

Impact of the Economic Crisis on Vulnerable Groups in Serbia's Labor Market¹

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This paper presents the main results of a survey conducted in 2009 and early 2010 by the Foundation for the Advancement of Economics (FREN) with the financial support of the United Nations Development Program (UNDP). The survey had two main objectives: (1) to analyse which population groups are considered vulnerable and to what extent, based on data on their positions in the labor market before the onset of the economic crisis and (2) to analyse the impact of the economic crisis on the relative positions of the vulnerable groups in Serbia's labor market compared to the total working-age population. The results confirm that the status of the young and rural population in South East Serbia has considerably deteriorated in 2009 over 2008, while the other "demographic" categories saw either a negligible improvement (e.g. women) or a negligible deterioration (older working-age population, in the 50-64 age category, less-educated people, the rural population) in their labor market status. There are no strong indicators of change in status of the category of especially vulnerable groups in the observed period, given that we lacked comparable data on the economic crisis period with which we could have compared the 2007 data. It can, however, be assumed that the relative position of Roma in the labor market has deteriorated and that the position of persons with disabilities has remained unchanged or has improved slightly.

1.1. Identification of Vulnerable Groups

The identification of vulnerable groups in this paper relies on the results of hitherto surveys of the living standards of the total population of Serbia and of especially vulnerable groups² and their social exclusion³, but additionally contextualises them within the labor market framework.

The results of a study on the living standards of Serbia's population reveal that the poverty profile has remained almost unchanged in the 2002-2007 period, despite the significant decline in poverty.⁴ The most vulnerable population comprised the residents of the rural parts of South East Serbia, persons with low education levels and the unemployed, elderly (over 65), as well as households with two or more small children (0-6). On the other hand, authors of a study on social protection and social inclusion in Serbia⁵ found that senior citizens in rural communities, children, Roma, refugees and internally displaced persons (IDPs) and persons with disabilities were especially vulnerable groups in Serbia in terms of poverty and social exclusion.

We have, therefore, included the following working-age population groups in the category of especially vulnerable groups in Serbia's labor market: Roma, refugees and IDPs, persons with disabilities, the rural population, the rural population in South East Serbia, the rural population without land holdings, the uneducated, as well as women, young people (15-24) and older people (50-64).

Improving the living standards of these especially vulnerable groups is above all possible by improving their employability i.e. by improving their status in the labor market. Labor market status is highly correlated with poverty given that income from work of poor households and those near the poverty line is the main determinant of their standard of living. Research of poverty in Serbia has shown that unemployment and inactivity are the main causes of

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1 This paper is based on a FREN study entitled "Position of Vulnerable Groups in Serbia's Labor Market" conducted in late 2009 and early 2010 with UNDP's financial support.

2 See: Krstić, G.: "Poverty Profile in Serbia in the Period from 2002 to 2007" in: *Living Standard Measurement Survey: Serbia 2002-2007 (LSMS)*, Statistical Office of the Republic of Serbia, Belgrade, 2008.

3 See: Bajec, J. et al: *Social Protection and Social Inclusion in the Republic of Serbia*: European Commission, May 2008.

4 *Ibid.*

5 *Ibid.*

poverty and social exclusion. The unemployed faced the greatest risk of poverty, but also the deepest and most severe poverty compared to other participants in the labor market. Consumption in households with unemployed heads was on average 24% lower in urban and 22% lower in rural areas than consumption in households with employed heads.

1.2. Methodology and Data Used

The labor market vulnerability of each of the listed especially vulnerable groups is assessed on the basis of its status in the labor market. The unemployed and/or inactive persons, on the one hand, and, contributing family and self-employed workers within the employed category, on the other, have the poorest status and define the category of vulnerable employment. This is why the following main indicators will be used to identify labor market vulnerability:

- The unemployment rate and/or inactivity rate,
- The employment rate, and
- The share of vulnerable employment in total employment.

Labor market vulnerability is a relative concept. A population group of working age is considered vulnerable in the event its key labor market indicators (participation rate, employment rate, share of vulnerable employment) are substantially poorer than the corresponding average values for the total working-age population.

According to the International Labor Organization (ILO) 2009 definition, vulnerable employment includes self-employed and contributing family workers, where self-employed workers comprise owners of companies, shops, own-account workers and farmers. In other words, vulnerable employment encompasses all employed workers except salaried and wage workers. Vulnerable employment more often entails insecure employment, with low wages and low productivity, poor workplace safety and working conditions. Such jobs are often informal, not even providing basic health and social insurance. The main limitations of this indicator include:

- (1) Wage workers can also be exposed to major insecurity and economic risk; and,
- (2) Some categories falling under vulnerable employment by definition, such as owners of small businesses, highly qualified professionals, lawyers, private doctors, etc. may actually enjoy an excellent position in the labor market. The share of these categories in vulnerable employment is, however, relatively small, except in developed countries.

