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Income Stratification in Modern Russia: Specifics and Dynamics

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Income stratification commonly operates with three broad categories: poor, middle class and wealthy (high-income, affluent) and different subgroups within or between them (Eisenhauer, 2011). Income stratification scales are used to obtain and compare quantitative estimates of well-off and poor groups, to gauge the risks of vulnerability to poverty and low income (López-Calva & Ortiz-Juarez, 2014), to assess the degree of inequality (World Bank, 2016). This type of stratification is widely used for international cross-country comparisons (Meyer & Sanchez-Paramo, 2014), as it is based on income level, which is a relatively universal indicator. It is also important for social policies, being used to set thresholds that define the poor and needy among the population who may be eligible for welfare – thus, different approaches to income stratification might mean different groups of the poor supported by social policy (Anikin & Slobodenyuk, 2018).

However, choosing a scale for income stratification is not a trivial methodological exercise. The methods used to define groups based on their positions in the income distribution can be summed up in two broad approaches – absolute and relative, conceptually similar to definition of absolute and relative poverty (Foster, 1998) or absolute and relative inequality (Niño-Zarazúa, Roope, & Tarp, 2017). Most of these approaches (and the resulting income thresholds) have been developed for different purposes and countries at different stages of social and economic development, so they are only to a certain extent applicable to Russia (Lokshin & Yemtsov, 2013). Moreover, methods in use mostly focus on defining certain groups among population (setting poverty line / affluence line, more rarely – middle class boundaries), but not on devising the income stratification scale for the society as whole. Therefore, the paper aims to contribute to existing research by defining suitable method of capturing income stratification in contemporary Russia at its current level of development and characterizing its general configuration and dynamics in recent years.

Absolute approach to income stratification

Absolute approach to income stratification is more familiar to Russian researchers since it is used for official measure of poverty based on the regionally set value of subsistence level. Globally, well-cited version of the absolute approach is used by the World Bank (Meyer & Sanchez-Paramo, 2014; Grant & Hansl, 2015). However, the results of its application to Russian data (RLMS-HSE¹ database using PPP calculated by World Bank²) show an extremely low share of the poor (daily income below \$5) in Russia - just 1.5-2.5% even during the economic crisis, while those at high risk of poverty (daily incomes in range of \$5-\$10) are about 10%. The overwhelming majority

¹ "Russia Longitudinal Monitoring survey, RLMS-HSE», conducted by National Research University "Higher School of Economics" and OOO "Demoscope" together with Carolina Population Center, University of North Carolina at Chapel Hill and the Institute of Sociology of the Federal Center of Theoretical and Applied Sociology of the Russian Academy of Sciences. (RLMS-HSE web sites: <http://www.cpc.unc.edu/projects/rlms-hse>, <http://www.hse.ru/org/hse/rlms>)

² Data source: World Bank (<http://data.worldbank.org/indicator/PA.NUS.PRVT.PP?locations=RU>).

of the population (over 87% in 2017) in terms of this approach falls within the middle class (daily income over \$10).

It is not surprising given that the minimum middle-class per-capita income (\$10 per day) in this methodology roughly equals to 50% of the median income and cuts off only the poorest group (0.5x median income is a widely used threshold of relative poverty). This threshold for the middle class in this approach is even lower than the official Russian subsistence level, hence the middle class by this definition is disproportionately large and heterogeneous, and that makes its analysis as a separate income group in the population pointless.

In the course of international comparison, both statistical and survey data show that Russia is better off regarding population incomes than the other BRICS countries and developing nations. Income stratification in Russia according to this method is much closer to that of Western Europe, where most of the population belongs to the middle class and the relative number of the poor is small (Anikin et al., 2016). However, while the configuration of the income structures is similar in terms of proportions of different income groups, the absolute level of income of middle class representatives in Russia and Western Europe is quite different.

This situation is the result of fundamental changes in Russian society which have occurred over the last 15 years and can be traced using this methodology. The calculations by the World Bank show that only slightly more than a quarter of the Russian population (27%) belonged to the middle class in 2000, while this share increased to 60% by 2010; sociological data show that the expansion of the middle class continued further, bringing it to almost 90% of population in recent years. Russian society has already moved away from the minimum physical survival standard for the population that these ranges are based on (and according to World Bank, Russia is currently a “upper-middle-income country”³), so most absolute income stratification scales that set the middle-class income threshold at \$10–13 per day cannot be efficiently applied for defining income structure.

