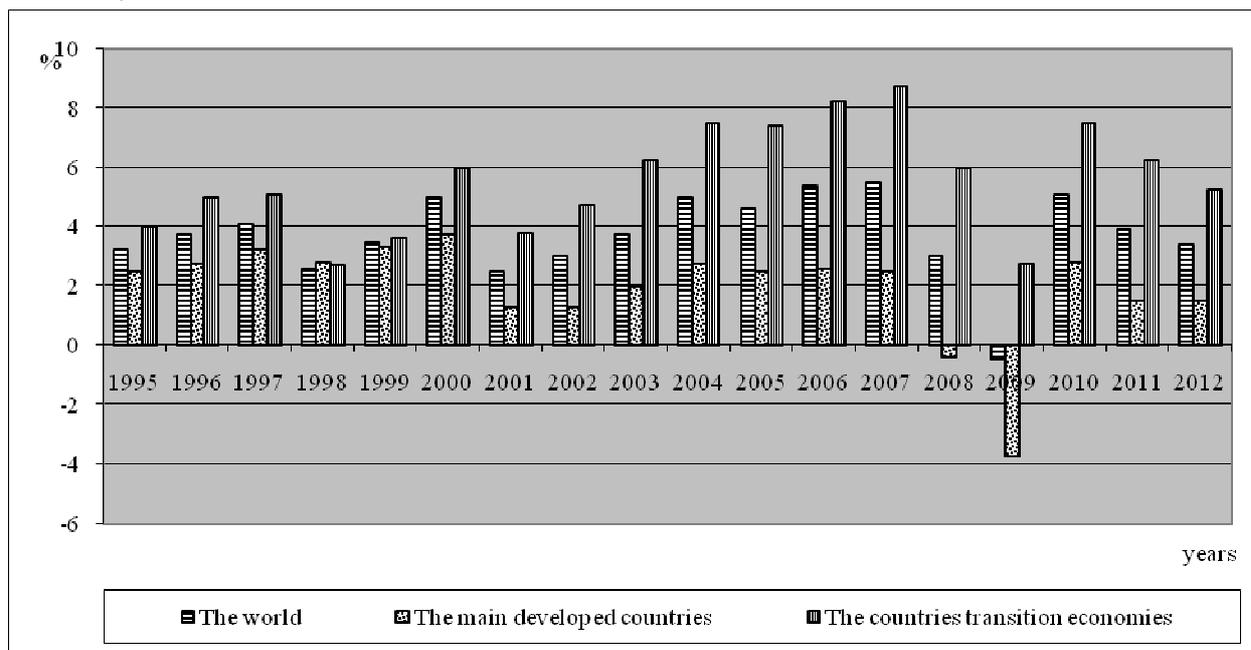


Figure 1. The average annual growth rate of GDP in constant prices

The dynamics of productivity in Ukraine for the years 2000-2012 are presented in Table 1 (compiled by the author based on [6]) using the method of a methodology of the labour productivity at the national level, which is proposed in the Temporary methodological recommendations calculation of the labour productivity in the economy and by the economic activities.

Table 1

The dynamics of the labour productivity in Ukraine for 2000-2012 years

Indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
GDP at current prices, mln. UAH	17007	20419	22581	26734	34511	44145	54415	72073	94805	91334	10825	13020	14088
The number of employed persons, thousands persons	20175	19971	20091	20163	20295	20680	20730	20904	20972	20191	20266	20324	20354
Labour productivity, ths. UAH / person	8,43	10,22	11,24	13,26	17,00	21,35	26,25	34,48	45,21	45,23	53,42	64,07	69,22

We can tell that the rate of the labour productivity tends to rise in Ukraine for the period 2000-2012 years, using analysis of the calculations are presented in Table 1. The average annual growth of indicator is 5.07 thousand UAH per worker.

The labour productivity is characterized by such trends in the world as a whole and for the specific regions: the developed economies and EU countries exceeded the global average of the labour productivity by 3.4 times; the Central and the Eastern Europe and the CIS countries - in 1.1 times, the Middle East - 1.6 times by the statistics of the International Labour Organisation [10].

