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**TÍTULO:** Análisis de la desigualdad y la pobreza en Rusia: problemas de medición y tendencias.

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**RESUMEN**. En el contexto de cambios socioeconómicos significativos en Rusia en todos los

aspectos de la vida, la obtención de información objetiva sobre las condiciones de vida de la

población, el grado de estratificación social y el nivel de pobreza son de particular relevancia. El

documento analiza los enfoques para medir la desigualdad y la pobreza en Rusia y describe las

características de las mediciones del nivel de pobreza obtenidas utilizando datos directos sobre los

resultados de la encuesta de presupuestos familiares y el modelo analítico. La introducción de los

ejemplos de encuestas de hogares y población en las estadísticas rusas ha cambiado drásticamente

las estadísticas de pobreza.

PALABRAS CLAVES: modelo analítico, pobreza, ingresos monetarios, desigualdad, encuestas de

ingresos y gastos de los hogares.

**TITLE:** Analysis of inequality and poverty in Russia: problems of measurement and trends.

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**ABSTRACT**. Against the background of significant socio-economic changes in Russia in all aspects of life, obtaining objective information about the living conditions of the population, the degree of social stratification and the level of poverty are of particular relevance. The paper analyzes the approaches to measuring inequality and poverty in Russia and describes the features of the poverty level measurements obtained using direct data on the results of the survey of household budgets and the analytical model Introducing the examples of household and population surveys into Russian statistics has dramatically changed the statistics of poverty.

**KEY WORDS:** analytical model, poverty, money income, inequality, household income and expenditure surveys.

# INTRODUCTION.

How serious is the problem of measuring inequality and poverty for the state and society? This issue concerns not only Russian but also foreign scientists.

Russian scientists pay considerable attention to measuring the population's income and poverty (Ovcharova et al, 2016; Nivorozhkina L.I., 2016; Sinel'nikov-Murylev, S.G., 2016), and foreign scientists (Kiendrebeogo, 2016; Bhattacharya, 2016; Capps, 2016). Scientific research is aimed at reflecting almost the entire scope of problems: household income, living conditions, indicators of poverty, inequality, social exclusion, and others.

At the conference of European statisticians (Geneva, 2015), they noted that composite indicators such as the UNDP human development index or the multidimensional poverty index (MPI) developed by the Oxford Policy and Human Development Institute (OPHI), could serve as tools for

measuring progress in sustainable development. However, the lack of internationally comparable household budget survey data makes it impossible to produce timely national, regional and global estimates of the dynamics of income poverty and income inequality. Data limitations emphasize the importance of further research on the goals of sustainable development, which are related to statistical problems (Nivorozhkina, 2016). Therefore, obtaining accurate data for income analysis and poverty assessment is one of the main goals of scientists and practitioners.

In Russia, statistical indicators of the population's monetary income and data on the official poverty line are developed at the national and regional level. It allows differentiating poverty estimates taking into account the economic development of the regions, identifying the range of differences across the country, and determining the contribution of each entity of the Russian Federation to the overall picture of poverty.

The differences between the estimates obtained using the direct data from the household budget survey and the analytical model give rise to several urgent problems. They result in the lack of consistency of data on the level of poverty in the population as a whole and on the level of poverty in the context of demographic and socio-economic groups of the population and households.

Different levels of socio-economic development and individual features of the Russian regions (level of urbanization, education, employment, and household size) lead to a significant difference in the spread of poverty in the regions. Poverty and its incidence remain an acute problem that needs to be addressed as a matter of priority. Programs to improve the information base of household sample surveys on the platform of the pan-European survey of income and living conditions (EU-SILC) were identified as the main development directions of Russian statistics (Surinov, 2015).

#### DEVELOPMENT.

#### Materials and methods.

Russian official statistics measures poverty the basis of the absolute concept of income insufficiency in relation to the poverty line criterion, the living below which is considered to be poverty.

The minimum subsistence level is used as a poverty line in Russia. It is determined quarterly both in Russia as a whole (hereinafter referred to as the RF) and in the RF subjects for three social groups of the population: working-age population, retired and children. The subsistence minimum is a key indicator for determining the level of poverty in the country and calculating social benefits to the population. Thus, in the IV quarter of 2015, the structure of the subsistence minimum in the whole of the Russian Federation was: 46.6% - food products; 23.2 - other goods; 23,1% - services; 7,1% - obligatory payments and duties. The main reasons that affect the subsistence minimum in the subjects of the Russian Federation, in addition to the level of consumer prices for goods and services, are the principles of formation of a set of food and non-food products included in the consumer basket. In general, the consumer basket in Russia is established by federal law, and in the regions - by legislative acts of the RF subjects.

