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ANALYSIS OF THE POSSIBILITY OF ELIMINATING EXCESS INEQUALITY THROUGH INCOME REDISTRIBUTION

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ABSTRACT

The main idea of the research paper is the redistribution of personal incomes. The subject is the effects of eliminating excess inequality. The core of the research paper is creating a model of erasing personal incomes under the subsistence minimum using a redistribution model. One possible way to get rid of personal incomes below the subsistence minimum is a partially progressive tax, which separates income into different sectors and settles a tax rate for each sector. Eventually, the redistribution can be held by certain society groups using a tax for wealthy people and government subsidies for poor segment of the population or evenly proportional income redistribution. It is useful to consider and compare two indicators: subsistence minimum and minimum consumer budget. A minimum consumer budget is a set cost of food and non-food products and services that meet basic physiological and sociocultural needs. In fact, it is the cost of the minimum consumer basket. The minimum consumer budget determines the lower bound value of life in society, followed by poverty. In Russia, this indicator is not popular, but it has a potential to be useful. In fact, one of the most important function of a tax system is keeping balance in society. The methodology is a redistribution optimization model. The optimal level of income inequality implies that there is a level of income inequality that maximizes economic growth. The optimization model consists of key parameters that determine inequality level, such

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as tax rate, education, and fertility. In some ways, the tax scale is not fair for definite groups of people. People have a social order to reconsider a tax scale. The result is a block of recommendations for shifting personal income inequality rate to a balanced point. The paper is aimed to provide a strategy for applying the fairer redistribution model with simple computations and prove that it can be applied with relatively low effort.

Keywords: excessive inequality; personal incomes; income redistribution; Gini index; subsistence minimum.

Análisis de la posibilidad de eliminar el exceso de desigualdad mediante la redistribución del ingreso

RESUMEN

Se logró la idea principal del trabajo de investigación de calcular el número de ingresos personales inferiores al mínimo de subsistencia en la Federación de Rusia utilizando fuentes estadísticas oficiales. El objeto es la redistribución de la renta personal. El tema son los efectos de eliminar el exceso de desigualdad. El núcleo del trabajo de investigación es crear un modelo de eliminación de ingresos personales por debajo del mínimo de subsistencia, utilizando un modelo de redistribución. Una forma posible de deshacerse de los ingresos personales por debajo del mínimo de subsistencia es un impuesto parcialmente progresivo, que separa los ingresos en diferentes sectores y establece una tasa impositiva para cada sector. Eventualmente, la redistribución puede estar a cargo de ciertos grupos de la sociedad utilizando un impuesto para las personas ricas y subsidios gubernamentales para el segmento pobre de la población o una redistribución de ingresos uniformemente proporcional. Es útil considerar y comparar dos indicadores: el mínimo de subsistencia y el presupuesto mínimo del consumidor. El presupuesto mínimo del consumidor es un costo fijo de productos y servicios alimentarios y no alimentarios que satisfacen las necesidades fisiológicas y socioculturales básicas. De hecho, es el costo de la canasta mínima de consumo. El presupuesto mínimo del consumidor determina el límite inferior del valor de la vida en sociedad, seguido de la pobreza. En Rusia, este indicador no es popular, pero tiene potencial para ser útil. De hecho, una de las funciones más importantes de un sistema tributario es mantener el equilibrio en una sociedad. La metodología es un modelo de optimización de la redistribución. El nivel óptimo de desigualdad de ingresos implica que existe un nivel de desigualdad de ingresos que maximiza el crecimiento económico. El modelo de optimización consta de parámetros clave que determinan el nivel de desigualdad, como la tasa impositiva, la educación y la fecundidad. De alguna manera, la escala de impuestos no es justa para determinados grupos de personas. Las personas tienen un orden social para reconsiderar una escala de impuestos. El resultado es un bloque de recomendaciones para cambiar la tasa de desigualdad de ingresos personales a un punto de equilibrio. El documento tiene como objetivo proporcionar la estrategia de aplicar el modelo de redistribución más justa con cálculos simples y demostrar que se puede aplicar con esfuerzos relativamente bajos.

Palabras clave: desigualdad excesiva; ingresos personales; redistribución del ingreso; índice de Gini; mínimo de subsistencia.

