

# Inequality of household income in urban and rural territories of Russia

Aleksey Pasyнков<sup>1\*</sup> and Ekaterina Zakharchuk<sup>1</sup>

<sup>1</sup>Institute of Economics of the Ural Branch of Russian Academy of Sciences, Center for Strategic Development of Territories, 29 Moskovskaya St., 620014 Ekaterinburg, Russia

**Abstract.** The article studies the differentiation of per capita incomes of urban and rural areas of Russia, as well as the share of social payments in household incomes. The regions of the Ural Federal District with different specializations of the economy are taken as the object of the study; official data of the Russian Statistical Office on municipal revenues are used. The study showed that there is a huge gap in per capita income both between the urban areas of the regions of the Ural Federal District (by 4.71 times), and even more between rural areas (by 19.27 times). The largest share of social payments in household income is observed in rural areas of the southern regions (about 45%), in urban areas it is somewhat less (20-30%). The specifics of the development of the northern regions predetermined the excess of per capita rural income over urban areas, in the Yamalo-Nenets Autonomous Okrug, by two times, and the share of social payments in income is insignificant in these regions. The calculations carried out by the authors showed that the average payments of social benefits in the regions of the Ural Federal District do not differ so significantly, from 83.8 (urban areas of the Tyumen region) to 136.2 thousand rubles per year (rural areas of Yamal). Therefore, the share of social payments in household income depends not so much on their amount, but on the level of other incomes of residents.

**Key words:** Social benefits; Households; Average per capita income; Urban and rural areas; Ural Federal District.

## 1 Introduction

In the world scientific literature, the problem of income inequality between urban and rural residents has been studied for a long time. The gaps in the standard of living between urbanized and non-urban areas are due to both objective (different efficiency of activity, cost of living, agglomeration effects, etc.) and subjective factors (specialization of territories, country conditions, level of education, etc.). In most countries of the world, the incomes of the urban population exceed those of the rural. This is a global trend, but income gaps have their own characteristics in different countries.

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\* Corresponding author: [monografia@mail.ru](mailto:monografia@mail.ru)

For example, in the countries of the European Union, according to research by scientists [1-3], it is concluded that in the richest countries of the EU there are few significant differences between the city and the countryside, while in the poorer countries of the east and south, rural areas have a much lower level of well-being and quality of life. The role of strategic planning and arrangement of rural areas to improve the welfare of households is noted [4-6]. American researchers [7-9] also point to income inequality between rural and urban areas in the United States. However, it is noted that the unevenness has remained at the set values in recent decades, including due to the social policy of the American government. The problem of the income gap between rural and urban residents is very acute in developing countries. The most active research on this topic is carried out by Chinese scientists [10-13], since the rapid growth of industry in the urban agglomerations of the People's Republic of China has led to a significant gap in living standards between rural and urban settlements.

In Russia, there is insufficient research on income disparities between rural and urban residents. Thus, the study [14] notes that the use of different methodologies for calculating the incomes of urban and rural residents does not show real results of the welfare gap between them. Other authors [15] argue that the difference in the incomes of urban and rural residents in Russia is only increasing, and therefore the reproductive function is not performed in rural settlements. The article [16] analyzes the sources of income for rural residents and concludes that there is a high share of in-kind income and the risk of poverty. An analysis of the methods used to reduce inequality between urban and rural residents in Russia and China is given in the works [17, 18]. Regional problems of inequality between the urban and rural populations of Russia are described on the example of Yakutia [19], Bashkortostan [20], St. Petersburg [21].

At the same time, the issues of income differentiation between urban and rural areas, based on official statistics, were practically not considered in Russia, as well as the impact of social payments from the state on the income structure. Therefore, the purpose of this article is an attempt to consider this problem on the example of a number of Russian regions.

## **2 Methods and data**

To analyze income differentiation between rural and urban households, we use official data from the Russian statistical office, Rosstat. It annually publishes the statistical form "The volume of social payments to the population and taxable cash income of the population in the context of municipalities", which contains information on all municipalities and regions of Russia in the context of indicators: taxable cash income of individuals and entrepreneurs, social and other payments, the volume of social payments to the population and taxable cash income of the population, the volume of social payments and taxable cash income of the population on average per one inhabitant of a municipal district (urban district). Using these data, we calculated additional indicators of the structure of household incomes: average per capita income per month for municipalities, social payments in the structure of household incomes, as well as average, minimum and maximum values of these indicators for the region. The study is conducted according to the data for 2020, as the most relevant in the databases. Of course, this year the impact of the COVID-19 pandemic on the income of citizens was felt, but in the Russian context, the distortions were insignificant.