If, following the approach of Ravallion et al. (2009), we turn to the concept of the “Western middle class” that includes those who are not poor by the US standards, the calculations based on the US poverty guidelines on the RLMS-HSE data show that about 45% of the Russian population can be considered poor while the rest enter the “Western middle class”. These results provide entirely different estimates of poverty and the middle class in Russia. However, this approach cannot be used as a working scale of income stratification as it defines only two groups, without taking into account their internal heterogeneity and the existence of other groups between them (vulnerable/needy population and so forth). The straightforward use of the US poverty criteria introduced in the concept of the “Western middle class” for Russia is also debatable.

Therefore, the income group thresholds set for developing countries by the widely cited income stratification methodologies based on the absolute approach turn out to be inefficient for Russia regarding its stage of socio-economic development and the general aim to construct an income stratification scale for the whole society and not only to define specific income groups, requires the application of relative income thresholds that correspond with the average standard of living in the country.

³ Data source: World Bank (<http://data.worldbank.org/country/russian-federation>).

Relative approach to income stratification

There are different versions of relative approaches and the income bounds defined on their basis. Some of them predetermine the size of these groups while attributing specific income quintiles or deciles to certain income groups (Easterly, 2001; Dallinger, 2013; see detailed review in Mareeva

& Lezhnina, 2019). In Russia, the data on the per capita income distribution by deciles and quintiles are published by FSSS. This distribution was changing slowly over the last 20–25 years but the relative share of the two lower quintiles in total income was decreasing; the recent economic crisis stopped this trend (see Table 1).

Table 1. Distribution of cash income in Russia by quintiles, 1980-2015, %

Year	Distribution of cash income in Russia by quintiles				
	First quintile (lowest income)	Second quintile	Third quintile	Fourth quintile	Fifth quintile (highest income)
1980	10.1	14.8	18.6	23.1	33.4
1990	9.8	14.9	18.8	23.8	32.7
1995	6.1	10.8	15.2	21.6	46.3
1999	6.0	10.5	14.8	21.1	47.6
2003	5.5	10.3	15.3	22.7	46.2
2007	5.1	9.8	14.8	22.5	47.8
2011	5.2	9.9	14.9	22.6	47.4
2015	5.3	10.0	15.0	22.6	47.1
2016	5.3	10.1	15.0	22.6	47.0
2017	5.4	10.1	15.1	22.6	46.8
2018	5.3	10.1	15.1	22.6	46.9

Source: FSSS. *Distribution of the total cash income and the specifics of cash personal income differentiation* (http://www.gks.ru/free_doc/new_site/population/bednost/tab1/1-2-2.doc). The data for the year 2018 are preliminary.

However, this approach does not uncover the structural changes in income stratification and the size of the particular income groups; it only gauges the change in incomes and income distribution and says little about the dynamics of the income stratification model itself.

The second group of relative approaches sets income groups by measuring their incomes against the median values across the population. This method does not predetermine the sizes of low

/ middle / high-income groups – they will differ depending on the patterns of income distribution. It allows an assessment of the changes in income groups size, given the entire population.

The key issue here, as with the absolute approach, is to set the appropriate income bounds. Typically, the poverty level is set at 0.5–0.6x median income; the middle-class threshold is often set at 0.75–1.25x median, and the upper middle-class boundary is 1.5–3x median income. These approaches are combined in different ways in various studies and publications.

Based on the literature review and statistical procedures (for details on boundaries testing and justification, see Anikin et al., 2016; Anikin, Slobodenyuk, 2018), we suggest defining a total of five income groups. The poverty threshold is set at 0.5x median income. The vulnerable population consists of those with income lower than 0.75x median (the typical lower demarcation for the middle class). The median income group demonstrates a typical standard of living for the whole population (0.75–1.25x). The middle class (1.25–2x median income) can be considered to be relatively well-off. Those with income higher than 2x median income fall into the high-income stratum.

To account for household size and economy of scale, we chose to apply a well-cited, OECD-modified equivalence scale currently used by Eurostat, according to which a weighting of 1 is assigned to the first adult, 0.5 to the second and to each subsequent person aged 14 and over, and 0.3 to each child aged under 14.

