



***Minimum size of payment as a social policy instrument: realities and problems***

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**Abstract**

The article raises the problems of non-compliance of the size of the minimum wage with constitutional guarantees, non-fulfillment of social and protective functions. The problems of the normative and legal nature are reflected, the inconsistencies of the social guarantees of working citizens proclaimed in the Constitution, including changes in legislation that worsen the situation of workers, are underlined. The statistics on the dynamics of the minimum wage, the subsistence level, and the consumer price index are given. The analysis of the dynamics of changes in the size of the minimum wage, the subsistence minimum in dynamics over a number of years, the consumer price index, the minimum and fixed set of goods was analyzed. When modeling the situation when the subsistence minimum is indexed by the rate of inflation, its value would be several times higher today. The discrepancy between the size of the minimum wage and the norms of the Constitution of the Russian Federation is revealed, while at the same time there is a growth trend.

**Keywords:** minimum wage, social policy, cost of living



***Tamaño mínimo del pago como instrumento de política social: realidades y problemas.***

**Resumen**

El artículo plantea los problemas de incumplimiento del tamaño del salario mínimo con garantías constitucionales, el incumplimiento de las funciones sociales y de protección. Se reflejan los problemas de la naturaleza normativa y legal, se subrayan las inconsistencias de las garantías sociales de los ciudadanos trabajadores proclamadas en la Constitución, incluidos los cambios en la legislación que empeoran la situación de los trabajadores. Se dan las estadísticas sobre la dinámica del salario mínimo, el nivel de subsistencia y el índice de precios al consumidor. Se analizó el análisis de la dinámica de los cambios en el tamaño del salario mínimo, el mínimo de subsistencia en la dinámica a lo largo de varios años, el índice de precios al consumidor y el conjunto mínimo y fijo de bienes. Al modelar la situación cuando el mínimo de subsistencia está indexado por la tasa de inflación, su valor sería hoy varias veces más alto. La discrepancia entre el tamaño del salario mínimo y las normas de la Constitución de la Federación de Rusia se revela, mientras que al mismo tiempo hay una tendencia de crecimiento.

**Palabras Claves:** salario mínimo, política social, costo de vida.





## **Introduction**

The subject of the study are socio-economic problems associated with the effect of the minimum wage. The purpose of the study is to study the theoretical and legal aspects of approving the size of the minimum wage in Russia, analyzing the dynamics of its size, the ratio with the subsistence minimum for the whole country and regions, developing recommendations for improving the methodology for calculating the minimum wage for the purpose of social protection of working citizens.

As a result of the research, problems of a regulatory and legal nature, inconsistencies in the social guarantees proclaimed in the Constitution were revealed. The analysis of the dynamics of changes in the size of the minimum wage, the subsistence minimum in dynamics over a number of years, revealed a weak negative relationship between the nominal size of the PM and the consumer price index. Regions with a high level of population with incomes below the subsistence minimum for the federal districts are singled out. As a result of the correlation-regression analysis, it was revealed that the size of the minimum wage has no significant effect on the average per capita income of the population. The minimum wage in Russia is the lowest in comparison with the countries of Europe. The complex approach to the solution of the problem of the non-compliance of the minimum wage with the established norms is proved and directions for improvement are proposed.

## **Problem Statement**

The Russian Federation is a country in which, on the one hand, social norms and guarantees are proclaimed in the Constitution of the country, on the other hand, these guarantees are either not implemented or not effective, formal. So, according to the basic law of the country, the minimum wage should not be lower than the subsistence level. However, according to statistics in 2016 in Russia there were 19.8 million people with incomes below the subsistence level (PM), which is 13.5% of the country's population.

It is generally recognized that the minimum wage as an instrument should fulfill a social function and protect an employee from unauthorized exploitation by the employer, and facilitate the



implementation of social guarantees for working citizens. In our opinion, in the Russian Federation the minimum wage does not fulfill its social and protective function. Moreover, the problems are even deeper: for example, among poor citizens a large percentage of people with higher education and good qualifications, the differentiation between regions and sectors is high, and the gap between the salary of the head of the organization and the average wages of the workers of the organization is high.

The minimum wage is one of the important institutions of the labor market, it is one of the social constitutional guarantees of citizens regarding the lower level of payment for an employee who has worked out fully established working hours with performance of labor duties.

The International Labor Organization emphasizes that the main purpose of the minimum wage is to establish the necessary social protection in relation to the minimum allowable wage levels. This definition of a minimum wage contributes to a relatively higher standard of living for workers whose work is estimated to be low as the lower limit of the price of labor services simultaneously solves two problems. Therefore, we can conclude that the very first and important function is social.

### **Literature review**

The development of wage theories goes back to the period of the formation of the capitalist mode of production. During the existence of economic science, the evolution of the theory of wages has changed approaches to its essence and the functions it performs.

The approaches of economists in regard to the functions of wages are also different. So, A.Smith, D.Ricardo, K.Marks allocated reproductive and stimulating functions. Many modern scholars also share the opinion of the classics. These functions are additionally indicated by the regulatory function of the scientists Slesinger G.E., (1996), Agaptzov SA , (2011), Volgin NA (2005). The approach of RA is interesting. Yakovleva (2005), which classifies the functions of wages depending on their personalized carrier. In his opinion, the reproductive function is represented by the employee, the stimulating - the employer, the regulating - the state. Adamchuk V.V. allocates reproductive, stimulating, measuring-distributive, resource-replacement, function of formation of payment demand. Osipov VV (1995) , allocates economic and social functions. B.M. Genkin





distinguishes five main functions: reproductive, accounting, regulating, social and motivating. (2003, p. 27). V.P. Pashuto and V.A. Sklyarevskaya singled out the question-producing, measuring, regulating, social and stimulating, VA. Weisburd - distributive, reproductive, stimulating, social, regulating (resource-location), formation of solvent demand and pricing, T.II. Tikhomirova - reproductive, stimulating, regulating, social-status and measuring functions (2010).

