

Inequality<sup>2</sup> is a part of the economic reality of any society. It is also a constant focus of attention of academic community, from time to time becoming a matter of heated social and political debates. Social scientists consider the growth of income inequality as one of the major socio-economic risks posed by globalization<sup>3</sup>. Inequality issues have acquired a particular importance in connection with the market transition of post-socialist countries, including Russia, where the ‘starting point’ of transformation was the centrally planned economy. The characteristic feature of the transition process has been a sharp increase in income inequality. In the late 1980s Russia, along with the Scandinavian countries was in the group of states with a low level of income inequality<sup>4</sup>. At present, the scale of inequality in Russia is comparable to economies of Latin America. This note aims to provide a comprehensive analysis of income inequality in Russia for the period since the beginning of market reforms. The sources of data are both official macro-statistics and independent sociological surveys.

## 1. What are inequality trends?

At the beginning of the transition period Russia, together with other post-socialist economies, experienced both a deep recession and an abrupt increase in income inequality. It was obvious that the transition from a planned economy to a market economy would have led to an increase in income inequality because of the collapse of ideological barriers that constrained income disparities. Gini index<sup>5</sup> has increased by almost 60% between 1991 and 1994 (**Figure 1**). The dynamics of other inequality measures used by the national statistics agency is also indicative of the immense scale of changes. The ratio between the mean incomes of the top and bottom deciles (so called funds ratio) has increased from 4.5 times in 1991 to 15 times in 1994; the share of the first quintile in the total income distribution fell from 12% in 1991 to 5.3% in 1994 and the following years.

It was not until the early 2000s when the Russian government has attempted to take income disparities under control using redistributive policies such as: (1) an accelerated increase in earnings of the public sector workers; (2) a sharp increase in the minimum wage; (3) a series of increases in the average and minimum pensions; and (4) an increase in spending on safety nets for vulnerable groups of the population. Nevertheless, all inequality indices showed a steady growth

---

<sup>1</sup> Centre for Analysis of Income and Living Standards at National Research University - Higher School of Economics

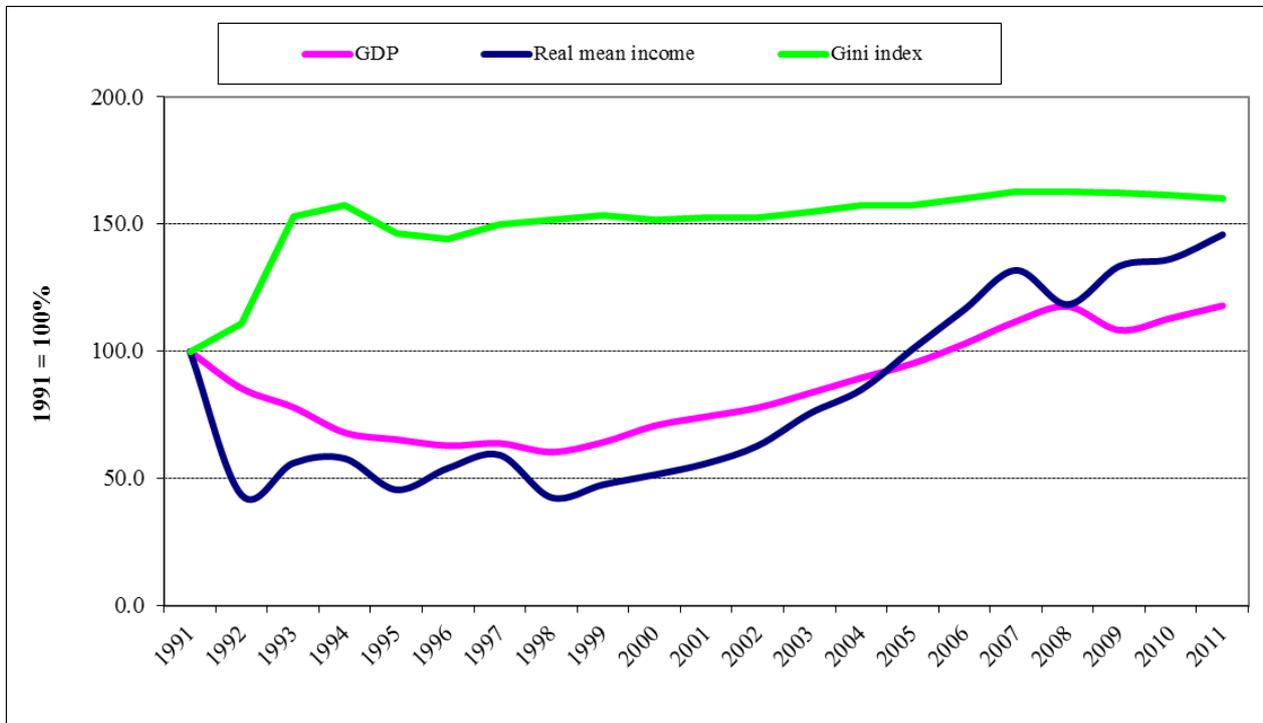
<sup>2</sup> The focus throughout the paper is on the national distribution of household incomes. However, in all societies, and particularly in Russia, there are many other types of inequality (e.g. in political power, social status, access to education, basic citizenship rights, etc.), and some may be more consequential than income in terms of their impact on a household well-being. However, in market economy income serves as a good predictor of well-being in other domains, such as social inclusion, education, health, etc. Noteworthy, in most OECD and Latin American countries the measures of well-being of households are based on income data. In contrast, in transition economies and in many developing countries the well-being measures are based on expenditure and consumption data. The Russian national statistics agency relies fully on expenditure and consumption data, while income data are considered a priori unreliable and are not collected. Income-based well-being measures for Russia can be derived exclusively from household surveys. See: Ovcharova, L. and E. D. Tesliuk (2006). Poverty and inequality in Russia: sensitivity of poverty and inequality statistics to alternative definitions of households welfare. Illustration using the NOBUS survey. Moscow, The World Bank.