The results of applying the proposed scale presented in Table 2 show that most Russians are currently characterized by a close-to-median income (taking account of equivalence scale, it amounts to USD PPP 870⁴, per person per month in a median household; without the equivalence scale, it amounts to USD PPP 644). In 2017, more than one-third of population belonged to the median income group that represented the typical standard of living for the country as a whole, since it comprised that part of the population with income around the national median. Poor and vulnerable groups amounted to one-fourth of the population, with the vulnerable having the larger share (relative proportion of the sizes of these groups is 2:1). The overwhelming majority of the poor also belonged in the zone of absolute poverty, according to the official subsistence level set regionally in Russia. Among the vulnerable, half of the group had incomes below regional subsistence levels, which proves the correctness of identifying them as vulnerable to poverty and balancing on its edge.

Other income groups can be considered as being relatively well off – about one-quarter belonged to the ‘middle class’, and the high-income group comprised 11.8% of the population. However, as the median income, even taking account of the equivalence scale, was only 2.26 times higher than the official subsistence level (or 1.67 times higher in absolute terms) in 2017, the standard of living for the vast majority of the median income group is quite modest, while the position of the ‘middle class’ is more favorable. In general, it is the demarcation between these two income groups that allows us to divide the Russian population into two major subgroups – the not well-off and the well-off; their proportion is roughly 60/40.

The relative scale that we propose is based on the country’s median income. However, in Russia, it is necessary to account for the various living standards across regions as well as in the urban and rural areas - the cost of living can vary widely, and the same levels of income can indicate fundamentally different living standards. Moreover, official poverty line (subsistence minimum) is set independently in each region. The scale can be adjusted for these inequalities with the use of region-specific and settlement-specific median income values. There are countries with greater disparities between urban and rural incomes (for example, India and China), while in

⁴ Using PPP calculated by WB at USD/RUB PPP rate at 26.18 in 2017.

Russia differences in the socio-economic development of regions are more important (Ovcharova, 2014).

We assessed the income structure using regional and settlement median income values (though it should be noted that RLMS–HSE data are not representative by regions, so that assessment can be viewed as a rough estimate only, demonstrating potential for further use). The results show that the proposed scale yields similar configurations of the income structure (‘middle class society’) for all three types of median (Table 2). However, with the use of regional or settlement values, the share of the median and middle-income groups further increases, while the share of groups with the lowest and highest income declines.

Table 2. Income stratification based on the median values for the country and adjusted for regions and types of settlement, 2017, %

Income groups	Household per capita income about income median (with OECD-modified equivalence scale)	Type of income median		
		by country	by settlement	by region
Poor	Lower or equal to 0.5 median	8.1	6.9	5.9
Vulnerable	0.5–0.75	16.4	15.5	17.1
Median group	0.75–1.25	37.4	39.3	42.3
Middle class	1.25–2	26.3	27.9	26.6
High income	Over 2x median	11.8	10.4	8.1

Source: RLMS–HSE, calculation by author

Though detailed description of the defined groups is beyond the scope of the paper, we address some characteristics of the defined income groups to demonstrate the differences in their material well-being and living standards (Table 3).

The data show several important trends. Firstly, consumer opportunities are significantly expanded from the lower to higher income groups. Differences are especially noticeable for opportunities for spending holidays abroad or even at Russian resort, making large-scale, expensive purchases, and paying for children’s university education if necessary. Secondly, the standard of living that the median group demonstrates and which, by nature of the thresholds used to determine it, is typical of the country's population as a whole, can be characterized as quite modest – the share of those satisfied with their material situation makes up only one-fifth of the group; the opportunities for qualitative improvements in consumption for its representatives are practically non-existent, and the ‘safety margin’ is not high – only about 20% of the group have any significant savings.

On the other hand, the standard of living of the median group, as well as the standard of living of the groups with even lower income (the vulnerable and poor), is already far from the level of survival in contemporary Russian society. Even among the poor, more than 60% have washing machines in their households and own computers, and a third own cars; more than

one-third of the representatives of this group state that they can afford additional educational services for children.

The results also show that the freedom of choice of consumption models is available only to a subgroup of the middle class and high-income groups. That is demonstrated by the ownership of relatively rare durable goods (dishwashers, air conditioners, smartphones, foreign cars) and consumer opportunities that are not typical for the Russian population in general – the ability to afford major purchases, vacations abroad, etc.