## **Methods**

International legal acts state that every person has the right to work, favorable working conditions, protection from unemployment, equal pay for equal work, fair and satisfactory remuneration ensuring the decent existence of the employee and his family. It is established that the minimum wage is valid and not subject to reduction, and factors that are taken into account in determining the level of the minimum wage are: the needs of workers and their families, taking into account the overall level of wages in the country, the cost of living, social benefits and comparative the standard of living of other social groups; economic considerations, including the requirements of economic development, the level of productivity and the desirability of achieving and maintaining a high level of employment (Gladkov N. G., 2010). Norms of the Russian legislation fix the constitutional right to work, to remuneration for work at a level not lower than the minimum wage (Constitution of the Russian Federation, Article 37). Until 2007, the concept of a minimum wage was more relevant to the minimum wage of an unskilled worker and was identical to the 1st rate of the tariff category. In addition, various surcharges and allowances, bonuses, other compensatory and social payments were not included in the minimum wage. Since 2008, changes in labor legislation have significantly worsened the situation of working citizens. So, now the minimum wage includes compensation payments, salaries amount to small amounts, the rest is considered as surcharges and as a result a significant part of the working population has incomes below the subsistence level. At the same time, the latter include people with higher professional education, whose activities, as a rule, are connected with the social sphere - education, health care, housing and communal services and others (Balkina A. S., 2016). Thus, these changes in the legislation worsened the situation of workers and legitimized loopholes for employers.

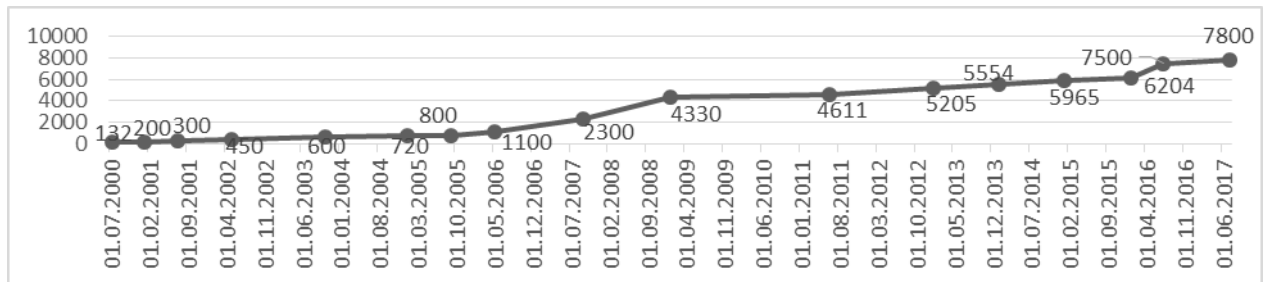
As already indicated, in Russia the size of the minimum wage is determined by the amount of the subsistence minimum, which is based on the consumer basket. Consider the dynamics of its





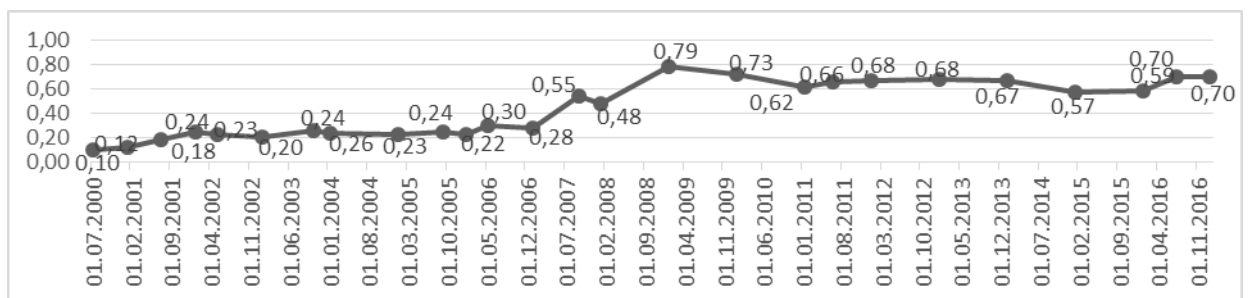
growth. From July 1, 2016, the minimum wage was raised to 7500 rubles, after 1 year from July 1, 2017, it increased by 300 rubles and amounted to 7800 rubles. The change in the size of the minimum wage for the period from 2000 to 2017 is shown in Figure 1.

Fig. 1 Change in the amount of minimum wage in Russia in 2000-2017, rubles.



The positive dynamics of the minimum wage does not allow making unequivocally positive conclusions, since the growth in absolute terms does not in itself indicate an improvement in the situation of working citizens. Figure 2 shows the ratio of the minimum wage to the subsistence minimum.

Fig. 2. Ratio of minimum wage to subsistence minimum in 2000-2017



It can be seen that until 2007, the minimum wage did not exceed 30% of the subsistence minimum, then increased and reached the highest value of 0.79 in 2009, after which it again fell to 0.57 in 2015. Only in 2016, the ratio reached a value of 0.7, which can not but be noted as a positive fact. In spite of the fact that the ratio has increased, the norms fixed in the legislation nevertheless



throughout the years under investigation have not been achieved. If we simulate a situation in which the subsistence minimum established in 2000 would be indexed for inflation, then its value from 2017 would be 48536.9 rubles, which is almost 5 times more than the established one. It is clear from this that, despite the inflation rate, the growth in the size of the subsistence minimum is understated. With the growth of prices for all goods and services, the cost of the consumer basket grows more slowly (Kokueva V. V., 2016).

The results of finding the correlation relation are interesting.

Cor (PM in actual prices, demand-for-price index) = -0.138

Cor (PM in comparable prices (2000), index of consumption.cost) = -0.170

An analysis of the results shows that the relationship between the nominal size of the PM and the consumer price index is very weak and negative, so with an increase in prices of 1 ruble, the subsistence minimum is reduced by 0.138 rubles. Similar calculations were obtained in finding the connection between the PM in comparable prices and the consumer price index. In our opinion, for the purpose of social protection of the population from a decrease in real incomes, the growth in the subsistence minimum should correspond to the growth of inflation, at least because the size of the minimum wage depends on the size of the PM. Thus, the growth dynamics of the subsistence minimum does not correspond to the dynamics of consumer prices. It is determined that the relationship between the size of the subsistence minimum and the consumer price index is weak and inverse, which in no way can ensure social justice and care for the population of the country.