Despite these limitations, vulnerable employment may serve as approximation for “poor” and informal employment, particularly in less developed countries and regions. Vulnerable employment accounts for over one half of total employment in the world (50.6% in 2007).⁶

Given that the assessment of the sensitivity of a vulnerable group is based on a number of indicators, the choice of the leading indicator(s) of labor market vulnerability depends on the specific features of each particular especially vulnerable group. While vulnerable employment is an important indicator in assessing the labor market status of the employed workers within each especially vulnerable group, there are some differences between their categories of unemployed workers, which arise from the specific features of each group. For instance, unemployment and the unemployment rate are the leading indicators for specific vulnerable groups (e.g. uneducated, Roma), although additional relevant information on their vulnerability is arrived at by analysing specific inactivity rates as well. The inactivity rate is the most important indicator of vulnerability of some groups, for instance, with respect to the group of persons with disabilities. The number of unemployed people in this category does not reflect the true state of affairs in the labor market, given that the inactivity of persons with disabilities is extremely high, which may be explained by the fact that most are discouraged or even formally prevented from looking for a job and are not even searching for one. The indicators of labor market vulnerability in the category of young people definitely include inactivity, which is not the consequence of schooling, and unemployment, while the leading indicator with respect to the older working-age population (50-64) is unemployment, followed by inactivity due to discouragement. As for the older working-age population, a differentiated approach to vulnerability needs to be applied and it needs to take into account the workers' sex, given the different retirement conditions for men and women.

Apart from identifying a specific group as vulnerable, we are also interested in the relative depth of its vulnerability, i.e. how much and how consistently it deviates from the corresponding average values. The four different indicators

⁶ See: *Global Employment Trends*, January 2009, ILO.

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we use to establish vulnerability need not necessarily reveal relatively uniform deviations from the corresponding averages. It is precisely this variability of vulnerability indicators that provides us with additional information about a large number of vulnerable groups, the features and sources of their vulnerability, and indirectly suggests recommendations for policies and measures targeting precisely the key sources of vulnerability.

We did not mechanically follow the quantitative i.e. statistical criteria in assessing the depth of vulnerability but they did serve as a good and most often very reliable initial road sign. It should be borne in mind that our multi-indicator methodology was developed specifically for this report and that, as far as we know, it has no immediate predecessor in similar studies conducted in the past.

Whether the position of a specific vulnerable group has improved or deteriorated under the influence of the economic crisis is established by comparing the changes (in absolute terms) in the key labor market indicators in 2009 over 2008 (in percentage points) with the changes (in absolute terms) in the indicators for the total working-age population. If the increase (decrease) in key labor market indicators for a specific vulnerable group follows a proportionate increase (decrease) in the corresponding indicators for the total population, the relative position of the vulnerable group compared to the total population remained unchanged. If, however, the increase (decrease) in labor market indicators of the vulnerable group exceeded the increase (decrease) in the indicators for the total population, the vulnerable group's position in the labor market improved or deteriorated depending on the economic interpretation of the effects of the change in the used indicator. For instance, a rise in the unemployment rate of a vulnerable group exceeding the rise in the unemployment rate of the total population indicates the deterioration of the vulnerable group's relative position compared to the total population, whereas such movement of the employment rate indicates the relative improvement of the vulnerable group's position.

We finally need to classify the especially sensitive/vulnerable groups by their specific features. We classified all especially sensitive groups in two categories. The first category, the group characterised by the greatest vulnerability, comprises Roma, as an especially vulnerable ethnic minority, persons with disabilities, refugees and IDPs, i.e. groups that became vulnerable due to external factors (wars, et al). This category is made up of relatively small groups in number and their disadvantaged position in the labor market is closely associated with long-standing or permanent social exclusion. The second category comprises vulnerable population groups defined by their demographic, socio-economic and geographic features, notably: women, young people (15-24) and older people (50-64), the uneducated, as well as the residents of rural areas, particularly in South East Serbia, and the rural population without land holdings.

The analysis of the labor market positions of especially vulnerable groups was conducted on the basis of the Labor Force Survey (LFS) and the Living Standards Measurement Survey (LSMS) data. The vulnerable groups not covered by the LFS (refugees, IDPs, persons with disabilities, rural population without land) were analysed on the basis of the 2007 LSMS and other surveys conducted by domestic and international institutions.