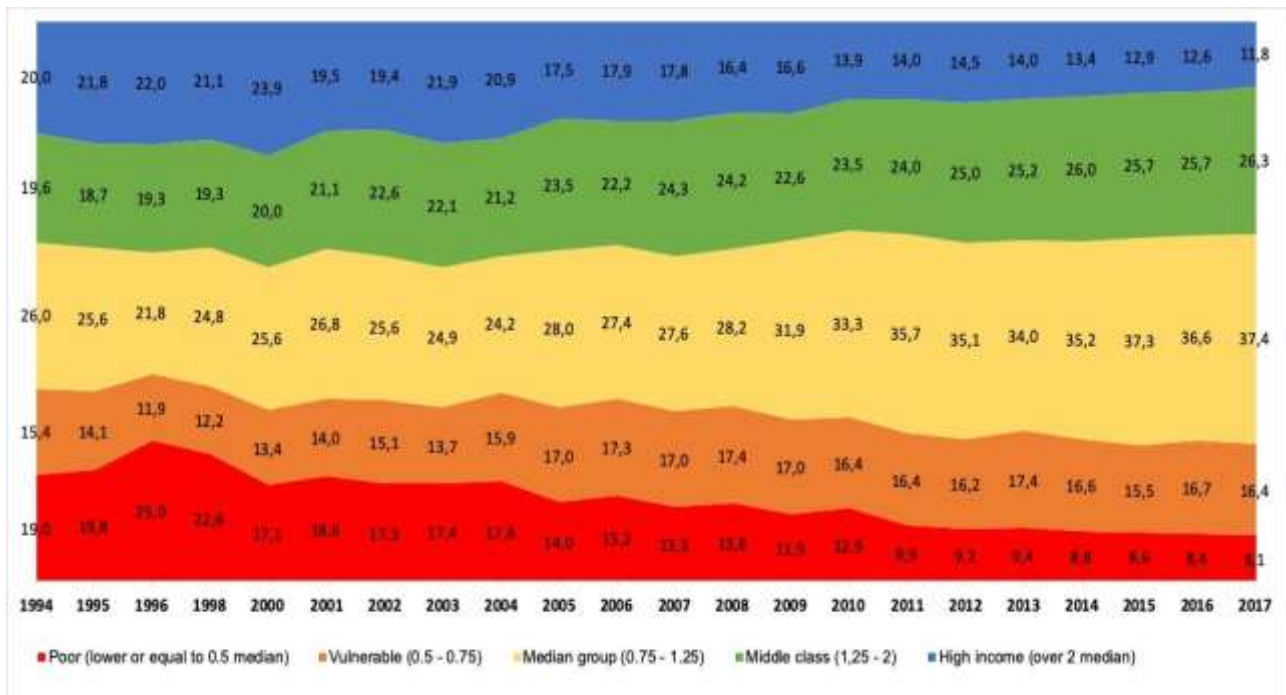
Table 3. Some characteristics of living standards in income groups, 2017, %

Aspects of consumption	Income groups				
	Poor	Vulnerable	Median group	Middle class	High income
Satisfaction with material well-being					
Completely or rather satisfied with material well-being	12.2	14.3	19.5	25.0	34.4
Do not worry about providing for themselves with necessities in the next 12 months	13.7	16.3	18.5	19.2	33.2
Consumption opportunities					
Have the opportunity to improve housing conditions if desired	3.5	3.8	5.7	9.0	14.6
Have the opportunity to save money for large purchases – car, dacha etc.	3.1	4.7	10.6	22.2	40.5
Can afford vacation abroad for the whole family	1.5	1.8	7.9	17.0	46.9
Can afford vacation on a Russian resort for the whole family	3.9	6.8	21.1	37.6	58.7
Have the opportunity to pay for their children's university education if necessary	15.4	17.1	32.4	48.2	71.5
Have the opportunity to pay for additional educational services for children if necessary	35.4	52.2	68.1	78.8	87.1
Property and durable goods ownership					
Have a TV in the household	94.7	97.8	98.9	98.2	98.3
Have an automatic washing machine in the household	63.8	76.3	90.7	95.0	98.1
Have a dishwasher in the household	0.5	1.9	3.3	5.6	18.1
Have an air conditioner in the household	6.6	5.9	14.8	17.9	19.0
Have a computer / laptop in the household	60.7	65.9	79.3	88.9	92.7
Have a personal smartphone	22.2	23.3	36.9	54.0	65.2
Have a personal laptop	14.3	13.7	16.8	26.1	34.3
Have a car in the household	33.3	39.6	51.3	63.3	71.7
incl. those who have a foreign car	10.8	13.1	24.8	44.0	60.6
Own another apartment (or part of it)	5.9	4.5	7.7	14.2	32.1
Savings					
Have household savings they can live on for 6 months or more	0.9	0.7	3.1	4.3	7.9
Have household savings they can live on for a few months, but less than six months	7.2	13.8	17.7	21.4	27.7

Source: RLMS-HSE, calculation by author

Let us now turn to the question of what changes the income stratification of Russian society has undergone during the last two decades. The starting point is 1994, when the consequences of the liberal reforms launched in 1992 became fully manifest, and the situation in the country was characterized by an economic crisis. In 2015, the country was once again in the midst of an economic crisis, but one with different causes and consequences. Russian society entered the new stage of economic recession (in 2014) with qualitatively different characteristics of population income and living standards. Figure 1 presents the dynamics of the income stratification, based on the country income median and OECD-modified equivalence scale for 1994–2017.