We analyzed Rosstat's statistical data on the specific weight of the population with incomes below the PM in Russia as a whole and by subjects of the Russian Federation, on the basis of which regions with the maximum and minimum levels were identified.

**Table 1. Regions with the maximum and minimum specific weight of the population with cash incomes below the PM in the context of federal districts**

<b>Федеральный округ</b>	<b>Max</b>	<b>Min</b>
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CFD	Ivanovo Region (2009-2011), Kostroma Region (2012), Smolenskaya (2013-2015)	Lipetsk region. (2009), Belgorod region (2010-2015)
NWFD	Vologda region (2009-2011), Pskov region (2012-2015)	Nenets AD (20009-2013), St. Petersburg (2014-2015)
SFD	Republic of Kalmykia (2009-2015)	Volgograd Region (2009-2010), Krasnodar Region (2011-2015)
NCFD	Republic of Ingushetia (2009- 2010,2014-2015), Karachay-Cherkess Republic (2011), The Chechen Republic (2012- 2013)	The Republic of Dagestan (2009- 2015)
VFD	The Republic of Mari El (2009- 2015)	The Republic of Tatarstan (2009- 2015)
UFD	Kurgan Region (2009-2015)	Yamalo-Nenets AD (2009-2015)
SFD	The Republic of Altai (2009), The Republic of Tyva (2010-2015)	Kemerovo region. (2009-2012), Omsk region (2013-2015)
FEFD	Amur Region (2009-2011), Jewish Autonomous Region (2012- 2013)	Sakhalin Region (2009), Chukotsky Autonomous District (2010-2015)

\* compiled by the author







It can be seen that in the SFD, VFD, UFD, the situation with regions where more citizens with incomes below the subsistence level is relatively constant. Although it can not be said that the situation in other federal districts is changing every year: two subjects of the Russian Federation are among the leaders and outsiders.

Analysis of Rosstat's "Labor and Employment in Russia, 2015" data on the distribution of the number of employees of organizations by the size of the accrued wages by types of economic activity showed that in the areas of "mining", "construction", "financial activities", the majority of employees received a fairly high salary, while in "education" and "health care" - on the contrary, the highest proportion of employees who received the lowest salaries. Most of the poor households live in small towns (less than 50 thousand people). It was also found that families with one child under the age of 16, with low incomes, make up a greater proportion than families with a large number of children.

Table 2 provides information on which federal districts the average wage is higher than, on average, in Russia. So, in the Central Federal District, North-West Federal District, Ural Federal District, Far Eastern Federal District, the average salary is higher than the national average for the last 16 years.

Table 2. The average nominal wage in the Russian Federation by federal districts

	2000 г.	2001 г.	2002 г.	2003 г.	2004 г.	2005 г.	2006 г.	2007 г.
RF	2223,4	3240,4	4360,3	5498,5	6739,5	8554,9	10633,9	13593,4
CFD	2173	3265,9	4432,6	5872,8	7276,3	9621,8	12117,4	15876,7
NWFD	2531,5	3655,1	5067,9	6143,7	7518,1	9487,2	11851,3	15256,1
SFD	1586,8	2330,6	3184,3	3946,6	4968,1	6204,2	7736,4	9874,8
NCFD	1213	1720,7	2441,7	3108	3844,5	4785,1	5950,2	7734,9
VFD	1783	2562,5	3412,1	4235,3	5149,9	6473,3	8118	10347,4
UFD	3486,5	5168,6	6588,6	8085,7	9692,5	11679,5	14306,9	17837,6



SFD	2269,6	3190,8	4309,5	5325,3	6507,8	8109,7	9877,5	12344,8
FEFD	3113,6	4298	5979,1	7554,7	9115,2	11507,9	13711,4	16713

Continuation of Table 2

	2008 г.	2009 г.	2010 г.	2011 г.	2012 г.	2013 г.	2014 г.	2015 г.
PФ	17290,1	18637,5	20952,2	23369,2	26628,9	29792	32495	34030
CFD	20665,7	22404,6	25376,9	28449,4	32186,2	36212,5	39945	41961
NWFD	19396	20892,7	23531,5	25776,4	29057,8	32548,9	35468	37931
SFD	12514,3	14065,7	15560,1	17236,9	19822,7	22496,6	24311	25471
NCFD	9861,8	11431,9	12569,2	13898,4	16725	19358,7	20930	21720
VFD	13209,9	13987,4	15613,6	17543,6	20020,4	22481,3	24601	25632
UFD	21826	22269	25034,5	28055,3	31598,4	34735,4	37270	39083
SFD	15381,4	16606,4	18657,6	20889,9	23788,5	26398,1	28347	29616
FEFD	20778,3	23157,8	25814,2	29319,7	33584	37578,8	40876	43164

\* - The table is compiled on the basis of Rosstat data

It can also be noticed that the lowest average salaries are observed in the North Caucasus Federal District. Average salaries in the NCFD are 40-45% lower than the average for Russia. The highest average salaries in the Far Eastern and Central Federal Districts. Calculation of the coefficient of variation shows a high differentiation of the average wage across the country in the context of districts.

To determine the role of SMIC and its social and reproductive function, consider the impact of SMIC on the size of per capita income using a statistical model.



We construct a correlation-regression model, where

Y - average per capita income of the population

X1 - size of minimum wages

X2 - nominal average wage

Figure 3 shows the results of a statistical regression analysis of the dependence of per capita income on the size of the minimum wage and the nominal wage.

