GORANA KRSTIĆ[1]
E-mail: gkrstic@ekof.bg.ac.rs

WOULD AN INCREASE IN LOW WORK INTENSITY CONTRIBUTE TO REDUCING POVERTY AND INEQUALITY IN SERBIA?

DA LI BI POVEĆANJE NISKOG INTENZITETA RADA DOVELO DO SMANJENJA SIROMAŠTVA I NEJEDNAKOSTI U SRBIJI?

JEL CLASSIFICATION: D31, D63, P2

ABSTRACT:

This paper presents a relationship between low work intensity, poverty and inequality in Serbia over 2012–2014 period, based on data from the Survey of Income and Living Conditions (SILC). Low work intensity contributes significantly to the risk of poverty, considering that approximately two out of three persons living in households with very low work intensities run the risk of poverty. On the other hand, only 40% of persons at risk of poverty live in such households, which indicates that there are other causes of poverty, such as low wages and social transfers that have not been sufficient to raise equivalised income above the risk of poverty threshold. The results suggest that an increase in work

1 Faculty of Economics, University of Belgrade

intensity of household members would result in a poverty decrease, but would also decrease income inequality measured by the Gini coefficient.

KEY WORDS:
POVERTY RISK, LOW WORK INTENSITY, INEQUALITY, SERBIA

APSTRAKT:

Ovaj rad prikazuje vezu između niskog intenziteta rada, siromaštva i nejednakosti u Srbiji u periodu 2012-2014. na osnovu podataka Ankete o prihodima i uslovima života (SILC). Nizak intenzitet rada značajno doprinosi riziku od siromaštva budući da približno dva od tri lica koja žive u domaćinstvima sa veoma niskim intenzitetom rada je i u riziku od siromaštva. Sa druge strane, samo 40% lica koja su izložena riziku od siromaštva živi u ovakvim domaćinstvima, što ukazuje i na druge uzroke siromaštva, kao što su niske zarade i socijalni transferi koji nisu bili dovoljni za povećanje ekvivalentnog dohotka iznad praga rizika od siromaštva. Rezultati pokazuju da bi povećanje intenziteta rada članova domaćinstva dovelo do smanjenja siromaštva, ali i do smanjenja nejednakosti dohotka, merene Gini koeficijentom.

KLJUČNE REČI:
RIZIK OD SIROMAŠTVA, NIZAK INTENZITET RADA, NEJEDNAKOST, SRBIJA

1. INTRODUCTION

The at-risk-of-poverty rate and percentage of persons living in households with very low work intensity are two out of three components of the at-risk-of-poverty or social exclusion indicator formulated by the EU in 2010 with the aim of encompassing other intangible aspects of poverty and exclusion from the labour market.

The at-risk-of-poverty rate, low work intensity and income inequality in Serbia can be monitored since 2013, when the first Survey of Income and Living Conditions was conducted, according to the internationally harmonized Eurostat methodology. These indicators for Serbia are among the highest compared to EU countries. Every fourth person in Serbia (25.4%) in 2014 had equivalised disposable income below the national at-risk-of-poverty threshold, while every fifth person below the age of 60 lived in a household with very low work intensity (Statistical Office of the Republic of Serbia, SORS 2016). Income inequality measured by the Gini coefficient was 38.2 (SORS, 2016). Despite that, research on income inequality is sporadic (Milanović 2003; Krstić 2011, 2016; Ranđelović and Žarković-Rakić 2011), unlike research on poverty and unemployment, and this topic has not been a priority on the agenda of policy makers.

The number of persons exposed to poverty risk increased in 2013, while it remained almost unchanged in 2014 , although the at-risk-of-poverty threshold (poverty line) increased, which indicates that persons at risk of poverty also benefitted from an income increase. The percentage of persons under the age of 60 living in households with very low work intensity increased by 17% in 2014 compared with 2012, which is primarily a consequence of the increase in the share of persons living in these households in the first two income quintiles. Income inequality in this period, although very high, remained almost at the same level.

The main objective of the paper is to analyse and quantify the relationship between low work intensity, poverty and inequality in Serbia using the Survey of Income and Living Conditions data. In accordance with the set objective of research, the following hypotheses have been formulated:

H1: Increase in work intensity of household members may result in a lower at-risk-of-poverty rate;

H2: Increase in work intensity of household members would result in a reduction of income inequality, measured by the Gini coefficient.