<sup>3</sup> For example, see: Firebaugh, G. (2003). The new geography of global income inequality. Cambridge, Harvard University Press.

<sup>4</sup> See: OECD (2008). Growing unequal? Income distribution and poverty in OECD countries, OECD Publishing.

<sup>5</sup> Here and thereafter in this paper, if not indicated otherwise, inequality is measured using *per capita disposable income*, i.e. the household income from all sources minus current taxes divided by the household size. If not indicated otherwise, the figures are taken from the website of the Federal State Statistics Service (FSSS). See: <http://www.gks.ru/>

throughout 1999-2008, despite that in this period the Russian GDP grew on average by 7% annually. The conjunctural economic growth, which was not supported by an equal growth in labor productivity, inhibited the government attempts to reduce inequality by means of income redistribution. Income inequality has stopped growing just recently as a result of the new economic crisis which has had a more adverse effect on income of the well-off strata, while income of the poor was supported by increases in the minimum wage and several indexations of pensions.



**Figure 1 – Dynamics of GDP, real mean income<sup>6</sup> and Gini index (in % to 1991)**

Note: income data for December of the relevant year

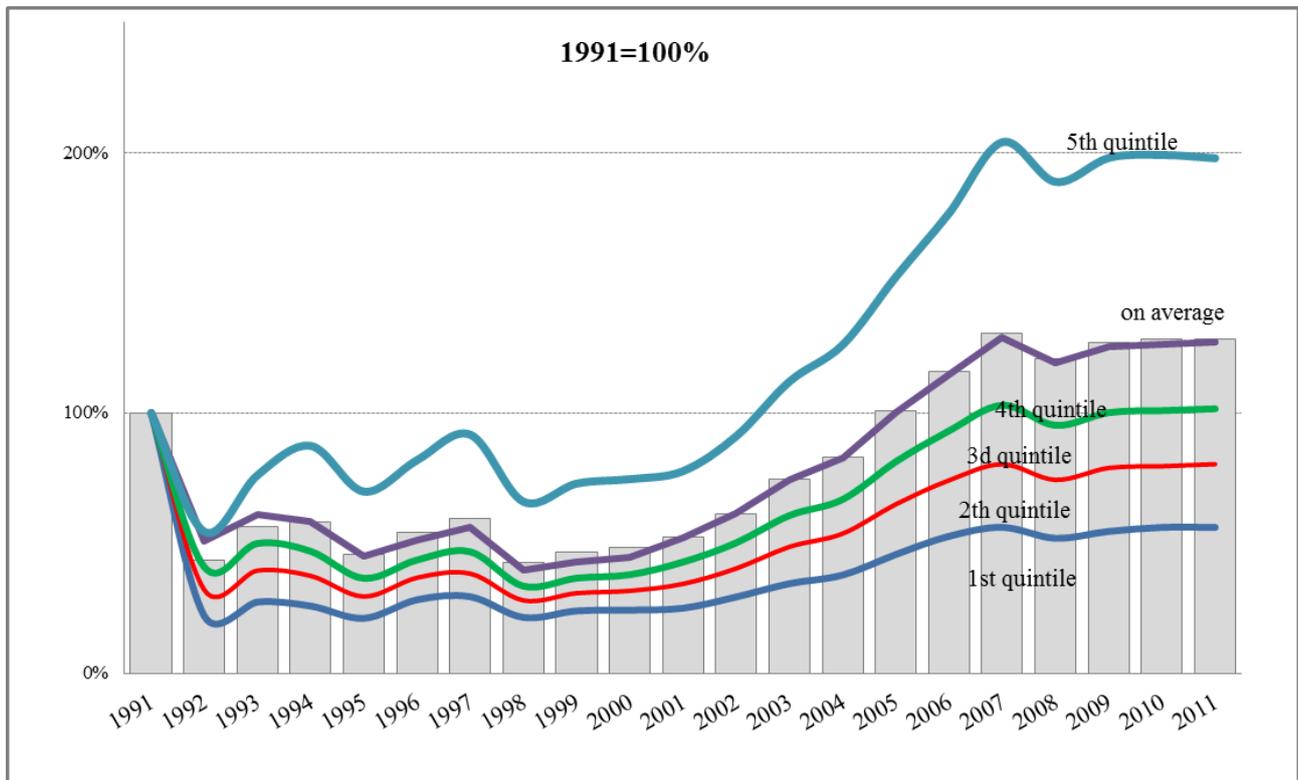
Source: Own calculations based on the FSSS data (<http://www.gks.ru/>)