Calculations of the subsistence minimum at both the Federal and regional levels are made on the basis of Rosstat data on the level of consumer prices (tariffs) for goods and services that form the consumer basket. Monitoring the level of consumer prices (tariffs) in order to calculate the subsistence minimum in the whole country is carried out by the state statistics in all subjects of the Russian Federation on the list of goods-representatives.

Basic principles of forming the consumer basket satisfy the human needs in nutrients, based on the chemical composition and energy value of food; meeting the needs of different groups of the population in non-food products, taking into account age-related features, protecting body from the

environment, as well as the organization of life; the existing structure of nutrition and the level of provision of non-food products in poor families; the choice of products that allow organizing a healthy diet at minimum cost, minimum upgradability, minimum diversity, low retail price, and availability of non-food products.

The minimum set of services provisions with housing is considered according to the established Federal standard of social norm of the area of housing on one family member in the family of three and more. Utilities are calculated based on industry standards of water, electricity and gas consumption for household needs and energy required for central heating.

Currently, the survey of household budgets is conducted by the Federal State Statistics Service (hereinafter FSES), which allows obtaining large-scale data on poverty in Russia.

The methodological approach of the sample survey of household budgets includes the quarterly surveys in all RF entities with a total coverage of about 50 thousand households; the construction of analytical models that involve the results of the household budgets surveys and calculation of the value of a macroeconomic indicator of per capita money incomes of population. The macroeconomic indicator of the average per capita monetary income of the population is formed monthly at the national and regional level on the basis of the reporting of organizations and data of tax authorities on payments of wages, pensions and benefits to the population, incomes from business and property received by the population, with an assessment of income from the informal sector of the economy for the corresponding reporting period (Velikanova, 2017).

The development of statistical information involves several stages in the data preparation process. The peculiarity of this approach is obtaining the estimates of the poverty level for the population as a whole, based on the model method, and estimates on the profile (structure) of the poor population, based on direct data from household surveys.

This approach is determined, first of all, by the need for urgent state support for the regions. In this regard, official statistics solves the problem of providing an operational set of data on the level of poverty among the entire population at the national (quarterly) and at the regional levels (annually). The following actions aimed at providing social support to the most vulnerable groups of the population determine the need for information on the localization of poverty in certain demographic and socio-economic groups of households. This step is based on the direct data from household income and expenditures surveys. In addition, the household budget survey program, based on its main objective of obtaining information on household expenditure and consumption, does not contain a complete set of variables to determine all components of household income. These estimates are very approximate and show a serious gap with the macroeconomic indicators of monetary income of the population. As a result, the poverty rate according to the household budget survey was 24.7% in 2015; it more than twice exceeds the share of the poor population living in families receiving social benefits obtained on the basis of administrative data.

The discrepancy between the data of the household budget survey and alternative estimates based on other sources of information; for example, administrative data and/or various studies of research institutes (Ovcharova et al, 2016), "Russian Monitoring of the Economic Situation and Public Health of the National Research University Higher School of Economics (RLMS-HSE) (2018), URL: <a href="http://www.cpc.unc.edu/projects/rlms">http://www.hse.ru/rlms</a> Mau, V. et al. (2016), it is also due to the initial limitations of the analytical capacity of the household budget survey program. The system of estimates published by the FSES is based on the limited set of indicators, beyond which there remains a broader set of indicators to reflect poverty.

Since 2011, the system of additional sample surveys of households on socio-demographic problems has been introduced into the Russian statistical practice. Along with traditional surveys (household budget surveys, labor force sample surveys, etc.), additional sample surveys are to reflect almost the

entire spectrum of modern issues: household income, living conditions, availability of social support and social services, nutrition, time budget, etc. A part of the new system of federal statistical surveys, it is the Sample observation of the population's income and participation in social programs (SOPIPSP). Based on the SOPIPSP results, the primary variables have been formed. They served as a basis for about a thousand calculated variables that provided aggregation of information on 200 components of cash payments and income received in cash and in kind.

The procedure of forming the aggregates according to the components of cash income is as close as possible to the methodology of the EU Statistics on Income and Living Conditions (EU-SILC) and is consistent with the main provisions of the ILO Resolution on household income and expenditure statistics (Velikanova, 2017).