Having in view the objective of research, as well as defined hypotheses, the paper is structured in six sections. After the introduction, the poverty measurement methodology, work intensity and inequality, as well as data used will be presented in section two. The results of the relative poverty analysis (i.e. the risk of poverty) will be presented in part three. The impact of low work intensity on poverty will be analysed and quantified in section four, while the impact of low work intensity on inequality in income distribution will be analysed in section five. Relevant conclusions will be derived at in the last part, along with implications for public policies, and a proposal for the direction of further research.

2. METHODOLOGY AND DATA

At risk of poverty rate

According to the concept of relative poverty, the at-risk-of-poverty rate is defined as the share of people (in the total population) with an equivalised disposable income below 60% of the national median equivalised disposable income (Eurostat, 2012). The main advantage of poverty measurement according to this methodology is in its comparability with poverty indicators among EU countries using this concept, considering that the poverty line is determined relative to a certain percentage of the national income median (60%) in every country. Relative poverty indicators in Serbia are fully comparable with relevant EU indicators.

The disposable net income of a household includes monetary labour income, income from property, pensions, social and other transfers which the household receives from persons who are not members of their household. That is income, after taxes and contributions have been paid, that is available to the household for spending or saving. Following the Eurostat methodology, income in-kind of the household is not included. The equivalised disposable income is calculated by dividing a household's disposable income by the modified OECD equivalence scale (the first adult member of a household is given a weight of 1, other adult members of a household are given a weight of 0.5, while a weight of 0.3 is given to each child under the age of 14). The relative poverty line is alternatively referred to as the at-risk-of-poverty threshold (Eurostat, 2012a).

It is necessary to stress that the at-risk-of-poverty rate, according to the Eurostat definition, 'does not measure poverty, but low income in comparison to other residents of the country, which does not necessarily imply a low standard of living'.[2] This concept of relative poverty is based on financial assets (or lack thereof) which should enable individuals to satisfy needs that are considered standard within their particular society.

The concept of relative poverty is not most appropriate for monitoring changes in the at-risk-of-poverty rate over time, since a change in this indicator may be a consequence of a rise or fall of the poverty line (resulting from a change in income distribution), rather than the consequence of a change in income of persons who were at risk of poverty. If the poverty line and the at-risk-of-poverty rate move in the same direction (increase or decrease), we cannot arrive at a proper conclusion regarding the at-risk-of-poverty rate trend. However, if these two indicators move in opposite directions, we can conclude with certainty that a change in the at-risk-of-poverty rate has occurred, not as a consequence of a changed poverty line, but due to a change in income of the population. For example, if poverty line increases and the at-risk-of-poverty rate decreases, then the income increase of a part of the population was such that it rescued them from an at-risk-of-poverty situation. Similarly, if the poverty line is lowered, like in many EU28 countries due to the economic crisis, and poverty risk increases, then the decline in the population's income contributed to the fact that many found themselves at risk of poverty (Krstić, 2014). To avoid possible misinterpretation of changes in this rate, Eurostat calculates the at-risk-of-

2 http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:At-risk-of-poverty_rate

poverty rate fixed in time (that is year 2008), as well as the persistent at-risk-of-poverty rate (Eurostat, 2012).

The rate of persons living in households with low work intensity – is defined as the share of persons under the age of 60, living in households in which adults (aged 18-59) worked, on average, less than 20% of the total number of months in which they could have worked during the reference period (Eurostat, 2012). The reference period refers to 12 months in a year preceding the year of the survey. For example, a two-member household with very low intensity is a household in which none of the working-age members work or one member works four hours two days a week, assuming a full-time 40-hour workweek. This indicator points to exclusion from the labour market, which is the main reason for social exclusion. A significant number of these persons receive social assistance; periodically participate in the labour market, and have hindered access to health, educational and cultural services (Eurostat, 2013).

Other categories of work intensity are the following: low (from 20% to less than 45%), medium (from 45% to 55%), high (over 55% to 85%) and very high (over 85% to 100%).

Income inequality

To measure income inequality we have used the Gini coefficient, defined as the average difference between all possible income pairs in a population ($x_{i,j}$), expressed as a part of the total income (Gini, 1912):

$$G = \frac{1}{2N^2\mu}\sum_{n=1}^{N}\sum_{j=1}^{N}\left|x_i - x_j\right| \tag{1}$$

where μ is the average income, and N is the number of households.