Given the magnitude of income disparities observed in Russia, the dynamics of mean income is close to the dynamics of the fourth quintile of income distribution (**Figure 2**). Real incomes of the fourth quintile and of the population on average have grown by 30% compared to the last pre-reform year (1991). Yet three bottom quintiles (or 60% of the Russian population) have seen a considerably smaller growth in their income. The third quintile has restored its pre-reform income level just in 2007, two years later than the fourth quintile. Two bottom quintiles have not restored their pre-1991 income level until the current period. At the same time, incomes of the top income quintile more than doubled over the two decades. The accelerated growth in income of the wealthiest quintile can be largely attributed to the conjunctural nature of the Russian economic growth, which was mainly provided for by the energy sector and mining industries. All in all, the Russian economic growth has not been inclusive.

The above figures give some idea of the extent and dynamics of income inequality in Russia in the last 20 years, yet it is worth noting that none of the current methods of inequality assessment in Russia produces fully reliable quantitative estimates of the inequality level. Many independent researchers argue that the published inequality indices are substantially underestimated: firstly, due to reweighting of the Household Budget Survey data using the log-normality assumption and,

<sup>6</sup> Real values are calculated by adjusting the nominal values for inflation using the Consumer Price Index.

secondly, due to ignoring regional disparities in the cost of living, as well as regional disparities in the population incomes.



**Figure 2 – Dynamics of real mean income by quintile groups (1991 = 100%)**

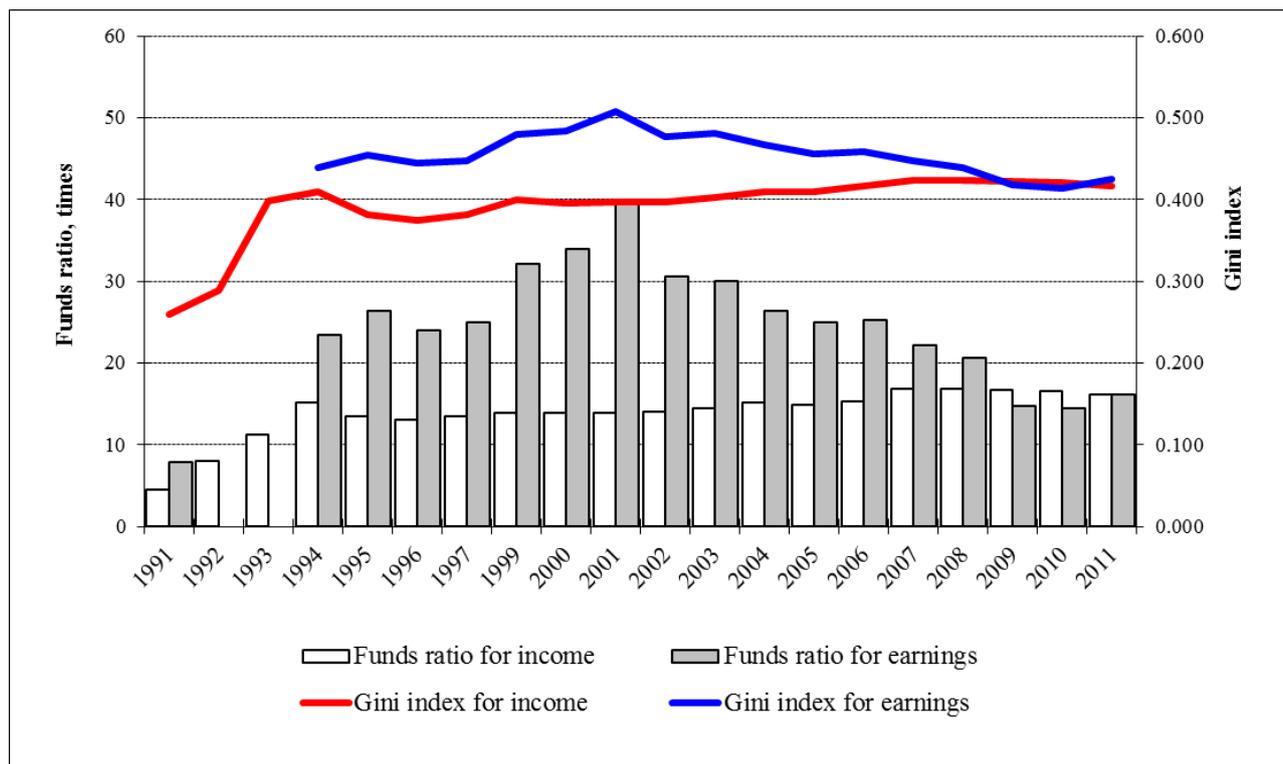
Source: Own calculations based on the FSSS data (<http://www.gks.ru/>)