We had at our disposal LFS data for three points in time – April 2008, October 2008 and April 2009 for our analysis of the impact of the crisis on the labor market. The October 2008 data, providing an overview of the situation in the labor market just before the onset of the crisis, constitute the most accurate starting point for tracking what happened to the labor market and the vulnerable groups after the crisis broke out. On the other hand, comparison of the situations in the labor market in April 2008 and April 2009 on the basis of LFS data proved to be the best methodological option given the need to isolate seasonal influences.

It, however, needs to be underlined that the differences in main labor market indicators “before” and “after” the crisis do not reflect only the impact of the crisis, but also the effects of autonomous economic factors, most importantly the transition and privatisation process already in its advanced stage.

Information in the 2008 and 2009 LFS was amended by registered data on unemployment (kept by the National Employment Service) and by data on formal employment in the non-agricultural sector (data in the RAD company survey conducted by the Statistical Office of the Republic of Serbia).

Given that the LSMS does not fully cover IDPs and refugees, but only groups integrated into the main population, we also used the data of the IDP LSMS conducted by UNHCR in 2007 (at the same time as the LSMS) and the data in a survey of refugees conducted by the NGO Group 484 in 2006. This has allowed us to compare, at least in general terms, the status of IDPs and refugees integrated into the main population (according to LSMS data) and the total IDP and refugee population.

1.3. Impact of the Economic Crisis on the Total Working-Age Population and the Vulnerable Groups in the Labor Market

Total Working-Age Population

Available data in the Statistical Office of the Republic of Serbia's Labor Force Survey (LFS) and survey of companies (RAD), and the data in National Employment Service registers suggest that the crisis greatly impacted labor market outcomes. All three sources of information indicate a fall in employment and a rise in unemployment and inactivity. The overall labor market strongly adjusted to the circumstances brought on by the economic crisis – employment dropped more than the GDP since the onset of the crisis, which means that Serbia recorded very high employment elasticity in the period (over 1). Based on previous comparable experiences, it is commonly believed that the full effects of the crisis on the labor market ensue with a delay and that the decline of employment may last much longer than the decline of the GDP. Taking this into consideration, the adjustment of the main labor market indicators in Serbia was unusually rapid and strong.

The fall of employment since the onset of the crisis was extremely deep as the comparison of aggregate employment data in the two periods closest in time to “before” and “after” the crisis shows. The estimated number of employed workers of working age dropped by nearly 160,000 or by around 6%, from October 2008 to April 2009. This resulted in a corresponding decline of the employment rate (amongst persons between 15 and 64 years of age), from 53.3% to 50.8%. The number of jobless persons simultaneously grew by around 30,000 increasing the unemployment rate from 14.7% to 16.4%.

Table L2-1. Serbia – Employment and Unemployment, Labor Force Survey¹, 2008–2009

		Total Number of Employed Persons (15-64) ²⁾	Number of Employed Farmers and Contributing Household Members in Agriculture (15-64) ³⁾	Employment Rate (15-64)	Total Number of Unemployed Persons (15-64)	Unemployment Rate (15-64)
2008	April	2,652,429	..	54	432,730	14
	October	2,646,215	443,243	53.3	457,204	14.7
2009	April	2,486,734	437,957	50.8	486,858	16.4
	October	2,450,643	411,304	50	516,990	17.4

Source: Labor Force Survey (LFS), SORS.

Notes:

1) The Labor Force Survey has been conducted twice a year, in October and April, since 2008.

2) Persons between 15 and 64 years of age are considered persons of working age.

3) Until October 2008, the ARS did not classify farm workers and contributing household members as 15-64, but only as 15+.

A more detailed examination of the breakdown of employment does not come as a surprise - persons in the “vulnerable” forms of employment, such as the self-employed workers, wage workers with flexible (fixed-term and service) contracts and the informally employed, were hit hardest by the crisis. The initial adjustment in the private sector seems to have mostly involved laying off peripheral (non-core) employees, such as those with fixed-term and service contracts. There was also an above-average decline of self-employment.

The much lesser growth of unemployment compared to the plunge in employment suggests that many persons, who had lost their jobs, moved to inactivity rather than unemployment. The greatest fall of employment, nearly 50,000 was recorded in the youngest age group (15-24). Simultaneously, however, unemployment in this group also declined, indicating that, at times of crisis, young people often opt for continuing their education as an alternative to looking for a job. Another group hit harder than the others is the 45-54 age category, in which employment fell around 7% in six months. As opposed to the young people, the decline of employment in this group was accompanied by a relatively high increase in unemployment. The causes of the decline in employment in these two groups are not the same. One can hypothesise that the crisis affected the 15-24 age group the most and spilled over onto the young people both by the break-off i.e. discontinuation of fixed-term and service contracts and the decline in the number of new job openings. On the other hand, the 45-54 age group was probably affected more by the completion of the privatisation process and post-privatisation restructuring of companies and the growing number of bankruptcies and liquidations, than by the crisis.