Introduction

A novelty of the study is that the elimination of excessive inequality has not been conducted, as well as the effects that can have a positive influence on the economic situation. It is simple to say that money ought to be redistributed; however, the main problem in such idea is searching the source of money for redistribution. The taxation system does a favor to the wealthiest group of people because it "attacks" salary funds but do not charge significant rental and dividends incomes. In fact, this is a problem of modifying tax rates. The hypothesis is that excessive inequality has an opportunity to be eliminated by adjusting the taxation system. Some ways can lead to a more balanced situation:

- Progressive taxes, starting from the set-up minimum.
- Established taxes, starting from the set-up minimum.
- Rising rental and dividend tax rates by applying progressive methods.

The dividend tax rate is 13% for Russian citizens and 15% for foreign people. Such conditions can be changed to benefit people with low personal incomes, more precisely, with incomes under the subsistence minimum (Kapelyshnikov, 2019).

Such operations can be useful in terms of eliminating excessive inequality. The practice can be applied on the overall economic scale. In addition, the parameters of the model can vary and be aimed at the minimum consumer budget that has another boarder (Piketty et al., 2018). Considering the possibility of raising a tax rate for dividend and rental payment receivers, it is possible to notice that the biggest drawback in applying the model for such a case is the lack of information. Statistic services has awareness about these kinds of personal incomes. Therefore, such a method can be observed as an experimental one in case of necessity (Novokmet, Piketty, 2017).

One of the main purposes of the paper is to determine the amount of people with personal income below the subsistence minimum in order to make a redistribution calculation for eliminating excessive inequality. However, it is compulsory to be aware about the non-taxable personal income because statistic service provides personal incomes data after taxation and has no data about personal income before taxation. It is important because on a step of constructing a redistribution scheme for eliminating excess inequality, a group with non–tax income could be got, and such groups cannot be taxed.

People with incomes below the subsistence minimum cannot release full economic potential, at least in the standard of living segment. Normal inequality allows the economy to grow but the level of inequality should be calculated and justified for the effectiveness parameter. This approach reveals the obvious disadvantage, such as the determination of the level of poverty and excessive inequality as a statistical part. For a quantitative assessment of income differentiation, statistical indicators are used (Table 1).

Table 1 - Statistic parameters of income differentiation

Indicator	Characteristics
Average income	total average income of the entire population
Modal income	level of income most common in the population

Median income	income indicator located in the middle of the ranked distribution series, i.e., one half of the population has lower incomes, and the second half is above the median
Quintile coefficient of income differentiation	shows how many times the minimum personal income of 20% of the wealthiest people is more than the maximum personal income of 20% of the poorest people
Funds ratio	characterizes the ratio between the average incomes of the fifth and first quintile groups
Income concentration index (Gini coefficient)	characterizes the inequality in the distribution of income of the population between its individual groups

Source: Sheviakov, Kiruta (2009)

The study of differentiation carried out with the help of variation series of income distribution of the population:

- Distribution of the total cash income of the population in 10% and 20% groups, allowing to calculate quintile and decile differentiation indicators, and estimate the concentration of incomes.
- Distribution into groups proportional to a size of the subsistence minimum allows evaluation of the population's social structure (poor, low-income, average, wealthy, and rich) and its dynamics (Sheviakov, Kiruta 2009).

One of the ways of adjusting distribution mechanisms is the mechanisms of income redistribution. In market economy countries, authority regulation carried out for a long time aimed at equalizing the material situation of various income groups of the population, and this system is recognized as the most important part of the income redistribution mechanism. The key point is a mechanism that will be adjusted in the "slightest" way, as it is possible.

The effectiveness of such authority regulation can be seen in the USA case. This equalization of the income distribution in the United States during the transition from initial market to disposable income leads to a significant decrease in the wealthiest group ratio and an increase in the income of the lower poor group by several times.

On the contrary, in Russia, such taxation increases inequality. A flat scale of taxes equalizes everyone only just at first glance. From the structure of personal incomes by their sources, it can be observed that the incomes of the richest people are undergone less tax loading because most of their incomes are not wages but other incomes (from the property, rental, dividends, etc.) that are taxed at a much lower absolute rate than the salary fund. Labor incomes have high taxation: the single social tax (or other forms of such taxation) and the income tax. It means that the existing taxation mechanism works for the richest group of people. Following parts regard to methods and tax redistribution model.