As an object of study, we took the Ural Federal District of the Russian Federation, which consists of 5 regions of different economic specialization: Kurgan region (agriculture), Sverdlovsk and Chelyabinsk regions (engineering and metallurgy), Tyumen region (diversified economic structure), Khanty-Mansi Autonomous Okrug (Yugra) (oil production) and Yamalo-Nenets Autonomous Okrug (Yamal) (natural gas production).

It should be noted that the administrative division of municipalities in the Russian Federation, although it has a single basis for the whole country, however, each region proceeds from the specifics of the territories. Therefore, for example, in the Kurgan region there are only two urban areas, the rest are rural. In the Sverdlovsk region, on the contrary, only five territories have the status of rural areas, the rest are coded as urban, even if there are no large settlements. The most convenient administrative division is in Yugra and Yamal, where large settlements have the status of urban districts, the rest are rural.

### 3 Results

First of all, let us consider the differentiation of household incomes between urban and rural residents in the regions of the Ural Federal District. We have compiled Table 1, which shows the results of the author's calculations on average values, highlights the maximum and minimum indicators of per capita income and their ratio between urban/rural areas.

**Table 1.** Per capita income of Urban and Rural territories in the regions of the Ural Federal District, 2020, rubles.

Region	Urban Territories				Rural Territories				Average Urban /Rural
	Average	Max	Min	Max/Min	Average	Max	Min	Max/Min	
Kurgan region	26,817	28,631	19,255	1.49	16,177	44,987	12,898	3.49	1.66
Sverdlovsk region	32,959	50,006	13,802	3.62	17,420	20,354	12,526	1.62	1.89
Tyumen region	36,370	40,245	16,686	2.41	19,895	62,504	13,541	4.62	1.83
Khanty-Mansi Autonomous Okrug - Yugra	50,140	61,714	32,094	1.92	73,694	118,773	36,604	3.24	0.68
Yamalo-Nenets Autonomous Okrug	68,421	84,895	43,666	1.94	139,247	248,615	46,393	5.36	0.49
Chelyabinsk region	32,238	41,456	15,943	2.60	17,815	23,238	13,083	1.78	1.81

As can be seen from the table, the lowest per capita incomes are observed in the Kurgan region, both urban and rural areas. At the same time, the gap between rural residents (3.49 times) is much larger than that of urban (1.49). On average, the income differentiation between urban and rural areas is not so impressive - by 1.66 times, but do not forget that there are only two urban settlements in the region (the cities of Kurgan and Shadrinsk). The other two regions of the Ural Federal District, the Chelyabinsk and Sverdlovsk regions, have a similar structure of income differentiation between urban and rural households. They have almost the same difference in income between rural areas (1.62 and 1.78), as well as the gap between rural and urban residents. The only difference in these regions is that in the Sverdlovsk region there is a larger gap between the incomes of the urban part of households (3.62 versus 2.60 in the Chelyabinsk region), but this can be explained by the peculiarities of the administrative division of the territories. The data on average per capita incomes are also close to them in the Tyumen region, where, on the whole, incomes are slightly higher for urban and rural households. A distinctive feature of this region is a significant gap in the incomes of rural settlements (4.62 times), due to the leading positions of the Uvat district, where oil production areas are located.

If the four southern regions of the Ural Federal District are quite similar in their structure of income differences between urban and rural households and correspond to the general

global trend of income differentiation, then the northern regions of the district are significantly different. In Ugra and Yamal, the average per capita income of households in rural areas is much higher than in urban areas. For example, in the Yamalo-Nenets Autonomous Okrug, the average income of rural residents is 139,247 rubles per month, while urban residents are only 68,421 rubles, that is, two times less. Also in Yamal, there is a record difference among all regions between the incomes of rural settlements - the maximum value is 248,615 rubles (Yamal district), the minimum is 46,393 rubles (Shuryshkarsky district), or 5.36 times. Among urban areas, the difference is not so significant – 1.94, which corresponds to the average for the Ural Federal District. This anomaly with the income differentiation of rural settlements of Yamal can be explained by high wages in the territories of development of new oil and gas fields, in the complete absence of urban infrastructure. To a lesser extent, the gap is manifested in the Khanty-Mansiysk Autonomous Okrug-Yugra, where the average per capita income of urban residents is only 68% of rural ones. The difference between the indicator of rural settlements is less, the maximum value is 118,773 rubles (Khanty-Mansiysk municipal district), the minimum is 36,604 rubles. (Soviet municipal district), or 3.24 times (even less than that of the Kurgan region). The specifics of differentiation in Yugra are the same as in Yamal, only to a lesser extent, due to the significant number of urban settlements.

