

## Minimum Wage and the Subsistence Level in the Russian Economy: Theoretical and Empirical Analysis of the Main Trends\*



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**Abstract.** The paper studies the relationship between the minimum wage and the subsistence level in the Russian economy. In particular, we analyze the degree of elaboration of the issue and reveal its aspects that are studied most extensively, less extensively and those aspects that remain debatable. We use a methodology of normative-positive analysis and reveal a causal relationship, according to which the subsistence level should determine the consumer basket and the minimum wage, respectively. However, as we note in our paper, in the current economic practice the specified relationship has the opposite direction as well. We consider the main trends in the change of the subsistence level, the consumption basket and the minimum

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wage at the level of the Russian economy and conclude that their nominal and legally established equality does not promote real simple reproduction of labor force in certain regions. Moreover, the data obtained in the course of empirical analysis show that there is a differentiation in the level of wages between the regions of one type of activity. Scientific novelty of our study consists in the fact that it considers the complete cycle of circulation of the commodity form of the simple labor force, including the receipt of the advanced minimum wage, the minimum disposable income, and the subsistence level. The data on Russia obtained during the analysis show that the minimum wage remains behind the real subsistence level; such a situation impedes the creation of conditions for the simple reproduction of labor force. The results we have obtained can be used to develop regulations at the federal and regional levels, to develop target programs to support rural areas and to study the correlation between the subsistence level and the minimum wage differentiated by sector, region and level of professional training of employees.

**Key words:** wages, labor remuneration, labor costs, measure of labor remuneration, minimum wage, subsistence level, policy on the minimum wage.

### Introduction

Currently, 93.4% of able-bodied citizens in domestic economy are employed<sup>1</sup>. It is obvious that any employee *wants* to be paid a sufficient amount of money for their work in order to have a *proper* life. However, in practice everything is much more diverse and complex than their wish. First, author's observations, research results, published official statistics, expert opinions, etc. suggest that, despite the changes in the increased wages in the country and in separate regions, the relatively low level of wages of employees remains. Second, the differences in current wages in economic practice are largely determined by the specific features of economic activity in the region. For example, in Altai Krai as a region with the agricultural (agro-industrial) profile the share of people receiving wages below minimum level amounted to 6.0% of the total number of employees in 2017. Third, despite the fact that since May 2018, under the current legislation

minimum wage (11,163 RUB) has equaled living wage, minimum wage remains relatively low<sup>2</sup>.

In world economic literature, the most studied aspect is minimum wage in relation to employment level, competitive labor market, level of labor regulation, consumer prices in the economy, human capital formation, etc. Since these aspects are not directly related to the problem under review, we focus on them from the perspective of general problem review.

Thus, when studying the impact of minimum wage on the level of *employment*, one group of researchers revealed a negative impact on the employment of certain groups of low-paid and low-skilled workers [2]. Another group of researchers revealed the reverse image, which helps determine the positive impact of minimum wage on employment [3, 4]. In particular, the article by S. Bauducco and A. Janiak explores the effects of raising

<sup>1</sup> *Labor force, employment and unemployment in Russia (based on the results of sample labor force surveys). 2018: statistics book.* Rosstat. Moscow, 2018. P. 44.

<sup>2</sup> In modern economic literature, such a measure does not meet much optimism among researchers. On the contrary, there are concerns that living wage will not be re-considered in time based on the necessary standard of living of the working-age population [1, p. 88].

minimum wage on macro-economic variables such as employment, capital stock, and wage distribution. The results of the study confirmed previous findings: moderate growth of minimum wage has almost no impact on employment, while it reduces the distribution of wage and creates positive side effects for its increase [5]. D. Cengiz et al. present an approach that studies the impact of minimum wage on employment. The novelty of the presented approach made it possible to assess this impact based on wage distribution [6]. A. Brown, Ch. Merkl, and D. Snower conclude that a sufficiently low minimum wage does not have a negative impact on employment. On the contrary, high minimum wage leads to a reduction in the number of jobs [7]. The study of T. Boeri brings us to a conclusion about the difference in the levels of minimum wage. After studying data for 68 countries for the period from 1981 to 2005, Boeri concluded that minimum wage set by the government is below minimum wage set in collective agreements [8].

The article by D. Lee and E. Saez presents normative analysis of the policy of establishing optimal minimum wage in relation to *the model of competitive labor market* using the standard social security system. In particular, it presents analysis of the optimal minimum wage policy required to build a redistribution mechanism in a highly competitive labor market in two variants: 1) in the presence of taxes/transfers and 2) in their absence. The study concluded that minimum wage is a useful tool if the government has mechanisms to redistribute in favor of low-paid workers [9].

