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REGIONAL INEQUALITIES AND TRANSITION: THE CASE OF SERBIA

Regionalne nejednakosti i tranzicija u Srbiji

The free market does not guarantee social results, but only economic.
(George Friedman, the founder of the analytical agency Stratfor)

Abstract

Market laws boost efficiency and contribute to economic growth and the rise in productivity, but they do not warrant stability and balance of distribution. Transition stagnation directly affects regional and social stability of the state. The focus of the paper is on three interrelated research parts which analyze: (a) interdependence of transition economic growth and regional and social inequalities in Serbia, (b) interdependence of the speed of transitional reform processes and inequalities, and (c) the degree of the impact of recession blows on regional and social inequalities.

Given that one of the greatest EU's challenges is how to achieve the highest possible social and regional equality in the following period, the paper presents an attempt to bring back into the public focus new concepts of the social state, social inclusion, and regional and social cohesion.

Key words: *regional inequalities, transition stagnation, middle class*

Sažetak

Tržišni zakoni povećavaju efikasnost i doprinose privrednom rastu i povećanju produktivnosti, ali ne garantuju stabilnost i ravnomernost u raspodeli. Tranziciona stagnacija direktno utiče na regionalnu i socijalnu stabilnost države. Fokus rada je usmeren na tri međusobno povezane istraživačke celine u kojima su analizirane: (a) međuzavisnost tranzicionog privrednog rasta i regionalnih i socijalnih nejednakosti u Srbiji, (b) međuzavisnost tranzicione brzine reformskih procesa i nejednakosti, i (c) stepen uticaja recesionih udara na regionalnu i socijalnu nejednakost.

S obzirom da je jedan od najvećih izazova EU kako postići što veću društvenu, regionalnu i socijalnu jednakost u narednom periodu, rad predstavlja pokušaj ponovnog vraćanja u fokus javnog diskursa novih koncepata socijalne države, društvene uključenosti, regionalne i socijalne kohezije.

Ključne reči: *regionalne nejednakosti, tranziciona stagnacija, srednja klasa*

Introduction

One of the greatest challenges for the EU in the period to come is how to achieve the highest possible social equality. All forecasts suggest that the EU is likely to face rather low rates of growth and unemployment in the long run as it will be overtaken by countries with dynamic economic growth (China, India). Social standard, the social state, education, health care, and, in general, social inclusion will not be something that can be taken for granted [9, pp. 86-98]. Therefore, in the focus of the "new growth paradigm" is social equality, and not economic growth.

The major problem in the EU is the trend of increasing inequality [2, p. 9]. Two parallel processes are underway – on the one hand inequality among states is in decline and, on the other, within states inequalities are growing [1, pp. 10-11], [20], [2]. The convergence of states in the EU has evolved at the expense of the issue of an ever stronger trend of weakening cohesion within states themselves. The major directions of the new growth paradigm are focused on the well-being of citizens, protection of the weakest and reforms of the public sector, and not exclusively on economic growth through boosting the output.

The research into interdependence of growth and inequality, transition speed and inequality has come up against key dilemmas: does more inequality stimulate economic growth or not? Does the policy of equal revenues stimulate economic growth? Or, does growth in itself generate more equality? [20] Theoretically speaking, a high level of inequality in revenues, like in Russia and Ukraine, is detrimental to growth and the "development of a wealthy middle class is of fundamental importance for the consolidation of capitalism" [13, pp. 12-13]. High levels of inequality can prevent the middle class from strengthening as the size of the middle class is important for successful transition. Examples of some countries, such as Russia, suggest that after privatization some interest groups that hamper further transition have been created. On the other hand, the middle class has an interest in the continuation of reforms and establishment of the rule of law. The poor, to the contrary, are in favor of the return of communism because their economic position in the course of transition deteriorated [8, pp. 7-10].