Thus, the specifics of the economic development of the regions of the Ural Federal District predetermine the diversity of the ratios of average per capita incomes both between urban and rural settlements, and within these groups.

In order to analyze the income structure of urban and rural areas of the regions of the Ural Federal District, we have prepared Table 2, which highlights the share of social payments. In Russia as a whole, social payments (which include various allowances, pensions, etc.) amount to approximately 20%, and are a fairly significant component of citizens' incomes. For clarity, we also showed in Table 2 the minimum and maximum values of social payments in rural and urban areas of the regions, and their ratio.

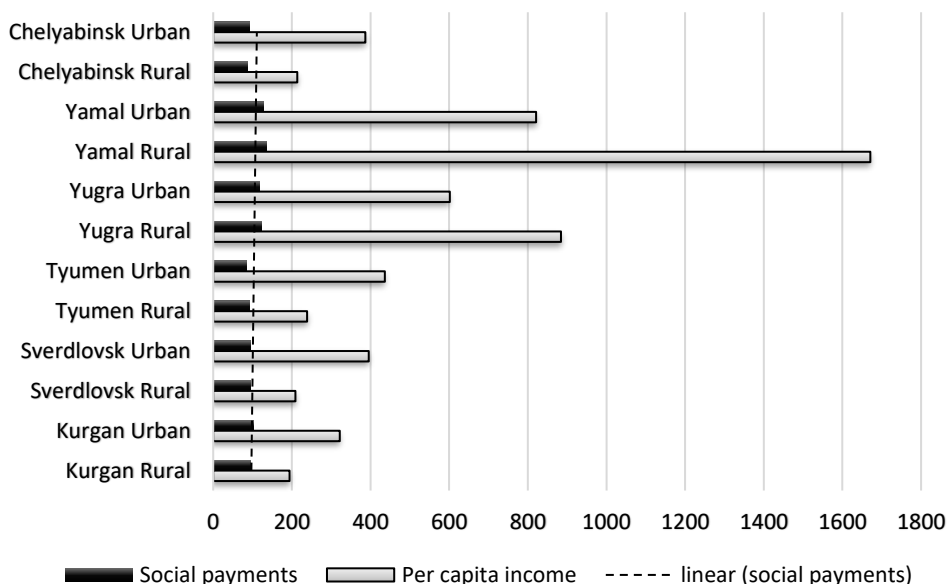
**Table 2.** The share of social payments in the income of Households Urban and Rural territories in the regions of the Ural Federal District, 2020, %.

Region	Urban Territories				Rural Territories				Average Urban/Rural
	Average	Max	Min	Max/Min	Average	Max	Min	Max/Min	
Kurgan region	31.93	38.44	30.88	1.24	48.93	63.94	35.69	1.79	0.65
Sverdlovsk region	23.86	60.83	13.29	4.58	45.69	52.64	41.63	1.26	0.52
Tyumen region	19.21	43.78	16.64	2.63	39.08	56.96	15.52	3.67	0.49
Khanty-Mansi Autonomous Okrug - Yugra	19.43	28.82	15.18	1.90	13.96	31.60	8.47	3.73	1.39
Yamalo-Nenets Autonomous Okrug	15.70	25.78	11.70	2.20	8.15	31.67	5.06	6.26	1.93
Chelyabinsk region	23.56	49.72	18.42	2.70	40.31	57.13	26.39	2.16	0.58

The largest share of social payments is observed in the Kurgan region, in rural areas it reaches almost half (48.93%), in urban areas - slightly less than a third (31.93). Also, in the rural areas of the Kurgan region, the maximum level of dependence on social payments among the regions of the Ural Federal District was recorded - 63.94% (Shadrinsk municipal district). Average values for the share of social payments are available in the Chelyabinsk and Sverdlovsk regions, however, the spread of values for urban areas is greater in the Sverdlovsk region (4.58 vs. 2.7 in the Chelyabinsk region), and for rural areas in the