The article by R. Sauer reviews the macroeconomic implications of changes in *the legislation* of minimum wage. According to the

assessment from the point of view of the US monetary policy, minimum wage has little impact on macroeconomics. Although detailed calculations demonstrate that a deliberate increase in minimum wage<sup>3</sup> can lead to economic growth [10].

In domestic literature, the study of minimum wage was carried out in conjunction with the *reproduction of labor power, industry and regional characteristics of wage, the wages policy*, etc. In particular, the studies by R. Kapelyushnikov, M.Yu. Neklyudova, T.N. Dolinina, etc. review and justify the need to regulate relations in the field of wages in terms of implementing legally established norms in wages for a particular enterprise [17–19]. Studies on the problems of minimum wage and related aspects in relation to the regional labor market, comparative analysis of foreign and domestic experience in regulating relations in the field of wages are presented in works by N.T. Vishnevskaya, E.N. Soboleva, A.L. Mazin, N.M. Kulagina, E.A. Efimova and many others [20–24]. One of the key aspects in the study of the wage policy is the need to determine minimum wage from the position of guaranteeing an employee an *acceptable* level of reproduction of labor [25–28]. At the same time, the economic significance of using minimum wage in the regulation of relations between an employee and an employer is justified by the importance of the state's participation in determining the standard (lower limit) that can properly meet the needs of an employee and their family members in clothing, food, housing, childbirth and upbringing, etc. [29–30].

<sup>3</sup> Some articles are devoted to the study of the impact of minimum wage on *industry prices* [11], *workers' consumption* [12], *training* [13], *workplace automation* [14–16].

A specific feature of the national school of economists engaged in the study of minimum wage is the fact that it is considered in conjunction with living wage. Most modern studies are focused on considering their ratio mainly in the 2000s. In particular, the study of the ratio of minimum wage and living wage for the working population is carried out in the article by E.N. Soboleva and I.V. Soboleva [31]. The research by V.V. Kookueva the considered methodological aspects are associated with the study of the legislative framework for establishing minimum wage and living wage followed by the assessment of changes in these values [32].

The studies of living wage are connected with the methodology of its determination. This issue was studied in the article by L.S. Rzhantsyna and I.V. Soboleva, who pay attention to approaches to quantitative determination of living wage using legally established Russian standards in comparison with foreign practice [33].

In the present paper, unlike the considered studies, in addition to studying the current trends in minimum wage, living wage and consumer prices for the period from 1990 to 2017, much attention is paid to the theoretical aspects of the formation of the minimum wage and living wage.

The less studied aspects in the study of the ratio of minimum wage and living wage are: the ratio of positive and standard approach in the study of this connection; the logical correlation between minimum wage, living wage and minimum market basket from the standpoint of circulation of the value of labor goods of labor.

Based on insufficient knowledge of these aspects of the problem, the purpose of the

present paper is to study the theoretical foundations and identify trends in the ratio of minimum wage (MW) and living wage (LW). To achieve this goal, we expect to solve the following objectives: to determine the research methodology; to analyze the theoretical and empirical results of the study of minimum wage and living wage; to show their scientific and practical significance in the modern economy.

### Research methodology

Legal literature sources have demonstrate that MW and LW from the standpoint of the methodology are in direct logical correlation. Thus, the Labor code of the Russian Federation states that MW is established simultaneously throughout the territory of the Russian Federation by Federal law and *cannot be lower than LW of the working population*<sup>4</sup>.

This means that from the logical and methodological point of view, the term “living wage” is a *normative* definition of minimum wage. This is confirmed in the latest version of Federal law on minimum wage, which states that starting from January 1st, 2019 and then annually, from January 1st of each year, minimum wage is established by Federal law in the amount of living wage of the working population as a whole in the Russian Federation<sup>5</sup>. At the same time, Federal law on living wage states that living wage is a cost estimate of consumer basket, which is referred to as a minimum set of food products necessary for human health and ensuring people’s life,

<sup>4</sup> See: *Labor Code of the Russian Federation no. 197-FZ* (last updated 11.10.2018), dated 30.12.2001. Available at ConsultantPlus reference system.

<sup>5</sup> See: *On minimum wage in Russia: Federal law no. 82-FZ*, dated 19.06.2000 (last updated 07.03.2018). Available at ConsultantPlus reference system.

as well as non-food goods and services, whose cost is determined in relation to the cost of a minimum set of food products<sup>6</sup>.

Thus, it seems to us, from the standpoint of the logic of legislation there is a *positive* deductive triad: consumer basket determines living wage, which, in turn, is a benchmark for establishing minimum wage.