Views that sustaining a degree of balance in income is good for economic growth are rather widespread. An opposite opinion is that development initially requires a sufficient amount of inequality, i.e. welfare needs to be concentrated in the hands of the few so that they could invest in capital and build up new industries. [14, pp. 20-26]. Such a view has its roots in a traditional standpoint that large industrial systems are the major drivers of development. However, the experience of Poland confirms the opposite: entrepreneurial activity and comprehensive social investments in education and health care have become major drivers of growth (in 1996 Poland had almost 2 million private entrepreneurs and more than 125,000 private commercial companies). A response to the question as to whether growth generates inequality also cannot be one-sided. The experience of Poland stands in contrast to that of Russia (the increase in earnings caused the abolishment of jobs and created more inequality). It can be concluded that the policy of the government determines the degree and forms of inequality.

What is the link between transition speed and inequality? There are some cases when sluggish reforms caused more inequality (due to large initial macroeconomic imbalances). Innumerable regression analyses show that if two countries have the same volume of reforms (measured, for example, by EBRD transition indicators) and the same starting conditions, the country that had by 10% higher growth of inequality (Gini coefficient) had a lower rate of GDP growth by about 1%. In Czech Republic, which had better starting conditions than Poland, Gini coefficient rose by 0.03 more than in Poland, while the annual growth rate of GDP in Czech Republic was by about 1.6 percentage points lower than in Poland. Similar to Czech Republic, Hungary saw the growth of inequality and had an average annual growth rate of GDP of about 2.4 pp lower than Poland [15]. Poland is a typical example of a transition country that rapidly completed its reform tasks, boosted its economic growth, and reduced inequalities through the system of targeted social transfers.

The paper consists of two connected parts: the first is centered on transition effects in key dimensions that generate the problem of regional and social inequality in Serbia, and the second on transition forms of regional

disparities and social inequalities in the entire transition period after 2001. The recession period since 2009 is analyzed in greater detail, the focus being on trends of inequality and the position of the middle class. The conclusion sums up results of the following tested hypotheses:

Hypothesis 1: Does growth in itself generate inequalities? Does regional and social inequality create macroeconomic vulnerability?

Hypothesis 2: Do inequalities increase during the period of transition reforms?

Hypothesis 3: Has recession led to declining inequalities?

Transition stagnation

Competitiveness position in the region

In comparison with most developed global economies, the EU as a whole has progressed in the establishment of an inclusive and sustainable society, but substantially lags in the critical area of smart growth, which raises the question about its innovation capacities, the ability to raise competitiveness, and its potential to sustain high growth and a rising standard of living. Serbia records lower scores than other candidate countries (see Table 1), including the adjacent member states Bulgaria and Romania, in almost all the areas included in the index of competitiveness Europe 2020 [5]. Although Serbian economy has made a lot of progress in its digital agenda in relation to 2010 by boosting its performances to the level comparable to that of Bulgaria and Romania, it takes sweeping reform efforts to enhance the business environment, and education and training as the basis for smart growth. Still, the first priority needs to be the establishment of institutional capacities in the country.

In the WEF's *Competitiveness Report 2013-2014*, which includes 148 countries, Serbia is ranked 101st and with GDP per capita of USD 4,943 is at the foot of the group of 31 countries (GDP per capita of Serbia is among the lowest in Europe and 6.5 times lower than the EU-27 average) which through improvement of efficiency aim for boosting the overall competitive position – *Serbia is the least competitive country in the European continent*. Serbia records oscillating developments on the competitiveness scale – the progress by 2008, followed by the period 2009-2013 that was marked by continuous inertia of government capacities in adopting strategic programs and pursuing fundamental reforms that would invigorate economic activity and stop the rise in unemployment. Almost all of the countries adjacent to Serbia are in the second development stage except for Hungary (63) and Croatia (75) which are moving to the group of the most robust economies that already includes Slovenia (62). On its way to reaching an average level of development of the EU, Serbia needs to raise the efficiency of state institutions, ensure macroeconomic stability, enhance the ease of doing business and foster innovation, within which there is not a single indicator that demonstrates a competitive advantage.