GE−generalised entropy is defined by the following formula (Shorrocks, 1980):

$$GE(\alpha) = \frac{1}{\alpha(\alpha-1)}\left[\frac{1}{n}\sum_{i=1}^{n}\left(\frac{x_i}{\mu}\right)^{\alpha} - 1\right] \tag{2}$$

where μ is the average income, α is a parameter which represents a weight allocated to the income distance between different parts of distribution which may take any real value. For lower α values, GE is more sensitive to changes in the lower part of income distribution, while for higher α values, GE is more sensitive to changes in the upper part of income distribution. The most frequent values for α are 0, 1 and 2. G(2) is one half of the square of the coefficient of variation.

GE-generalised entropy may be decomposed according to selected population groups (Cowell and Jenkins, 1995) so that total income inequality (I) equals the sum of inequalities between selected groups (I_b) and residual inequality within the group (I_w):

$$I = I_b + I_w \tag{3}$$

I_b is defined as:

$$I_b = \frac{1}{\alpha^2 - \alpha}\left[\sum_{j=1}^{k} f_j \left(\frac{\overline{y}_j}{\overline{y}}\right)^{\alpha} - 1\right] \tag{4}$$

I_w is defined as:

$$I_w = \sum_{j=1}^{k} w_j GE(\alpha)_j \tag{5}$$

$$w_j = v_j^{\alpha} f_j^{1-\alpha} \tag{6}$$

where f_j is the share in total population, and v_j the share in total income of every group j.

Inequality within a group is defined as the weighted sum of inequalities within each group, where weights are population shares and income shares. Inequality between the groups is calculated for the entire population when every individual income y within a group is replaced by the average income of that group $\overline{y}_j$, so that this inequality reflects the difference in average income between the groups.

The decomposition of inequalities between groups and within a group has been made for $\alpha=2$ i.e. for one half of the coefficient of the variation square.

Data

The paper draws on the data from the Survey of Income and Living Conditions (SILC) which is carried continuously since 2013 and is a regular annual statistical survey used to assess financial poverty, on the basis of household income, according to a methodology which is comparable with EU standards. In 2015, the survey encompassed 5,680 households and 15,552 persons aged 16+. The reference period for income and labour market activity is the previous year. The survey is representative at the national and regional levels.

SILC provides data on total income of households and of household members, and on income components, and therefore presents the best source of data for measuring poverty and inequality, given that the risk of poverty and inequality estimates are based on the household income.

SILC also provides data on the social and demographic characteristics of persons, their professional activities (for persons aged 16 and over), education, quality of life, and/or their health condition, material deprivation and living conditions, as well as data on characteristics of households, housing conditions and costs. On the basis of these data, it is possible to measure not only financial poverty, but also intangible aspects of poverty, such as material deprivation and low work intensity of household members.

3. AT-RISK-OF-POVERTY RATE

According to SILC data (for 2013-2015), in the 2012–2014 period, approximately one fourth of Serbia's population was exposed to poverty risk (Table 1). This does not necessarily mean that these persons are poor, but that they are at greater risk than others to become poor, as their equivalised income is below the income considered necessary to achieve a normal living standard in Serbia. This amount – at-risk-of-poverty threshold (poverty line) per person per month in Serbia was RSD 13,680 in 2012. Although the concept of relative poverty is not the most suitable for comparison over time, as already explained in the section on methodology, the increase in the at-risk-of-poverty rate in Serbia by one percentage point in 2013 relative to 2012, together with the drop in the at-risk-of-poverty threshold (poverty line), indicates that the number of persons at risk of poverty increased in 2013. The at-risk-of poverty rate remained almost unchanged in 2014, although the at-risk-of-poverty threshold increased by 11%, which indicates that persons at risk of poverty also benefitted from an income increase. Had there been no increase in income of these people, the at-risk-of-poverty rate would be much higher.

TABLE 1. AT-RISK-OF-POVERTY RATE IN SERBIA, 2012—2014

	2012	2013	2014
At-risk-of-poverty rate, %	24.6	25.6	25.4
Relative at-risk-of-poverty gap, %	36.6	39.9	37.6
At-risk-of-poverty threshold, monthly, in RSD (60% of the median equivalised income)			
One person	13,680	13,480	14,920
Household with two adults and one child under the age of 14	24,624	24,134	26,856
Household with two adults and two children under the age of 14	28,728	28,157	31,332

Source: SORS (2016), Communication: Survey of Income and Living Conditions (SILC) No. 084. Data for relevant years based on SILC for 2013, 2014 and 2015.