If we look at this triad from the standpoint of minimum wage, we get the opposite *normative* (prescriptive) triad<sup>7</sup>: minimum wage *must* correspond to living wage, and living wage *must* correspond to consumer basket.

The positive aspect, as is known from the methodology of scientific research, is related to the study of what *there is*. With regard to the above-mentioned problem, in fact, the *actual* and available monetary wages in money economy, all other things being equal, *determine* the employees' real standard of living.

The normative aspect, as is also known from the methodology of scientific research, is related to what *there is (the actual being)*, it must

correspond to its ideal concept. For the purpose of the article, minimum wage must always correspond to minimum standard of living of wage-earners.

### Theoretical research results

The theoretical study of minimum wage reveals its nature in the framework of both simple commodity-money circulation (i.e. labor markets and consumer goods) and circulation of individual industrial capital, which is set out in K. Marx's "*Capital*". We believe that the neo-Marxist approach helps consider and analyze the correlation, the transit of minimum wage and living wage "into each other".

According to Marx, the purchase of labor power by the capitalist  $M - C_{LP}$  is at the same time the sale of labor power by the worker  $C_{LP} - M$  [36]. The worker spends the money, including minimum wage, on purchase of means of consumption, or  $M - C_{MC}$  where  $C_{MC}$  – a commodity(ies) as a means of consumption.

According to Marx's theory, the circulation of a commodity "labor power" fits *only* into the scheme of *simple* commodity circulation:

$(C - M - C)$ , rather than capital circulation (1)

$$M - C - M' \quad (2)$$

This theoretical vision did not help Marx get the commodity scheme of circulation of production factors, including labor power.

First, according to Marx, the scheme of simple commodity circulation excluding downtime for the circulation of cost of labor power is as follows:

$$C_{LP} - M - C_{MC} \quad (3)$$

<sup>6</sup> On living wage in Russia: Federal law no. 134-FZ, dated 24.10.1997 (last updated 29.07.2018). Available at ConsultantPlus reference system.

<sup>7</sup> The normative (prescriptive) approach and the positive (descriptive) approach are known to be opposite and mutually exclusive. This was first paid attention to in philosophy and methodology of science by D. Hume, who formulated the principle known as Hume's guillotine [34]. It states that from the standpoint of formal logic it is impossible to move directly from "*is*" statements (descriptive statements), with the subject and the predicate of statement linked by "is", and "should" statements (prescriptive statements), where "should" or "shouldn't" is asserted or denied, rather than "is".

One cannot but agree that what Hume himself and his many followers said is obvious from the standpoint of formal logic. But Aristotelian formal logic does not cover all logic. G.W.F. Hegel in his Science of Logic, in particular in his doctrine of essence, speaks not only about the *reality* of essence, its finitude, but also going beyond this finitude towards *infinity*. Such a process, or rather, the desire to go beyond the finitude, is associated with the principle of *ought*, whose nature is not real (finite), but *ideal* (infinite) essence [35]. Therefore, according to Hegel, the actual ought moment is included in the logic of essence, the "is" logic.

that is, the sale of labor power in order to buy means of consumption. However, in this scheme, the initial and final points do not coincide, which contradicts the form of a circular movement in which the initial and final points must coincide in form and content, i.e., in the lapidary form, the circulation of the commodity of labor power should be as follows:  $C_{LP} - M - C_{LP}$ , with the end of one cycle being the beginning of the next.

Second, in the labor market small commodity circulation of value of labor power is always associated with a certain kind of downtime, during which the received *wage* of workers become monetary stock (Keynes' liquidity preference) intended for the purchase of means of consumption. Workers do not spend their wage *immediately*, but spend it *in parts* during a certain period of time. With that said, Formula 3 is the following:

$$C_{LP} - M \dots M - C_{MC}, \quad (4)$$

where points indicate downtime in money expenditure as wages, including its minimum level.

Third, receiving wages is mediated by the process of labor. Wages (the price of labor) acts as *remuneration for labor*, more precisely, as remuneration for the *work* performed. This circumstance helps divide wage into two parts. One part is paid in advance in order to maintain the working capacity of the employee until the end of the labor process. Hypothetically, it should correspond to a certain *constant* value which equals living wage and minimum wage. The other part of the salary must be paid fully, according to the contract, including various benefits and allowances. Hypothetically, this

part is *variable*. Considering the above, Formula 4 becomes the following:

$$C_{LP} - M_{PW} \dots C_{W^*} \dots W - M_{WP} - C_{MC}, \quad (5)$$

where  $M_{PW}$  – prepaid wage,  $\dots C_{W^*} \dots$  – labor process,  $W$  – work performed,  $M_{WP}$  – wage for work performed, net of prepaid wage.

