

**ISCKMC 2022****International Scientific Congress «KNOWLEDGE, MAN AND CIVILIZATION»****ON CAUSES AND FEATURES OF ECONOMIC INEQUALITY IN  
MODERN WORLD**

Dmitry Gennadievich Alexandrov (a)\*, Adik Tagirovich Aliev (b),  
Tatyana Ivanovna Kurnosova (c), Rubinshtein Evgenia Danielievna (d)  
Fatima Mikhailovna Urumova (e)

\*Corresponding author

(a) National University of Oil and Gas «Gubkin University», bld. 1, 65, Leninsky ave., Moscow, Russia,  
Prof.Alexandrov@gmail.com

(b) Academy of public administration, 13 Industrial st., Mytishchi, Moscow region, 141006, Russia,  
alievadik@yandex.ru

(c) MGIMO University, 76, Vernadskogo ave., Moscow, 119454, Russia, tk7641437@mail.ru

(d) Far Eastern Federal University, FEFU Campus 10 Ajax Bay, Russky Island, Vladivostok, 690922, Russia,  
fineasusual@mail.ru

(e) Moscow Region State University, 24, Very Voloshinoy str., Mytishchi, Moscow Region, 141014, Russia,  
ou\_ru@mail.ru

**Abstract**

Increasing poverty, declining incomes and mass unemployment against the background of rising incomes and wealth of the ruling elites is a fiasco of the traditional model of market capitalism. Further differentiation of incomes of the population reduces aggregate demand and complicates the process of selling goods and services. Modern methods for measuring economic inequality using the Gini coefficient and the coefficient of funds do not consider wealth stratification, which leads to underestimation of people's economic inequality. According to the Gini index, the degree of current economic inequality in Russia and the United States is almost at the same level. The split of the economy into the "economy of the rich" and the "economy of the poor" generates additional expenses for society increasing the cost of the wasteful and expensive production of goods and services for the rich. In our opinion, the solution to the problem of economic inequality in modern society is a further increase in taxes on super-rich families and the development of a social insurance system for the rapidly impoverished population. It is necessary to adopt a more coordinated, comprehensive and consistent policy aimed at employment growth. The creation and development of a legal, civilized and mobile international labor market, the socio-economic and legal protection of labor migrants will enable to form a middle class in the countries with a high degree of inequality and to partially solve the problem of poverty in these countries.

2357-1330 © 2022 Published by European Publisher.

*Keywords:* Economic inequality, Gini coefficient, international labor market



## 1. Introduction

Inequality has existed throughout the history of human society. In modern conditions, the problem of inequality has not only been unresolved, but also is further developing.

In our opinion, the attempts of the state to solve the problem of inequality is not the merit of the state, but a desperate attempt to solve the main problem of a market and commodity economy being the problem of selling goods and services in the domestic (local, regional and national) and external (international and world) markets. In economically developed countries, the supply of goods and services is often greater than the demand for them. Thus, the following question arises: How should be extra goods and services used? The answer is that this problem can be tackled by exporting excess goods and services to developing countries. However, the developing countries are, as a rule, poor (with the exception of countries rich in oil, gas and other natural resources) and they cannot afford paying for the goods and services supplied to them. Therefore, the level of consumption in developing countries needs to be pulled up to the level of consumption in the countries with developed economies. Therefore, economically developed states tend to make certain concessions by issuing loans to less developed countries for the development of their consumer sector (Hetschko et al., 2020; Stiglitz, 2015).

The growth of incomes of the poor strata of the population and the reduction of wealth inequality contributes to including new potential consumers in the sales process. In this case, the temporary “concessions” of the rich in favor of the poor eventually turn into an increase in the incomes of the rich segments of the population (see Table 1).