The first priority must be to build up institutional capacities in the country, the area for which the largest portion of EU funds is allocated. A substantial room for improvement remains in the area of inclusive growth, and that with respect to rigidity of the labor market (characterized by incompatible productivity and earnings,

Table 1: Regional competitive position 2013

Index Europe 2020	Serbia		Bulgaria	Romania	Croatia
	Rank	Value			
	32	3.53	3.76	3.79	4.01
Subindex A: SMART GROWTH	*32*	*3.45*	*3.69*	*3.64*	*3.86*
1. Business environment	32	3.12	3.55	3.44	3.30
2. Digital agenda	31	4.10	4.30	4.08	4.72
3. Innovation	31	2.79	2.96	2.89	3.14
4. Education and training	32	3.81	3.95	4.14	4.27
Subindex B: INCLUSIVE GROWTH	*31*	*3.69*	*3.98*	*4.02*	*3.89*
5. Labor market and employment	28	3.53	4.32	4.00	3.55
6. Social inclusion	28	3.85	3.64	4.03	4.24
Subindex C: SUSTAINABLE GROWTH	*30*	*3.49*	*3.61*	*3.97*	*4.83*
7. Environment sustainability	30	3.49	3.61	3.97	4.83

Source: [24]

weak employee-employer relations, and a high rate of youth unemployment). The labor market needs to be flexible in order to ensure reallocation of employees from one economic activity to another, fast and at a low price, and ensure movement and adjustment of earnings without social unrest and strikes. This is particularly important for countries that are recovering from the global economic crisis.

The analysis of transition competitiveness shows that in Serbia no marked changes to its structure have taken place, which is why the country fails to reach higher ranks in the global rankings that other countries of the region boast. Over the past 7 years on average Serbia has been more competitive than 30% of countries only, which means that it is not only unable to sell its products (on the EU market primarily) but also that due to *macroeconomic instability* (rank 136), *institutional constraints* (126), *inefficiency of the market of goods* (132) and *underdeveloped infrastructure* (90) it is unattractive to potential investors. Knowledge as the most important and an indispensible driver of economic activity is not appreciated enough, and thus *Serbia is notorious for its "brain drain"* (146th position – by the indicator Country capacity to retain talent it is better ranked only than Venezuela and Myanmar, and 147th – by the indicator Country capacity to attract talent, it is ahead of Venezuela).

Results Serbia scored this year demonstrate it is urgent all state entities acted jointly in speeding up structural changes, and undertook priority measures in most critical areas, primarily those where sub-indexes are ranked above the 120th position (as much as 45 sub-indexes). Even with 3 pillars with a rank higher than last year one can notice that marked improvement has been recorded only within one or two sub-indicators, while values of other sub-indicators deteriorated.

Serbia is in a very adverse competitive position as according to most indicators it is below the average of countries that belong to the second development stage, which means far from the average of the EU member states (see Table 2). Unless there is modernization of production capacities and constant investment in education and promotion of the expertise of workforce, Serbia cannot improve its efficiency in some other economic spheres, nor

can it reach a higher development degree. In the long run human capital and technology are two key factors that determine sustainable economic growth and a competitive position of an open market economy.

The most critical fields are Institutions (pillar 1), Macroeconomic environment (pillar 3), Business sophistication (pillar 11), and Innovation (pillar 12), within which there is not a single competitive advantage.

Table 2: Most critical fields of Serbia 2013

|	Pillar	Rank
Protection of minority shareholders' interests	1	144
Burden of government regulation	1	142
Efficiency of state corporations	1	138
Efficiency of regulative in settling disputes	1	137
Volume of HR training	5	140
Buyer sophistication	6	143
Extent of market dominance	6	142
Effectiveness of anti-monopoly policy	6	141
Strength of local competition	6	138
Country capacity to attract talent	7	147
Country capacity to retain talent	7	146
Cooperation in labor-employer relations	7	144
Introducing new technology to a company	9	137
Nature of competitive advantage	11	145
Willingness to delegate authority	11	141

Source: [24]

Reform stagnation

Structural reforms in the transition region of SEE, after slowing down in the crisis period 2008-2009, are still faced with major challenges [10]. In 2013 reform stagnation continued, and deterioration of transition indicators was evident both on the sector and the state level. At the level of states, for the first time since 1990 the EBRD analysis has shown that the number of deteriorations (of transition indicators) surpasses the number of improvements. In the field of market and trade three indicators in Hungary and two in Slovakia deteriorated, mostly due to a larger stake of the state in the energy and insurance sectors, which had an adverse effect on the trust of domestic and foreign investors. The upgrade was made only in Croatia, in the field of large-scale privatization, owing to the sale of several shipyards that was a precondition for the EU membership.