## 2. What are the causes of inequality?

The effectiveness of redistributive policies to a large extent depends on the completeness and adequacy of knowledge about the nature and factors of inequality. These factors are formed at different economic levels. At the macro-level income inequality is a result of earnings inequality and public policies aimed at its regulation. Labor incomes – *earnings* and *entrepreneurial income* – are the most important and widespread income source for the population. They account for at least a half of GDP and for almost 80% of the population income (earnings – for 65-70%; entrepreneurial income – for another 10%). Earnings to a large extent determine the size of *social transfers* – the second largest source of the population income. In recent years those accounted for approximately 18% of the total income.

The earnings inequality is caused by disparities between and within the sectors of economy. Inter-sectoral earnings disparity can be explained by variation in the economic value and competitiveness of production of various industry groups. The highest average earnings (exceeding the mean level at least by 1.2 times) are observed in mining industry, infrastructure and government. The ‘medium’ group is formed by manufacturing industry and construction. The ‘inferior’ group is represented by the public sector (except for government and military sectors), trade, hotel and restaurant business, and other communal, social and personal services. Agriculture, where the average earnings constitute no more than 50% of the country average – has a particularly low status. High earnings disparities are also observed within individual sectors. The highest ratio between earnings of the top and bottom deciles (20 times and higher) in the last years was in the service sector, including banking and finance, trade, hotel and restaurant business, and other communal, social and personal services.

One of the most negative features of the Russian labour market is the high incidence of low-paid employment. As of 2011, 13% of employed had earnings below the official poverty line – the *Subsistence Minimum*. In the public sector (education, health care, social services, culture and sports), as well as in agriculture, low-paid employment was characteristic for at least a quarter of workers. The scale of low-paid employment, in turn, is influenced by three factors: firstly, the policy of containment of inflation at the expense of income security of the population, despite the fact that the rest of inflation-boosting factors are ‘set free’; secondly, the high proportion of low-skilled jobs in the economy; thirdly, the growth in the share of working-age population with increasing family constraints on full-time employment, emerging as a result of the weak development of the social care services.



**Figure 3 – Dynamics of income and wage inequality**

Source: the FSSS data (<http://www.gks.ru/>)

It is worth noting that the trend in earnings inequality does not fully coincide with the trend in income inequality (**Figure 3**). Between 1991 and 2001 the ratio of earnings of the top and bottom deciles has increased from 7.8 to 39.6 times and then fell sharply to 30.5 times in 2002, which marked the beginning of a decline in earnings inequality in Russia. In 2009-2010 earnings inequality was even lower than income inequality. It is logical to assume that the persistence of income inequality could be attributed to *entrepreneurial incomes* and *incomes from property*. However, the mechanisms of formation of these sources of income (which in sum account for approximately 15% of the population income), have not changed so essentially as to create the effect of opposite dynamics of income and earnings inequality. Most likely, the growth in income inequality together with the reduction in earnings inequality was provided by the *unreported part* of earnings, which is estimated at 40% of total earnings or a quarter of the population income<sup>7</sup>.