Ukraine in 2008 lagged behind the developed countries in 2,2-5,9 times, from the countries transition economies in 1,7-2,5 times in terms of the labour productivity, which is calculated as a ratio of GDP at prices PPP to a busy persons by another source comparison (Table 2, compiled by the author [7]).

Table 2

The labour productivity in Ukraine and other countries
(US \$, constant prices of 1990)

Country	Years				
	1990	1995	2000	2007	2008
Ukraine	12,104	6,157	6,661	10,883	11,134
Austria	36,542	38,457	44,305	48,118	48,121
Finland	33,899	39,411	44,587	50,838	50,560
France	44,897	47,902	51,311	54,931	55,052
Norway	38,044	44,368	48,579	52,27	51,736
Poland	11,519	14,540	19,324	24,373	24,553
Sweden	33,126	37,929	42,911	49,548	48,987
China	2,562	3,941	4,660	9,574	10,378
Russia	15,281	10,761	11,991	17,85	18,702
Belarus	14,248	10,842	14,63	25,168	27,547
UK	35,069	39,996	44,657	50,989	51,697
USA	47,907	51,455	57,909	63,783	65,480
Japan	37,144	38,765	40,771	45,687	45,587

The labour productivity as a key indicator of the economic competitiveness is directly related to wages that allows estimating the social standards of all segments of the population. The competitive advantages are providing not only the labour productivity, but also the ratio of the level of the wages in the country and abroad, according to Western economists [5].

The temporary methodical recommendations calculation of the labour productivity in the economy and by economic activities is set to the need to use at the international comparisons of the productivity and the wages in prices by purchasing power parity (PPP), which negates the impact of the domestic prices. There are presented the results of calculations on the difference between the growth of the productivity and the wages in Ukraine and other countries in 2000-2007, in the table.3 [8].

Table 3

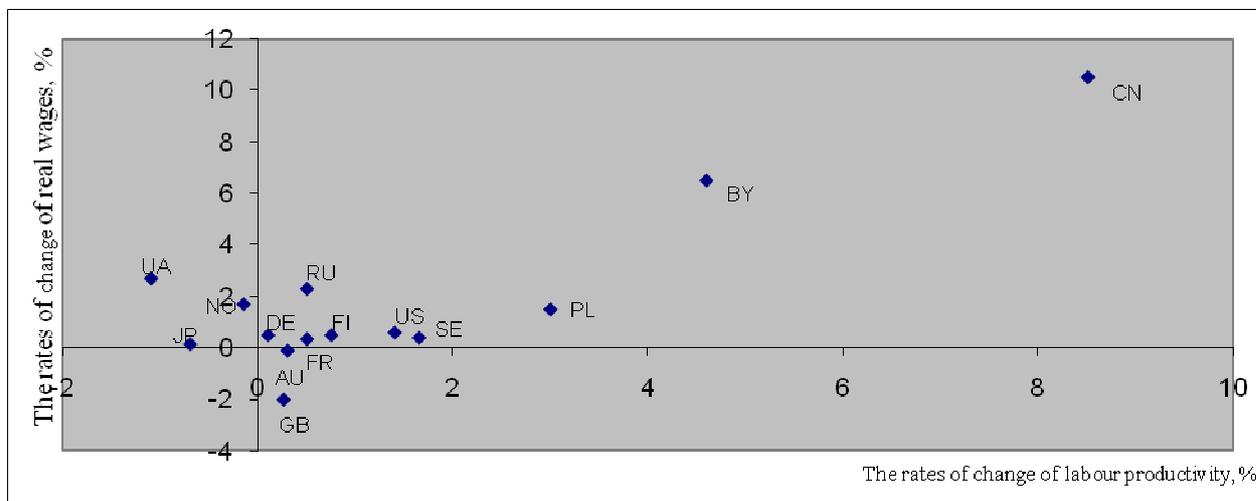
**The difference between the growth of the productivity and the wages in at PPP prices in
Ukraine and other countries in 2000-2007,%**