Serbia has not made any considerable progress for the third year in a row (see Figure 1). Transition indicators remained at the level of 2010, and thus an average transition progress grade remained unchanged (3.17), and in comparison

Figure 1: Transition speed in Serbia, 2001-2013

■ Annual improvement
☐ EBRD transition indicators (the average value)
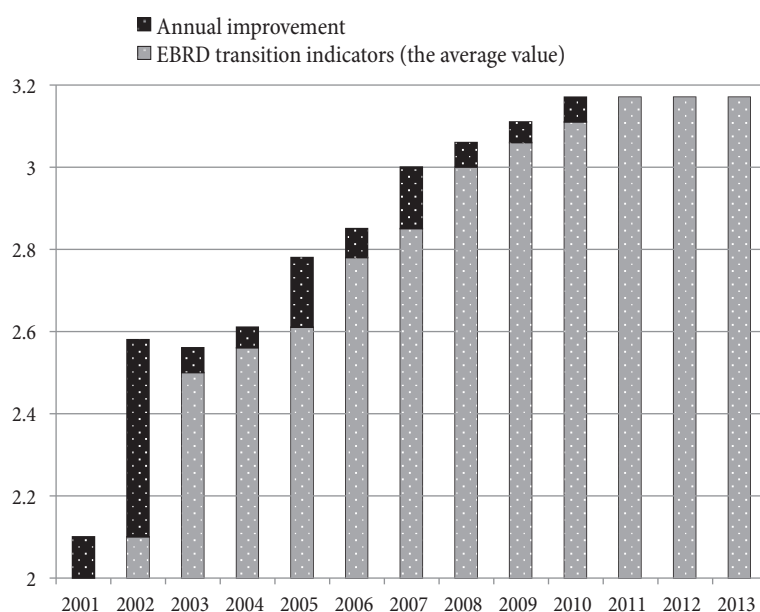
Source: Author's calculations on the basis of the EBRD reports (2001- 2013)

with adjacent countries it was higher only than the value for BiH (3.00). According to EBRD indicators (see Table 3), Serbia straggles behind most of the adjacent countries in the area of large-scale privatization, governance and restructuring of companies, and implementation of the competitiveness policy.

The largest transition lag occurred in large-scale privatization, governance and restructuring, and competitiveness policy. There are still 419 companies awaiting privatization, 153 companies undergoing restructuring, and around 900 companies with the minority share of state-owned assets. The transition indicator of *governance and restructuring of companies* in all the countries of the region is at its lowest.

Although the enforcement of bankruptcy legislation has improved, not much has been done when it comes to the strengthening of competition and corporate management, and thus in Serbia the value of this index is rather low (2.3). In the area of *large-scale privatization* Serbia also straggles behind other adjacent countries (index of 2.7; for countries in the region it ranges from 3.0 in BiH to 4.0 in Bulgaria and Hungary). In order for the index to reach a higher value, it is necessary for more than 25% of assets of large companies to be in private ownership (55% of assets of large companies in 2012 were active in only 16 PE of republic interest). Large-scale privatizations are mainly at a standstill.

Table 3: EBRD transition indicators

Serbia		Bulgaria		Romania		Croatia		Macedonia		BiH		Hungary	
2001	2012	2001	2012	2001	2012	2001	2012	2001	2012	2001	2012	2001	2012
Large-scale privatization													
1.0	2.7	3.7	4.0	4.0	3.7	3.7	3.7↑	3.3	3.3	3.3	3.0	4.0	4.0
Small-scale privatization													
3.0	3.7	3.7	4.0	3.7	3.7	4.3	4.3	4.0	4.0	2.7	3.0	4.3	4.3
Governance and restructuring of companies													
1.0	2.3	2.3	2.7	2.0	2.7	2.7	3.3	2.3	2.7	1.7	2.0	3.3	3.7
Competitiveness policy													
1.0	2.3	2.3	3.0	2.3	3.3	2.3	3.0	2.0	2.7	1.0	2.3	3.0	3.7↓
Price liberalization													
4.0	4.0	4.3	4.3	4.3	4.3	4.0	4.0	4.0	4.3	4.0	4.0	4.3	4.0↓
Trade and foreign exchange system													
2.7	4.0	4.3	4.3	4.3	4.3	4.3	4.3	4.0	4.3	3.0	4.0	4.3	4.0↓