<sup>7</sup> The specificity of the Russian labour market is that demand and supply are balanced not due to lay-offs of the labour force as in other post-socialist economies, but due to the super-flexible mechanisms of labour remuneration, which allow firms to keep the labour force, at the same time significantly reducing their wages. The increased flexibility of earnings together with the stable employment rate has caused the development of non-standard forms of remuneration,

In addition, at the macro-level inequality is caused by the weakness of the tax related redistributive mechanisms, including a flat income tax rate, regressive social security contributions and low property taxes. For example, the total personal income tax and social security contributions in 2010 on average amounted to 43% of net earnings<sup>8</sup>. In 2011, the social security contributions rate has been increased by 30% (from 26% to 34% of gross earnings). In other words, labor income is subject to increasingly higher taxes. On the other hand, high-income groups pay virtually the same percentage of their income in social security contributions as low-income groups do, because a significant part of income of the former comes from entrepreneurial activities, property, investment and unreported earnings. Even if a portion of their income is made up of statistically observed earnings, a large part of them are not subject to social security contributions due to their regressivity. In 2010, the effective tax rate (income tax and social security contributions relative to disposable income) of the bottom decile was 10.6%, while the same figure for the 9th and 10th deciles were 16.4 and 14.7%, respectively. The property taxes on the rich are almost non-existent. Yet the main causes of high inequality at the macro-level are the high prevalence of low-paid employment and the lack of jobs in the formal sector of the economy.

At the micro-level, income inequality is a result of disparities in incomes of households with different demographic and socio-economic characteristics. For example, earnings tend to grow with age due to the accumulation of experience and/or improving the match between employees' skills and employers' requirements. The family composition has an impact on household incomes; the latter are usually reduced due to the presence of children. Since employment is the main source of livelihood for most households, household incomes are largely determined by the labour market status of the household members. Education is a determinant of an individual's prospects in the labour market. According to the human capital theory, individual productivity is growing with the number of years of education, which is reflected in higher earnings of people with higher education. The prospects of individuals in the labour market may also depend on the spatial aspects of the labour market – access to employment and earnings may be higher in more urbanized territories. If there are obstacles to mobility of people, spatial inequality can be a source of stagnant poverty for households living in less economically advanced territories.

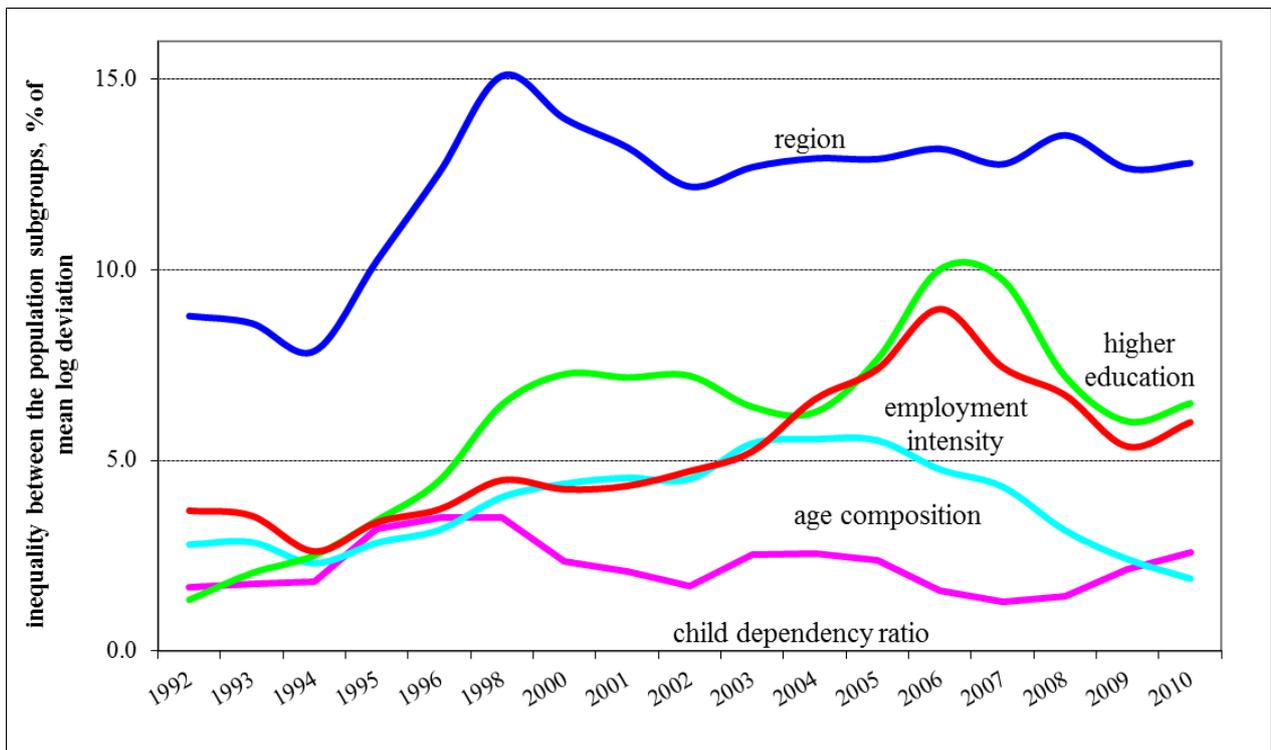
The contribution of those household characteristics to overall inequality can be determined by decomposing aggregate inequality indices by population subgroups<sup>9</sup>. The application of this method in Russia (**Figure 4**) has shown that in the period of 1992-2010 the fastest growing factor of inequality was 'higher education', whose weight increased five-fold (or seven-fold excluding the crisis years 2008-2009). At the same time, during the whole period the most important inequality factor was regional inequality, even though its contribution started to decrease since 2000. It is important to stress the different roles of these two factors in the Russian economy. Rising inequality as a result of the growth in incomes of highly-educated people (due to increased return on investment in education) is typical for developed market economies, hence a significant increase in inequality due to education is a positive trend. At the same time, high contribution of regional disparities to the overall inequality is a negative phenomenon in terms of economic development, and can be regarded as a manifestation of a social risk, a barrier for inclusive economic growth and human development.