Fig. 3 - Regression analysis results

Regression analysis results

*Regression statistics*

Multiple R	0,999367262
R- square	0,998734924
The normalized R-square	0,998540297
Standard Error	356,0848563
Observations	16

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-statistics</i>	<i>P-value</i>	<i>Low 95%</i>	<i>High 95%</i>	<i>Low 95,0%</i>	<i>High 95,0%</i>
Y-intersection	694,6580 657	193,251775 7	3,59457 5332	0,003 2655 67	277,16 29868	1112, 15314 5	277,16 3	1112,1 53



Variable	0,321349	0,20572277	1,56204	0,142	-	0,765	-	
X 1	213	5	9768	2829	87822	78624	0,1230	0,7657
Variable	0,795832	0,04154468	19,1560	6,539	0,7060	0,885		
X 2	338	2	5814	43E-11	8051	58416	0,7060	0,8855

\* - calculated by the author

As a result of the calculations, the equation is:

$$Y = 694.65 + 0.33213x_1 + 0.7958x_2$$

It is seen that the influence of factors is positive. However, it can be seen that the effect of the SMIC on the average per capita income is 0.3213, and the effect of the nominal wage is rather high - 0.7958. It follows that the average per capita income does not strongly depend on the size of the minimum wage, apparently because of its low size.

Let us check the results obtained. The coefficient of determination - R<sup>2</sup> is equal to 0.99, this is a very high value, which may indicate the statistical significance of the factors studied. The model was tested for heteroscedasticity and autocorrelation.

Thus, these calculations showed that the regression model obtained was statistically significant. The analysis of this model allows to draw a conclusion about the low role of the minimum wage in the formation of average per capita income of the population of Russia.

Consider changes in the size of the minimum wage, the unemployment rate and the number of unemployed. Table 3 shows that in nominal terms the size of the minimum wage increases, the unemployment rate and the number of the unemployed decrease. It is clear that the unemployment rate can not be reduced because of the nominal growth of the minimum wage, since there are many other factors. However, it is necessary to check whether the growth of minimum wages provokes an increase in the number of unemployed or the unemployment rate.





Table 3 - The dynamics of changes in the minimum wage, the unemployment rate and the number of unemployed in 2000-2015

Years	minim um wage	unemployed, thousand people in Russia	Unemployment rate, %	Years	minim um wage	unemployed, thousand people in Russia	Unempl oyment rate, %
2000	132	7699,5	10,6	2008	2300	4697,0	6,2
2001	200	6423,7	9	2009	4330	6283,7	8,3
2002	450	5698,3	7,9	2010	4330	5544,2	7,3
2003	600	5933,5	8,2	2011	4330	4922,4	6,5
2004	600	5666,0	7,8	2012	4611	4130,7	5,5
2005	720	5242,0	7,1	2013	5205	4137,4	5,5
2006	1100	5250,2	7,1	2014	5554	3889,4	5,2
2007	2300	4518,6	6	2015	6204	4263,9	5,56
				2016	7500	4243,5	5,5

First, let's check the relationship between the indicators. Table 4 shows the calculated correlation coefficients between the size of the minimum wage at actual and comparable prices in 2000, with the number of unemployed and the unemployment rate.

Table 4 - Correlation between the minimum wage and unemployment

Index 1	Index 2	Correlation coefficient
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minimum wage size	The number of unemployed in the whole country	-0,675673367
minimum wage size	Unemployment rate for the whole country	-0,718753494
minimum wage in comparable prices	The number of unemployed in the whole country	-0,631658075
minimum wage in comparable prices	Unemployment rate for the whole country	-0,686674267

It is evident that in all cases the relationship between these indicators is negative and average, only in the case of the size of the minimum wage - the unemployment rate in the whole country, the correlation coefficient is "-0.7187", which indicates a stronger relationship than other indicators.

We perform a correlation-regression analysis. To perform a comparative analysis, we will use a linear function, compare the determination coefficients and formulas.

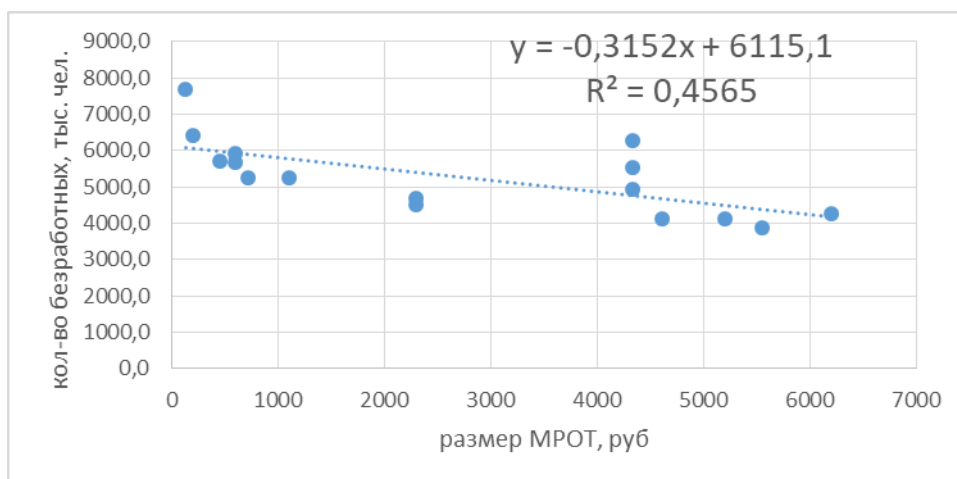


Figure 4- The relationship between the minimum wage and the number of unemployed in the whole RF





According to data for 2000-2015, a correlation-regression model was constructed for the dependence of the size of the minimum wage and the number of unemployed in the whole country. It can be seen that the spread of data is quite wide, as evidenced by the coefficient of determination - 0.456. Thus, in 45% of cases the dependence is described by the equation  $y = -0.3152x + 6115.1$ . As the size of the minimum wage increases, the number of unemployed will decrease slightly.

In carrying out similar calculations, but where x was the size of the minimum wage at comparable prices in 2000, the variation is even higher, but the dependence is also negative, weak. The coefficient of determination is 0.399.