Methods

One of the main purposes of the paper is to determine the amount of people with personal income below the subsistence minimum in order to make redistribution calculations for eliminating

excessive inequality. However, it is compulsory to be aware of the non-taxable personal income because the statistic service provides personal income data after taxation and has no data about personal income before taxation. It is important because, on a step of constructing a redistribution scheme for eliminating excess inequality, a group with non–tax income could be got, and such groups cannot be taxed.

According to the Russian Federation Tax Code, 70 types of personal income are not subject to taxation (Tax Code of the Russian Federation, 2022). The main idea of the research is not a high accuracy of calculations, so only the biggest groups out of all 70 types would be taken.

The following types of non–tax incomes make up the largest groups with periodical payments:

1. Pensions for state pension provision.
2. Alimony received by taxpayers.
3. Student scholarship.

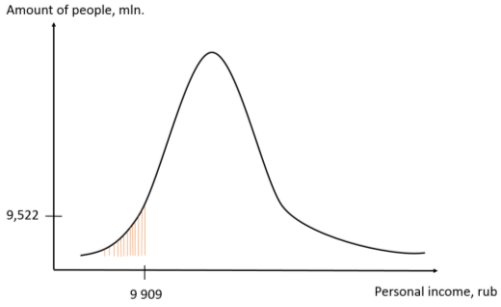
Russian statistic service reports that 72,142 million people 15 to 72 were working in 2017. The pension age used to be 55 for women and 60 for men. The number of working men above 60 was 1,936 million, and working women above 55 were 5,135 million. The share of population with income below the subsistence minimum was 13,2% according to the statistic service. The subsistence minimum was 9 909 rubles or 168 US dollars.

Statistic Internet resource provides information about:

- The amount of people with personal incomes less than subsistence minimum in percentage annually in each region of RF.
- The amount of subsistence minimum annually in each region.
- The distribution of the population incomes annually in percentage in each region (divided by 20 percent groups).
- The value of per capita personal income annually in each region (divided by 20 percent groups).

In order to make calculations, the exact amount of people with a personal income below the subsistence minimum has to be known. Incomes below the subsistence minimum in each region are between 20% and 40% of people, but the definite number of people is not provided by official statistical source (Guriev, Rachinsky, 2005). Then it has to be calculated manually. One of the possible ways of determining the exact number of people with personal income under the subsistence minimum is a proportional numeric value. Obtained data could be different from the real number, but the deviation would not be significant for calculations in such scales.

Figure 1. Number of people with personal income below the subsistence minimum.



The amount of money that needs for covering all incomes below the subsistence minimum calculates by the formula (1.1):

$$\frac{Ny}{2}, \quad (1.1)$$

where
N – the number of people with income below the subsistence minimum,
y – the subsistence minimum.

In other words, formula (1.1) calculates the area of a red – stripped triangle illustrated in the figure 1. The amount of money that needs to cover all incomes below the subsistence minimum is 47 176,749 million rubles or 799.605.915 US dollars (Sheviakov, Kiruta, 2009).
One of the redistribution tools is the taxation of high incomes and subsidizing small ones. The significant fact is that people who receive salaries are taxed at 13%, as well as people who receive dividends, although the highest income group predominantly owns them. Income from rent is slightly higher, 15% and the population receiving income from rent belongs to the group of the population with the highest income as well.

To raise all incomes above the subsistence level, 3.5% of all incomes should be added to the smallest group. It can be done by redistributing income in the third, the fourth, and the fifth 20% group of people with the highest incomes, taking 1, 3 and 6 percent, respectively (Godoey, Reich, 2019). The most possible way is revising and recalculating the tax rate on personal income. An additional option that can be modeled is a new progressive tax scale on dividend income and rental income; however, the information about such parameters has a low accuracy rate.

The optimal level of income inequality implies that there is a level of income inequality that maximizes economic growth. The economist Saadat calculated a Gini index that maximizes economic growth. The information about 25 countries from 1960 to 2010 period took for calculation. Variables are the following:

- Economic growth (annual percentage growth rate of per capita GDP).
- Income inequality (inequality measured by the Gini coefficient).
- Fertility (total fertility rate).
- Education (average number of years of secondary and tertiary school attainment).
- Tax rate (tax rate as a percentage of commercial profit).
- Tax revenue (tax revenue as a percentage of GDP).
- Top income shares (income share held by 10 percent, 5 percent, and 1 percent group of people).