Source: EBRD Transition Reports 2001-2013

Credible measurement of industrial competitiveness is particularly pertinent to transition. According to the UNIDO's CIP index[1], Serbia is rather low positioned in relation to the EU average [22]. The sub-index *capacity to produce* ranks Serbia by 71 positions lower than the EU average, the sub-index *capacity to export* by 31 positions lower, the sub-index *industrialization intensity* by 17 positions, and *export quality* by 29 positions lower than the EU average in the global rankings.

Reform stagnation is indicated also by the research into business environment, and the dynamics of creation of a regulatory environment that is conducive to doing business. The deterioration of the rank (from 87th position in 2012 to 93rd position in the world in 2013) was largely due to the raising of VAT, which further boosted costs of doing business of companies (see Table 4). On the other hand, thanks to major structural reforms some countries have managed to improve their doing business and lessen the effects of the global economic crisis.

Table 4: Ranking of transition countries by conditions for doing business

	2012	2013
Macedonia	36	25
Slovenia	31	33
Montenegro	50	44
Slovakia	43	49
Hungary	52	54
Bulgaria	57	58
Romania	73	73
Croatia	88	89
Albania	82	90
Serbia	87	93
BiH	130	131

Source: [23]

For years now the lowest rank and 182nd position in 2013 Serbia scored for the process of obtaining licences and various permits (for construction, access to electricity, telephone, permits from various inspectorates, etc.). A very low rank of Serbia is conditioned by high costs of issuing construction permits, expressed as % of GNI per capita. While in the EU on average it takes 98% of GNI/capita (most in Ireland, 446%, and least in Slovakia, 7%),

in Serbia entrepreneurs need to pay 14 times higher a value than GNI/capita or 1,433% (only 10 countries out of Europe have higher costs), while in countries outside the EU costs equal: in Montenegro 1,159%, in BiH 1,100%, in Croatia 646%, and in Macedonia 512% of GNI/capita [23].

Educational lagging

The most relevant international research on the degree of reforms in education is PISA – *Programme for International Student Assessment*, which enables the assessment of the quality, legitimacy and efficiency of the education system, but it also serves to monitor the quality of changes in the education system. In many countries data provided by PISA tests have become not only key indicators for the assessment and monitoring of the progress in the quality of education but PISA is also used as the EU indicator of social inclusion, IT literacy, and poverty. A large number of countries use PISA results as indicators of education development and in their strategic documents they plan on raising the level of PISA performance (all the OECD countries, Japan, Croatia, etc.). In our country, PISA performance is used as an indicator in the implementation of the Strategy for Poverty Reduction.

According to PISA 2012 (see Table 5), the quality of education in Serbia is still below the average of OECD countries [18, p. 5], [7], [10], [11], but the difference is smaller compared to 2009. Compared to countries of the region, reading, mathematics, and science literacy of students from Serbia is higher than that of students from Bulgaria, Romania, and Montenegro, while it is lower than that of students from Hungary, Slovenia, and Croatia (see Figure 2).

Despite some positive changes in the period 2006-2012, there are still major lags in some segments:

- In the segment of reading literacy the percentage of students who reached the level of functional literacy in 2012 was 67%, at the level of 2009 (76.5% of girls and 57.2% of boys) but *11.9% of students in Serbia were below the first level of literacy* (in OECD countries 5.5%): 17.8% of boys and 6.0% of girls. In comparison with OECD countries reading literacy of students from Serbia was lower by *50 points, which*

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1 Competitive Industrial Performance Index 2012-2013 through its three dimensions and a combination of eight quantitative indicators shows the extent to which each country is able to produce and export competitive products.