The need to expand the system of poverty indicators assessment poses a challenge for the Russian state statistics expand their system of indicators. This work focuses on introducing the non-monetary poverty indices into practical statistics.

The development of research methods for non-monetary poverty should be based on a reasonable definition of the set; for example, it may be the formulation of a set of social indicators of the prevailing standard of living, the definition of the list of deprivations based on the results of studying the opinion of the population and experts on the distinctive features of the life of families unable to provide the standard of consumption adopted in society. The development of metadata is to facilitate the correct analytical interpretation of non-monetary poverty indices along with official statistical data on absolute and relative poverty. The most important direction for future work is to provide a statistical base for monitoring the System of global indicators of achievement of the sustainable development goals and targets for the period up to 2030 (Surinov, 2015).

### Results.

Official calculations of the poverty level in Russia as a whole are carried out by the FSES since 1992. As it was mentioned above the subsistence minimum is used as a poverty line. Its calculation procedure has changed several times (2000, 2005 and 2013), leading to an increase in the subsistence minimum by 15-20% compared to the previous period. All this resulted in an increase in the poverty level compared to the earlier current procedure for calculating the subsistence minimum (Surinov, 2015). Under these conditions, the reduction in the poverty level in 2015 compared to 2000 was 2.2 times according to the actual data; if we take into account the comparability of the calculation methodology, it is 2.8 times (Fig. 1).

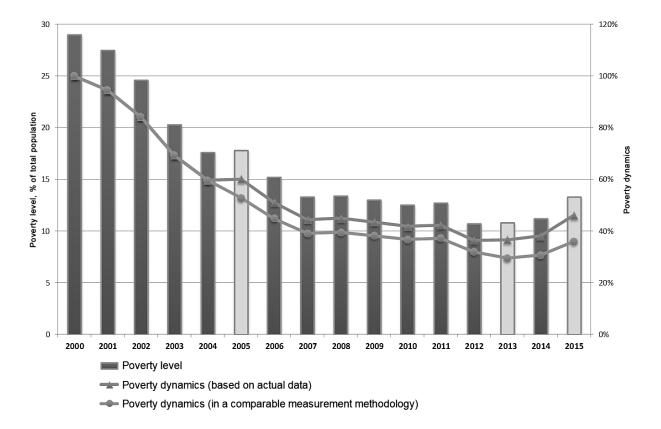


Fig. 1. Dynamics of the poverty level of the population (in % to 2000) \*.

\*In 2005 and 2013, the procedure for calculating the subsistence minimum changed; in 2015, the accounted structure of the population changed.

To ensure the comparability of poverty indicators in the long-term dynamics, the FSES calculates the poverty level as a percentage of the previous year in compliance with the unified methodology for calculating the poverty level (including the minimum subsistence level) in the current and previous years. It allows obtaining a quantitative assessment of changes in the poverty level, excluding the "leaps" due to the changing methodology of calculation within the analyzed time series.

In 2015, the value of the subsistence minimum in Russia as a whole equalled to 9701 rubles per capita per month; compared to 2014, it increased more than 1.2 times.

The level of socio-economic development, natural and climatic conditions, socio-cultural characteristics, and established traditions largely determine the value of the subsistence minimum (poverty line), established in the RF subjects.

According to official data published by FSES, the value of the subsistence minimum established in the RF subjects varied significantly. Among the regions of the Russian Federation in 2015, the lowest value of the subsistence minimum per capita was recorded in the Republic of Tatarstan, which is part of the Volga Federal Bistrict (7695 rubles per month, or 79.3% of the subsistence minimum in Russia). The highest value was observed in the Republic of Tuva, which is part of the Siberian Federal District (16537 rubles per month, or 1.7 times higher than the level of Russia). On the basis of data on the distribution of population, according to the value of per capita monetary income, the researchers determine the macroeconomic indicator, which describes the level of poverty in Russia, or the share of the population with monetary income below the subsistence minimum (poverty rate). This indicator shows the prevalence of poverty and the number of the poor.

There are other methods of defining poverty lines and levels: for example, it is the proportion of the population of the Russian Federation with incomes below the poverty line established at the international level, taking into account purchasing power parity. In 2015, the gross domestic product of Russia in terms of purchasing power parity in billion USD equalled to 3579.8 (decreased by 86.3 billion USD compared to 2014). (Surinov, 2016). At the same time, the stabilization of the number of poor people was recorded - the share of the population with incomes below the international poverty line of 3.90 USD, accepted based on purchasing power parity, was 0.3 percent of the total population in Russia in 2015 and 2014. It is 1.3 times less than in 2013 (see Table 1).