The model specification is as follows:

$$Y_{it} = \beta_0 + \beta_1 Gini_{it} + \beta_2 Gini_{it}^2 + \beta_3 X_{it} + \varepsilon_{it} \quad (1.2)$$

where
Y = annual percentage change in per capita gross domestic product

Economic growth is defined as the annual percentage change per capita of gross domestic product. The optimum level of income inequality occurs at the Gini value of 0.383.

Policies aimed at maximizing growth should consider the prevailing level of income inequality. In countries where the level of income inequality is below the optimum level, the government should follow a "laissez-faire" approach to inequality and simply allow the forces of the free market to prevail. On the other hand, in countries where the level of income inequality is above the optimum level, the government should consider implementing progressive taxation on income and wealth, taxation on capital gains, elimination of tax loopholes and tax havens, as well as increased regulation of financial markets. The key difference between the results of this study and the findings of other authors is the concept that there can be a level of income inequality that maximizes economic growth (Saadat Younas, 2018).

Calculation model

The official Gini coefficient in Russia is 0,411. That means the figure is close to excellence; however, it has the potential to be closer (Saadat, 2018). The tax scale is unfair, and society has a social order to change the tax scale. This confirms the changing of the redistribution model through operations with the tax scale. Before building a model, certain conditions must be established:

- Tax revenues from income tax are used rationally, and there is no way to take funds from there.
- All income from the redistribution of income tax will go only to eliminate excess inequality.

To determine the boundaries, statistics on the distribution of the population by per capita income were used, 1 border (I_1) - up to 14000, 2 border (I_2) - up to 19000, 3 border (I_3) - up to 45000, 4 border (I_4) - up to 75,000 rubles. This choice of borders is confirmed by the need for the category of citizens with incomes within the second zone not to be taxed to avoid sliding back into poverty. The share of pensioners in the composition of the poor is 11.1% and is fully included in the first group. However, these boundaries cannot be used because the redistribution will be carried out in accordance with two parameters: the optimal Gini coefficient and the elimination of excess inequality. The final borders for the calculation are: 1 border (I_1) - up to 12324, 2 border (I_2) - up to 19320, 3 border (I_3) - up to 27976, 4 border (I_4) - up to 48673 rubles. The second border remained almost unchanged compared to another approach, so people from this zone would not move below the poverty border (Babu et al., 2016).

According to official figures, the working population is 76.1 million people. One of the primary tasks of the work is to transfer revenues from the first (lowest) category to the second category. To do this, not only completely abolish the 13% income tax for the first category of people is needed, but also adding the missing 47 176 million rubles or 799.605.915 US dollars through the taxation of the remaining categories. 28.8 million people fall into the lowest 20% income category. With the abolition of 13% tax for the first category of income, a deficit of 31 973 million rubles will appear in the model (Acosta-Ormaechea, et al, 2019). To fulfill these two gaps, a total amount of 79 149 million rubles or 1.341.508.474 US dollars is needed. In redistribution calculations, the categories will have the sign C, the tax amount for each category will be signed as a.

Tax_1: $(I_1) > C_1$; 0%

Tax_2: $(I_2) - (I_1) = C_2$; Tax_2: 13%

Tax_3: $(I_3) - (I_2) = C_3$; Tax_3: $13\% \cdot C_2 + a_1\% \cdot C_3$

Tax_4: (I_4) - (I_3) = C_4; Tax_4: 13% · C_2 + a_1% · C_3 + a_2% · C_4
Tax_5: 2($\overline{x}$ - (I_4)) = C_5; Tax_5: 13% · C_2 + a_1% · C_3 + a_2% · C_4 + a_3% · C_5