---

which are hidden from statistical observation. Only a half of unreported earnings can be classified as informal economy, while the other half is made up by earnings of employees at small and medium firms which fall out of Labour Force Surveys. The poorest and the richest part of the population tend to have the highest share of unreported earnings. Typically, this part of earnings is most susceptible to reduction in the crisis conditions, but it restores and grows very fast as soon as recovery begins. See: Gimpelson, V. and R. Kapeliushnikov (2011). Labour market adjustment: is Russia different? *IZA Discussion Paper No. 5588*. Bonn, The Institute of Study of Labour.

<sup>8</sup> Own calculations based on the tax-benefit microsimulation model RUSMOD. See: Popova, D. (2012). Constructing the tax-benefit microsimulation model for Russia - RUSMOD. *EUROMOD Working Paper No. EM7/12*.

<sup>9</sup> See: Shorrocks, A. (1984). "Inequality decomposition by population subgroups." *Econometrica* **52**(6): 1369-1386.



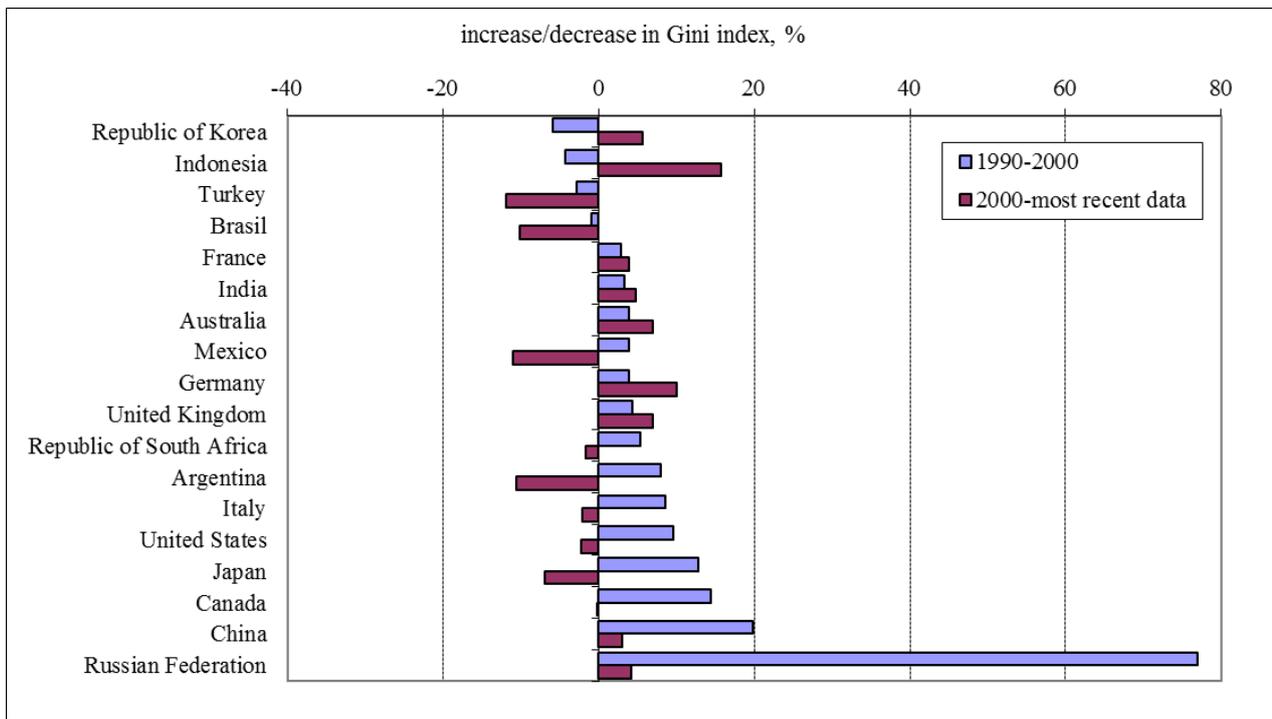
**Figure 4 – Factors of inequality at the micro-level (% contribution of inequality between the population subgroups to total inequality, mean logarithmic deviation)**