Table 1 Share of the RF population with incomes below the poverty line accepted at the international level, taking into account purchasing power parity. In percent of total population.

	Share of	Share of population with average per capita income					
		below:					
					with incomes		
	\$1.90	\$3.90	\$5	\$10	below the		
	a day	a day	a day	a day	subsistence		
					minimum		
2013	0.0	0.4	1.0	7.5	10.8		
2014	0.0	0.3	0.8	6.7	11.2		
2015	0.0	0.3	0.7	5.9	13.3		

Note: information from FSES.

Different levels of socio-economic development and individual features of the Russian regions (level of urbanization, education, employment, and household size) lead to a significant difference in the spread of poverty in the regions. In 2015, the poverty rate in the Russian regions ranged from 7.6% in the Republic of Tatarstan to 38.8% in the Republic of Tuva. In 2015 62.4% of poor households lived in urban areas.

In 2012-2015, there was a trend of growth in the number of poor households in urban areas and a decrease in the number of such households in rural areas. A large proportion of the poor were concentrated in small towns and small rural settlements. Thus, "urban poverty" is increasing in

Russia. The urban population is the most vulnerable to poverty, mainly because of the high concentration of poor households and the level of income that differs little from the subsistence level. All this increases the vulnerability of households even with a small decline in income.

If consider the distribution of poor households by their structure, there is a high proportion of households consisting of three or more people. Such households, there is a high probability of a high dependency burden, which predetermines the inclusion of such households in the category of poor. In Russia as a whole, the proportion of poor households consisting of three or more people was 81.2%. A distinctive feature of Russian poverty is child poverty. In Russia, 62.9% of poor households had children under 16, of which households with 1 child were 30.3%, with two children - 23.6%, with three or more children - 8.6 %.

In the year 2014, the average per capita disposable resources in poor households in Russia amounted to 6172.7 rubles per month. At the same time, the deficit of available resources per household amounted to 7854.3 rubles per month. Average per capita income of the population in nominal terms for 2015 increased by 10.1%6 and amounted to an average of 30 311 rubles per capita annually. Despite the fact that in 2015 there was an acceleration in the growth of nominal cash income compared to 2014, the increase in consumer prices by 12.9% led to a sharp decline in living standards in real terms. Real disposable income of the population for 2015 amounted to 96.8%, real wages-90.5%, the real size of pensions - 96.2% of the indices of the previous year (Dokhody, raskhody i potreblenie domashnikh khozyaystv, 2018). Changes in real disposable income of the RF population as a whole (cash income minus mandatory payments and adjusted for the consumer price index) for 2009-2015 are presented in Fig. 2.

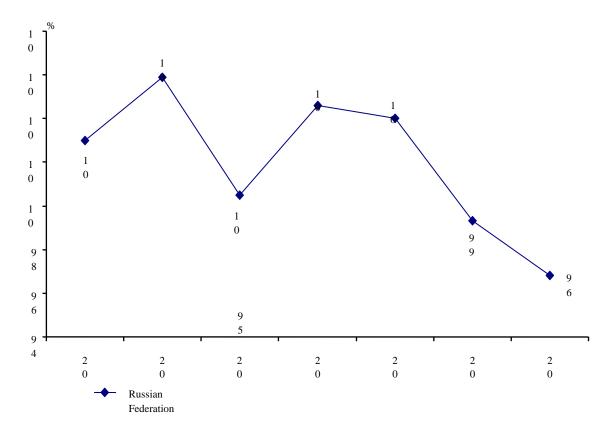


Fig. 2. Dynamics in real disposable cash income of the population (in percent of the previous year). Note: Compiled by the authors according to FSES information.

Based on the FSES data obtained from the monitoring, measurement and analysis of poverty in Russia in 2015 with the allocation of "risk groups", revealed that the highest value of the poverty risk index depending on the level of education has a population with basic General education - 1.6%. A high index of risk of poverty according to sex and age was found in women aged 16-30 years and men aged 60 or more.

In the year 2015, Ye.T. Gaidar Institute for Economic Policy conducted a study "Russian economy in 2015: trends and prospects". The results revealed that the status of the retired has significantly deteriorated: the ratio of the average size of pensions to the subsistence minimum was 148.9% - the lowest level compared to 2010. The decline in the real size of pensions on 3.8% (compared to the previous year) had a negative impact on the dynamics of living standards parameters in 2015. A sharp decline in real incomes of the population led to a reduction in the actual final consumption of

households in 2015 on 7.9% (compared to the previous year). The negative trend here is the growing decline in retail turnover by market segments by the end of the year (compared to the values of the previous year) (Mau et al, 2016).