Values a1, a2, a3 should move 79 149 million rubles or 1.341.508.474 US dollars from C_3, C_4, C_5 to C_1. This is the first condition of the redistribution. The second condition is the Gini coefficient, maximizing the economic growth of 0.383. For such a large economy as the Russian redistribution of 79 billion rubles or 1.341.508.474 US dollars is a very small task. Nevertheless, this action will help to get rid of excessive inequality. Therefore, it seems possible to solve this problem in a rather mild way with the values a_1 = 1%, a_2 = 2%, a_3 = 4%. The blocks for taxation are C_2 = 7 512 (127 US dollars), C_3 = 8 656 (147 US dollars), C_4 = 20 697 (351 US dollars), C_5 = 41 594 (705 US dollars) rubles. Due to the fact that 13% income tax does not change, it does not participate in redistribution calculations, except the income tax for the first group, since it is erased and filled with income from the redistribution (Sheviakov, Kiruta, 2009).
Tax_1: 12 324 (I_1) > C_1; 0%
Tax_2: 19 320 (I_2) - 12 324 (I_1) = 7 512; Tax_2: 13%
Tax_3: 27 976 (I_3) - 19 320 (I_2) = 8 656; Tax_3: 13% · C_2 + a_1% · C_3
Tax_4: 48 673 (I_4) - 27 976 (I_3) = 20 697; Tax_4: 13% · C_2 + a_1% · C_3 + a_2% · C_4
Tax_5: 2*(74 774 - 48 673 (I_5)) = 41594; Tax_5: 13% · C_2 + a_1% · C_3 + a_2% · C_4 + a_3% · C_5

The total additional tax revenue from the third category will be 2 500 million (42.372.881 US dollars), from the fourth 14 400 million (244.067.796 US dollars), from the fifth 62 300 million rubles (1.055.932.203 US dollars).
C_3: 8 656 · 0,01
C_4: 8 656 · 0,01 + 20 697 · 0,02
C_5: 8 656 · 0,01 + 20 697 · 0,02 + 41 594 · 0,04

Using the redistribution, the first criterion is fulfilled - complete elimination of the excess inequality (Chang et al., 2020). With such distribution, all income will exceed the border between the last and the second 20% of the group, which is 12 324 rubles or 209 US dollars. It is worth paying attention to the fact that before the redistribution there were people in each group whose incomes were near the border of the zone.

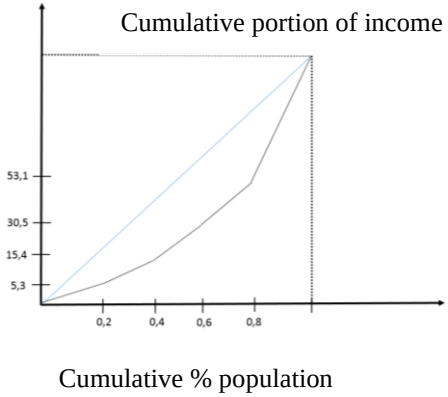
In accordance with the calculations of the Gini index to the formula and data of Rosstat, the Gini index is equal to 0,3828. In accordance with the calculations of Rosstat, the Gini index equals 0,411. Rosstat calculates the Gini coefficient on a share of the total income that comes at the beginning and in the end of the i-th interval. The net income interval for each group is determined from the population distribution curve by the size of per capita income by multiplying the middle-income interval by the population in this interval. Indicators for the Russian Federation and constituent entities of the Russian Federation are calculated using the value of a macroeconomic indicator of per capita money incomes of the population, as determined in accordance with the methodological regulations on the calculation indicators of incomes and expenses of the population; data for the Russian Federation as a whole updated on the results of annual calculations of indicators of financial income and expenditure. The fundamental problem with the use of the curves of the Gini index lies in the fact that data about the richest category cannot be provided for economists and statistics services. In addition, socioeconomic sciences have accumulated many years of trends in inequality, measured using the Gini index or

(rarely) other generally accepted factors. If the study aims to compare the state of the economy, or to study dynamics of inequality (the study of the dynamics, not cross-country comparison, it makes using generally accepted indices impossible), then the computation of the Gini index for demonstrating changes or extension of the trend is justified.

Research results

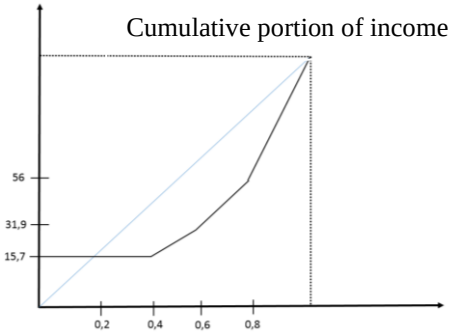
The redistribution model allows to get rid of the excessive inequality, but it was supposed to maximize two criteria: the value of the Gini index at which it provides the highest economic growth and transfer the group of people with incomes below the cost of living above its border. Figure 2 and 3 show the Lorentz curve before the redistribution.