Vulnerable Groups

This section analyses which groups of population are considered vulnerable and the depth of their vulnerability on the basis of data on their labor market status before the onset of the economic crisis. It will also analyse the impact of the economic crisis on the relative positions of the vulnerable groups in Serbia's labor market compared to the total working-age population.

Whether a vulnerable group's position has improved or deteriorated under the influence of the economic crisis is established by comparing the changes (in absolute terms) in the key labor market indicators in 2009 over 2008 (in percentage points) with the changes (in absolute terms) in the indicators for the total working-age population. It should be underlined that, in addition to the leading indicator(s), it is necessary also to monitor the changes of the other labor market indicators to establish a change in the labor market position of a specific vulnerable group.

The position of all identified vulnerable groups of working age in the labor market in 2008 is presented in Table L2-2, which shows the values of the key labor market indicators and their deviations from the corresponding indicators of the total working-age population.

As Table L2-2 shows, the vulnerability of relatively large groups – such as women, the older and the rural population – is relatively low. This finding does not come as a surprise given the great heterogeneity of these groups by virtue of their size (women, for instance, account for half the working-age population). The above finding, however, does not invalidate the finding about the generally greater vulnerability of the members of these groups and the considerably greater risk of deeper and extreme vulnerability in case of additional or multiple elements of vulnerability. For instance, the relative vulnerability of women, who are also uneducated (additional factor), is greater than that of uneducated men and the gap between them is greater than the gap between all men and all women. The low vulnerability of the rural population can be attributed to the relatively imprecise definition of the group, which accounts for around two-fifths of the working-age population.

Young people (15-24) are, however, an exception amongst relatively large demographic groups. Amongst the vulnerable groups, this age group holds the poorest position in the labor market given that the deviations of the unemployment and inactivity rates of young people are the greatest compared with the corresponding indicators of the total working age population. The vulnerability of this group has thus been qualified as extremely deep.

Table L2-2. Which Population Groups Were Vulnerable in 2008 and How Vulnerable Were They?

	Unemployment Rate (UR) %	UR/UR of the Total Population (pp)	Employment Rate (ER), %	ER/ER of the Total Population (pp)	Activity Rate (AR) %	AR/AR of the Total Population (pp)	Vulnerable Employment Share (VES)	VES/VES of the Total Population (pp)	Depth of Vulnerability and Key Indicators (Sources) of Vulnerability
LFS, 2008 Total (15–64)	14		54		62.8		31.2		
Women	16.1	2.1	46	-8	54.8	-8	29.7	-1.5	Low/Combination of Indicators Extremely
Young People (15–24)	32.6	18.6	21	-33	31.2	-31.6	26.7	-4.5	Deep/Combination of UR and AR
Older People (50–64)	8.2	-5.8	47.6	-6.4	51.9	-10.9	44.1	12.9	Low/Combination of ER, AR and VES
Less Educated Persons	13.1	-0.9	39.4	-14.6	45.4	-17.4	61.2	30	Medium to Deep/VES and Combination of ER, AR
Rural Population	12	-2	58.4	4.4	66.4	3.6	47.6	16.4	Low/VES
Rural Population in SE Serbia	14.7	0.7	56.3	2.3	66	3.2	54.8	23.6	Medium/VES
Rural Population without Land ²	19.3	5.4	50.3	-5	62.3	-1.9	19.1	-5.9	Medium/UR, ER
LSMS, 2007 Total (15–64)	13.9		55.3		64.2		25		
Roma	31.6	17.7	33.3	-22	48.7	-15.5	30	5	Extremely Deep/Combination of UR, AR as well as VES
Refugees	18.1	4.2	53.6	-1.7	65.5	1.3	28.6	3.6	Low/Combination of Indicators
IDPs	17.2	3.3	47	-8.3	56.7	-7.5	21.7	-3.3	Low/Combination of Indicators
Persons with Disabilities	13.6	-0.3	26.9	-28.4	31.1	-33.1	31.2	6.2	Extremely Deep/AR and ER

Notes:

1) Data on Roma, refugees, IDPs and persons with disabilities date back to 2007 (source: LSMS).

2) pp. stands for percentage points.

3) All economically negative deviations from the average (i.e. higher unemployment and vulnerable employment rates, lower employment and activity rates) are shown in red and all positive deviations in green.