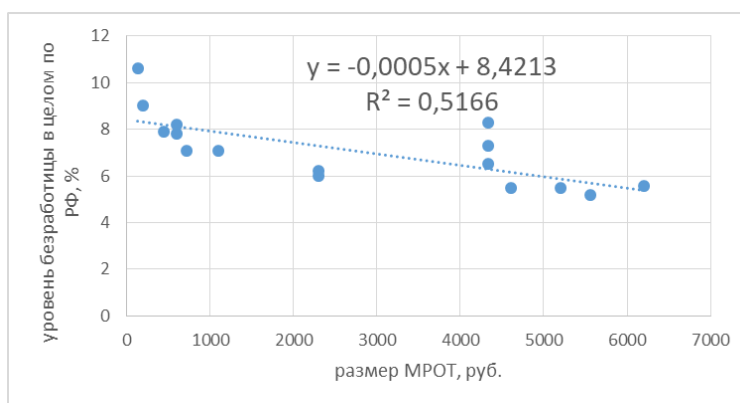


Figure 5 - The relationship between the minimum wage and the unemployment rate in the whole of Russia

Figure 5 shows that for 51.6% of cases with an increase in the minimum wage, the unemployment rate decreases, which is described by equation

$$y = -0,0005x + 8.4213.$$

Due to the fact that Russia is a country with a highly differentiated socio-economic development indicators, finding the links between the indicators in the whole country gives a low value of the coefficient of determination.

Consider how the unemployment rate and the number of unemployed will change when the size of the minimum wage is changed. Model the situation. Now we know that since July 1, 2016, the minimum wage has increased and amounted to 7500, an increase of 20% compared to 6204 rubles.

Based on the calculations presented in Table 5, it is clear that an increase in the minimum wage by 20% will lead to a 12% decrease in the number of unemployed, and a 16% decrease in the



unemployment rate. It turns out that the average increase in the size of the minimum wage in the country should positively affect the situation related to unemployment. However, in connection with the fact that in the models obtained the coefficient of determination is in the range of 0.5, which means that by 50% the decrease in the unemployment figures is determined by the growth of the minimum wage and by 50% due to other factors. So, as of 19.10.2016, the unemployment rate is 5.2%, something much higher than calculated based on the linear model. This is because the coefficient of determination is 0.5, i.e. This model is 50% explained by the SMIC factor.

Table 5 - Calculation of the effect of changing the minimum wage on unemployment figures

x	y	formula	The change in y with an increase in x by 20% (up to 7500 rubles in 2016) compared with 2015.
Size of minimum wages	The number of unemployed in the whole country	$y = -0,3152x + 6115,1$	<b>3751,1 тыс. чел (↓12%)</b>
Size of minimum wages	Unemployment rate for the whole country	$y = -0,0005x + 8,4213$	<b>4,67 (↓16%)</b>

We will carry out similar calculations for those regions in which the highest unemployment rate is in 2015, perform a correlation-regression analysis, calculate how the unemployment rate will change with an increase in minimum wages by 20%. Table 6 shows the calculations.

Table 6 - Results of correlation-regression analysis of regions with high unemployment

Region	Correlation coefficient	Formula and R <sup>2</sup>	The change in the unemployment rate







			with an increase in the minimum wage by 20% compared with 2015.
Republic of Kalmykia	-0,88501955	$y = -0,0013x + 19,52$ $R^2 = 0,7833$	9,77 (↓8,7%)
The Republic of Ingushetia	-0,226026791	$y = -0,0011x + 48,482$ $R^2 = 0,0511$	40,23 (↑32%)
Tyva Republic	-0,513827968	$y = -0,0005x + 21,372$ $R^2 = 0,264$	17,62 (↓5%)
The Republic of Dagestan	-0,928701877	$y = -0,0028x + 25,641$ $R^2 = 0,8625$	4,64 (↓57%)
Kabardino-Balkaria Republic	-0,86883229	$y = -0,0021x + 21,833$ $R^2 = 0,7549$	6,08 (↓40%)
Karachay-Cherkess Republic	-0,681688843	$y = -0,0012x + 17,93$ $R^2 = 0,4647$	8,93 (↓41%)

It is seen that the highest correlation coefficient is observed in Kalmykia, Dagestan, Kabardino-Balkaria, Karachay-Cherkessia. Interestingly, in Ingushetia, where the highest unemployment rate, the correlation is low. The constructed models have a high coefficient of determination in Kalmykia, Dagestan, and Kabardino-Balkaria. In these regions, the sensitivity to a change in the size of SMIC is stronger. According to the Rosstat of the Republic of Kalmykia, as of August 2016, the unemployment rate was 9.8%, which is very close to the figure that we calculated using correlation regression analysis. It turns out that an increase in the minimum wage to 7500 in 2016 to some extent affected the decrease in the unemployment rate by 8.7% compared to 2015 and amounted to 9.8%.





Now we carry out correlation-regression analysis for regions with low unemployment. Calculations are given in Table 7.

Table 7 - Results of correlation-regression analysis of regions with low unemployment

Регион	Correlation coefficient	Formula and R <sup>2</sup>	The change in the unemployment rate with an increase in the minimum wage by 20% compared with 2015.
Moscow	-0,109998981	$y = -4E-05x + 1,7438$ R <sup>2</sup> = 0,0121	1,44 (↓18%)
Saint - Petersburg	-0,595338828	$y = -0,0004x + 3,7175$ R <sup>2</sup> = 0,3544	0,72 (↓65%)
Moscow Region	-0,480385313	$y = -0,0003x + 4,6068$ R <sup>2</sup> = 0,2308	2,36 (↓28%)
Samara Region	-0,539858636	$y = -0,0004x + 6,1078$ R <sup>2</sup> = 0,2914	3,11 (↓9%)
Republic of Tatarstan	-0,599770915	$y = -0,0004x + 6,8517$ R <sup>2</sup> = 0,3597	3,85 (↓3%)

The results of the correlation analysis show that there is practically no correlation between the minimum wage and the unemployment rate (the correlation coefficient is "-0.1"). This is understandable, since in Moscow, however, as in other regions with low unemployment, the average salary is much higher than the minimum. Although in St. Petersburg, Moscow region, Samara region, the Republic of Tatarstan the coefficient is higher than in Moscow, "-0.5: -0.6", which indicates an average feedback. Further analysis of the resulting linear regression equations,





the coefficient of determination shows that these models describe only 23-35% of cases. Therefore, measuring the impact of SME growth on the unemployment rate is not statistically significant.