A distinctive feature of 2015 was an increase in the propensity of the Russian population to saving as a precautionary measure in crisis period. The population used different ways to save their income. If in 2014, 5.8% of the population's cash income was used to purchase foreign currency, in 2015, this figure decreased to 4.2% with an increase in savings in deposits and securities to 6.5% of the population's cash income.

In the IV quarter of 2015, the share of savings reached 16.0% of cash income; including deposits and securities – 10%. The level of interest rates in Russian banks on deposits at the end of 2014 - the first half of 2015 had a significant impact on the dynamics of household savings. The total volume of bank deposits of the Russian population at the end of 2015 amounted to 23 219.1 billion rubles and increased by almost a quarter compared with the indicator of the earlier period. However, as deposit interest rates are lower than inflation rates, it is most likely that the retired will remain the largest group of depositors accustomed to negative real interest rates in banking institutions.

In the year 2015, the wages in the monetary income of the RF population amounted to 66.0%, social benefits - 18.1%, at the setting of reducing the contribution of entrepreneurial activity. Therefore, the analysis of business income is particularly interesting. Their presence is traditionally high at the bottom of the republics of the North Caucasus; for example, in 2001, their share in the income structure of the population of the Republic of North Ossetia-Alania was 32.2%, the Republic of Ingushetia – 26.2%, the Republic of Dagestan – 22.6%, with an average Russian value of 12.6%. Also, the share of business income exceeded 20% in some more developed southern regions like Stavropol Territory, Rostov, Samara and Tambov regions. However, in 2001-2014, the

share of business income in the Russian Federation shows a trend of steady decline, and in 2014 it is only 8.4% on national average. Only Dagestan in 2014 shows an increase in the share of this component from the mentioned above regions (up to 24.9%).

In Moscow, the share of business income decreased from 11.6% to 5.9% in 2001-2014, and in St. Petersburg - from 9.1% to 1.8%. Note also that in these cities, the share of business income in total household income was even higher in 1995: 14.4% in Moscow and 18.4% in St. Petersburg. All this indicates a significant change in the nature of entrepreneurial activity and its spatial distribution (Malkina, 2012).

The level of income inequality in Russia in 2015 measured by Gini coefficients slightly decreased. Gini coefficient decreased to 0.412 at 0.419 a year earlier; the coefficient of funds decreased to 15.5 times against 16 times in 2014. The decrease in interregional differences is explained by the increased redistribution of income through the budget system, which allowed increasing pensions and other social benefits in order to support some sectors of the country's economy (Zubarevich, 2013).

In order to reduce social tension in 2015, the RF Government increased the amount of funds for social support (benefits) for RF citizens to 287739 million rubles, or 104.5% compared to last year. The average amount of support per user was 654 rubles, which reduced the number of poor people. Monetary compensation was used to cover the costs on urban, suburban and intercity transport, the purchase of medicines and medical services, sanatorium-resort vacation or health resorts, communication services, food, clothing, footwear, essential civilian supplies, and other purposes. The monitoring "Distribution of households by assessment of their financial situation", conducted by the FSES in the I quarter of 2016, revealed the serious lack of money. 1.2 % of the population didn't have enough money for food; 22.3% had enough money for food, but couldn't afford clothes

and paying for housing and communal services; 46.2% had enough money for food, but could not afford to buy durable goods.

Table 2. Distribution of households by assessment of their financial situation. In percent of all households in the relevant group.

	All									
	households	Those who assess their financial situation as follows:								
		not enough	enough money for	enough money	money is enough	money	cannot			
		money for	food, but not	for food and	for food, clothing	enough to	say			
		food	enough for clothes	clothing, not	and durable goods,	buy				
			and paying for	enough for	not enough to buy	everything				
			housing and	durable goods	a car, apartment,	they need				
			communal services		or summer house					
All households	100	1.2	22.3	46.2	26.4	2.6	1.3			
Households grouped: by residence.										
by residence.										
Urban residents.	100	1.1	21.5	44.5	28.4	2.9	1.6			
Rural residents.	100	1.5	24.6	51.6	20.2	1.4	0.7			
By presence of children.										
Households										
with children	100	1.4	21.7	44.9	27.9	2.2	1.9			
under 16.										