Less educated persons had very low employment and activity rates, much lower than the total working-age population (by 14.6 and 17.4 percentage points respectively) while their vulnerable employment share was much higher than that of the total working age population (by as much as 30 percentage points). The vulnerability of persons with lower education attainment has thus been qualified as medium to deep. As opposed to less educated persons, the medium-level vulnerability of the population in the rural parts of South East Serbia is primarily due to its extremely high share of vulnerable employment compared to the total working age population (23.6 percentage points). The medium-level vulnerability of the population in the rural areas without land holdings is, on the other hand, the result of high unemployment and low employment rates compared to the total working-age population.

Within the category of especially vulnerable groups, Roma and persons with disabilities are extremely vulnerable, while the vulnerability of refugees and IDPs is low.

The extremely deep vulnerability of Roma is primarily due to their extremely high unemployment rate - 31.6% - which is by as much as 17.7 percentage points higher than the unemployment rate of the working age population, and to their low activity rate, standing at 48.7% (15.5 percentage points lower than average). Also, their vulnerable employment share is 5.5% higher than average.

The extremely deep vulnerability of persons with disabilities is the consequence of their extremely low activity rate standing at a mere 31.1%, i.e. 33.1 percentage points lower than the activity rate of the total working age population. In a way, the non-inclusion of persons with disabilities puts them beyond the reach of the standard “unemployment radar”, which is why their extremely low inactivity rate is the leading indicator of their high vulnerability.

Table L2-3. Changes in the Relative Positions of Vulnerable Groups in Serbia due to the Impact of the Economic Crisis (2009 over 2008)

	Unemployment Rate		Employment Rate		Activity Rate		Vulnerable Employment Share		Conclusion
	2009	2009/2008	2009	2009/2008	2009	2009/2008	2009	2009/2008	
	%	pp.	%	pp.	%	pp.	%	pp. ⁸	
LFS, Total (15–64)	16.4	2.4	50.8	-3.2	60.8	-2	28.6	-2.6	
Women	18.1	2	43.3	-2.7	52.8	-2	25.7	-4	Unchanged Status
Young People (15-24)	40.7	8.1	16.8	-4.2	28.3	-2.9	21.9	-4.8	Significant Deterioration
Older People (50–64)	10.7	2.5	44.5	-3.1	49.8	-2.1	39.8	-4.3	Unchanged Status
Less Educated Persons	15.6	2.5	35.8	-3.6	42.4	-3	59.1	-2.1	Unchanged Status
Rural Population	13.4	1.4	54.2	-4.2	62.6	-3.8	46.2	-1.4	Unchanged Status
Rural Population in SE Serbia	20.5	5.8	44.8	-11.5	56.3	-9.7	47.1	-7.7	Significant Deterioration
Rural Population without Land	No strong indicators, but deterioration is probable								
Roma	No strong indicators, but indirect sources suggest significant deterioration (young people, less educated persons, rural population).								
Refugees	No strong indicators, but slight deterioration is probable.								
IDPs	No strong indicators, but slight deterioration is probable.								
Persons with disabilities	No strong indicators, but is probably unchanged or slightly improved (due to institutional headway).								

The changes in the relative positions of the vulnerable groups in Serbia brought on by the economic crisis are presented in Table L2-3. Within the category of vulnerable groups by demographic and other features, only the status of the young and rural population in South East Serbia have worsened significantly in 2009 over 2008 due to the deterioration of the key vulnerability indicators of these groups, which was greater than the decline of the corresponding indicators of the total working age population. For instance, the unemployment rate amongst young people grew by 8.1 percentage points (from 32.6% in 2008 to 40.7% in 2009), while the employment rate of the total population grew by 2.4 percentage points in the period.

The other vulnerable groups within this first “demographic” category saw either negligible improvement of their

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position in the labor market (women) or a negligible deterioration of it (older persons in the 50-64 age category, less educated persons, the rural population). However, as the deviations of changes in key indicators of these vulnerable groups compared to the corresponding indicators of the total population are not statistically significant, we are of the view that their position did not change significantly under the influence of the economic crisis.

There are no strong indicators of change in the position of the category of especially vulnerable groups in the observed period, given that we do not have comparable data on the economic crisis period with which we could compare with the 2007 data. We can, however, assume that the relative position of Roma in the labor market has deteriorated, in view of the fact that they are an extremely young population which is as a rule informally employed and we have already demonstrated that the positions of young and informally employed people have significantly declined during the crisis. We can also assume that the position of persons with disabilities has remained unchanged or has slightly improved, given that the effects of the application of the Law on Professional Rehabilitation will only become apparent this year.

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