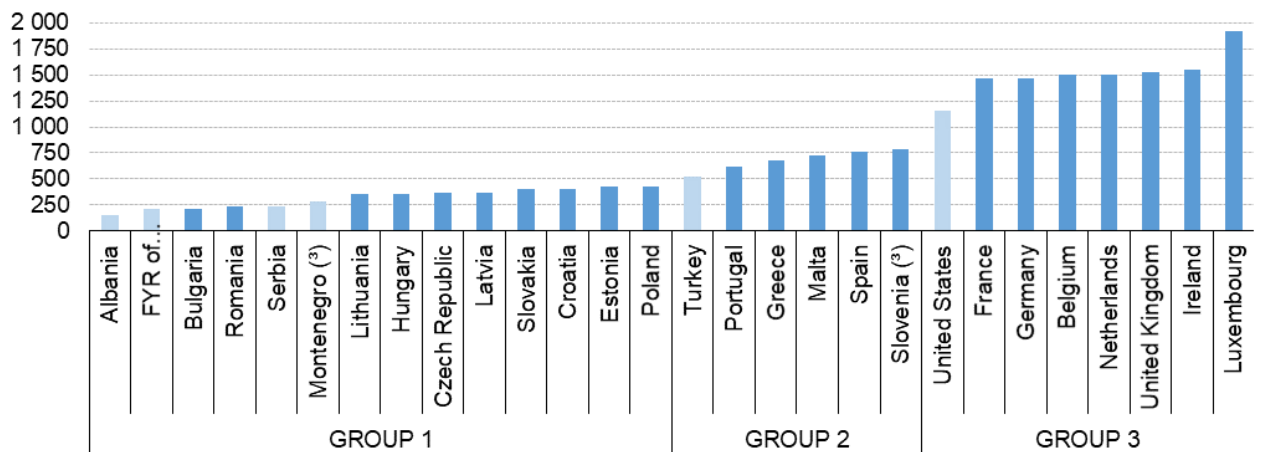
Thus, correlation-regression analysis showed that the relationship between the indicator of the size of the minimum wage and the unemployment rate still exists: the reverse, the average. The conducted calculations do not allow to make an unambiguous conclusion that it is the growth of the minimum wage that leads to an increase in unemployment. Also, due to the country's highly differentiated socio-economic indicators, the impact of the minimum wage growth varies by region: in some regions (as a rule, high unemployment rates), sensitivity and dependence are higher, others are not or weak. Regression analysis showed that other factors, other than the SMIC's size, influence the unemployment rate. In this regard, we believe that we should not be afraid of raising the size of the minimum wage, believing that it will cause an increase in the unemployment rate in the country as a whole. On the contrary, it should be periodically reviewed, increased due to the growth of consumer prices, to protect the working population.

### **Comparison with foreign experience**

We present a comparative analysis of SMIC in Russia and in Europe. So in 22 out of 28 EU countries the minimum wage is fixed. In Austria, Denmark, Finland, Italy and Sweden there is no statutory minimum wage. The level of minimum wages in Europe varies considerably between EU countries. The lowest minimum wage in Albania is 156 euros per month, in Macedonia 214 euros, in Bulgaria 215 euros per month.

According to Eurostat data, all countries are divided into three groups according to the minimum wage (see Figure 6).

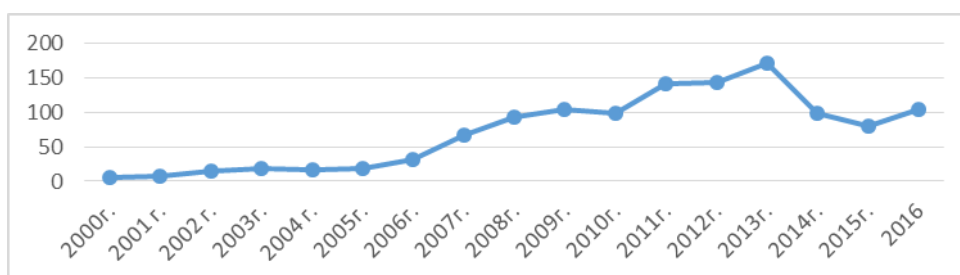
Figure 6. The size of the minimum wage in the EU in 2016.



Group 1, where the minimum wage is below 500 euros per month, is the most numerous and includes 14 countries. The lowest minimum wage in the candidate countries, including Albania, and the highest in the first group - in Poland, 431 euros per month. Group 2 includes countries with an SMIC from 500 to 1000 euros per month: Turkey, Portugal, Greece, Malta, Spain, Slovenia. The lowest salary in this group in Turkey is 518 euros, and the highest in Spain and Slovenia. Group 3 includes seven EU member states (France, Germany, Belgium, the Netherlands, the United Kingdom, Ireland and Luxembourg), where the minimum wage is more than 1,000 euros per month. The highest monthly minimum wage is applied in Luxembourg: 1,922.96 euros per month - about nine times more than the Bulgarian size ..

Consider the size of the minimum wage in Russia in European currency. Figure 7 shows the dynamics of the minimum wage in euros in Russia from 2000 to 2016. A positive trend is seen until 2013, then due to depreciation of the Russian currency, the size of the minimum wage in euros has decreased. Despite the positive trend, we draw attention to the fact that the size of the minimum wage in Russia is lower than in the poorest European country.

Fig. 7 The size of the minimum wage in euros in Russia in 2000-2016.





Studying the foreign experience of approving the size of the minimum wage has shown significant differences. Thus, in some countries the level of the minimum wage is determined by the government taking into account the recommendations of the social partners, in others it is unilaterally determined by the government. In ten EU countries, the minimum wage is determined by the government on the basis of a third party recommendation. In Bulgaria, Estonia, Hungary, Latvia and Lithuania, the government received a recommendation from the social partners or tripartite bodies; in Ireland and Great Britain is adopted on the basis of the recommendations of the expert committees. In Hungary, the government establishes the minimum wage after consultation with the National Economic and Social Council (NGTT). In Latvia, the process begins with the proposal of the relevant ministry about the level of the minimum wage, further developed in consultation with the Ministry of Finance and social partners. In Germany, the minimum wage was approved only in 2015 thanks to collective bargaining, trade unions, experts and amounted to 1440 euros, in 2016 it rose to 1473 euros. In Ireland, in 2015, a law on minimum wages was adopted, a Commission was created, which includes representatives of social partners, scientists and other professionals in this field. The Government of Great Britain in May 1997 decided to create an independent commission on the minimum wage (LPC - Low Pay Commission), consisting of representatives of employers, trade unions and academia. . Since April 1, 2016, the minimum wage in the country for workers older than 25 years has been set at 7 pounds 20 pence per hour. According to experts, this measure led to an immediate increase in the remuneration of 1.3 million working British.