Source: Own calculations based on the Russian Longitudinal Monitoring Survey (<http://www.hse.ru/rlms>)

### 3. Inequality in Russia and other G20 countries

The experience of the G20 countries suggest that high levels of income inequality and the growth in inequality are not inevitable attributes of a certain stage of economic development and depend on the effectiveness of redistributive policies, rather than the size of national wealth. Countries with the lowest level of inequality (Gini coefficient of about 0.300 or below) are rich countries with a strong welfare state (France, Germany, Japan, Korea and Canada). The medium group (Gini coefficient of 0.320-0.380) consists of rich countries with a weak welfare state (Italy, Australia, the United Kingdom and the United States) and three middle-income countries (India, Turkey and Indonesia). Russia, together with South Africa, Mexico, Brazil, Argentina and China, belongs to the group with the highest inequality level (Gini index of about 0.400 or higher).

**Figure 5** indicates that over the past 20 years income inequality has increased in almost all G20 countries, including the wealthiest. However, Russia is the clear leader in this regard. For example, in China, ranked second after Russia by the inequality growth, Gini index has increased by 20% in the 1990s and by 3% in the 2000s. Russia's Gini index has risen by 77% in the 1990s and by 4% in the 2000s, despite the fact that the initial level of inequality in Russia before the market reforms was lower than in rich European countries. There are some positive experiences in G20 as well; in Brasil and Turkey inequality has been decreasing in the last two decades, while in the last decade there has been a reduction in inequality in Argentina, Mexico and Japan.



**Figure 5 – Dynamics of inequality in G20 countries**

Note: Gini index for equivalised disposable income (square root equivalence scale).

Source: Own calculations based on the Standardised World Income Inequality Database (SWIID), version 3.1, December 2011<sup>10</sup>.

#### 4. What changes can affect the level of inequality in Russia?

Economic inequality can be affected by redistributive policies targeted at the poor and the wealthy, as well as by the general economic development trends.

Improvement of the *social protection system* can significantly reduce inequality. The key measures are related to improvement of the system of targeted cash transfers for the poor, which in 2010 accounted just for 0.5% of GDP. Non-contributory social assistance programs in total accounted for 2.8% of GDP, but most of these resources (1.7% of GDP) was spent on the privileges<sup>11</sup> which generally do not reach the poor well and achieve little in terms of poverty reduction. Noteworthy, in other middle-income countries spending on targeted transfers for the poor range between 1 and 2%, while in OECD countries on average they reach about 2.5% of GDP<sup>12</sup>. Apart from cash transfers, efforts should be made to increase the availability and quality of childcare facilities, which will have a positive impact on the productivity of women. The first priority is elimination of the shortage of places in kindergartens, while the strategic goal is the universally available pre-school education.

<sup>10</sup> See: Solt, F. (2009). "Standardizing the World Income Inequality Database. ." *Social Science Quarterly* **90**(2): 231-242.

<sup>11</sup> This is the element of the social protection system inherited from the Soviet times. The *privileges* are not means-tested benefits in the form of cash transfers or free services or discounts on payment for services provided to vulnerable categories of the population, such as people with disabilities, war veterans, dependents of war victims, victims of the Chernobyl accident, etc., but they also cover numerous categories for services to the state and those based on the occupational status.

<sup>12</sup> See: Weigand, C., & Grosh, M. (2008). Levels and patterns of safely net spending in developing and transition countries. *Social Protection Discussion Paper No. 0817*. Washington DC: The World Bank.

