

HIGHLIGHTS

What do we know about income inequality in Serbia so far?

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Introduction

Serbia records the highest level of inequality in income distribution, measured by the Gini coefficient, among European countries, according to data from the Survey on Income and Living Conditions. The Gini coefficient of 38.2 points in 2015 was significantly higher than the average Gini for the EU-28 countries (31.0), and also higher than in any other former Yugoslav Republic, such as Macedonia (35.2), Croatia (30.6), and particularly Slovenia (24.5).

Nevertheless, the interest of decision-makers in Serbia for the problem of inequality has so far been rather limited. The main concern of the government over the past several years has not been to address the problem of inequality and poverty, but above all, fiscal consolidation, preservation of macroeconomic stability and promotion of growth and investment. Considering the low interest of decision-makers in the topic of inequality, it is not surprising that no formal procedure for assessing the distributive effects of public policies before their adoption has been developed.

At the same time, academic research on inequality in Serbia is limited. Milanovic (2003) examines the inequality of consumption and income, and contribution of each component of income to inequality. Krstić et al. (2007) and Krstić and Sanfey (2011) analyse the scope and the dynamics of wage inequality, as well as factors explaining it, using the Labour Force Survey (LFS) 1996–2003 data and Living Standards Measurement Study (LSMS) 2002–2007 data. Randjelović and Žarković-Rakić (2011) show that the income tax system in Serbia has significantly less redistributive effect, i.e. the capacity to reduce inequality, in relation to the income tax system in (mostly older) EU member states. Similarly, in the older EU member states the most important social assistance benefits have considerably stronger impact on reduction of inequality compared to the social benefits in Serbia. So, although fragmented and limited, the current research suggest possible causes of high inequality in Serbia - low redistributive capacity of taxes and social benefits, on the one hand, and low

employment rates and pronounced duality of the labour market on the other.

In this Highlight we will show what we know about income inequality so far, that is, we will discuss the current state of inequality and inequality trend over the last decade in Serbia compared to the neighbouring countries and countries of the European Union (EU), as well as the results of recent research that may be relevant to decision makers in our country.

In the analysis we will use data from the Survey on Income and Living Conditions (SILC) conducted by the Statistical Office of the Republic of Serbia (SORS) since 2013, according to a methodology that is comparable to EU standards. This survey provides detailed information on total household and personal income and its components, and is therefore the best source of data for measuring inequality according to the official methodology of the SORS (and the Eurostat). The starting aggregate for inequality analysis is the household net disposable income. It is a cash income that is, after paying taxes and contributions, available to the household for consumption and savings. The household disposable income is further divided with the modified OECD equivalence scale (to take account of the household composition and the economy of scale) resulting in equivalent available income, which is the basis for calculating inequality.

Serbia has a high income distribution inequality

By monitoring the income inequality, measured by the Gini coefficient, in the last four years, and by comparing the data available for the previous period, we can draw several conclusions:

(1) According to the SILC data, the value of the Gini coefficient that ranged from 38.0 to 38.6 in the period 2013–2016 indicates a relatively stable and high income inequality in Serbia, significantly higher than the EU-28 average;

Table 1: Gini coefficient (*100) for equivalent disposable income, Serbia and EU, SILC, 2013–2016.

	2013.	2014.	2015.	2016.
Serbia	38,0	38,6	38,2	38,6
EU	30,5	30,9	31,0	...

Source: Survey on Income and Living Conditions (SILC). For Serbia, Press Release no. number 087, Statistic Office of the Republic of Serbia; For EU Eurostat: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_di12&lang=en

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2) there has been an increase in inequality over the previous decade, but a part of this growth is definitely a result of the different data sources used: Household Budget Survey (HBS) and SILC which became available only after 2013 (Krstic, 2016);

(3) inequality of income over the period 2006–2013 was probably higher than the inequality that could have been monitored on the basis of the Household Budget Survey, but until the emergence of SILC there were no adequate survey data designed for the coverage of income that would have shown this (other than LSMS data);

To provide an answer to the question of how to reduce income inequality in Serbia, we considered potential causes of high inequality. One of the causes of high inequality in Serbia is the high percentage of persons living in households with very low work intensity (Krstic, 2016), and these are persons which work less than 2.5 months during one year. SILC data from 2013 show that the work intensity of household members in Serbia is very low, with a significantly larger share of these persons aged 60 years (21.2%) than the European average (10.5%) and individual EU countries (with the exception of Ireland 21.1%). This is a result of the high inactivity of the working age population, as well as the fact that a low percentage of such persons live with other adults who work. Serbia has the largest share of people who do not work, especially the unemployed, in the working age population compared to the EU countries.