The system for the approval of the minimum wage in European countries is different, on the whole it comes down to such methods: definition at the level of the Government; coordination with social partners; approval at the level of tripartite commissions. In many countries, the minimum wage is defined as monthly, but there are also countries where the minimum hourly rate is set, and one of the factors may be the age of the employee. In Russia, the minimum wage is very low, it is related to the size of the subsistence minimum and the value of the consumer basket.

## **Conclusions**



So, the minimum wage in Russia does not correspond to the necessary wage level, which allows satisfying its primary needs, does not fulfill the reproductive function, does not create conditions for the worker to restore his ability to work (Pollak, A. P., 2015).

The size of the minimum wage is not indexed in accordance with the growth of consumer prices, therefore, its amount depreciates year by year. The social and regulatory role of minimum earnings is reduced to zero. The minimum wage does not exceed the subsistence minimum, although under the Constitution it should be no less than the last. At the same time, the subsistence level is also growing more slowly than inflation is growing. When modeling the situation when the subsistence minimum is indexed by the rate of inflation, its value would be several times higher today. An analysis of the effect of the size of the minimum wage and the nominal wage on average per capita income showed a greater effect of the growth of nominal wages on the average per capita income.

In Russia, a fairly high level of wage differentiation by region, by type of activity and many other factors. It can be concluded that the country as a whole is "poor", most of the people are "poor". The first and necessary step could be an increase in the size of the minimum wage to the level of the subsistence minimum, which would correspond to the norms promulgated in the Constitution of the Russian Federation. In the second stage, the minimum wage should be brought to a level that would ensure the necessary standard of living for the individual and his family members (Sabitova T. V., 2015).

Russian legislation does not protect employees from unscrupulous employers. Not all regions are set regional minimum sizes above the federal value due to budget deficit. The guarantees declared in the Constitution are essentially formal and do not have a real social and reproductive function.

We also consider it expedient to use the compensation mechanism for labor costs in the amount of one minimum wage established by the legislation of the relevant subject of the Federation, increased by insurance premiums to state non-budgetary funds, when enterprises implement socially significant projects (Ivanova T. B., 2016).

In recent times, it has been increasingly suggested to introduce a minimum hourly tariff and make appropriate changes in labor legislation, but I believe that simply introducing a minimum hourly tariff will not change the situation as a whole, it will be only a technical moment. Most of the employers and currently use hourly pay, but its cost is low and determined on the basis of the norm of the number of hours per week. It should also be noted that despite many hours of processing the



employer does not fix them, does not pay them, considering that the employee who does not perform his work at the set time, is considered ineffective.

We can not disagree with the fact that compensation, incentives and social payments should not be included in the amount of the minimum wage or the minimum hourly tariff (Lada A. S., 2016)

We agree that it is advisable to proceed to an establishment in percent of the chosen criterion (to the subsistence minimum, the average monthly wage, the cost of the budget of material prosperity, etc.); development of unified approaches to the establishment of minimum wage; establishment of the procedure for raising and indexing the minimum wage, including taking into account the growth of consumer prices, in order to prevent a reduction in the level of established guarantees. (Pollack A. P., 2014).

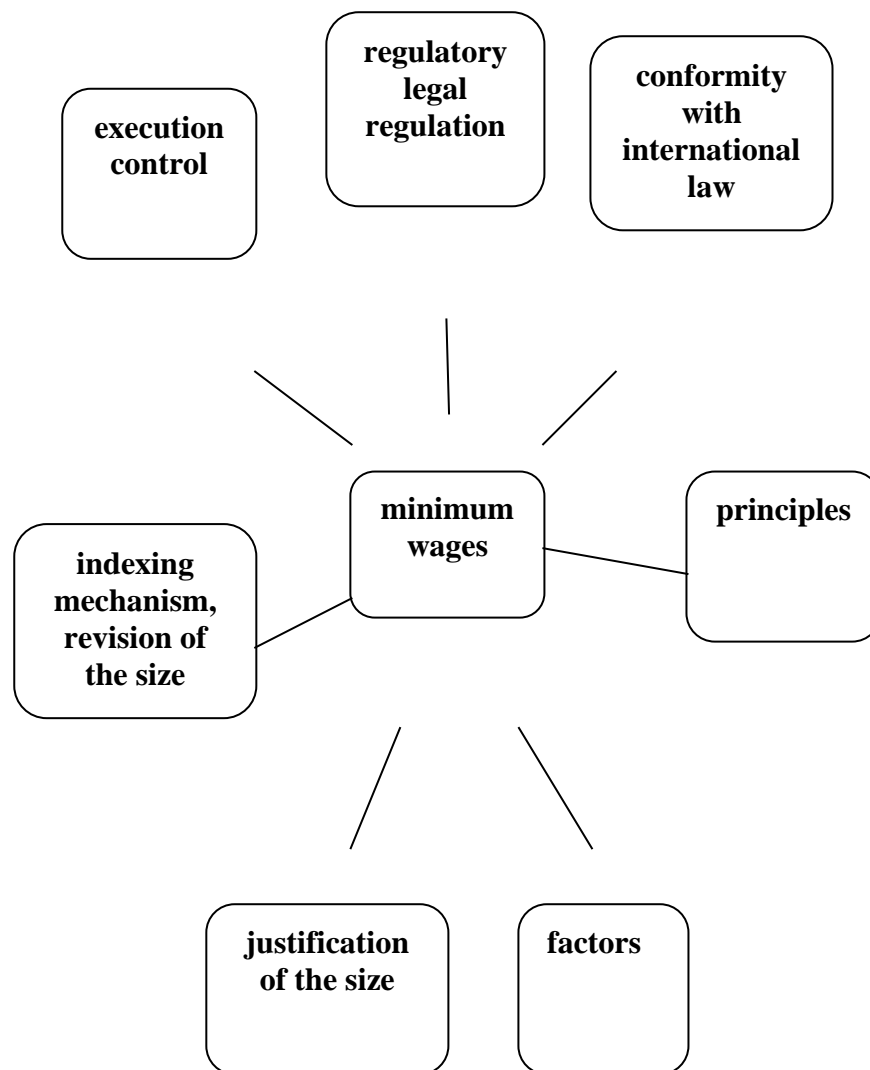
Attention is drawn to proposals related to the link to the median salary. Individual scientists believe that the minimum wage should be at the level of 40% of the median salary (Klepikova L. I., 2015). It is interesting to propose the establishment of a minimum wage in the range from 1.5 to 2 PM (Fedoseeva Yu., 2015).