Country	2000	2001	2002	2003	2004	2005	2006	2007	Average growth in 2001-2007
Ukraine	4,9	-0,1	-8,4	-0,1	0,2	-7,8	-0,7	1,2	-2,24
Russia	-0,3	-7,5	-9,0	-0,7	2,4	5,2	-2,0	-5,2	-2,41
Poland	3,3	-2,1	4,9	2,6	5,6	1,0	0,9	1,0	1,99
Hungary	-3,7	-0,3	-1,6	-0,9	-0,1	-1,5	1,3	-0,2	-0,49
Czech Republic	-1,4	9,0	-0,7	-10,2	9,2	-0,9	-0,2	0,5	0,95
Slovakia	0,8	2,3	-3,9	6,1	5,6	-1,2	1,3	1,1	1,60
Romania	-19,4	1,2	2,8	6,1	1,3	-6,2	2,4	0,0	1,07
USA	-1,9	0,3	0,9	0,8	1,4	0,7	0,4	-0,3	0,58
Germany	-1,4	0,6	0,8	0,7	1,8	2,1	1,9	1,4	1,31
France	-0,1	-0,6	-0,7	0,1	0,6	0,3	0,6	0,3	0,08
Great Britain	-2,2	0,5	1,1	0,9	0,3	-0,9	0,7	1,8	0,63
Japan	0,6	-0,3	1,2	1,3	2,6	-0,1	-0,9	2,4	0,88

The wages growth remained above the pace of the labour productivity in the certain years in the some countries according to Table. 3. Thus, the productivity labour growth exceeded the growth wages only in 2000, 2004 and 2007 in Ukraine. And, the average temp of changes of these parameters expressed the opposite trend at 2.24% for the study period. The trend of the ratio of the labour productivity and the wages are worse only in Russia. There have been observed the best the macroeconomic proportion between the growth of the labour productivity and the wages in Poland, which during the period 2001-2007, amounted to 1.99%.

There was observed a positive trend in labour productivity in the most countries over the period 2008-2011 (Fig. 2, compiled by the author [3]). There was also observed the moderate growth of real wages in many of these countries. However, rates of labour productivity growth prevailed over rates of the growth of wages only in some countries. Only UK, USA, Sweden, Poland, Austria, Finland, France can be attributed to these countries.

The positive macroeconomic proportions aren't characterized by any of the countries transition economies. In addition, Ukraine demonstrated negative rate of the change in labour productivity over the period 2008-2011.



CN - China; PL - Poland; UA - Ukraine; RU - Russian Federation; BY - Belarus; AU - Austria; FI - Finland; FR - France; DE - Germany; NO - Norway; SE - Sweden; GB - Great Britain; JP - Japan; US – USA.

Figure 2. Rates of change of labour productivity and real wages in Ukraine and other countries in the years 2008-2011

In particular, the increase of economic productivity of the system as a whole and the labour productivity is a major source of growth of the level of the meet the needs, improving the welfare of the population and development of society.

Most researchers analyze the possibilities of increasing the efficiency of production in the main areas on the basis of factors that provide increased productivity of living labour, return of material, the capital productivity and the output capital ratio in the economic literature on increasing of the effectiveness of activity of the enterprise.

A comprehensive approach that may be implemented on the basis of program-based approach should be used to achieve effectively the goals and to solve objectives to improve labour productivity at the separate enterprise and in the country. Among the areas of these measures can be distinguished the support and promotion of enterprises in implementing programs to improve labour productivity, the monitoring the external factors influencing the labour productivity of the entities of businesses, the systematic measures for the development of priority sectors of the economy.

The development of the national economy should be based on the prevailing of the labour productivity growth compared to the wages of employees. The condition for the formation of a competitive economy is the greatest possible positive difference between the rates of the labour productivity and the wages. It is necessary to improve the state regulation of processes occurring in the employment and the wages of employees at this stage of the market reforms. The state regulation should be included in the labour sphere, above all, improving the legislative and the regulatory framework, the standards, the methods of calculation and the measurement of the labour productivity, a systematic recording and analysis of trends in the dynamics of the labour productivity and the wages through the continuous monitoring to ensure optimal balance in the rate of growth of these indicators.

Conclusions and further research. The productivity provides a competitiveness in economy, of the region or separate enterprise, affects the created product and welfare of the population. The income growth of the workers, the coordination of current production activities with the strategic priorities, the implementation criteria of the economic productivity, the providing the competitive position of the enterprise are achieved through increasing of the labour productivity and the production in general.