Table 5: PISA – changes 2006-2012 in the region

	Reading literacy		Mathematics literacy		Science literacy	
	2012	2006-2012	2012	2006-2012	2012	2006-2012
Serbia	446	*45*	449	*13*	445	*2*
Croatia	485	*7*	471	*4*	491	*5*
Slovenia	481	*-13*	501	*-3*	514	*2*
Montenegro	422	*30*	410	*10*	410	*9*
Bulgaria	436	*34*	439	*25*	446	*7*
Romania	438	*42*	445	*30*	439	*11*
Hungary	488	*6*	477	*-14*	494	*-8*
OECD average	496	*7*	494	*0*	501	*0*

Source: Author's calculations on the basis of the [18]

is equal to an effect of somewhat more than one year of schooling in OECD countries;

- When it comes to mathematics literacy, 61% of students from Serbia reached the level of functional mathematics literacy but *15.5% of students from Serbia are below the first level of literacy* (9.1% of students in OECD countries): 16.5% of girls and 14.5% of boys. In comparison with OECD countries mathematics literacy of students from Serbia is lower by 45 points, which is equal to *an effect of more than one year of schooling in OECD countries.*

- As regards science literacy, 65% of students reached the level of functional literacy in the domain of science, *10.3% of students in Serbia do not possess scientific knowledge* (in OECD countries 4.8%): 11.1% of boys and 9.6% of girls. In comparison with OECD countries, science literacy of students from Serbia is lower by 65 points, *which is equal to an effect of 1.5 years of schooling in OECD countries.*

Transition and the quality of life

The comparative research of the quality of life in Europe [6] presents the issue of inequality in quite a different light, especially after recession blows in the period 2009-2011. EQLS not only enables the monitoring of changes in a society but it can also determine new trends and developments in the future. The research into the quality of life in transition countries has been done in the following segments (see Table 6): (1) subjective well-being, (2) health and mental well-being, (3) living standards, (4) work-life balance, (5) public services, (6) trust and tensions, (7) participation and exclusion, and major findings thereof are:

Figure 2: Education reforms in the region 2012 – functional literacy

Source: [18]

Table 7: Transition gap and regional disparities (NUTS-2) 2012

Country	GDP per capita (PPS), EU=100			
	national level	richest region	poorest region	richest : poorest
Bulgaria	47	75.3	27.2	2.8:1
Czech	79	175.3	66.0	2.7:1
Hungary	66	108.5	39.6	2.7:1
Poland	66	97.0	40.9	2.4:1
Romania	49	111.1	29.4	3.8:1
Slovenia	82	104.7	71.9	1.5:1
Croatia	61	78.3	44.3	1.8:1
Serbia	35	60	21	2.9:1

Source: Author's calculations on the basis of the Eurostat and RSO

Table 8: The trend of regional lagging - GDP PPS p.c. (EU-27=100)

Regions	2009	2010	2011	2012
Belgrade Region	65	61	60	60
Region of Vojvodina	34	33	35	35
Region of Sumadija and Western Serbia	26	24	23	23
Region of Southern and Eastern Serbia	23	22	22	21

Source: Author's calculations

The group of medium developed transition countries (Hungary, Czech Republic, Poland, and Croatia) is at 2/3 of the EU, and Slovenia stands out with GDP PPS of above 80%. However, intra-regional disparities vary: in Serbia they are larger (2.9:1) than economic disparities in Slovenia and Croatia (1.5:1 and 1.8:1), and at the level of economic inequalities in Bulgaria, Czech Republic, and Hungary. The greatest regional economic disparities are found in Romania (3.8:1).

Economic downturn and a deteriorated macroeconomic balance in the period 2009-2012 affected regional economic developments as well, but at various intensities. The economic lag of all regions mounted in comparison with the EU average (see Table 8).

The Region of Belgrade, as the most developed region, is at 60% of the EU, while the Region of Southern and Eastern Serbia as the least developed region in the EU is at only 21% of the EU.

One of the greatest challenges of the policy of regional development of Serbia is the long-term trend of rising regional inequalities and the concentration of economic activities in Belgrade and Novi Sad [12]. More than a half of employees in Serbia work in these two cities, while the share of other economic indicators develops around 2/3 (see Figure 3).