Serbia's at-risk-of-poverty rate is significantly above the average value for 28 EU countries (17.3%), and at the level of this indicator in the country with the highest at-risk-of-poverty rate in the EU (Romania).[3]

The relative at-risk-of-poverty gap measures the difference between the at-risk-of-poverty threshold (poverty line) and median equivalised income of persons who are below the at-risk-of-poverty threshold and is expressed as a percentage of the at-risk-of-poverty threshold (Eurostat 2012). Unlike the at-risk-of-poverty rate, which shows who is exposed to poverty risk, the relative at-risk-of-poverty gap shows how much funds they lack (in % of at-risk-of-poverty threshold) to escape poverty risk status. An increase in the relative at-risk-of-poverty gap from 36.6% in 2012 to 39.9% in 2013 indicates that the position of people at risk of poverty had deteriorated, because their income was further from the at-risk-of-poverty threshold in 2013 than in 2012, although the value of the at-

3 http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_li11&lang=en

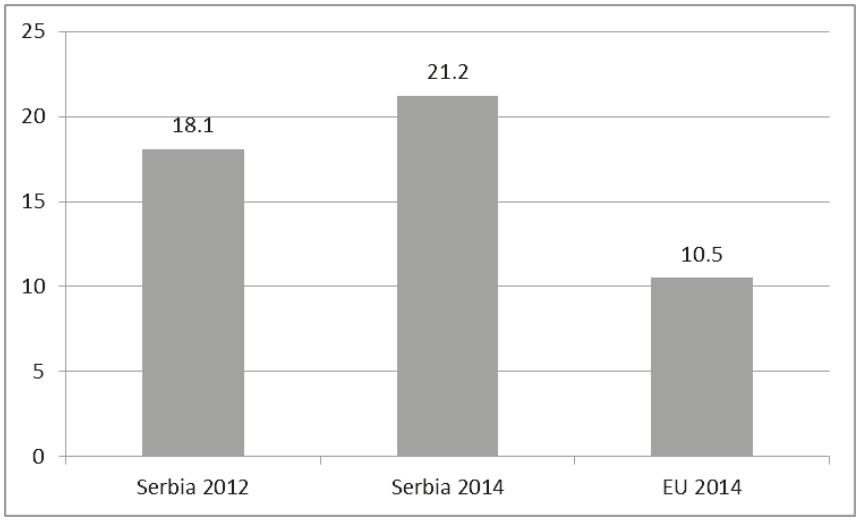
risk-of-poverty threshold was lower due to a decline in the population's income. In 2014, although the at-risk-of-poverty rate remained unchanged, the relative at-risk-of-poverty gap was reduced, indicating that the position of persons at risk of poverty somewhat improved, because they lacked less income than in the previous year to escape the situation of poverty risk.

4. LOW WORK INTENSITY

Serbia's labour market is characterised by low activity among the working-age population, a low employment rate and high unemployment. In contrast to these labour market indicators, which relate only to the number of active or employed persons, the work intensity of household members indicates the amount of work, i.e. how many household members worked, in relation to the potential number of months. The other significant advantage of this indicator is in the fact that activity and work intensity are not observed at the level of the individual, but rather at the household level, as a person's welfare is not solely dependent on the intensity of one's work but also on the work intensity of the other members of one's household.

Work intensity of household members is very low in Serbia, with a significantly higher share of these people under the age of 60 (21.2%) than the European average (10.5%) (Figure 1). Compared with individual EU countries, only Ireland had a higher share of persons living in households with very low work intensity than Serbia (Krstić, 2015) in 2013 (21.1% vs. 20.5%).