Figure 2. Lorenz curve in the initial state



Source: Kuznets (1955).

Figure 3. Lorenz curve in the new state (Kuznets, 1955).



Source: Kuznets (1955).

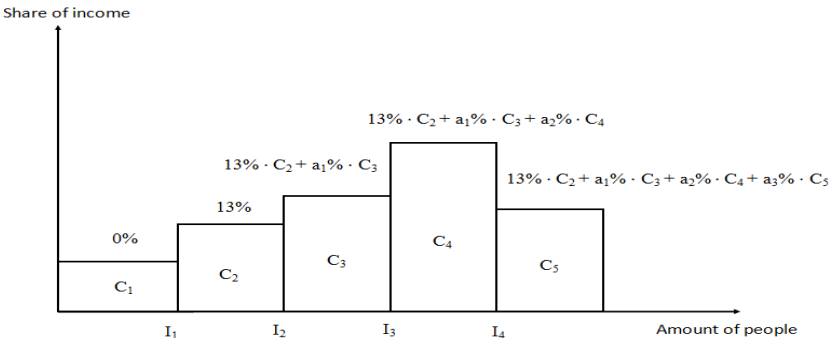
In the new state, the Gini index has a value of 0,32 according to calculations using the Gini index formula. According to the calculation of Rosstat, it equals to approximately 0,35. The aimed value of the Gini index was 0,383 because this coefficient creates conditions for maximizing economic growth (Kuznets, 1955).

The redistribution model failed to complete two conditions fully. Despite this, 20% of the revenues of a zone with the lowest income were transferred to the second zone, and the Gini index fell by 6 points (figure 3). It is possible to bring this equation to the level of the maximum value of two factors (a Gini index and the elimination of excessive inequality) at the same time. It is possible to bring the value of the Gini index to the one that maximizes economic growth (Milanovich, 2017). One of the study's main objectives is to analyze the possibility of eliminating excessive inequality. The results showed that this purpose could be achieved in a rather mild way through the income redistribution of various population groups.

Computation of the Gini index is a statistically good comparison. Especially the situation after the application of the redistribution model shows visible results. In the case of the total elimination of the excess inequality, there is no cumulative percentage of the population under the subsistence minimum.

The model can be visually applied in both variances: table and graphic format. The main advantage of that approach is a possibility of exclusion people with personal incomes below the subsistence minimum out of the taxpayers' group. No matter which zones the personal income came in. It can be regulated with a high flexibility rate because of the income zones' mutual independence. The highest attention is aimed at people that get in a zone with the lowest personal incomes. Fortunately, zone borders can be regulated as well as the tax rate in each zone (Lindert, 2017). The reason why these options become useful is the possibility of adjusting the border between two low-income zones the way that the border would define a division between people with incomes lower than subsistence minimum and upper it. The high sensitivity of the model is the main advantage because besides the elimination of an excessive inequality high-income groups should not suffer, and the model allows to take care of the satisfying such important condition. The applied model is illustrated in figure 4.

Figure 4. Applied progressive tax model.



From the theoretical point of view, there are not only two kinds of progressive taxation models. The progressive tax model that is chosen for application fulfills all requirements, and it is the most convenient for the tax flow regulation because each parameter can be changed in order to direct a model the way it needs according to established conditions. Such a model has an opportunity for further research. Establishing a normal inequality level is an institutional problem. Since inequality is generated by a whole set of economic and institutional factors, then the question of its elimination must be approached systematically. The market does not provide equality of opportunities, although formally in the field of commercial transactions presupposes it. A market not limited by non-market institutions of redistribution leads to unlimited growing economic inequality, allowing for the coexistence of very low and very high incomes and exaggerating inequality. Mutual income redistribution effects and economic growth can provide a fundamental solution to Russia's demographic problems. Reduction of excessive inequality will allow not only stop depopulation but also provide significantly more high rates of economic growth. That is why the indicators of inequality and relative poverty should become a key benchmark for coherent economic, social, and demographic policies.