**Table 1.** Gini index in the USA and in Russia, in percent

Country	1994	2013	2018
the USA	40.35	41.06	41.4
Russia	40.9	41.9	37.5

Source: [https://data.worldbank.org/indicator/SI.POV.GINI?end=2019&most\\_recent\\_value\\_desc=false&start=1967](https://data.worldbank.org/indicator/SI.POV.GINI?end=2019&most_recent_value_desc=false&start=1967)

## 2. Problem Statement

Modern economic literature usually considers one type of economic inequality being the inequality in distributing current incomes of the population (Akerlof & Kranton, 2000; Forsythe & Wu, 2020). There are two main indicators used to characterize the degree of economic inequality and they are as follows: the Gini coefficient and R/P 10 %. In our opinion, considering economic inequality as inequality in current income masks real inequality since it does not take regard the wealth inequality (or wealth stratification) of the population, inequality in the distribution of wealth and access to this wealth. The total wealth of an individual or the population of a country consists of accumulated wealth (capital, property) and current income. Current income can be conditionally divided into income from accumulated wealth (capital and property) or property income (non-labor income, unearned income) and non-property income from current management and production activities (labor income, earned income).

Property (non-labor income, unearned income) income includes all income received from the use and sale of capital and property owned by proprietary:

1) income of capital owners (dividends on shares, coupon profit on bonds, income from securities speculation, loan interest on loaned capital, rent received for renting land and other property, income from intellectual property and other income),

2) income from the sale of property and capital.

Non-property (labor, earned) income includes the income of employees and managers from current production and management activities in the form of wages and bonuses for the successful management of the company. Earned income is basic, primary income. Unearned income is a secondary income. Owners of capital and property receive their unearned income from the labor of hired workers and tenants of capital and property.

One of the reasons for the slow growth of the world economy (primarily the US economy) was the outstripping growth of property income in comparison with industrial income. These disproportions persist both at the micro level, specifically, at the level of an individual firm (disproportions in the distribution of income between owners and employees), and at the level of the entire national economy (disproportions in the distribution of national income between rich and poor classes of the population). They lead to violations in the mechanism of selling goods and services, and failures in the operation of the market mechanism. “Underpayment” to workers and “overpayment” to owners leads to a further increase in the differentiation of society into rich and poor causing a slowdown in the economy and an economic crisis, since the poor cannot afford the goods and services they produce and provide (Medeiros et al., 2019).

According to our calculations, in the United States for the period 1950–2020 the share of personal unearned income in relation to earned income has grown by 5 % over 70 years.

Thus, to assess the degree of parasitism of capital owners in the national economy, we propose to introduce two coefficients: *EPCI* and *EPC2*:

$$EPCI = \frac{\text{unearned income}}{\text{earned income}} = \frac{R+i+P}{W} \times 100 \%, \text{ where:}$$

*EPCI* is a coefficient of economic parasitism in the national economy (***Economic Parasitism Coefficient 1***);

*R* is land rent and other lease rents (***Rent***);

*i* is lending rate or rate of interest for the use of loan capital (***Interest rate***);

*P* is profit of the capitalists for the use of their entrepreneurial abilities (***Profit***);

*W* is wages of hired workers (***Wage***).

The higher this indicator is, the greater the parasitism of capital owners in the national economy under study is.

The coefficient of economic parasitism in the national economy can be shortly calculated in another way:

$$EPC2 = \frac{\text{unearned income}}{\text{earned income}} \times 100 \% = \frac{R+i+P}{R+i+P+W} \times 100 \% = \frac{R+i+P}{NI} \times 100 \%, \text{ where:}$$

*EPC2* is a coefficient of economic parasitism in the national economy (***Economic Parasitism Coefficient 2***);

*R* is land rent and other lease rents (***Rent***);

*i* is lending rate or rate of interest for the use of loan capital (***Interest rate***);

*P* is profit of the capitalists for the use of their entrepreneurial abilities (***Profit***);

$W$  is wages of hired workers (*Wage*).