The analysis of regional disparities at the level of districts (NUTS-3) shows the real scale of regional disparities in Serbia (see Table 9). In the period 2006-2012 extreme values increased slightly, namely the composite Development Deficiency Index (DDI – comprises five development dimensions and 13 representative indicators) shows that the ratio of Belgrade and Toplica districts from 6.8:1 in 2006 increased to 7:1, i.e. the Region of Belgrade was 7 times more developed than the Toplica District. An even more worrying trend is that values of DDI for as many as 21 districts registered a drop in comparison with 2011.

Figure 3: Regional economic concentration – Shares of the City of Belgrade and South Backa area in Serbia, 2012
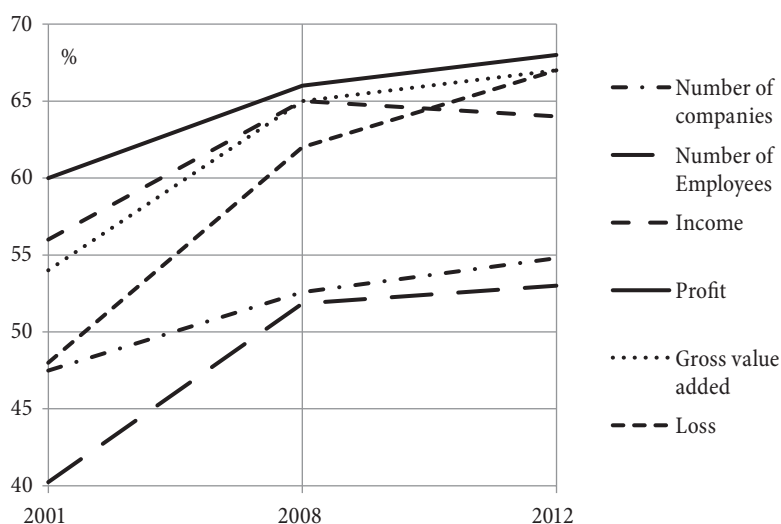
Source: Author's calculations

Table 9: Transition extreme ranges in municipalities

Indicators (Serbia =100)	2001			2008 No. of municipalities			2012		
	>100%	<50%	Extremes	>100%	<50%	Extremes	>100%	<50%	Extremes
Earnings per employee	31	43	1:13.4	14	62	1:12	13	58	1:10.7
Employment rate	36	17	7.8:1	18	31	8.8:1	16	20	8.3:1
Unemployment rate	42	20	1:6.7	26	53	1:5.7	33	54	1:4.6
Budget revenues/capita	13	51	16:1	12	45	5.5:1	13	14	4.5:1

Source: Author's calculations on the basis of the RSO

The analysis of individual and synthesized indicators for the measurement of regional disparities provides an integral picture of regional development of Serbia [12]. Distinctive socio-demographic and economic development has several levels – the Danube-Sava concentration, the undeveloped area, the developed centre, and the underdeveloped periphery (see Figure 4).

The regional analysis of ranges of extreme values at the local level confirms the hypothesis about the reduction of regional disparities in times of recession (see Figure 5). Extreme ranges of representative indicators in the transition period in 2008-2012 were in decline but still at a high level, and thus in 2012 the range in earnings was 1:11, the employment rate (8:1), the unemployment rate (1:5), and in budget revenues per capita 5:1.

Asymmetries of regional competitiveness

The European Union has promoted regions as places most natural to manage economic development, pursue an adequate social policy, and take care of environment. One of the most important objectives is to boost overall competitiveness and it can be achieved only through enhancement of regional competitiveness and reduction of regional disproportions. Therefore it is necessary to thoroughly know, first of all, the economic basis of the region (enterprises, sectors, qualifications, and human resources), as well as to be familiar with specific factors of development of the region in order to be able to make this area attractive for investment that would boost overall competitiveness. The intertwining of the strategy and operational performance of a company, and the quality of