Conclusion

The choice of the applied redistribution model can be fortified by the results that it gives. One of the research assumptions was that the elimination of the excess inequality does not require many resources in relative terms. All redistribution calculations can be done in a mild way that wealthy people will almost have no serious influence on their personal incomes. Results are the following a_1 = 1%, a_2 = 2%, a_3 = 4%. Tax rate figures mean the amount that the taxpayer should pay in a redistribution advance in order to completely eliminate the excess inequality. On the background of the significance and federative level influence of the research problem such figures are not relatively high. That means that high personal income that contains the majority of its proportion in the block of the highest income should be taxed only 17% (13% + 4%). Other blocks are taxed much lower what shows that the excess inequality elimination is not a highly complicated procedure considering the financial point of view. In advantage of this idea the redistribution system is closed and highly strict, which means that there is no need for extra cash flows or other budget resources. All recalculations are conducted only in terms of the closed income and tax system. The total amount of income maintained on the same level as well as the total tax amount that paid in the budget.

The research paper had the main goal that has been achieved. The goal is to create a redistribution model that can help make a total elimination of the excess inequality. All personal incomes below the subsistence minimum have been pushed up the border.

Besides the research's main goal, the paper follows some conditions that make the model more applicable and less theoretical because it is obvious that the total elimination of excess inequality is unreal or high difficult in realization. Some criterions applied in order to make the redistribution model closer to real life.

The hypothesis was that the excess inequality elimination procedure is not a highly complicated task and does not require a high quantity of resources for the realization. One of the criteria was reaching the inequality level that maximizes economic growth. Unfortunately, this secondary goal is not achieved because making the inequality level equal to the level that maximizes economic growth, excess inequality would still exist. Eliminating the excess inequality

is the main and high-priority goal; however, optimizing the inequality level for better economic growth is also important.

The new redistribution and inequality elimination model helped to observe a unique Gini index formation. In terms of numbers, there is nothing special, but looking in graphical illustrations in the initial and in the new states the difference can be observed. The Gini index in the illustration format gives the picture with "cut" straight line that shows that there is no person in a zone with the personal income below the subsistence minimum.

Another important condition of the creating a redistribution model was showing that such action could be easily applied in terms of income redistribution resources. In absolute terms, the number of people with personal incomes below the subsistence minimum is more than ten million. However, in relative terms, they have a very low income, meaning that the personal income needed for a person to reach and overcome the under-subsistence minimum line is also low compared to others. Practically, this means that a wealthy person can take a load of up to 20 people to make them go out of the low-income zone. It is one of the main hypotheses of the research paper. In addition, in absolute terms, the amount of people with personal incomes below the subsistence minimum is more than 10 million people, whereas in relative terms, the income of that income group is only 7% out of all groups. Moreover, the amount that needs in the redistribution model pursuing the excess inequality elimination idea is only 3,5% of all income. This figure is extremely low when the deal is a total elimination of excess inequality and helping people that are not wealthy enough.

The research has a potential for the further conduction. Eliminating excess inequality can be considered one of the stages in a poverty abolition practice. The work that has been made in the research can be considered as the foundation stage in reducing inequality and poverty elimination. The next stage is the introduction of the consumer budget figures. Such approach to calculating the inequality level has a good potential to establish parameters in inequality calculations. For such purpose, there should be principally another category and quality of the information, and the statistics should be wider and more representative.

Bibliographic References

Acosta-Ormaechea, Santiago; Sola, Sergio; Yoo, Jiae. (2019) Tax Composition and Growth: A Broad Cross-Country Perspective. **German Economic Review**, 20(4), Germany (Pp.37–49). Extracted from: https://www.imf.org/external/pubs/ft/wp/2012/wp12257.pdf

Assembly of national code (2022), Tax Code of the Russian Federation, Russia. Extracted from: https://www.nalog.gov.ru/eng/tax_legislation/tax_code_of_russia/

Babu, Suresh; Bhaskaran, Vandana; Venkatesh, Manasa. (2016) Does inequality hamper long run growth? Evidence from Emerging Economies. **Economic Analysis and Policy**, 52, India, (Pp.100–112). Extracted from: https://www.sciencedirect.com/science/article/abs/pii/S0313592616300418

Chang, Eui Soon; Elizabeth, Gavin; Nikolay, Gueorguiev; Jiro, Honda. (2020) Raising Tax Revenue: How to Get More from Tax Administrations? **IMF Working Paper** 20/142, The USA (Pp. 13-15) International Monetary Fund. Extracted from: https://www.imf.org/-/media/Files/Publications/WP/2020/English/wpiea2020142-print-pdf.ashx

Churchill, Sefa Awaworyi; Ivanovski, Kris; Munyanyi, Musharavati Ephraim. (2021). Income inequality and renewable energy consumption: Time-varying non-parametric evidence.

