The European Proceedings of
Social and Behavioural Sciences
EpSBS
www.europeanproceedings.com
e-ISSN: 2357-1330

DOI: 10.15405/epsbs.2021.05.321

ISCKMC 2020
International Scientific Congress «KNOWLEDGE, MAN AND CIVILIZATION»

LABOR PRODUCTIVITY GROWTH AS A FACTOR OF REDUCING THE WORKING POVERTY RATE

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Abstract

Until recently, the opportunities of the global economy allowed people to adjust their incomes due to migration. It is the lack of opportunities to provide stable and sufficient earnings for a family that leads people to make decisions about changing their place of work, moving to another industry, or changing the place of residence to another region of the country. Such labor mobility can be considered as favorable factor in solving the problem of household poverty in a country without state participation. The COVID-19 pandemic-related administrative bans in almost all the countries of the world have restricted the movement of labor both within and outside countries. The processes of employment and income generation will be preserved for some indefinite time within the borders of national and regional economic systems. In these circumstances, the problem of cross-national, cross-sectoral and regional differentiation of income of the employed will become more obvious. A significant decline in labor income as a result of a decrease in the effective demand of households is highly likely, which will affect the cutback in business revenue. The business response – a reduction in wages -will be unambiguous These processes will be typical for all the world's economies, and a significant contribution to lower wages in developing countries will be made by a larger supply of labor represented by returning migrants. Increasing inequality of labor income will become an objective reality.

Keywords: Labor productivity, payment for labor, poverty, industry

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1. Introduction

Poverty is one of the main global problems of the modern world. According to the review by Gammarano (2019) from the ILO Department of Statistics' Data Production and Analysis Unit in 2018, 79 % of all employed people in the world were not poor. This means that the employed people's labor income allows them to provide a comfortable living for themselves and their families. According to international standards, the poverty line is an income or expenditure of $ 1.90 per person per day based on purchasing power parity (PPP). Poor people are those who spend less than $ 1.90 per day on basic food, clothing, and housing. In 2018, 13 % of the employed were moderately poor. 8 % of the world's employed were in extreme poverty, which is the global level of working poverty.

The governments should consider the existence of the working poor as a paradoxical phenomenon that is set to be eradicated. Employment must provide workers with decent payment for labor, safe working conditions, and social security. Over the period 2000-2018, according to the International Labor Organization (ILO), the share of the working poor has decreased by half, in 2000 this figure was 26 **%** (Gammarano, 2019). However, during the crisis period of 2008-2010, the positive dynamics of reducing the poverty of the employed slowed down. High inter-industry wage differentiation within the country, the presence of segments of the labor market or even entire industries with low wages level leads to migration from the country.

2. Problem Statement

According to ILO, in 2017, 10 % of the highest income earners received 48.9 % of all labor income in the world, the previous group of 10 % of the employed (the ninth decile) – 20.1 %, and the eight groups of the remaining employed – only 31 % of world labor income. Over the period 2004–2017, the share of wages in gross domestic product (GDP) for the 20 % of the lowest-paid employed decreased from 3.9 % of all labor income to 3.5 %. The share of the middle class (as defined by the ILO) which made 60 % of the employed, declined from 44.8 to 43 %. This trend is driven by increasing labor income inequality in major countries such as Indonesia, Italy, Germany, Pakistan, Great Britain, and the United States (ILO, 2019). Overall, the share of global income earned by employees fell from 53.7 % in 2004 to 51.4 % in 2017. This means that the share of capital income increased from 46.3 to 48.6 % (ILO, 2019). Insecurity of the employed is an indicator of the weakness of the government policy in relation to increasing the income of the employed and providing social guarantees. The degree of inequality in global labor income is not only a consequence of differences in average incomes across countries. In poorer countries, labor income differentiation is generally stronger. This is due to the scale of the national economy, the sectoral structure of the country's economy, the level of technological development and accumulated human potential.