Fourth, various taxes and fees are deducted from wage, legal non-labor incomes are added. This point of distribution is indirectly included in the cycle of labor value. Taking into account the point of distribution, Formula 5 becomes the following:

$$C_{LP} - M_{PW} \dots C^W \dots W - M_{WP} \dots M_{PDI} - C_{MC}, \quad (6)$$

where  $M_{PDI}$  – personal disposable income, while  $M_{PDI} = M_{WP} - T + M_{LNI}$ , where  $T$  – all taxes and charges,  $M_{LNI}$  – legal non-labor income.

Fifth, in order to sell labor power again, including its simple form, the worker must 1) act as a buyer of means of consumption, (2) consume them and (3) reproduce former labor power. In view of the above, the *complete* image of circulation of commodity form of simple labor power value is the following:

$$C_{LP} - M_{PW} \dots C_{W^*} \dots W - M_{WP} \dots M_{PDI} - C_{MC} \dots P_C \dots S_F - C_{LP}, \quad (7)$$

where  $M_{PDI}$  – personal disposable income;  $C_{MC}$  – means of consumption as a commodity;  $P_C$  – process of consumption;  $S_F$  – satisfaction/dissatisfaction with the process of consumption;  $C_{LP}$  – reproduced labor power in the same quality and volume, i.e., speaking Marxist language, a simple reproduction of a commodity “labor”<sup>8</sup>.

<sup>8</sup> In this article we cover simple labor power that corresponds to and must comply with minimum wage. It does not analyze expanded reproduction of labor power and workers' skill improvement.

Based on the issue of minimum wage and living wage, the reproduction of the commodity form of labor power value can be represented as follows:

$$C_{SLF} - M_{PW} \dots C_{UL} \dots W - M_{MW} \dots M_{MPDI} \quad (8)$$

$$- C_{CB} \dots L_{LW} \dots S_{MS} - C_{SLF}$$

where  $C_{SLF}$  – simple, as a rule, unskilled labor power;  $M_{PW}$  – prepaid minimum wage, which is approximately 40% of minimum wage;  $C_{UL}$  – unskilled labour;  $W$  – work performed, as a rule, in the form of services;  $M_{MW}$  – minimum wage;  $M_{MPDI}$  – minimal personal disposable income;  $C_{CB}$  – consumer basket;  $L_{LW}$  – living wage;  $S_{MS}$  – minimum satisfaction/dissatisfaction with living wage;  $C_{SLF}$  – reproduction of simple labor power.

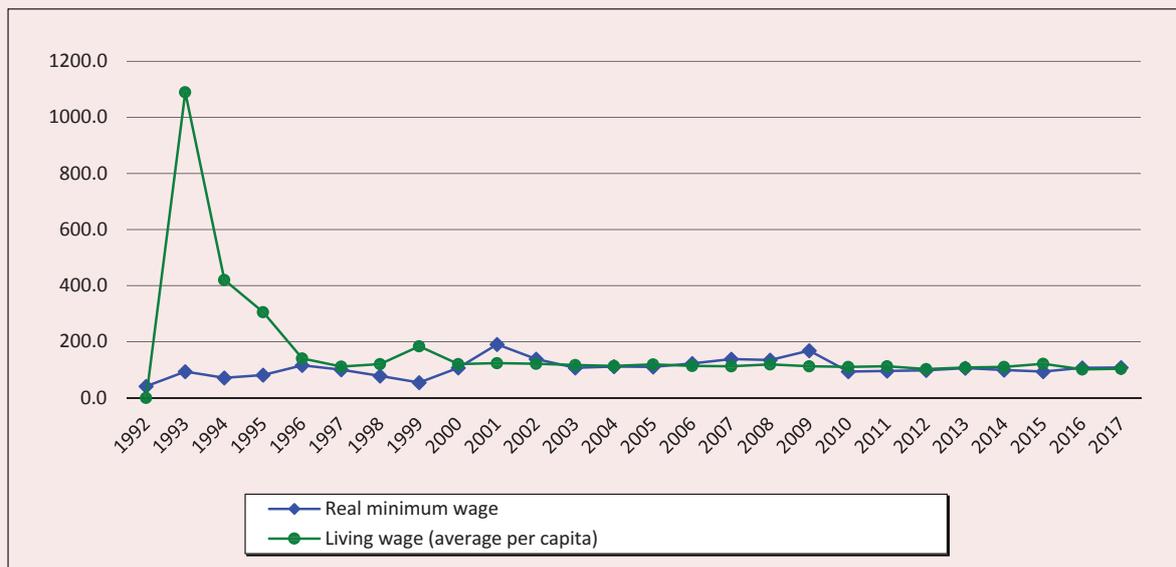
Formula 8 *theoretically* links minimum wage, consumer basket and living wage. This provision is an important methodological and conceptual basis for the normative-positive analysis of the current trends in minimum wage and living wage in the Russian economy as a whole, as well as separately for the selected group of agricultural regions.