$NI$  is *National Income*.

$$NI = R + i + P + W$$

The higher this indicator is, the greater the parasitism of capital owners in the national economy under study is. These coefficients of the degree of parasitism of the national economy also show the degree of exploiting the poor, working population of the country by the class of owners (see Table 2).

In practice, to calculate the proposed coefficients of economic parasitism in the national economy, it is possible to use the US Statistical Tables for the period 1950–2020: “Personal income and its distribution” (Economic Research. Federal Reserve Bank of St. Louis).

**Table 2.** Personal income and its distribution over the years\*

Item number	Income item	Years	Volume	Measurement unit
1.1.	Payment of employees	1950	633.073	USD Billion
1.2.	Owners’ income with regards to the valuation of reserves and adjustments for capital consumption	1950	150.058	USD Billion
1.3.	Rental income of persons adjusted for capital consumption	1950	35.116	USD Billion
1.4.	Personal income receipts by assets	1950	82.736	USD Billion
Item number	Income item	Years	Volume	Measurement unit
2.1.	Payment of employees	2020	45,797.845	USD Billion
2.2.	Owners’ income with regards to the valuation of reserves and adjustments for capital consumption	2020	6,778.311	USD Billion
2.3.	Rental income of persons adjusted for capital consumption	2020	3,207.701	USD Billion
2.4.	Personal income receipts by assets	2020	11,649.119	USD Billion

\* Calculated by the author (Aleksandrov, 2021).

Thus:

$$EPCI_{1950} = \frac{\text{unearned income}}{\text{earned income}} = \frac{1.2.+1.3.+1.4.}{1.1.} \times 100\% = 42.31\%;$$

$$EPCI_{2020} = \frac{\text{unearned income}}{\text{earned income}} = \frac{2.2.+2.3.+2.4.}{2.1.} \times 100\% = 47.24\%;$$

There was a redistribution of income in favor of the unearned income of capital owners. The share of unearned income in relation to earned income has increased by 5 % over 70 years.

$$EPC2_{1950} = \frac{\text{unearned income}}{\text{earned income} + \text{unearned income}} \times 100\% = \frac{1.2.+1.3.+1.4.}{1.1.+1.2.+1.3.+1.4.} \times 100\% = 29.73\%;$$

$$EPC2_{2020} = \frac{\text{unearned income}}{\text{earned income} + \text{unearned income}} \times 100\% = \frac{2.2.+2.3.+2.4.}{2.1.+2.2.+2.3.+2.4.} \times 100\% = 32.08\%;$$

There was a redistribution of income in favor of unearned income. The share of unearned income in relation to the sum of earned and unearned income has increased by 2 % over 70 years.

The growth in the share of unearned income in relation to earned income and to the sum of earned and unearned income indicates a redistribution of income from employees to owners of capital and the growth of the parasitic nature of the modern US economy (Aleksandrov, 2021).

The owners of capital and property cannot solve the problem of selling goods and services due to the small number of these classes and strata of the population.

The growth in the share of property (unearned) income in economically developed countries leads to the transformation of the economy from a “production economy” into a “rental economy” and slows

down economic growth in the country reducing the level of citizens' well-being. Joseph Stiglitz's (2015), a famous economist, Nobel Prize winner in economics, covers this idea in his book "The Price of Inequality: How Today's Divided Society Endangers Our Future".

Using the Gini coefficient, one can analyze the problem of inequality in different countries and, above all, in Russia and the United States. There is a convergence of Russia and the United States in terms of inequality (Table 1. Gini index in the United States and in Russia, in percent). The reorientation of the economies of these two countries to rental income leads to a decrease in production volumes and consumer demand. However, since 2019, the lack of consumer demand in Russia and the United States has been partially offset by a variety of social benefits during the COVID-19 epidemic. However, the increased consumer demand of the population was not satisfied due to the reduction in the production of consumer goods during the period of the forced stoppage of production. This has led to rising prices for consumer and manufactured goods and to inflation in many parts of the world (Aaronson et al., 2020; Larson & Sinclair, 2021).