The comprehensive approach to improving labour productivity provides support and promotion of enterprises in implementing programs to improve labour productivity, the monitoring the external factors influencing the labour productivity of the entities of businesses, the systematic measures for the development of priority sectors of the economy. The implementation of the state legislative and the legal

regulatory of employment and the wages of employees and monitoring the main macroeconomic indicators and the proportions cause to enhance the functioning.

Literature:

1. Aivazyan S.A. Applied Statistics and Fundamentals ekonometrii / S.A. Aivazyan, V.S. Mkhitarian. - Moscow: UNITY, 1998. - 1022 p.
2. Grishnova O.A. Labor Economics and social and labor relations: a textbook / O.A. Grishnova. - 4th ed., Updated. - K.: Znannja, 2009. - 390 p.
3. The report "Wage of the world in 2012-2013" : Wages and equitable growth / GTPDT and Office ILO of countries of Eastern Europe and Central Asia. - Moscow: ILO, 2013. - 112 p.
4. Economics of Enterprise: a textbook / J.M. Petrovych, A.F. Kit, V. Kulishov [and others] ; General ed. J.M. Petrovich. - Lviv: Novyi svit-2000, 2004. - 680 p.
5. Krugman P.G. The international economy. Theory and politics / Robert P. Krugman, M. Obstfeld, translation of the English; edited V.P. Kolesov, M.V. Kulakov. - Moscow: Ekonomicheskii Faculty of MGU: UNITY, 1997. - 799 p.
6. The official website of the State Committee of Statistics of Ukraine [Electronic resource]. - Mode of access: <http://www.ukrstat.gov.ua>.
7. Official site of the International Labour Organisation: Key indicators of the labor market [Electronic resource]. - Mode of access: <http://kilm.ilo.org/KILMnetBeta/default2.asp>
8. Sokolyk M. Productivity and wages at PPP in Ukraine and other countries: a comparative analysis / M. Sokolik // Economics and Forecasting. - 2011. - № 1. - P. 85-103.
9. The Temporary methodical recommendations calculating of labor productivity in the economy as a whole and by economic activities [Electronic resource]: approved Order of the Ministry of Economy of Ukraine on Dec 26. 2008, № 916. - Mode of access: <http://zakon.nau.ua/doc/?code=v0916665-08>.
10. Global employment trends : May 2009 update / International Labour Office. – Geneva : ILO, 2009. — C.15.

Chernushkina O.O. LABOUR PRODUCTIVITY IN UKRAINE: COMPARATIVE ASPECT

Purpose. The purpose of this paper is to identify the place of labour productivity in the productivity theory, to analyze the international comparisons of Ukraine and countries of the world in terms of labour productivity, to examine the correlation of wages and labour productivity, to ground the principles of its further growth.

Methodology of research. The general philosophical principles and methods of learning, such as: the dialectical method, the methods of deduction and induction, the historic and logical method to refine the categorical apparatus, the methods of analysis of a statistical and an economic information and a graphic-analytical analysis in the study of the trends in labour productivity, the analysis and the synthesis in justifying directions for further labour productivity growth were methodological basis of the study.

Findings. It was emphasized that the productivity of provides of a competitive economy, a region or an individual enterprise and affects the created product and welfare of the population. The rising incomes the employees, the coordination of current production activities with a strategic priority, the implementation criteria productive management, the ensuring the competitive positions of the enterprise are improves labor productivity and production in general. The support and the stimulation an enterprises in implementing programs to improve the labour productivity, the monitoring the an external factors influencing the labour productivity of business entities, the systematic measures for the development of the priority economic sectors, the introduction of a state legislative and a normative-legal regulation of the employment and the remuneration of the employees, the monitoring the main macroeconomic indicators and proportions are provides a comprehensive approach to improving the labour productivity.

Originality. It has been found a place Ukraine among other countries with the main macroeconomic proportions, in terms of the labour productivity and substantiated the basis for its further growth.

Practical value. The scientific conclusions that derived from the study will contribute to the creation of favourable conditions for the development of an industry and the national economy as a whole, the full reproduction of the labour force by increasing of the labour productivity and improving the management of the human resources.

Key words: productivity, labour productivity, wages, macroeconomic proportions, increasing of labour productivity.