**Analysis and explanation of empirical results**

The study of Russian trends in minimum wage helped identify the main problems in the economy in terms of wage.

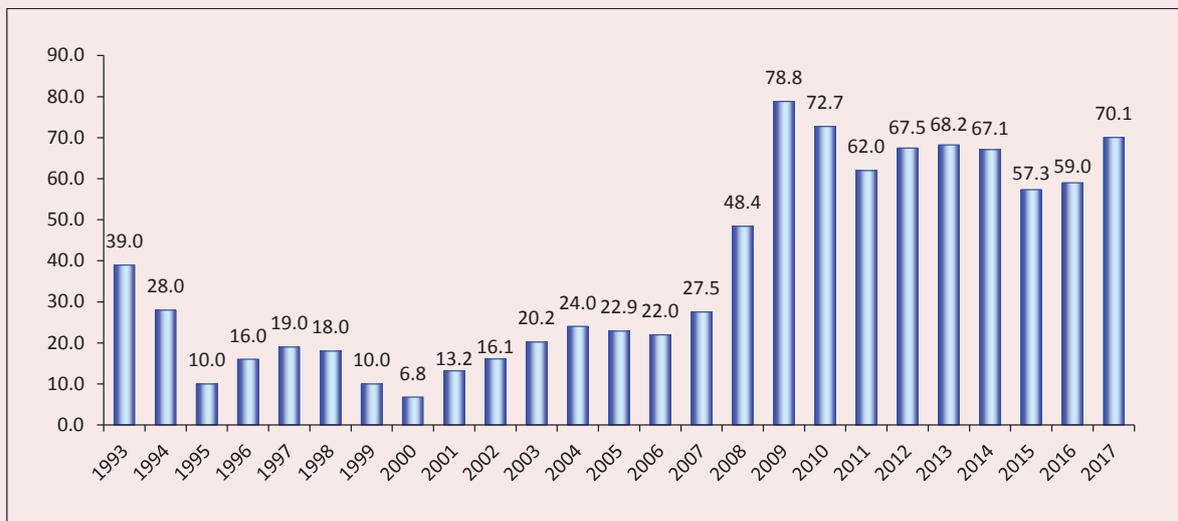
1. Empirical analysis shows that during the 25-year period in the Russian economic activity there was a gap between minimum wage and living wage. During this period, the Russian

Figure 1. Minimum wage and living wage, % to previous year



Sources: *Russia in numbers. 2018: brief statistics book*. Rosstat. Moscow, 2018. Pp. 117, 120; *Russia in numbers. 2017: brief statistics book*. Rosstat. Moscow, 2017. Pp. 118–120, 130; *Russia in numbers. 2016: brief statistics book*. Rosstat. Moscow, 2016. Pp. 118–120, 130; *Russia in numbers. 2015: brief statistics book*. Rosstat. Moscow, 2015. Pp. 118, 120, 130; *Russia in numbers. 2014: brief statistics book* Rosstat. Moscow, 2014. Pp. 128, 130; *Russia in numbers. 2013: brief statistics book*. Rosstat. Moscow, 2013. Pp. 128, 130; *Russia in numbers. 2011: brief statistics book*. Rosstat. Moscow, 2011. Pp. 116–117; *Russia in numbers. 2008: brief statistics book*. Rosstat. Moscow, 2008. Pp. 116–117; *Russia in numbers. 2004: brief statistics book*. Federal State Statistics Service. Moscow, 2004. Pp. 99–100; *Russia in numbers. 2000: brief statistics book*. Goskomstat of Russia. Moscow, 2000. P. 99.

Figure 2. Ratio of minimum wage and living wage in Russia in 1993–2017, %



Sources: *The Social Status and Standard of Living of the Russian Population. 2017: statistics book.* Rosstat. Moscow, 2017. P. 141; *The Social Status and Standard of Living of the Russian Population. 2011: statistics book.* Rosstat. Moscow, 2011. P. 176; *The Social Status and Standard of Living of the Russian Population. 2008: statistics book.* Rosstat. Moscow, 2008. P. 182; *The Social Status and Standard of Living of the Russian Population. 2006: statistics book.* Rosstat. Moscow, 2006. P. 187; *Russian Statistics Yearbook. 2003: statistics book.* Goskomstat of Russia. Moscow, 2003. P. 195; *The Social Status and Standard of Living of the Russian Population. 2001: statistics book.* Goskomstat of Russia. Moscow, 2001. P. 24; *Russian Statistics Yearbook. 2001: statistics book.* Goskomstat of Russia. Moscow, 2001. P. 171.

economy lost the reproductive function of minimum wage. Since 1992, a significant difference has formed between the nominal value of minimum wage and living wage, which has increased over years. In the following years (1993–1998), the government’s policy on regulating wages of low-skilled workers was focused on increasing the nominal value of minimum wage, yet with an annual decline in its growth rate. Due to the crisis of 1998, the amount of minimum wage remained unchanged in 1997–1999 (*Fig. 1*).