We consider it expedient to differentiate the regional minimum wage in the constituent entities of the Russian Federation on the following grounds: agricultural and non-agricultural labor, and labor in the budgetary sector of the economy and in the off-budget sector (Pollack A. P. , 2014).

Discussion remains the question of how the SMIC correlates with the amount of the subsistence minimum, and for which group of the able-bodied population its value is calculated. The amount of the subsistence minimum does not fully take into account the cultural, educational and medical needs of workers. They also believe that to solve housing problems it is important that the minimum wage has a close relationship with the subsistence minimum (Ivanitsky V. V., 2014). The big difference between the minimum wage, the living wage and the average wage is the reason for the property differentiation of the population, which leads to a threat to the economic and social security of the country.

When developing recommendations for improving the mechanism for determining the minimum wage, an integrated approach is important, taking into account various factors. Figure 8 shows the main elements of an integrated approach to determining the minimum wage.

Fig. 8. Comprehensive approach to the definition of minimum wage



\* - developed by the author

Implementation of an integrated approach to the definition of minimum wage and direct proposals are reflected in the following figure.

Fig.9. Proposals for the implementation of minimum wage tasks and functions as a tool for social policy

conformity with international law	<ul style="list-style-type: none"><li>• Ratification of international Conventions, according to which it is necessary to take into account the needs of</li></ul>
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	workers and their families, taking into account the cost of living, the requirements of economic development.
regulatory legal regulation	<ul style="list-style-type: none"><li>• Achievement of the implementation of guarantees of the RF Constitution;</li><li>• amend the Labor Code of the Russian Federation st.133, which prohibits the inclusion in the minimum wage of various compensatory, social benefits.</li><li>• when approving, take into account the opinion of social partners, experts.</li></ul>
principles	<ul style="list-style-type: none"><li>• unity</li><li>• fairness</li><li>• Reasonableness</li><li>• consideration of factors: regional, natural and climatic factors, working conditions, qualifications.</li></ul>
factors	<ul style="list-style-type: none"><li>• regional, natural and climatic, affecting the cost of living;</li><li>• Harsh, harmful and dangerous working conditions;</li><li>• qualification, level of education</li><li>• the presence of dependents.</li></ul>
justification of the size	<ul style="list-style-type: none"><li>• development of methods for calculating the minimum wage, where the following restrictions and conditions are simultaneously fulfilled: <math display="block">\left\{ \begin{array}{l} \text{MPOT} = f(x), \text{ где } x - \text{совокупность факторов} \\ \text{компенсации, доплаты } \notin \text{MPOT} \\ \text{ПМ} \leq \text{MPOT} \leq 2,5 + 3\text{ПМ} \end{array} \right.</math></li><li>• revision of the norms of consumption of food and non-food products and the volume of services that really</li></ul>



	correspond to the satisfaction of the necessary needs of citizens
indexing mechanism, revision of the size	<ul style="list-style-type: none"><li>• regular nature, dependent on inflation;</li><li>• regular review of the size of the regional minimum wage</li><li>• matching the size of indexing</li></ul>
enforcement of guarantees	<ul style="list-style-type: none"><li>• control by the executive, legislative authorities for approval, justification and recalculation of the size</li><li>• the possibility of public control</li><li>• Presence of real responsibility for the implementation of guarantees established in the Constitution of the Russian Federation</li></ul>

\* - suggested by the author

Thus, in general, the direction of improving the minimum wage as a tool of social policy can be reduced to the following:

- It is necessary to ratify international conventions that protect the rights of working citizens;
- introduce amendments to the Labor Code of the Russian Federation st.133, prohibiting the inclusion in the minimum wage of various compensatory, social subsidies;
- when approving, justifying the size, indexing the minimum wage, it is necessary to take into account the opinions of trade unions, expert communities and other social partners;
- minimum wage must be established to pay for low-skilled labor;
- The size of the minimum wage should be regularly indexed in accordance with the growth of consumer prices;
- approval of minimum wage should be based on the following principles: unity; justice; validity; consideration of factors.
- when determining the minimum wage, it is necessary to consider the following factors: education and qualifications, regional aspect, working conditions, which can be reduced to the formula:



$$MW = MW(\text{ validity}) \times k(\text{ reg}) \times k(\text{ educ}) \times k(\text{ labor})$$

where

MW( validity) - the justified size of minimum wage,

k (reg) -coefficient, taking into account regional features

k (educ) - coefficient, taking into account the level of education and qualifications (people with higher education and high qualifications should not receive a salary at the minimum level)

k (labor) - coefficient, taking into account working conditions

In conclusion, it can be said that MW as an instrument of social policy is of low efficiency and does not fulfill the functions assigned to it. At the same time, its existence can not be ruled out, because its size is a measuring tool for budget workers, a social indicator for regions with a low level of socio-economic development. In our opinion, the minimum wage should be at least the subsistence minimum, be indexed in time, and the target value should be 2.5-3 times the size of the LW. This size can provide a standard of living at the required level for the employee and his family. It is important that the size of the minimum wage takes into account working conditions and the level of qualifications and education of a person.

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