FIGURE 1. THE PERCENTAGE OF PERSONS (0-60 YEARS) LIVING IN HOUSEHOLDS WITH VERY LOW WORK INTENSITY IN SERBIA AND EU

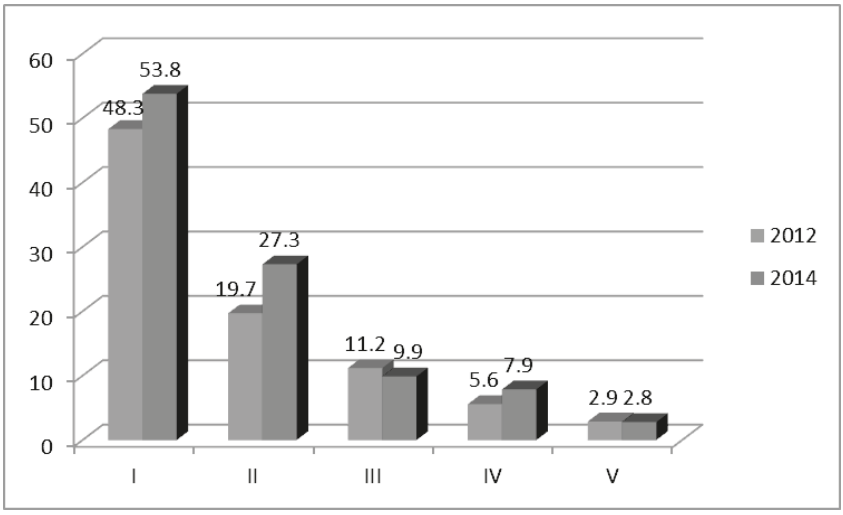


Source: RZS (2016), Saopštenje Anketa o prihodima i uslovima života br. 084 [Communication: Survey of Income and Living Conditions No. 084]. Data for EU according to Eurostat (2016).

'The high rate of very low work intensity of household members in Serbia can be attributed to 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 highest share of people who do not work, particularly the unemployed, in the working-age population compared with EU countries' (Krstić, 2015, pp. 83). It is even higher than in countries with the greatest share of these persons (Ireland, Greece and Croatia).

The profile of persons living in households with very low work intensity indicates that pensioners and the unemployed, persons with lower levels of education, as well as children whose parents have less than an elementary level of education or who have finished primary school only, are at greatest risk of living in such households (Krstić, 2015). The risk of an individual to belong to this category of households decreases with an increase of their level of education or their parent's level of education, since a higher level of education is in negative correlation with unemployment and inactivity.

FIGURE 2. PERCENTAGE OF PERSONS (0-59) LIVING IN HOUSEHOLDS WITH VERY LOW WORK INTENSITY BY INCOME QUINTILES, 2012 AND 2014



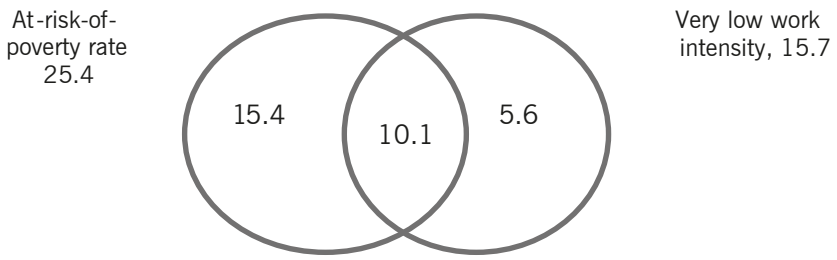
Source: Author on the basis of Eurostat base data: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_lvhl13&lang=en

Observed by income quintiles, the percentage of persons living in households with very low work intensity decreases with an increase of equivalised income (Figure 2), which is expected because low equivalised income is the result of low work intensity of household members. Pensioners and the unemployed account for the greatest share among these people, and employed persons account for only 1.6%.

The number of persons under 60 who live in households with very low work intensity has increased by 132,000 in 2014 relative to 2012, representing a 17% increase. This increase is primarily the consequence of an increase in the number of people living in these households from the first two income quintiles (Figure 3).

Poor results achieved in poverty reduction in the period of economic boom during the 2000s in the EU can partially be explained by the fact that there was no reduction in the number of jobless households, despite an increase in the employment rate (Vandenbroucke and Vleminckx, 2011; Cantillon, 2011).