Chelyabinsk region (1.26 vs. 2.16). A feature of the structure of household incomes in the Tyumen region is the most significant gap between the share of social payments in urbanized and rural settlements, which reaches two (19.21% versus 39.08), and in general the income structure is similar to the industrial regions of the Urals. The high level of income in Yugra and Yamal predetermined the low level of social payments in household income, so in the Yamalo-Nenets Autonomous Okrug, the lowest dependence was recorded in rural settlements, only 8.15. Also, a feature of the northern territories is a strong difference depending on the social payments of households in rural settlements, where the minimum value was recorded in the Yamal municipal district (5.06%), and the maximum in the Shuryshkarsky municipal district (31.67%) of the Yamalo-Nenets Autonomous Okrug. At the same time, the gap in social payments for urban settlements is at the level of the average for the entire Ural Federal District.

Combining the data on average per capita incomes and the share of social payments in incomes by urban and rural regions of the Ural Federal District, we obtained Fig. 1.



**Fig. 1.** The ratio of average per capita income and social payments in urban rural areas of the regions of the Ural Federal District, 2020, thousand rubles in year.

As can be seen from the figure, social payments make up different amounts in the incomes of households in the regions under consideration. However, it is also clear that the amount of social payments in the territories of the Ural Federal District does not differ as significantly as the average per capita income. The highest social benefits are present in the northern territories, the lowest in the Chelyabinsk region. At the same time, graphically in Figure 1, it can be seen that the difference in social security is not large both between the regions of the Ural Federal District and between urban and rural areas.

Thus, it can be stated that the social security system existing in the Russian Federation actually equalizes the average per capita receipt of these benefits, regardless of the socio-economic specialization of the region, and gradation into rural and urban areas. This effect is achieved mainly by an even distribution of the recipients of most benefits - pensioners and children, who account for most of these payments (pensions and social security for the birth and maintenance of children). Increased social benefits in Yugra and YNAO (by about 20-

30% of the average level) can be explained by additional social guarantees for residents of the northern and Arctic regions, paid from regional budgets.

## 4 Discussion & conclusion

The assessment of income differentiation between the rural and urban population presented in this study is, of course, not typical for the entire Russian Federation. The structure of the economy of the regions of the Ural Federal District had a huge impact on the studied indicators, starting with the natural gas fields of Yamal and ending with the agrarian rural areas of the Kurgan region. The large expanses of Russia and the diversity of economic structures of the regions of the Russian Federation are strongly reflected in income gaps between rural and urban areas. Therefore, in a broad sense, the income convergence policy should be based on the peculiarities of the territorial and economic development of each of the regions of the Russian Federation.

The conducted research on the role of social payments in household incomes of the regions of the Ural Federal District of Russia allowed us to formulate a number of main conclusions.

1) There is a strong difference between regions in the average per capita income of households, both between urban areas (the minimum value in the Sverdlovsk region is 13,082 rubles, the maximum in Yugra is 61,714 rubles), and between rural areas (the minimum in the Kurgan region is 12 898 rubles, the maximum in Yamal is 248,615 rubles).

2) The regions located in the south of the Ural Federal District (Sverdlovsk, Chelyabinsk, Kurgan and Tyumen regions) show a global trend towards excess income of urban residents over rural ones. On average, this gap is 1.8 times, the smallest value is in the Kurgan region – 1.66.

3) The specifics of the economic development of the northern territories, the Yamalo-Nenets and Khanty-Mansi Autonomous Okrugs, where hydrocarbon raw materials are currently being extracted in rural areas, has led to an anomalous situation in terms of income. The average per capita income of urban areas is much less than that of rural areas, sometimes twice.

4) Average payments of social benefits per capita range from 83.8 thousand rubles per year (urban areas of the Tyumen region) to 136.2 (rural settlements of Yamal), which is much lower than the differentiation of average per capita incomes between regions.

5) Accordingly, the share of social payments in household income depends not so much on their level, but on other incomes of the population (wages, business income, etc.). In territories with low total per capita incomes, a high share of social payments is observed, and vice versa, for the rich regions of the north, this share is insignificant.

## Acknowledgments

The study was supported by the Russian Science Foundation grant No. 23-28-00431, <https://rscf.ru/project/23-28-00431/>.

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