Referring to the study of income differentiation of US households in the period 1988–2016, Russian researchers note that the most important factors of income differences were education, industry affiliation, and membership in trade unions. Conducting their research on the differentiation of average wages in Russia for the period 2004–2017, Russian scholars identified a number of trends and features of the home economy. First, the least affluent groups of population have become the leaders of wage growth,

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which can only be assessed positively. Second, wage growth has slowed for employees with higher education, but "diploma depreciation has not occurred"/ Third, the most important positive trend is the fact that the growth of average wages in the formal sector has increased significantly in comparison with the growth of wages in hidden employment. Fourth, with regard to the place of work – either city or village, there is a shift in the growth of wages in the direction of higher growth rates in rural areas. The fifth trend is to maintain a high differentiation of average wages depending on the industry of employment. Payment for labor in the public sector or agriculture tends to increase by the end of the study period, including due to the government efforts, though it is non-comparable to the payment in such a highly profitable sector of the economy as oil and gas industry (Ovchinnikov & Malkina, 2019). Earlier in her work, Malkina (2017) noted some factors of interregional differences in household income inequality. In Russian regions, on the whole normal inequality is higher in the regions with a large intra- and inter-industry differentiation of average wages, a lower share of profit in the value added of enterprises, and a low level of employment.

3. Research Questions

The lower the business revenue, the lower payment for labor of the employed in this industry is. Typical sectors of such economy include national agricultural production. Russian scholars note the significant problem area of the development of agricultural regions and put forward theses on the necessity to diversify the economy of regions specializing in agricultural production. Socio-economic problems of development of Russian regions with agricultural specialization lies in environmental degradation of areas, decrease of the demographic potential of the territory and the country. In the labor market, the problems of high unemployment and significant differentiation of the population by income level due to lower wages are particularly relevant. Dissatisfaction with income leads to the migration of labor resources from rural areas, which further causes a decrease in the intellectual, educational, professional, cultural and moral potential of rural residents (Zakshevsky et al., 2019).

Stating the system-forming role of agriculture for the national economy of Russia, the scholars warn of a serious threat to the economic security of the country with the strengthening of inter – and intra-regional differentiation, determined by the sectoral specialization of territories. They note the need to use strategic planning tools for the development of the agricultural sector of the country's economy, increasing the effectiveness of the state economic and social policy tools in relation to agricultural regions (Samygin et al., 2019). Researchers from the Orel State Agrarian University emphasize that trends in labor productivity in agriculture can serve as an important and, further, stable development trends of this sector and the national economy taken as a whole (Shestakov & Lovchikova, 2019).

The maximum application of the potential of the national economy in order to increase the income of the employed as a result of the formation of a progressive industry structure is characteristic of all developing countries. For example, Hoang et al. (2019) give recommendations on the formation of the sectoral and regional structure of the national economy of Vietnam. The recommendations to create jobs in labor-intensive industries are quite traditional for developing countries. For Vietnam, this is the production of textiles and clothing, agricultural production, and the food industry. The authors still note that it is necessary to pay considerable attention to investment in human capital as the basis for long-term economic growth and stability of the country's economy.

4. Purpose of the Study

The ability of businesses to pay high wages depends on the general state of the national and global economy, as well as the existing systems of relations on the national labor market. In countries where there is a long tradition of paying high wages, the level of the working poor is either minimal or absent in fact. In such countries, established stable traditions in the labor market are maintained even in recessionary circumstances. National labor market protection systems transform business labor costs into government expenditures in the form of social transfers. This is how household income is supported: business and government redistribute social responsibility for the employed and their family members. Such mechanisms for social protection and fairer treatment in recessionary situations can only be afforded by national governments that are clearly aware of the need to simultaneous support of both businesses and citizens. The formation of such an attitude of the state is not a single-step execution during crisis – it is the result of decades of ethical behavior towards citizens engaged in the national economy. The economic indicator of the formed fair system of income distribution in the national economy is the indicator of "labor income share as a percentage of GDP". This indicator is included in the group of indicators of the sustainable development. The paper provides a cross-country comparison of labor productivity, labor income share as a percentage of GDP, industry structure and working poverty rate.

5. Research Methods

The methodological basis of the study is the comparative analysis of the level of efficiency of social production that is labor productivity, and the share of the working poor in the country. Recent research allows to draw some important conclusions regarding the correlation between the level of income and efficiency of the workforce in the national economy. The calculations were made on the basis of the International Labor Organization’s data (ILO, 2019).

The level of wages and the level of poverty of the employed people depend on the scale of the national economy. In this case, the scale of the national economy will mean the volume of production of goods and services in the national economy of the country, the gross domestic product (GDP). The amount of value added produced in the country determines the job offers to the local population and migrant workers. It is the sectoral structure of the national economy that specifies the level of value added produced, the level of labor productivity per employee, and labor income share as a percentage of GDP. The higher the level of employment in such traditional industries as agriculture is, the lower the level of output and labor productivity and higher the level of poverty becomes. Countries with industrial specialization in agricultural production are characterized by poverty of the employed.