Analysis of inequality by work intensity of household members indicates that income inequality is the highest for households with very low work intensity and it decreases with an increase in work intensity of household members (Krstic i Zarkovic Rakic, 2017a). The greatest reduction in inequality is the transition from very low to low labour intensity, which is expected because persons who do not work also belong to households with very low intensity work. This suggests that a significant reduction in income inequality could be achieved by employing persons in these households.

Decomposition of the total inequality into inequality between households with different levels of work intensity and the remaining inequality within these households shows that the differences in average income among households with different levels of work intensity explain 19% of the total income inequality. This means that most of the income inequality (81%) can be attributed to inequalities within households with different levels of work intensity, which is a conclusion that can be relevant from the aspect of creating public policies that could contribute to reducing inequality. Hence, the reduction in income inequality within these households

would result in a significant reduction in total inequality, and potential factors that could affect inequality of income/wages within these households are characteristics of the persons (sex, age, education, marital status, activity, etc.) and households, which will be additionally analysed in the following paragraphs.

Decomposition of income inequality by income sources via classical method (measured by the Gini coefficient) indicates several important findings (Krstic i Zarkovic Rakic, 2017a).

(1) wages which constitute the largest source of income (three quarters of the overall disposable income) have high inequality (0.615) and they are unequally distributed towards better of households. This all influenced that wages contributed the most to total inequality (93%) and increased it. All other income sources, other than income from capital (which influenced very little) decreased inequality;

(2) taxes have the largest impact on reducing inequality, followed by social transfers, pensions, and finally income from self-employment and private transfers. However, the impact of these components of income on reducing inequality is very small because, other things being equal, a one percent increase in taxes reduces income inequality by 0.062 while for social transfers this effect is somewhat lower, amounting to 0.055.

Decomposition of total inequality by sequential approach is another method of decomposing the total income inequality which was used to compare the direction and magnitude of the impact of each income source on inequality with the average value for the EU countries (Krstic i Zarkovic Rakic, 2017a). It implies that the impact of each income source is calculated by comparing income inequality without and with that income source.³

All income sources (except for wages, whose impact was not tested because the distribution of wages was the initial, benchmarking, distribution with which the influence of the self-employment income is compared) reduce the inequality. Impact direction is the same for all sources as in the EU countries; the only difference is in a self-employment income, because in most EU countries this income increases inequality (ILO 2015), while in Serbia it decreases it. This is because most of the self-employment income is associated with vulnerable employment, since the distribution of this income is primarily directed towards the poorer population.

³ This decomposition method is not suitable if we want to determine which component has the greatest impact on decrease/ increase of inequality since the reference distribution changes with inclusion of each new component of income (ILO, 2015). However, it is useful for international comparisons.

Although the Gini coefficient of disposable income in Serbia is significantly higher than the average for the EU-28, it is interesting to note that the Gini coefficient for market income is at the EU average (55.1 vs 55.2). This indicates that the main reason for such a high inequality of disposable income in Serbia is the low redistributive role of social transfers and taxes.

The largest difference in the impact of income sources on income inequality in relation to the EU is recorded for pensions. Due to the effect of pensions, the difference between the Gini coefficient for market and the Gini coefficient for disposable income amounts to an average of 17.2 percentage points for EU countries and only 10.9 percentage points for Serbia. One possible explanation could be found in smaller coverage of the population by pensions in Serbia than in the EU, since 93% of men and only 79% of women in Serbia receive pensions according to the 2012 Census data, and the fact that in most EU countries persons over 65 receive social pensions, which also affect reduction in inequality. Other social transfers reduce inequality in Serbia to a somewhat less extent than the EU average shows (3.5 vs. 3.7 percentage points, respectively) which is explained by the low coverage of households with monetary social assistance and child benefits and the low amounts of these benefits in Serbia. Taxes have a significantly lower impact on reducing income inequality than in the EU (2.7 vs. 4 percentage points), which is a result of a very low level of progressivity of the Serbian income tax system.

Finally, given that the wages make the most of the total inequality of income (according to the presented results of the decomposition of income inequality by income sources), we analysed the factors affecting the wage inequality (Krstic and Zarkovic-Rakic, 2017b). By applying a regression method, we decomposed the wage inequality by different characteristics of persons which we expect to influence the wages, such as age, level of education, gender, etc. Although a significant portion of the wage variation remains unexplained by variables in regression, the results indicate a significant role of education in explaining the wage inequality in Serbia. The level of education makes up to 63% of the estimated share of income inequality in 2012. The role of education as a factor influencing income inequality was dominant during the 2000s on the basis of the data of the Living Standards Survey (Krstic and Sanfey, 2011). Data from PISA surveys that show that our education system fails to cancel the effects of socio-economic inequalities are indicative in this sense. Moreover, in some segments it deepens them as the data show⁴ that there is twice as many functionally illiterate children in

the families that are among 20% of the population with the lowest socio-economic status, than in 20% of wealthiest families. The children in the first group lag behind their peers whose parents belong to higher social classes by two school years.