Note: Information from FSES.

Official statistics confirm that in the setting of remaining income inequality, there occur relative and sometimes absolute decline in the level and quality of life of most population.

Professor M. Malkina obtained interesting values while studying the relation between normal and excessive inequality with health indicators. On the one hand, regions with high levels of excess inequality have averagely lower overall incidence. On the other hand, there is a clear attachment of some diseases to the type of regions characterized by a certain type of inequality. Diseases of the circulatory and nervous systems and eye diseases prevailed in regions with increased excessive

inequality. Neoplasms, diseases of the musculoskeletal system, respiratory diseases, injuries and poisoning, which is especially typical for mining regions and Far East prevail in regions with normal inequality. This reduces the quality of life and reveals the need for the development of the generalized indicators of welfare that take into account various benefits and costs of economic development.

### Discussion.

To its credit, the FSES describes the social structure in detail at the national level. At the same time, the dynamics of household income is somewhat heterogeneous from territory to territory. It differs in the concentration of the upper classes in regional urban centers and the creation of rich urban neighborhoods, social polarization of rural areas, with the allocation of areas inhabited by elites, and rural areas in demographic and social decline on the other side.

After the adoption of the Federal law "On state social assistance" of 17.07.1999 № 178-FZ, there was a transfer of powers and funds to the regional level in the form of subventions from the federal budget. Deputies and specialists in territorial social policy in regions and municipalities faced the need for additional data. It could not be fully satisfied with the state statistics for various reasons. In some cases, these are social support measures that are implemented in micro-territories, such as the so-called "pockets of poverty" in small towns and rural settlements. Distinguishing process of the respective zones requires data necessary for the specification of territories, and this data does not always coincide with official statistics in quantitative characteristics. The more specific the territory or population group (micro-territory or micro-group) is, the less official statistics can be found for such small samples that are carried out by the state statistics bodies. It is clear that the specific situation is related to the methodological features of the household budget survey.

The differences between the estimates obtained using the direct data from the household budget survey and the analytical model give rise to several urgent problems. They result in the lack of consistency of data on the level of poverty in the population as a whole and on the level of poverty in the context of demographic and socio-economic groups of the population and households. The main factor complicating the harmonization process is, of course, the problem of obtaining adequate information in the household budget survey.

It should be noted that when conducting a household budget survey, the main methodological condition is the voluntary basis for respondents' participation in the survey. The interviewer questions the respondents from the age of 16. They are members of the household selected for the survey, and the questionnaires are filled in by the interviewer according to the respondents without presenting any documents confirming the correctness of the answers. The practice of the household budget survey indicates that, like all surveys of this kind, respondents tend to underestimate and under-report their income. The researchers also meet difficulties in reaching households at the highest end of the income distribution affecting the sample structure.

Currently, in the period of the protracted economic crisis, there exists a certain structure of the labor market. High representation among the working-age poor is not only due to unemployment, but also to low wages. Low wages stimulate the emergence of a little-known group of the so-called working poor; that is, you can work and be poor. Low wages automatically lead to a low level of all social benefits and low pensions.

The resources of poor households are not enough to overcome poverty on their own, and social protection is not effective enough. Due to the significant number of households with incomes slightly higher than the subsistence level, the risk of increasing the number of the poor with the slightest deterioration of the economic situation in Russia remains.

The next "poverty trap" is especially dangerous for the young. Young people understand that it is impossible to just "sit" in positions in the public sector. If in 1990-e years in Russia, secondary employment was a common practice, and people had two or three works, in 2000 years, this practice had almost disappeared. The priority was a comfortable lifestyle, the desire to devote free time to themselves and their families. This is the traditional behavior of the Russian middle class. Nowadays, one should keep their workplace first, and this work does not guarantee the usual level of prosperity, secondly. Such processes already exist in megalopolises and large cities, where labor markets and activities are diversified.

In single-industry towns, there is no such choice. For residents of single-industry towns, obtaining and keeping a workplace is highly dependent on the activities of a small number of large enterprises. What if the only employer cannot load the employees with work and forces them to transfer for a shorter working week? Where is a second employer who will pay? There is so-called "shadow" or informal employment, according to the statistics. The practice of informal employment occurs when the formal preservation of the relationship between the employee and the employer (the work record books remain with the employer) still exists, but in fact the employer has no obligations to the employee. As a result, such phenomena cause statistical distortions in the measurement of personal income and informal employment in different regions and the level of poverty.

