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# WAGES IN THE RUSSIAN ECONOMY: LEVELS AND DYNAMICS

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## *Abstract*

Wages are the most important livelihood for the Russian citizens. In 2018 Russian wages amounted to 59.3 % of all cash income. Wages are formed on the basis of labor costs taking into account the supply and demand mechanisms. Over a long period of time, the economies of developed countries have witnessed a real wage growth, thereby confirming the high efficiency of the modern post-industrial economy. In Russia, during market transformations in 1992, 1995 and 1999, there was a significant decrease in the level of real wages, especially in the budget sector of the economy. But after 1999, real wages began to rise again, reaching a total of 80 % of the 1991 level by the mid-2000s. From 2000 to 2018, the average monthly accrued wages increased 20 times, and its purchasing power increased more than 2 times. The most important condition for wage growth is an increase in labor productivity. This indicator is one of the lowest in Russia. Today, the growth of labor productivity is one of the most important tasks requiring large-scale works to increase labor productivity in the Russian economy.

**Keywords:** Wage, employee, labor productivity, minimum wage, labor market, labor.

## 1. Introduction

In the global economy, the competitiveness of national economies is dependent on the ability to innovate and perceive advanced technological achievements determined by quality of the workforce and motivation of workers. At the turn of the end of the 20th and beginning of the 21st centuries, there was a rapid increase in the number of classic industrial wage earners, taking into account China with more than 1.5 billion people for whom wages are the main income (Buzgalin & Kolganov, 2005.). More than 3 billion people are involved in labor activities. 1.65 billion people out of the total number of workers are employed and regularly earn wages; 1.5 billion employees work in the agricultural sector and for small family companies. More than 200 million are unemployed (Fedchenko et al., 2018).

## 2. Problem Statement

The article aims to study the level and dynamics of wages in the Russian economy.

## 3. Research Questions

This article analyzes the level and dynamics of wages in the Russian economy as a whole and in the context of individual economic activities, identifies factors affecting wage formation.

## 4. Purpose of the Study

The purpose is to determine the role of wages for modern society, study its level and dynamics in the economy of the Russian Federation, factors that influence its formation and the wage level.

## 5. Research Methods

The article uses the methods of statistical analysis, functional analysis, positive and normative analysis. The work follows the problem-chronological principle, the principles of consistency and scientific objectivity.

## 6. Findings

Despite the fact that researchers have made a lot of labor economics hypotheses, only the idea developed by Smith who suggested that labor is a residual claimant for income, are considered as the first systematic interpretation of the wage theory. According to Smith, wages have existed both in the primitive system and in the capitalist economy. He attempts to describe the mechanism of wage fluctuations, emphasizing that the physical cost of living is its lowest level (as cited in Schumpeter, 2001). He relates the analysis of wages to the level of wealth and country's population. The growth of welfare increases wage levels which affects the birth rate and the volume of labor supply.

At each historical stage, the cost of reproduction of the labor force required to achieve the normal level of consumption of workers and members of their families is considered as the base for the formation

of average real wages. On this basis, wages are formed taking into account the mechanisms of supply and demand.

In the economies of developed countries, there has been an increase in the level of real wages. For example, in the United States for 1960–1995, real wage growth was more than 61 % due to the high efficiency of the modern post-industrial economy (Mayevsky, 2005).

Wage is an important source of subsistence. In 2018, labor remuneration accounted for 59.3 % of all cash incomes of the  population (GosKomStat, 2019). Under the market transformation of the Russian economy during 1992, 1995 and 1999, as a result of shock therapies, there was a significant decrease in the real wages. In 1999, the share of wages of employees of the health care, education, and culture institutions was 30 % relative to its value in 1991. After 1999, real wages began to grow; in the management sector, in 1991, the wages were at the level of 2004, in other sectors it was 90 % of the 1991 level. By 2004, the level of real wages reached 80 % of the 1991 level (Gimpelson & Lukyanova, 2006).

The employment rate has always been quite stable and not sensitive. During the transformation crisis of the 1990s, the employment rate decreased by less than 15 % with a reduction in GDP of about 40 % (at the bottom of the crisis) (Gimpelson et al., 2017).

The value of the average wage indicates the level of economic development. In the Russian economy, the main obstacle to scientific and technological progress is a low wage level. In conditions of low wages, both private and public investors do not to invest in scientific and technological transformations, since scientific and technological progress occurs when the costs are lower than the saved wages (Abalkin, 2006).