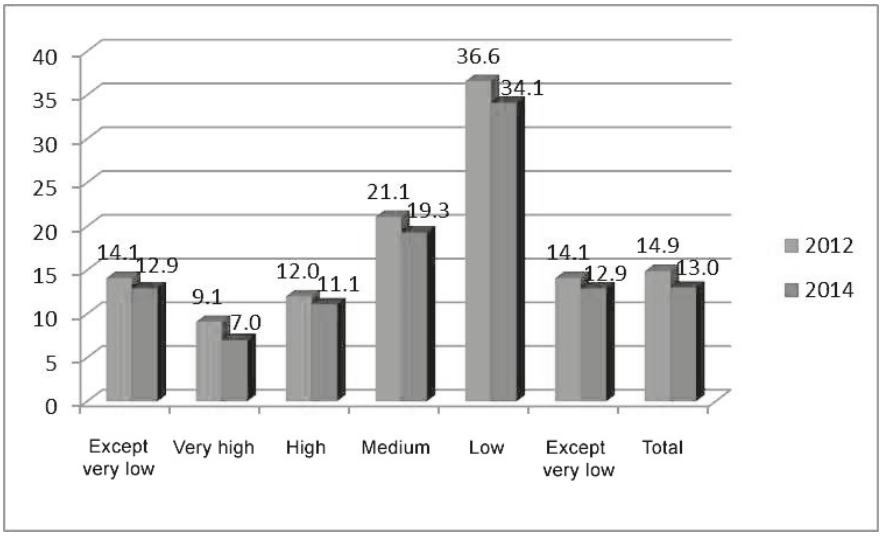
FIGURE 3. AT-RISK-OF-POVERTY RATE AND THE PERCENTAGE OF PERSONS LIVING IN HOUSEHOLDS WITH VERY LOW WORK INTENSITY IN SERBIA, 2014, %



Source: RZS (2016), Saopštenje Anketa o prihodima i uslovima života br. 084 [Communication: Survey of Income and Living Conditions No. 084].

Figure 3 shows relationship between the proportion of persons exposed to risk of poverty and the proportion of persons living in households with very low work intensity in Serbia. Almost 10.1% of the population are exposed to both risks. These are persons in households where members do not work or work very little, and who also have relatively low incomes. Out of total number of persons living in households with very low work intensity, almost two thirds face risk of poverty, as work and work intensity of household members is the main precondition for higher income and a better living standard. However, only 40% of persons in risk of poverty live in households with very low work intensity. This indicates that low wages, in combination with work intensity above very low, are the main reasons for poverty within this population segment, in addition to social transfers which were insufficient to increase equivalised income above the at-risk-of-poverty threshold.

FIGURE 4. AT-RISK-OF-POVERTY RATE FOR EMPLOYEES (AGED 18-59) BY WORK INTENSITY OF HOUSEHOLD MEMBERS, 2012 AND 2014



Source: Author on the basis of Eurostat base: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_iw03&lang=en

Work intensity of household members has considerable effect on the at-risk-of-poverty rate of employees. The greatest risk of poverty among employed is in households with low work intensity (34.1% in 2014), meaning that approximately one in three employed persons living in these households with low work intensity is exposed to the risk of poverty (Figure 4). The at-risk-of-poverty rate further decreases with an increase of work intensity, from 19.3% in households with medium work intensity to 7% in households with very high work intensity, similarly, as shown by the data for the EU28 average.[4] This means that only a very high work intensity of a household may result in a significant reduction of the at-risk-of-poverty rate, having in mind that the average at-risk-of-poverty rate of employed equalled 13% in 2014 (SORS, 2016). In 2014 as compared to 2012, at risk of poverty of employed decreased the most in households with very high work intensity, and the least in households with low work intensity.

5. INEQUALITY OF INCOME DISTRIBUTION

According to SILC data, inequality of income distribution in Serbia measured by the Gini coefficient is very high and was relatively stable in the 2012–2014 period (Table 2). The Gini coefficient in Serbia equalled 38.2 in 2014, which is a slightly higher value than the average for the 28 EU countries (31) and higher than the value of the Gini coefficient of countries with the greatest inequality, such as Lithuania (37.9), Romania (37.,4) and

4 http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_li06h&lang=en

Bulgaria (37).[5] Compared with countries in the region, the greatest income inequality, after Serbia, was recorded in Macedonia (35.2) which is not in the EU, but is included in the EU-SILC reporting system (Figure 5).