### **3. Research Questions**

The purpose of the work is to study the causes and features of the problem of economic inequality and find ways to solve this problem.

- i. The main reason for the growth of economic inequality is scientific and technological progress, which pushes a person out of the production process and leads to the replacement of manual labor by mass robotic production. The decline in employment and income of the population leads to an increase in poverty and a decrease in consumer demand and the production of consumer and industrial goods (Goldsmith-Pinkham & Sojourner, 2020).
- ii. Economic inequality must be taken into account not only in terms of current income, but also in terms of property.
- iii. The growth in the share of property (unearned) income in economically developed countries leads to the transformation of the economy from a "production economy" into a "rental economy" and slows down economic growth in the country reducing the level of citizens' well-being.

The growth of incomes of the poor strata of the population and the reduction of wealth inequality enable to include new potential consumers in the sales process. The fight against poverty is an attempt to solve the problem of implementation by stimulating the consumer demand of a rapidly impoverished population.

### **4. Purpose of the Study**

The purpose of the work is to establish the main reason for the further growth of economic inequality and differentiation of the population in most national economies and to propose ways to mitigate this problem.

## 5. Research Methods

Methods of statistical analysis have been used to study the problem.

## 6. Findings

The study resulted in finding out the true causes and characteristics of increasing poverty and inequality in most countries, including Russia and the United State.

## 7. Conclusion

The solution to the problem of economic inequality in modern society is a further increase in taxes on the super-rich families and the development of a social insurance system for the rapidly impoverished population. It is necessary to pursue a more coordinated, comprehensive and consistent policy for the growth of employment. The creation and development of a legal, civilized and mobile international labor market, the socio-economic and legal protection of labor migrants will enable to form a middle class in countries with a high degree of inequality and partially solve the problem of poverty in these countries.

## References

- Aaronson, D., Brave, S. A., Butters, R., Sacks, D. W., & Seo, B. (2020). Using the Eye of the Storm to Predict the Wave of COVID-19 UI Claims. Technical Report. *Federal Reserve Bank of Chicago*. <https://doi.org/10.21033/wp-2020-10>
- Akerlof, G. A., & Kranton, R. E. (2000). Economics and identity. *The Quarterly Journal of Economics*, 115(3), 715–753. <https://doi.org/10.1162/003355300554881>
- Aleksandrov, D. G. (2021). Transformation of state and private property in the modern economy. *Innovation and investment*, 4, 28.
- Economic Research. *Federal Reserve Bank of St. Louis*. Retrieved May 7, 2022, from <https://fred.stlouisfed.org/>
- Forsythe, E., & Wu, J-C. (2020). Explaining Demographic Heterogeneity in Cyclical Unemployment. *Labour Economics*, 69, 101955. <https://doi.org/10.1016/j.labeco.2020.101955>
- Goldsmith-Pinkham, P., & Sojourner, A. (2020). Predicting Initial Unemployment Insurance Claims Using Google Trends. Technical Report. *Yale School of Management*.
- Hetschko, C., Schöb, R., & Wolf, T. (2020). Income support, employment transitions and well-being. *Labour Economics*, 66, 101887. <https://doi.org/10.1016/j.labeco.2020.101887>
- Larson, W. D., & Sinclair, T. M. (2021). Nowcasting unemployment insurance claims in the time of COVID-19. *International Journal of Forecast*. <https://doi.org/10.2139/ssrn.3641296>
- Medeiros, M. C., Vasconcelos, G. F., Veiga, Á., & Zilberman, E. (2019). Forecasting inflation in a data-rich environment: the benefits of machine learning methods. *Journal of Business & Economic Statistics*, 39(1), 98–119. <https://doi.org/10.1080/07350015.2019.1637745>
- Stiglitz, J. (2015). *The Price of Inequality: How Today's Divided Society Endangers Our Future*: (E. R. Rozhdestvenskaya, Trans.) Eksmo.