The risk is also high in the case of the "new poor" emerging from the transformations. They include: the unemployed (including officially employed workers on unpaid or partially paid leave or working in enterprises that have accumulated significant wage arrears) and their families; working poor, including public sector workers employed in such sectors as education, health, science, and art, as well as agricultural workers and small traders, particularly in rural regions (and their families); refugees and internally displaced people inside the country. The phenomenon of hidden

income in these statistics can be studied by comparing information on household income and expenditure.

This estimation was carried out during the project "Russian monitoring of the economic situation and health of the population of RLMS-HSE" for 2006-2014. It was based on studying the characteristics of households, whose expenditures systematically exceeded their incomes (Ovcharova et al, 2016). Tracking households that represented the costs exceeding their declared income from year to year or that refused to answer the questions concerning their income, specification of their socio-demographic structure, the principles of settlement allowed identifying groups of households that had unofficial income.

Ignoring this problem while the results increasingly affect the general population of statistical observation may lead to unjustified overestimation of the level of absolute poverty and underestimation of differentiation, and as a consequence, relative poverty.

In order to minimize the impact of the systematic bias because of household refusals to participate in the SOPIPSP, statistical weighting is carried out during the results formation. Along with the standard methods, it includes procedures to compensate for the presence of complete refusals of households to participate in the survey. Currently, there is a greater discrepancy with the macroeconomic indicator of monetary income of the population. This discrepancy is caused by lower reliability of data on the income formed in survey of household budgets based on the information from the respondents. After the elimination of discrepancies between official and independent poverty estimates and introducing new components in the statistical observations of the FSES, the population income can change the Russian statistics.

The second methodological approach to solving the FSES tasks is based on applying the analytical model. The modes is based on applying the results of the survey of household budgets and the value of the macroeconomic indicator of per capita monetary income of the population, formed monthly

at the national and regional level on the basis of reporting by organizations and tax authorities on payments to the population of wages, pensions and benefits received by the population of income from business and property, with an assessment of income generated in the informal sector of the economy for the corresponding reporting period on a quarterly basis.

The analytical model is used as a tool for obtaining preliminary short-term estimates. Bringing the data of the household budget survey to the annual accounting period would allow levelling the income inequality during the year. It is to cause significant shifts in poverty estimates compared to the SOPIPSP, where the annual accounting period is initially used. By this, it is possible to create a platform for combining estimates of relative poverty according to two surveys.

In addition, attention should be paid to the use of the results of the survey, the results of which allowed expanding the set of income aggregates for the analysis of monetary poverty indicators. The expansion of the set of income aggregates used to estimate the level of absolute poverty made it possible to assess the contribution to the overall level of household welfare of the value of natural income in the form of own production used for personal consumption, social transfers and transfers from other sources to households in kind, as well as, on a pilot basis, the monetary equivalent of net imputed rent. Adding these components expanded the monetary category of income to assess the differences in the share of in-kind income in the income of different groups of households.

The expansion of household and population sample surveys resulted in a fundamental change in poverty statistics, which has long been based on estimates of indirect indicators and has now become a solid empirical basis for measuring absolute and relative poverty, and for measuring poverty in a multidimensional way.

The beginning of this work was due to the joint efforts of FSES, the Ministry of labor of Russia and other interested agencies with the participation of the World Bank and the Ministry for international development of Great Britain (DFID). They made it possible to define analytical, methodological

and information components of poverty statistics in Russia in the framework of the target project. Choosing and implementing the programs to improve the information base of household sample surveys on the platform of the pan-European survey of income and living conditions (EU-SILC) were identified as the main development directions of Russian statistics.

Currently, there is no comprehensive monitoring in Russia that observed the dynamics of all forms of poverty and social exclusion both in Russia as a whole and in the context of socio-demographic groups of the population and subjects of the Russian Federation. This makes it impossible to assess the impact of public policy measures on the level, profile and depth of poverty and to implement effective social policy in conditions of low economic growth and limited budgetary resources on social benefits.

Meanwhile, the international and Russian scientific communities have accumulated more experience in the development and testing of modern methods and instrumental approaches to the definition and measurement of poverty and social exclusion. The most developed methods include multidimensional measurement of poverty, material deprivation and social exclusion that take into account income and property security, consumption level, labor potential of households, level of education and health, as well as the level of inclusion of certain socio-demographic groups in economic and social relations. Currently, the system of statistical indicators of poverty, formed on the basis of sample observations on socio-demographic problems conducted by FSES, is being adjusted to the algorithms if methods developed in international practice to calculate the indices of multidimensional poverty, material deprivation, and social exclusion in the Russian Federation.