TABLE 2. GINI COEFFICIENT AND EQUIVALISED INCOME QUINTILE SHARE RATIO IN SERBIA, 2012-2014

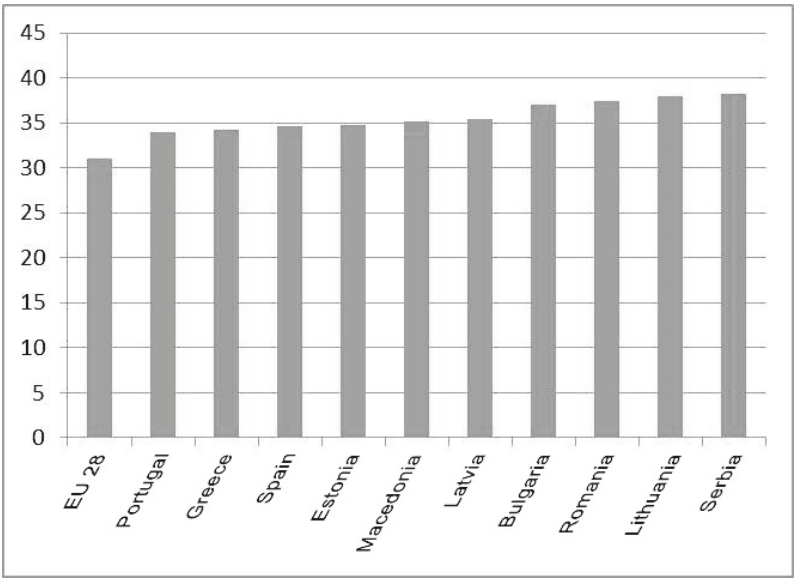
	2012	2013	2014
Gini coefficient (*100)	38.0	38.6	38.2
Quintile share ratio	8.6	9.8	9.0

Source: RZS (2016), Saopštenje Anketa o prihodima i uslovima života br. 084. [Communication: Survey of Income and Living Conditions No. 084]

Note: Income in kind is excluded from the total income.

Income inequality in Serbia is also high when measured by the quintile share ratio, which was 9 in 2014. This means that 20% of the wealthiest population in Serbia had 9-fold higher equivalised income relative to 20% of the poorest. The value of this indicator is significantly higher compared to the average value for 28 EU countries, which equalled 5.2 in 2014, but also higher than in countries with the highest values recorded in Romania (8.3), Lithuania (7.5), Macedonia (7.2 in 2013) and Bulgaria (7.1).[6]

FIGURE 5. THE GINI COEFFICIENT FOR SERBIA, MACEDONIA AND EU COUNTRIES WITH THE HIGHEST GINI COEFFICIENT, 2014



Note: The Gini coefficient multiplied by 100.

Source: Author on the basis of Eurostat database data. Data for Macedonia refer to 2013.

5 http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tessi190&plugin=1

6 http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tessi180&plugin=1

Bearing in mind that the first Survey of Income and Living Conditions was carried out in 2013, we may discuss fluctuations in income inequality over the previous period based on the Household Budget Survey data. Data from this Survey show that income inequality, measured by the Gini coefficient, dropped from 2006 until the start of the global economic crisis in 2009 (from 35.4 to 31.2; Government of the Republic of Serbia, 2012), then began to increase. A significant increase in income inequality is evident in the period from 2010 to 2012 (from 33 to 38), which is to some extent the result of the various sources of data (the HBS in 2010, and SILC in 2012). One of the reasons for this leap in income inequality over a period of two years may be explained by the fact that all of the components of income, especially wages, which most contribute to inequality, are better covered by SILC than by the HBS, taking into account that the HBS was designed first and foremost to cover expenditures and not income. Although comparable data over a long-term period is not available, making it difficult to discuss trends, it is certain that income inequality in Serbia in comparison to the EU average was higher over the entire preceding decade.

SILC results point out that actual income inequality is somewhat lower than presented due to underestimated social transfers in SILC and due to the exclusion of income in kind according to Eurostat methodology. Both factors affect mainly the population with the lowest income. However, their impact on the presented inequality is not more than 1.5 percentage points (Krstić, 2016).

Many factors have contributed to such high-income inequality in Serbia. Besides others, these include a high rate of very low work intensity of household members, high share of non-standard forms of employment (part-time, temporary jobs, self-employment), predominantly within the shadow economy, as well as a modest redistributive role of direct taxes and social transfers (Krstić, 2016). Low coverage with social transfers, particularly monetary social assistance and child benefits, and very low progressiveness of the Serbian tax system explain the relatively modest, according to international standards, redistributive role of direct taxes and social transfers. Ranđelović and Žarković-Rakić (2011) and Žarković-Rakić (2015) also point to a relatively low redistributive role of direct taxes and social transfers in Serbia on the basis of the 2007 Living Standards Measurement Survey, relative to EU countries (Medgyesi, 2014). Their role is also modest compared to the countries in the region, such as Croatia and Slovenia (Čok, Urban and Verbič, 2013).