Using Table 1, let us consider the dynamics of wages in the Russian economy from 2000 to 2018.

**Table 01.** Dynamics of nominal and real average wages in the Russian economy (Compiled by the authors according to "Russia in Figures, 2019")

| Indicators | 2000 | 2005 | 2010 | 2014[1] | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|
| Average wages (in prices of the corresponding year) rub. | 2223 | 8555 | 20952 | 32495 | 34030 | 36709 | 39167 | 43445 |
| US dollars (based on the average annual official exchange rate of the US dollar) | 79 | 303 | 690 | 856 | 561 | 549 | 671 | 695 |
| The ratio of average monthly wages and social benefits to the cost of living of the working population, % | 172 | 268 | 347 | 379 | 331 | 351 | 364 | 397 |
| Real accrued wages of employees (taking into account the consumer price index) in % to the previous year | 120.9 | 112.6 | 105.2 | 101.2 | 91.0 | 100.8 | 102.9 | 106.8 |

[1] Data for do not take into account information on the Republic of Crimea and Sevastopol.

Analyzing the data from Table 1, we can conclude that over the past years, the Russian economy has seen an increase in both nominal and real wages; an increase in nominal wages exceeds an increase in real wages, which is associated with an outstripping increase in consumer prices. In general, from 2000 to 2018, the average monthly wage increased 20 times, and its purchasing power increased more than 2 times.

The results of a study of the level and dynamics of the average monthly nominal wages indicate that their highest rates were observed in the mining industry, especially in the oil and gas production industry, exceeding the average Russian wages 1.4–3 times; in the tobacco industry, the excess was 2.3 times; in the production of coke and petroleum products – 2.0 times; in the financial and insurance sectors – 2.1 times; in research and development sectors – 1.7 times; in the information and communication industry – 1.6 times (GosKomStat, 2019).

Throughout the period under review, wages were lower in agriculture, hunting, fishing, fish farming, textile leather production, and wood processing industries, as well as in the industries producing straw products and weaving materials, industries providing postal, courier, hotels and catering services. In the above areas, in 2018, the average monthly wage was in the range of 50-60% of the average Russian equivalent (GosKomStat, 2019).

There is a significant regional differentiation of wages in the Russian economy, which is confirmed by the data in the following table.

**Table 02.** The average monthly salary in the federal districts of Russia (GosKomStat, 2019)

|  | **The average monthly nominal wages for the first half of 2019, in rubles** |
|---|---|
| Russian Federation | 46210 |
| Central Federal District | 58832 |
| North-Western Federal District | 51438 |
| Southern Federal District | 33093 |
| North Caucasus Federal District | 28263 |
| Volga Federal District | 33272 |
| Ural Federal District | 50245 |
| Siberian Federal District | 40008 |
| Far Eastern Federal District | 54274 |

An analysis of the data in Table 2 indicates that the highest level of wages was observed in the Far Eastern Federal District. It exceeds the average Russian counterpart by 18 %, while the lowest level was observed in the regions of the North Caucasus Federal District – about 61 % of the average Russian level.

In the commercial sector, high wages stimulate the growth of public sector wages. The region has a great potential in the form of over-tariff payments but this does not exclude the widening of the wage gap between the budget and non-budget sectors. The presence of monetary and non-monetary incentives is evident from the fact that the number of people employed in the main public sectors (education and healthcare) is high (Gimpelson & Lukyanova, 2006).

The regional wage differentiation based on a territorial basis does not compensate for living expenses, and higher wages in different regions do not always mean higher real incomes and higher standards of living. Table 3 shows the survey data for some regions.