6. Findings

According to ILO statistics in 2017, the average global level of labor productivity reached $ 24,947.2 us dollars in 2010 prices (measured in 2010 dollars), the rated value of the indicator “labor

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income share as a percentage of GDP" made 51.4 %. The share of the employed poor was 7.7 %. For the structure of employment in the world as a whole, see Figure 1.

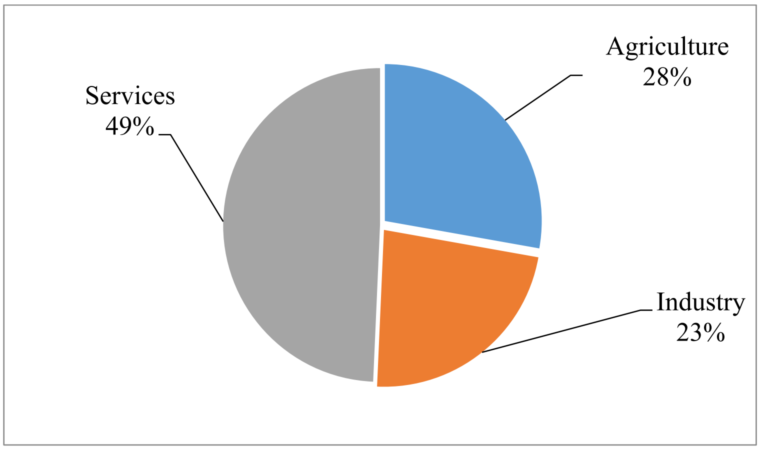

Figure 1. Sectoral structure of employment in the world, 2017

The global average values of indicators should inspire sufficient optimism. However, the high level of differentiation in the economic development of countries causes serious gaps in the level of labor productivity, payment for labor and the existence of such a paradoxical category of the employed as the working poor. The World Bank divides all the countries into four groups by the level of gross national income (GNI) per capita (in US dollars, converted from the local currency by the Atlas method) (WB, 2020). The data of the grouping of countries based on the structure of employment and the share of the working poor is shown in Table 1.

Table 1. Grouping of countries by GNI per capita, 2017

Country group	GNI per capita in US$	Labor productivity per employee in US$ in 2010 prices	Percentage of employed poor	Percentage of people employed in agriculture	Percentage of people employed in manufacturing industry	Percentage of people employed in service sector
Low income	<= 955	1,551.1	40.4	61.2	10.6	28.2
Lower-middle income	996–3,895	5,935.1	11.7	39.5	22	38.5
Upper-middle income	3,896 – 12,055	16,897.3	0.9	22	26.4	51.6
High income	>12,055	90,027.7	0	2.9	22.9	74,2

In the aggregate, 119 countries have working poor workers. Comparison of the characteristics of country groups brings to the conclusion about the relationship between labor productivity, employment structure and the opportunity to receive high labor payment. The developing countries with the lowest productivity level correspond to the highest level of the employed poor, and the economies of these countries have agricultural specialization in the sectoral structure of the employed. The *High income* countries have the highest share of employment in the service sector and the highest level of productivity, which allows employed workers to have high payments. According to ILO data, there are no working poor in this country group, though we can reveal them under the detailed analysis of each country. The

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maximum and minimum values of the indicators of the industry structure of employment, labor productivity, and the share of labor payment in the GDP by country group are shown in Table 2.

Table 2. Characteristics of country groups, 2017

Indicator name	Low income	Lower-middleincome	Upper-middleincome	Highincome
Number of countries in the group	31	45	52	60
Labor productivity per employee measured in US$ in 2010 prices (maximum)	7,400.60	19,391.40	79,280.50	228,955.40
Labor productivity per employee measured in US$ in 2010 prices (minimum)	403.20	1,246.40	42,320.60	24,968.80
Labour income share as a percent of GDP (maximum)	58.1	67.4	63.6	70.7
Labour income share as a percent of GDP (minimum)	28.5	26.6	27.0	18.6
Working poverty rate, % (maximum)	71.5	69.9	11.4	2.5
Working poverty rate, % (minimum)	4.1	0.1	0.1	0.1
Percentage of employed workers in agriculture, % (maximum)	92.0	66.8	43.1	14.5
Percentage of employed workers in agriculture, % (minimum)	11.0	9.0	3.2	0.2
Percentage of employed workers in industry, % (maximum)	33.0	42.4	41.9	54.5
Percentage of employed workers in industry, % (minimum)	1.5	6.2	10.7	10.6
Percentage of employed workers in industry, % (maximum)	64.0	64.5	75.0	89.0
Percentage of employed workers in industry, % (minimum)	6.0	24.1	37.3	44.2