The performance of living wage in the Russian economy in the first decade of economic transformations lied in the fact that growth rates of living wage were greater than the rate of annual minimum wage increase. This was particularly evident in 1993–1995

and 1998–1999. It was during these years that the differences were so significant that the economic policy measures taken in the next 15 years did not significantly increase the nominal value of minimum wage or overcome its lagging behind living wage. The superiority of annual growth rates of minimum wage over the growth rates of living wage in 2001–2002 and 2006–2009 also did not eliminate the lag accumulated over previous periods.

The period of recovery growth in the Russian economy<sup>9</sup> in 2000–2007 had a positive impact on the performance of minimum wage

<sup>9</sup> During the period of recovery growth reviewed during 1999–2008, there was a “restoration of the socio-economic level achieved under socialism”, where growth was mainly associated with “an increase in export prices for oil and an increase in prices for a number of other commodities” [37, p. 10].

and living wage. During this period, there was a reduction in the difference between these indicators, which has remained up to the present time (*Fig. 2*).

The law on increasing minimum wage adopted in 2018 is aimed at eliminating the nominal gap between these indicators. However, this measure does not mean that minimum wage that equals potential living wage provides the necessary minimum funds for *proper* reproduction of labor power of an employee and their family members. Moreover, low living wage established in certain regions does not take into account the full cost of basic means of subsistence (clothing, food, utilities, rent/purchase of housing, raising children, medical services, etc.), which contradicts the legally established and theoretically justified logical connection between living wage, consumer basket and minimum wage. For example, in Altai Krai at the end of 2018, minimum wage for the public sector of economy at the level of established federal value does not ensure the reproduction of labor power of worker with such wages. According to statistics for November 2018, renting a one-room apartment in the region amounted to 9,000 rubles a month (respectively, purchase of housing will require even more expenditures in the form of down payments, and in case of borrowing bank resources – also repayment of a mortgage loan). At such expenses on satisfaction of other needs – in food, clothes, education of children, etc. – a little more than 2,000 rubles is left, which makes it completely impossible to ensure simple reproduction of labor power.

2. Despite the legislative requirement that minimum wage should not be lower than living wage, in practice there is still a phenomenon

when a part of the working-age employed population receives minimum wage below the established minimum wage. This negative trend indicates that even the *minimum* level of reproduction of labor power is limited.

It is known that minimum wage established at the federal level and applied in regions for regulating labor relations is the standard basis for worker's social guarantees. In this sense, minimum wage is associated with many *institutional aspects*, with the established legal standards and rules having a special place. In particular, the institution of contractual regulation of labor relations between the employee and the employer forms a mechanism regulating standard working hours, the form of accounting working hours and produced products (respectively, time or price wage system), etc. The legislatively established lower wage limit in the form of minimum wage should be aimed at providing the employee with a guarantee to create *proper* financial conditions for the reproduction of labor power. However, the fact that in the Russian economy there is still a number of employees receiving wages below the minimum established level (according to 2017) indicates the absence of a mechanism for protecting employees in the labor market.