How to reduce income distribution inequality in Serbia?

An increasing number of research points to the growth of income inequalities in developed economies over the past three decades (OECD 2011, IMF 2014). Some of the policy proposals aimed at reducing income inequality include introduction of the guaranteed minimum income, universal child allowance, and increase in capital ownership for larger number of people. Active management of the process of technological progress, which would increase the employability of workers, especially those with low qualifications is also emphasized. It is also recommended to monitor the distributional consequences of inclusion in international trade flows (Atkinson, 2015).

Serbia, on the other hand, even without going through current austerity measures, could not financially afford the introduction of a guaranteed minimum income or universal child allowance. Expenditures on two basic social benefits, social welfare and child allowance account for 0.6% of GDP, far below the average 1.1% of GDP for similar expenditures in EU countries (Clavet et al., 2017). Low amounts of these two social benefits and the limited coverage of the population cannot significantly contribute to the reduction of inequality. Nevertheless, although in the situation when the austerity measures are being implemented it is unrealistic to expect an increase in social spending, it is possible to work on better targeting of benefits, especially child allowance, by ensuring less leakage of resources to not-so-poor individuals (e.g. those who earn income in the shadow economy) and diverting the funds to those who need them most.

Globalization and technological changes also affected the situation in the Serbian labour market, but the biggest changes were a result of the restructuring of the economy, extinction of existing and creation of new enterprises, as was the case in other former socialist countries. Despite a certain recovery in the period after the last economic crisis, the situation in Serbian labour market is still worrying as the number of people with very low work intensity increases. Only in the last two years, their number increased by 130,000. Majority of them are unemployed or inactive (group dominated by pensioners), and most have low levels of education.

⁴ http://www1.worldbank.org/poverty/visualizeinequality/PISA/cov_gaps.html

The results of the total income inequality decomposition by work intensity of household members, shows that the biggest impact on reducing income inequality is achieved by a reduction of income inequality within households with different work intensity. This means that the increase in the employment of persons in these households would reduce income inequality, because the number of those without pay or those who receive unemployment benefits will be reduced. However, this would not be enough, if these new jobs are not full time jobs, permanent, in the formal sector, or in other words higher quality jobs with higher wages, better social protection, and better working conditions.

In order to increase their employability, it is necessary to increase the level of their skills and qualifications through counselling, additional training and other active labour market measures implemented by the National Employment Service. In this regard, spending on an active labour market policy measures should be increased, as envisaged by the National Employment Strategy, according to which spending for these purposes should increase to 0.5% of GDP by 2020. However, this currently seems difficult to reach as spending on active measures declined from year to year and now amount to less than 0.1% of GDP.

It is, however, important to act even before individuals enter labour market, and that means providing access to high quality education to the largest possible number of people. In this regard, data show that the rate of enrolment in high schools is significantly lower than the average (by almost 30%) for children from lower socio-economic classes and 16% higher for children from wealthier families. These inequalities continue in the course of further education because high school students, although they account for only one third of all graduates, participate in almost 50% of the total number of students in the first year of academic studies (Baucal and Pavlović Babić, 2009).

Increasing the progressivity of citizens' income tax in Serbia could be achieved through introduction of tax deductions for supported family members (at present this option is available only to the citizens who pay annual income tax, i.e. those with high income) and by increasing the tax-exempt threshold from the current 25% of the average wage to 50% (Arandarenko and Vukojevic, 2008). Crucially, however, the existing so-called schedular tax system, which is becoming increasingly rare in modern tax systems, should be replaced with a system that integrates income from labour and capital and applies progressive tax rates, which should range from 15% to 30%.

Finally, further research should address the impact of pensions on reducing inequality in order to precisely identify the causes of the lower redistributive capacity of this source of income. For now, it seems that the smaller coverage of pensions, especially of the female population in rural areas, is one of the causes of such effect. Namely, agricultural households, when deciding that some of the members are to be registered for social insurance, choose a household carrier or male family member. In this regard, in order to reduce inequality, and especially poverty in old age, it is necessary to work on increasing the coverage of the rural population with social security.

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