Figure 1. Income stratification by the relative approach using the country's median income dynamics in 2014-2017, %



Source: RLMS-HSE, calculation by author

As can be seen from Figure 1, the period from 1994 to 2017 was characterized by a gradual decline in relative income differentiation among the general population in Russia (without taking into account the upper and lower 3–4%, who are not included in the sample of mass surveys). Groups at opposite ends of the spectrum – those with incomes below 0.5 median and more than 2x the median

– significantly decreased as a share of the population during this period: in 1994, the share of the first group was 19.0% but by 2017 it had fallen to 8.1%; for the second group, these figures were 20.0% and 11.8% respectively. The decrease in the shares of these income groups was accompanied by the expansion of the median group, which in two decades has grown from a quarter of the population (26.0%) to more than a third (37.4%), and currently dominates in the income structure.

Therefore, according to the RLMS–HSE data, the last two decades were characterized by a tendency towards equalization of incomes and an increasing proportion of the population with incomes close to median value – in other words, by a growing number of people who are living in roughly the same conditions and have similar living standard that reflects the general living standard of the country as a whole, while being quite different from the typical conditions of the groups that are at the top and bottom of income scale. These trends complement the picture of the dynamics of income and income inequality which can be obtained from official statistics and other sources.

To complement this picture, we can also address the measures of monetary inequality. As can be seen from the dynamics of the Gini coefficient, from 1994 to until 2007 the overall inequality in the country increased (0.409 to 0.422), and only then did it begin to decline slightly (to 0.409 in

2017 and 0.411 in 2018), still remaining quite high⁵. An overview of the recent international reports devoted to the problem of monetary inequality (World bank, 2016; Hardoon et al., 2016; Credit Suisse, 2017; EBRD 2017; Alvaredo et al., 2018) help place these results in an international perspective. These reports assess relative position of Russia in international context in terms of inequality of income and inequality of wealth. Differences in the approach to inequality measurement, combined with the use of different data sources, lead to different estimates of its degree and depth (for the detailed review, see Mareeva, Slobodenyuk, 2018).

Estimates of income inequality related to the distribution of income among the population as a whole (usually measured using the Gini coefficient) position Russia as a country with high degree of inequality (especially against the background of Western European countries), but not the extreme; some sources show that income inequality in mass strata has been declining in Russia in 2008-2015 (World Bank, 2016).

However, measurement of inequality by income concentration and wealth concentration provides a very different picture. On a global background, Russia is characterized by very high rates of income concentration in the hands of the top 1% and 10% of the population; wealth concentration is even higher, and it positions Russia as a world leader of inequality that continues to grow. For example, according to the estimations of World Income Database researchers, 10% of Russians hold 46% of national income (vs. 37% in Europe, 41% in China, 47% in USA), while wealth concentration among top 1% reaches 43% (vs. 30% in China, 39% in USA) (Alvaredo et al., 2018). According to assessments provided Credit Suisse, wealthiest 10% of Russian population hold 77% of national wealth while 1% hold 56% (vs. 72% and 47% in China or 77% and 38% in USA accordingly); Gini coefficient for wealth reaches 0.826 (Credit Suisse, 2017).

This picture shows different aspect of income inequality than income stratification described above. For the purpose of developing socioeconomic policy measured aimed to combat poverty and inequality it should be borne in mind that the concentration of income / wealth and monetary inequality among the general population, although characterizing the extent of the inequality in the country as a whole from different angles, are different phenomena, requiring different mechanisms for managing them. Income stratification provides additional instrument for developing new measures and assessing their effect. The process of expanding of the middle groups in the income stratification can have both positive and negative socio-economic consequences and call for a separate discussion.

⁵ Data source: FSSS (URL: <https://fedstat.ru/indicator/31165>, extracted on 05.08.2018); the data for the year 2018 is preliminary.

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