In the first group of *High income* countries, six countries have the working poor: Argentina, Barbados, Kuwait, Oman – 0.1, Chile – 0.2, and Panama – 0.8. The minimum productivity values refer to the countries with the working poor, they are Panama and Argentina. In the subgroup of countries with a share of wages in GDP of more than 50 %, there are four countries with the working poor. The country with the lowest "Labor income share as percentage of GDP" – Qatar has no the working poor. Panama, the country with the highest share of the working poor, has only 30.3 % of GDP for payment for labor, and it also has the highest share of people employed in agriculture. The countries of this group have the highest figures for the world economy in the sphere of services and industry, and the minimum level for employment in the agricultural sector.

In the *Upper-middle income* group, 37 countries have the working poor. A high share of the distribution of GDP on payment for labor does not guarantee that there will be no employment poverty in these countries. This group of countries has a high share of employment in the service sector, but in comparison with the previous group, this low-income segment has lower income. In general, the group is characterized by a high level of inter-industry and intra-industry payment. Botswana is a representative example of this type: it has the highest level of the working poor, with a fairly high level of employment in services and industry, and a middle payment share in GDP. Another interesting example for the group

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is Gabon. This country shows the lowest share of wages in GDP in the group and the highest level of employment (33.9 %) in agriculture, while the share of the working poor is only 1.8 %.

In the third group of 44 nations, the *Lower-middle income*, 39 countries have the working poor. Paradoxically, a big share of GDP distributed in favor of the employed does not guarantee decent pay for them in these countries. The reason for this is a small scale of the national economies. Here we can observe significant gaps in the economic and social development. The maximum level of efficiency of public production, measured by the level of labor productivity per employee, is 2.18 times lower in this group than the minimum level of efficiency of public production in the group of *Upper-middle income* countries. The minimum level of employment in agriculture is 2.81 times higher if compared with the previous group. Almost identical points of minimum and maximum employment in industry and in the service sector do not provide a high level of remuneration.

The fourth, *Low income* group, includes 64 countries, all of them have the working poor. More than 60 % of them work in Burundi, Somalia, Madagascar, Central African Republic, Malawi, and Guinea-Bissau. In 17 countries in this group, the indicator of *labor income share as a percentage of GDP*makes more than 40 %. The share of people employed in agriculture, the traditional sector for this group, is more than 50 % in 19 countries. The top three countries of employment in agriculture are the countries with the highest level of poverty in the group and the world: Burundi, Somalia, and Central African Republic. These are the world's poorest countries, which are part of the group of countries with a minimum level of productivity per employee. Thus, labor productivity per employee in Somalia was 403.20 US$, the minimum value in the aggregate of the studied countries; some other figures are: Burundi-504.90 US$, Madagascar – 844.90 US$, the Democratic People's Republic of Korea – 911.10 US$, and Central African Republic – 974.20 US$.

7. Conclusion

The low level of efficiency of public production, due to the scale of the national economy, industry specialization, the level of technological development and educational potential of the workforce, determines the possibility of obtaining decent wages for employees. The problems of socio-economic development of countries with a high share of employment in the sphere of agricultural production are quite typical. The need to support agricultural producers is not only a strategy for ensuring food security and economic and political independence of the country. The agricultural sector of the economy is becoming dominant for developing countries, but the existing production technologies remain traditional and labor-intensive. The social function of the government – providing employment and obtaining labor income for citizens – conflicts with the tasks of ensuring the growth of business income as a possible source of investment and ensuring economic growth. The large labor supply in these countries leads to significantly low wages. The governments practically exclude themselves from solving the problems of investing in agricultural production, increasing labor productivity, and increasing payment for labor. Eliminating the phenomenon of the working poor implies new targets for public policy in all countries. When forming a system of decent payment for employees in the national economy, it is necessary to focus not on the indicator the *share of labor income as a percentage of GDP*, but on the indicator the *working poverty rate*, and the *annual growth rate of output per employee*.

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