TABLE 3. INCOME INEQUALITY BY WORK INTENSITY OF HOUSEHOLD MEMBERS AND TOTAL INEQUALITY DECOMPOSITION, 2012

	Share in persons	Share in equivalised income	Gini	GE(2)
Very low	18.14	8.73	0.451	0.472
Low	13.07	8.87	0.328	0.212
Medium	19.86	17.51	0.321	0.249
High	16.83	19.20	0.307	0.182
Very high	32.09	45.69	0.324	0.245
Total	100.00	100.00	0.388	0.333
Inequality within a group				0.270
Inequality between groups				0.063

Source: Calculations by author. SILC 2013.

Table 3 presents income inequality by work intensity of household members. It also shows the decomposition of total income inequality (measured as G(2), i.e. half the squared coefficient of variation) to inequality between households with different work intensity and residual inequality within these households using the formula given in the methodological section for $\alpha=2$.

Income inequality is the highest for households with very low work intensity and decreases with rising work intensity of household members. Both inequality measures, the Gini coefficient and G(2), show similar trends with change in work intensity of household members. Differences between households with different work intensities explain 19% of the total income inequality, based on the G(2) inequality indicator between groups. This means that 81% of the total income inequality can be attributed to inequality within households with different levels of work intensity. From a policy point of view, elimination of the difference in average incomes between these households would result in reduced inequality by only 19%. Therefore, reduction of inequality within these households would result in a significant reduction of inequality by 81%.

6. CONCLUSION

Serbia is characterised by very low work intensity, a high at-risk-of-poverty rate and high income inequality in the 2012–2014 period. These indicators are much higher than the EU average, but also among the highest compared to individual EU countries. The contribution of this paper is that the effects of work intensity of household members on poverty and income inequality in Serbia are quantified for the first time on the basis of individual data from the Survey of Income and Living Conditions.

The results show that higher work intensity of household members reduces the poverty risk of employed persons. This confirms the first hypothesis of this paper. The highest poverty risk of employed persons is faced by households with low work intensity, where approximately one employed person in three is exposed to poverty risk, and the lowest in households with very high work intensity (7%). This means that only a very high work intensity of a household may lead to a significant reduction in the at-risk-of-poverty rate.

An analysis of inequality by work intensity of household members indicates that income inequality is the highest for households with very low work intensities and it decreases with an increase in work intensity of household members. This confirms the second hypothesis of this paper. The decomposition of income inequality by work intensity of household members shows that a reduction of income inequality within households with different work intensity has the biggest impact on reducing income inequality in Serbia, while the elimination of differences in average income between these households would result in the reduction of inequalities by only 19%. Policies that contribute to greater employability of individuals, such as education, lifelong learning and active employment measures, would reduce inequality in market income - income that an individual earns on the labour market, before redistribution policies start to produce effects (Krstić and Žarković-Rakić, 2017).

The main prerequisite for poverty reduction is GDP growth, accompanied by a rise in employment, as well as a decrease of income inequality. Data show that employment significantly reduces poverty risk, however, it does not always guarantee better welfare or an escape from poverty, as the quality of employment is a key determining factor of this. Adverse effects of dismissal of workers from enterprises undergoing transition on total demand and living standards in the forthcoming period may be partially compensated for by the positive effects of better-quality employment in more productive sectors, as well as extended coverage of the poor with the right to monetary social assistance. In addition, striking a balance between social protection and employment incentives is particularly important for poverty reduction, as it would provide incentives to social assistance beneficiaries to find employment.

In conclusion, it is necessary to mention that one of the limits of this paper is in that we cannot track the dynamic changes of these three indicators over an extended previous period, bearing in mind that the Survey of Income and Living Conditions began to be carried out from 2013. Also, we believe that actual income inequality is lower 1.5 percentage points than those presented, due to underestimated social transfers in SILC and due to the exclusion of income in kind.

Further research in this area should provide answers to the questions; what additional factors, besides increased work intensity, such as education, work experience, type of employment, sector of activity, etc., could contribute to reducing poverty and income inequality in Serbia and what is their importance. This would enable the analysis of other policies that may contribute to reducing poverty and income inequality in Serbia.

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