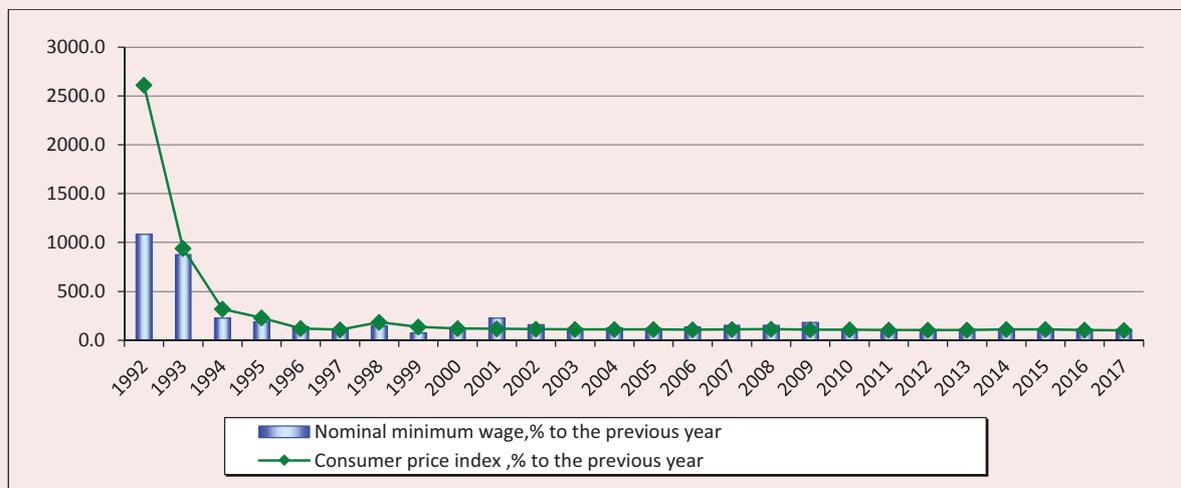
Comparative analysis of data of federal statistics of organizations on the distribution of employees by wage in 2017 revealed an increase in the number of employees receiving wages below minimum wage by 0.4 p.p compared to the same period in 2015. At the same time, there was a reduction in the number of employees whose wages were below living wage and from 1 to 2 living wages in the analyzed periods (*Tab. 1*).

Table 1. Distribution of employees by wage in the Russian economy for April 2015 and 2017, %

Accrued wages	Number of employees	
	2015	2017
Lower than minimum wage*	1.4	1.8
Lower than living wage**	10.7	7.3
1 to 2 LW	28.5	26.7
2 to 3 LW	24.7	24.6
3 to 4 LW	14.9	16.3
4 to 5 LW	8.3	9.5
More than 5 LW	13.0	15.6

\* As of January 1st, 2015, minimum wage in the Russian economy was 5,965 RUB, January 1st, 2017 – 7,500 RUB.  
 \*\* Living wage (LW) of the working population in the 1st quarter of 2015 amounted to 10,404 RUB, in the 1st quarter of 2017 – 10,701 RUB.  
 Sources: *Labor and employment in Russia: statistics book*. Rosstat. Moscow, 2017. P. 240; *Labor and employment in Russia, 2015: statistics book*. Rosstat. Moscow, 2015. P. 255; *The distribution of the number of employees by wage for April 2015: statistics bulletin*. Rosstat. Moscow, 2015. Pp. 77–82; *The distribution of the number of employees by wage for April 2015: statistics bulletin*. Rosstat. Moscow, 2017. Pp. 77–82 .

Figure 3. Minimum wage and consumer price index in Russia in 1992–2017, % to previous year



Sources: calculated by: *Russia in numbers. 2018: brief statistics book*. Rosstat. Moscow, 2018. Pp. 36, 120; *Russia in numbers. 2017: brief statistics book*. Rosstat. Moscow, 2017. Pp. 36, 120; *Russia in numbers. 2016: brief statistics book*. Rosstat. Moscow, 2016. Pp. 36, 120; *Russia in numbers. 2015: brief statistics book*. Rosstat. Moscow, 2015. Pp. 36, 120; *Russia in numbers. 2012: brief statistics book*. Rosstat. Moscow, 2012. P. 36; *Russia in numbers. 2011: brief statistics book*. Rosstat. Moscow, 2011. Pp. 116–177; *Russia in numbers. 2009: brief statistics book*. Rosstat. Moscow, 2009. P. 33; *Russia in numbers. 2008: brief statistics book*. Rosstat. Moscow, 2008. Pp. 116–117; *Russia in numbers. 2006: brief statistics book*. Federal State Statistics Service. Moscow, 2006. P. 33; *Russia in numbers. 2004: brief statistics book*. Federal State Statistics Service. Moscow, 2004. Pp. 30, 99–100; *Russia in numbers. 2000: brief statistics book*. Goskomstat of Russia. Moscow, 2000. Pp. 30, 99.

At the same time, there is a trend in the Russian economy towards increasing the number of workers whose wages were distributed in the range above 2 LW. These results show an increase in the differentiation in labor income.

3. An important issue for analysis in the study of the correlation between living wage and minimum wage is the study of monetary losses of the purchasing power of minimum personal disposable income (DPDI) associated with an increase in prices of consumer goods.