The multidimensional poverty index is a better instrument for measuring poverty more objectively and providing a detailed and comprehensive picture of the situation of the poor. This index uses is based on a comprehensive assessment of poverty, taking into account its acuteness and depth. The index calculates the number of deprivations that an individual face at the same time every day. It

may be poor health, poor living conditions, lack of a minimum level of education, etc. This method served as a basis for several methodologies with different lists of specific deprivations. The most well-known example of the multidimensional poverty index is the index proposed to work with the European data of the pan–European survey on income and living conditions (hereinafter-EU-SILC). This option is based on poverty indicators measured at the household level. According to the EU-2020 development program that uses this method, the index includes 6 indicators: income, material deprivation, employment, education, health, and environmental characteristics.

As it is noted by Russian scientists and practitioners, the deprivation approach is based on assessing the basic needs, and seeks to directly measure whether individuals or households have access to minimal benefits, such as food, clothing, housing, etc., in accordance with the standard adopted in society, or they are restricted in access to these benefits. According to the deprivation approach, the poor are those whose standard of living is significantly different from the country standard.

The poverty estimation through deprivation assumes that the standard of living, considered as a significant deviation from the standard, is determined by expert and sociological methods based on the household surveys. However, the deprivation method has a number of restrictions. One of them is that there is no consensus on the ratio of the lines of monetary and deprivation types of poverty. The work carried out in Russia on expanding the list of deprivation indicators will allow further calculation of indices suitable for international comparisons.

FSES is improving the methodology for the formation of the statistical base for the calculation of income inequality and poverty indicators "on the basis of harmonization of the program of sample household income survey with the program of the European survey EU-Statistics on Income and Living Conditions (EU-SILC)".

For future work on poverty measurement, the most important area is to provide a statistical framework for monitoring the System of global indicators of achievement of the goals and targets of the sustainable development goals for the period up to 2030.

## CONCLUSIONS.

The study shows that Russian statistics has wide experience and significant scientific and practical developments in household income surveys.

Scientific research is aimed at reflecting almost the entire scope of problems: household income, living conditions, unemployment, access to social support and social services, and others. The work describes the features of estimates of the poverty level in the application of the model method and estimates on the profile (structure) of the poor based on direct data on the results of household surveys. It is noted, that the poverty line in Russia is the subsistence minimum. The influence of the principles of forming a set of food and non-food products included in the consumer basket, depending on natural and climatic conditions, socio-cultural characteristics and established traditions, on the value of the subsistence minimum in the subjects of the Russian Federation is reflected.

The analysis of certain characteristics of the RF entities revealed a significant difference in the spread of poverty in the country. The study of the dynamics of the level of poverty in Russia allowed justifying the reasons for the growth of poor households. The authors emphasize such reason of the growth of the number of poor households in urban areas as the increase in the proportion of households consisting of three or more people. It is proved that the characteristic features of Russian poverty are urban and child poverty.

The dependence of the level of poverty risk depending on the level of education, sex and age of a person is considered. It is noted that the increase in the amount of funds for the provision of social support (benefits) to RF citizens in 2015 allowed to reduce the number of the poor. The authors also

gave the comparative statistics of new results obtained on the basis of expanding the range of statistical indicators to measure poverty and the method of ensuring the comparability of data during the transition to new sources of information. The paper reviews the methods of forming a harmonized set of indicators required to assess the index of deprivation, taking into account interregional differences in the conditions, lifestyle and standard of living of the population of Russia. The issues of adaptation of the system of statistical indicators of poverty to the algorithms of international methods for the calculation of multidimensional poverty indices, material deprivation and social exclusion for Russia are also covered in the work.

An important factor in assessing the actual situation in Russia in the field of the eradication of poverty in all its manifestations is ensuring the comparability of poverty estimates in the long-term dynamics. In order to achieve sustainable development, the poverty level, measured in accordance with the national methodology, is to be halved. These trends should be measured in a comparable methodology, otherwise poverty reduction can only be achieved through changing the calculation methodology. They also should have nothing to do with the actual dynamics (reduction or even growth) of poverty.

It is proved that introducing the international experience in measuring the level of poverty contributes to obtaining accurate data for analysis of income and poverty rate estimates in Russia. All this creates a favorable environment for determining the development priorities of state support measures for socially vulnerable groups of the population.

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