**Table 03.** The ratio of the average wage to the cost of living (for the Russian regions) (GosKomStat, 2019)

| Russian regions | The average monthly nominal accrued wages for the first half of 2019 in rubles. | The cost of living (average per capita) in rubles. per month for the second quarter of 2019 | The ratio of the average monthly wage to the cost of living |
|---|---|---|---|
| The Russian Federation | 46210 | 10753 | 4.3 |
| Moscow | 91420 | 16957[1] | 5.4 |
| Ivanovo region | 26435 | 10544 | 2.5 |
| Nenets Autonomous District | 87878 | 20063 | 4.4 |
| Kaliningrad region | 33236 | 11590 | 2.9 |
| Rostov region | 32222 | 10673 | 3.0 |
| Stavropol region | 30423 | 9550 | 3.2 |
| Perm region | 37173 | 10556 | 3.5 |
| Sverdlovsk region | 39853 | 11019 | 3.6 |
| Khanty-Mansiysk Autonomous District – Ugra | 73697 | 15337 | 4.8 |
| Yamal-Nenets Autonomous District | 103872 | 16926 | 6.1 |
| Altai Republic | 32226 | 10162 | 3.2 |
| Irkutsk region | 45213 | 11576 | 3.9 |
| Magadan Region | 89470 | 19755 | 4.5 |
| Kamchatka Krai | 75876 | 20481 | 3.7 |
| Chukotka Autonomous District | 104954 | 22474 | 4.7 |

[1] – data for the first quarter of 2019.

The ratio of the average wage and the cost of living was 4 to 1, and the ratio differed from 2.5 to about 6 times.

Among social parameters, the cost of living plays a key role. The All-Russian Center for Living Standards obtained data according to which a family with per capita income below one living wage is in a state of extreme poverty, not being able to purchase clothes, household items, etc. After a while, personality degradation can develop. Low-income families with an income of two minimum wages do not experience malnutrition problems, but they find it difficult to buy clothes or long-term goods. With a per capita income of 2 to 3 minimum sets, one can lead a modest and dignified life, have a normal diet, regularly purchasing clothes and vital goods and services. A high income exceeds four minimum which makes it possible to eat according to personal tastes (Rakoti, 2001).

Increased labor productivity is the initial reason for an increase in wages. Labor productivity depends on the cost of human capital, formed from the accumulation of family income, wages, government spending on social needs. The main source of financing professional development of workers is wages (Nesterov & Ashirova, 2003). According to the experience of developed Western countries, these costs are paid off in the form of social peace, improved living standards, increasing life expectancy, external and internal security, etc.

In 2017, V.V. Putin emphasized the need to develop and implement urgent measures aimed at increasing labor productivity at the enterprise level. This contributed to the development of the national project "Labor Productivity and Employment Support" and the creation of the Autonomous Non-Profit Organization "Federal Center of Competencies in the Sphere of Labor Productivity".

In Russia, labor productivity (LP) has been increasing. After the crisis of 2008–2009, the LP index was increasing until 2011; then its growth rate began to decline. According to Rosstat, in 2016, the LP index decreased by 0.3 %. The LP index has been declining for two consecutive years; in 2015, it was only 98.1, having decreased by 1.9 % in the context of automation and robotization. In 2017, the index increased by 1.5 %. In 2017, the growth rate of labor productivity lagged behind the indicator of 101.9 %, which was calculated as part of the priority program "Labor Productivity and Employment Support", and was less than the forecast value of 2 % determined by the experts of the Ministry of Economic Development (Omelchenko, 2019).

The data of the Ministry of Economic Development for 2018 predicted an increase in labor productivity by 1.5 % after its growth of 2 % in 2017, and in 2019 the growth rate may slow down to 1.2 %. It is assumed that only from 2020 can accelerate growth and this indicator will grow by 1.8 % in annual terms, in 2022 it can reach 3.1 % and will remain at approximately this level until 2024 (Omelchenko, 2019).

Despite the positive dynamics, the level of labor productivity calculated in US dollars is one of the lowest in the world. In the USA, it is 2 times higher (Omelchenko, 2019).

A comparative analysis of labor productivity in Russia, the USA, France and other European countries identified that the lag of Russia was 2.2–18.6 times. Moreover, according to the labor productivity ranking (the assessment was carried out according to GDP per capita and the level of productivity) compiled by Market Watch, in 2017, Russia was among the 36 largest economies and ranked third from the end. This means that Russians earn less money for more time than the residents of the remaining 33 countries, and their labor productivity per hour is less than $ 5.6 (Omelchenko, 2019).

In 2012, V.V. Putin set the task to increase labor productivity 1.5 times. Thus, large-scale works aimed at increasing labor productivity in the Russian economy have begun.

## 7.  Conclusion

The ability of companies to meet market realities depends on the ability to ensure labor productivity at the level of world leaders. To solve these problems, it is necessary to have relevant information. Based on the real situation in the industry and the economy as a whole, having an opportunity to compare yourself with others, you can develop sound strategies aimed at improving the efficiency of labor use.

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