Journal of Cleaner Production. Vol. 296, The UK. Extracted from: (PDF) Income inequality and renewable energy consumption: Time-varying non-parametric evidence (researchgate.net)

Filippidis, Michail; Tzouvanas, Panagiotis; Chatziantoniou, Ioannis. (2021). Energy poverty through the lens of the energy-environmental Kuznets curve hypothesis. **Energy Economics.** Vol. 100, The UK. Extracted from: Energy poverty through the lens of the energy-environmental Kuznets curve hypothesis (repec.org)

Godoey, Anna; Reich, Michael. (2019). Minimum wage effects in low-wage areas. **Institute for Research on labor and Employment Working Paper**, The USA, (Pp. 106-19). Extracted from: https://escholarship.org/uc/item/90k268p9

Guriev, Sergei; Rachinsky, Andrei. (2005). The role of oligarchs in Russian capitalism. **Journal of Economic Perspectives**, Russia, (Pp. 131–150). Extracted from: https://www.jstor.org/stable/4134996

Kapelyshnikov, Rostislav. (2019). Economic inequality a universal evil? **Voprosy Ekonomiki**, 2019;(4), Russia, (Pp. 91-106). Extracted from: https://www.vopreco.ru/jour/article/view/2167

Kuznets, Simon. (1955) Economic Growth and Income Inequality. **American Economic Review**. Vol. 45, No. 1 (Mar., 1955), The USA, (Pp. 1-28). Extracted from: https://assets.aeaweb.org/asset-server/files/9438.pdf

Lindert, Peter. (2017). Rise and future of progressive redistribution. **CEQ Working Paper**, 73, (Pp. 32–37). Extracted from: http://repec.tulane.edu/RePEc/ceq/ceq73.pdf

Milanovich, Branko. (2017). Global inequality: a new approach for the epoch of globalization. **Publishing House of the Gaidar Institute**. The USA, Extracted from: http://pinguet.free.fr/branko16.pdf

Novokmet, Filip; Piketty, Thomas. (2017). From Soviets to Oligarchs: Inequality and Property in Russia. 1905-2016, **WID.world Working Paper**, Russia, (Pp. 56–81). Extracted from: http://piketty.pse.ens.fr/files/NPZ2017WIDworld.pdf

Piketty, Thomas; Saez, Emmanuel; Zucman, Gabriel. (2018) Distributional national accounts: methods and estimates for the United States. **The Quarterly Journal of Economics**, 133(2), The USA, (Pp. 552–608). Extracted from: https://www.nber.org/system/files/working_papers/w22945/w22945.pdf

Saadat, Younes. (2018) The Optimum Level of Income Inequality: Evidence from Panel Data. **Journal of Business and Policy Research**, 13(1), The USA, (Pp. 77-88). Extracted from: https://zantworldpress.com/wp-content/uploads/2018/07/6.-Yusuf.pdf

Sheviakov, Alexei; Kiruta, Alexander. (2009). Inequality, economic growth and demography: Non-examined interconnections. **Innovations**, 3(4), Russia, (Pp. 41-46). Extracted from: https://cyberleninka.ru/article/n/neravenstvo-dohodov-kak-faktor-ekonomicheskogo-i-demograficheskogo-rosta/viewer

Úbeda, Fernando; Forcadell, Francisco Javier; Aracil, Elisa; Mendez, Alvaro. (2022). How sustainable banking fosters the SDG 10 in weak institutional environments. **Journal of Business Research.** Vol. 146, The USA, (Pp. 277-287). Extracted from: How sustainable banking fosters the SDG 10 in weak institutional environments (lse.ac.uk)

Zhao, Yibing; Wang, Can; Cai, Wenjia. (2022). Carbon pricing policy, revenue recycling schemes, and income inequality: A multi-regional dynamic CGE assessment for China. **Resources, Conservation and Recycling.** Vol. 181, China. Extracted from: Microsoft Word - CUE2021 - Carbon Pricing Policy, Revenue Recycling Schemes and Income Inequality A multi-regional CGE assessment for China - Yibing Zhao.docx (energy-proceedings.org)