Regulation of inequality through *taxation* is generally carried out by means of reducing the incomes of the rich. One of the most effective tools of inequality reduction is a progressive tax scale, but it is not a priority measure to be implemented in Russia. Introduction of the progressive income taxation may cause a rise in informal economy and can stop the growth of the middle classes. The structure of inequality in Russia calls for the introduction of tax measures targeted at the richest groups of the population, such as property and luxury taxes. Noteworthy, some attempts in this respect have been recently initiated by the government and are expected to come into force in January 2014<sup>13</sup>. Apart from that, the redistributive capacities of the tax system could be achieved by reducing taxes for the poor. A good alternative to the reform of tax rates could be the increased support to families with underage children (who constitute the majority of the poor in Russia<sup>14</sup>) through the system of tax benefits, which are successfully applied by many European countries. Tax benefits are less capital-intensive and can be easily spelled out in the Tax Code.

Promoting equal opportunities in access of the population to good quality *education and health care services* is an important source of inequality reduction. Despite the prevalence of cash income as the main proxy of well-being, over the past few decades there has been observed an expansion of approaches based on multidimensional estimates of well-being, taking into account not only income, but also non-monetary variables, such as health and education. For example, such multidimensionality is the foundation of the UNDP Human Development Index (HDI). In 2010 Russia was ranked 66 by the overall HDI value<sup>15</sup>. The inequality adjusted HDI improves the position of Russia by 7 ranks due to the fact that countries with higher income inequality such as Mexico, Brazil, Venezuela, go down in the overall ranking of countries. However, the HDI based on indicators of health and education only (without the GNP measure) worsens the position of Russia by 13 ranks (mainly due to the extremely low life expectancy values). This demonstrates that the material gains from the Russia's economic growth have not yet transformed into gains in social development.

*Regional inequality* remains one of the most problematic features of inequality in Russia. Some politicians see the solution to the problem in supporting the depressed territories through the system of intergovernmental transfers. However, the comprehensive research suggests that this approach is inequitable, as the major part of those resources are being captured by the regional elites. The package of policies to reduce regional disparities should include policies promoting labor migration, investment in social infrastructure of the depressed territories and subsidies to firms creating new jobs, instead of subsidies to the budgets of those territories. Assisted migration, in turn, must be accompanied by policies facilitating the reallocation of people through the development of social housing and mortgage loans.

---

<sup>13</sup> The amendments to the existing legislation are currently being developed by the Ministry of Finance. They include the introduction of higher tax rates on luxury cars and real estate. For example, the document suggests a tax on luxury cars that cost more than 5 million rubles. There will be a double tax rate for cars that cost 10.5 million rubles and are not older than 5 years, and a triple rate for cars that cost 10-15 million rubles and are not older than 10 years. This is a regional tax, so regional authorities have the right to raise or reduce the tax rates. In addition, the taxes will be levied on real estate with the cadastral value of over 300 million rubles. If the total value of the real estate is over 300 million rubles, the dwelling will be taxed at 0.5% rate and the land – at 1.5% rate. If the estimated cost of a dwelling or an unfinished building is over 300 million rubles, it will be taxed at 0.5-1% rate.

<sup>14</sup> See: UNICEF (2011). *The situation analysis of children in the Russian Federation: on the way to the equal opportunity society*. Moscow: UNICEF.

<sup>15</sup> See: UNDP (2011). [National Human Development Report for the Russian Federation 2011. Modernisation and human development](#). Moscow, UNDP.

## References

- Firebaugh, G. (2003). The new geography of global income inequality. Cambridge, Harvard University Press.
- Gimpelson, V. and R. Kapeliushnikov (2011). Labour market adjustment: is Russia different? IZA Discussion Paper No. 5588. Bonn, The Institute of Study of Labour.
- OECD (2008). Growing unequal? Income distribution and hoverty in OECD countries, OECD Publishing.
- Ovcharova, L. and E. D. Tesliuk (2006). Poverty and inequality in Russia: sensitivity of poverty and inequality statistics to alternative definitions of households welfare. Illustration using the NOBUS survey. Moscow, The World Bank.
- Popova, D. (2012). Constructing the tax-benefit microsimulation model for Russia - RUSMOD. EUROMOD Working Paper No. EM7/12.
- Shorrocks, A. (1984). "Inequality decomposition by population subgroups." Econometrica **52**(6): 1369-1386.
- Solt, F. (2009). "Standardizing the World Income Inequality Database. ." Social Science Quarterly **90**(2): 231-242.
- UNDP (2011). National Human Development Report for the Russian Federation 2011. Modernisation and human development. Moscow, UNDP.