The indexation of minimum wage is one of the measures of the state's wage policy. Depending on the performance of nominal minimum wage and the growth rate of consumer prices, we can talk about the possible preservation of the purchasing power of established minimum wage for workers receiving it as their main income. During the analyzed period, the growth rate of minimum wage in some years was several times lower than that of consumer prices. As a result, the purchasing power of low-paid employees has been lost. *Figure 3* clearly shows the lag in the growth rate of nominal minimum wage behind the growth rate of consumer prices over the past 26 years. The greatest difference in these indicators (more than 1.5 times) in 1992 was not compensated for low-paid Russian employees over the following years. Due to the measures taken by the government in certain periods (1996, 2000–2009, 2013, 2016–2017), the annual growth rates of consumer prices were less than the growth rates of minimum wage, according to official statistics. However, these positive trends did not compensate for the lost purchasing power of minimum wage for the rest of the years, as a result of which they

did not contribute to improving the standard of living of recipients of minimum wage and creating conditions for the reproduction of their labor force.

4. The problem of reproduction of labor power is especially significant in relation to specific regions with minimum wage lagging behind minimum wage set at the federal level on the one hand, and differentiated wage due to differences in the standard of living (for example, the difference in living standards in Southern and Northern regions) on the other hand. The latter circumstance suggests that if in such regions different standard of living is formed with the establishment of appropriate living wage, then the existing differentiation in wages is a justified phenomenon for a developed economy. Thus, the value of low-skilled simple labor (minimum wage) in the Far North is higher based on a higher standard of living in this territory, as well as due to the established increased regional premium rate.

However, in contrast to the theoretical provisions and legislative standards, in the Russian practice minimum wage also differs for employees in regions with the same profile<sup>10</sup>. This was confirmed by the analysis of individual regions with agriculture as one of the leading sectors. The data suggest that, despite the average wages in agriculture in Russia, in some regions there still are employees with wages below minimum wage. We are talking about regions such as the Belgorod, Voronezh, Kursk oblasts, the Republic of Crimea, where this figure is 0.3, 2.0, 1.3 and 2.4%, respectively. To compare,

<sup>10</sup> According to the estimates, the difference in wages received by employees of the same professions, but different regions reaches two times [37, p. 12].

Table 2. Share of agriculture in GVA, average annual number of employees in agriculture and number of employees with wages below minimum wage in some regions with agricultural profile, %

Regions	Share of agriculture in total GVA in Russia in 2015, % to total	Average annual number of employees in agriculture in 2016, % of total employees	Employees with wages below minimum wage in the Russian economy (as of April 2017 – 7,500 rubles per month)
Belgorod Oblast	20.8	13.9	0.3
Voronezh Oblast	15.3	13.5	2.0
Kursk Oblast	18.9	12.2	1.3
Republic of Crimea	17.0	14.2	2.4
Stavropol Krai	17.2	17.2	4.7
Altai Krai	17.3	13.9	6.0

Sources: compiled by the authors using statistics from: *Regions of Russia. Socio-economic indicators. 2017*. Pp. 178–179, 554–555; *Distribution of employed by gross wages since 2017*. EMISS. Available at: <https://fedstat.ru> (Accessed: 10.03.2018).

Stavropol and Altai krais, where the number of employees with wages below minimum wage set at the federal level was 4.7 and 6.0%, are similar in terms of the share of agriculture in GVA and the average annual number of employees in agriculture (*Tab. 2*).

Of course, a particular profile in the region has an impact on wage formation in its territory. However, in Russia there is a trend to differentiate wages between regions of one type of profile. The only explanation for maintaining a relatively high level of minimum wage in such regions is the well-developed regional policy and strategy of enterprises together aimed at creating conditions for the reproduction of the labor power and the formation high standard of living<sup>11</sup>.

### Conclusion

The legislative leveling of minimum wage and living wage in 2018 contributed to the emergence of various scientific publications which reflect the following general and controversial aspects.

<sup>11</sup> These results will be presented in a separate article in more detail.

First, on the one hand, the leveling of minimum wage and living wage is generally recognized as an important measure in maintaining the standard of living of low-paid workers [38]. On the other hand, there is an opposite view in scientific research, according to which this leveling will not improve the situation among low-paid employees – recipients of minimum wage [1].

Second, the issue of estimating minimum wage and the corresponding living wage in market economy is debatable. We note that minimum wage and living wage must include the full range of *basic* consumer goods, i.e. 1) *mandatory* payments (taxes, utilities, etc.), 2) consumer costs associated with basic consumer choice, and 3) minimum savings.

Third, the most controversial is the issue of including in minimum wage housing payments and mortgage payments since this method is the main means of acquiring housing in modern conditions.

Fourth, the continuing differentiation in minimum wage in regions of agricultural (agro-industrial) profile requires the revision of the

state wage policy in order to support low-paid workers in leading industries, for example, in the form of increasing regional premium rates, etc.

The main conclusion is the following: it is necessary to carry out *system* reforms in wages,

aimed at reconsidering the existing regulatory levels of minimum wage and living wage. In particular, it is necessary to develop mechanisms for determining the remuneration level taking into account regional specific features and industry characteristics.

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