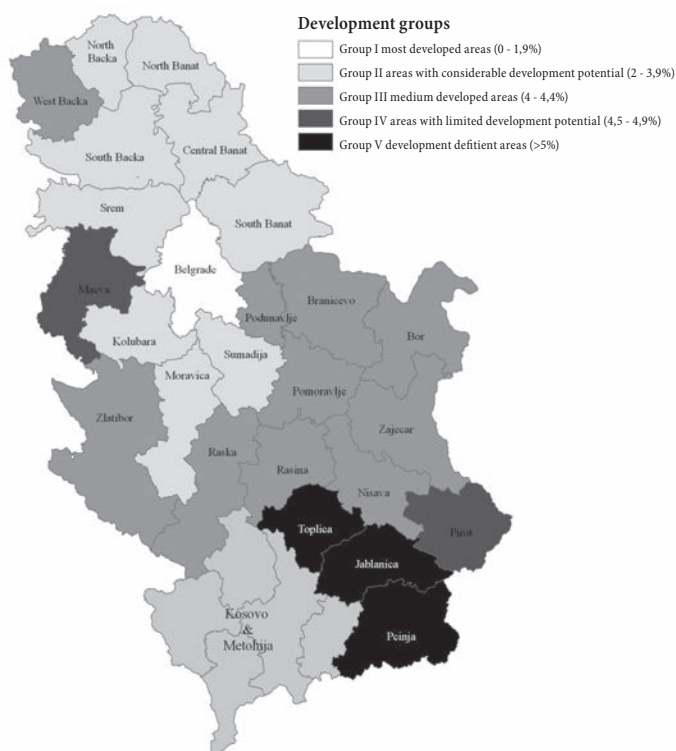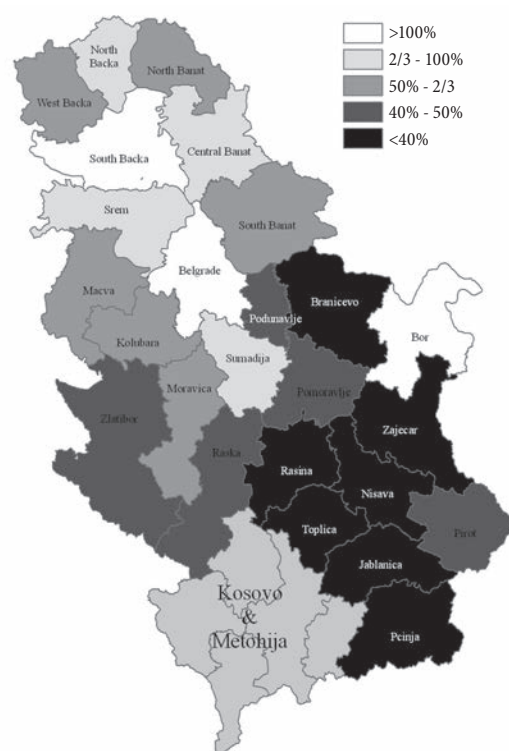**Figure 4: Development Deficiency Index 2012**

Figure 5: Regional distribution of income p.c. 2012

the business environment is a key factor that determines regional competitiveness. Levels of productivity, employment, investments, the degree of openness of an economy, as well as the availability of highly educated population are most important for the growth of competitiveness.

The analysis of regional gross domestic product per capita points not only to the degree of development, but is also an indicator of regional productivity and efficiency (see Table 10). The northern part of Serbia is more productive than the southern part, the Region of Belgrade is most productive, and the generated GDP per capita is 71.4% above the republic average, followed by the region of Vojvodina with 2.6% above the average of Serbia, while other two regions are far below the republic average.

The greatest contribution to labor productivity in 2012 was that of the Belgrade Region and the South Backa District, the total of 62%. Although GVA per employee was below the average of Serbia, the contribution of Nisava and Srem districts to overall productivity was rather significant compared to other districts owing to a larger share in total employment.

Table 10: Trend of regional productivity

Regions	GDP/capita (Serbia =100)			
	2009	2010	2011	2012
Belgrade	179.4	177.8	172.2	171.4
Vojvodina	95.2	96.8	99.5	102.6
Sumadija and Western Serbia	71.4	69.9	67.3	67.6
Southern and Eastern Serbia	63.3	63.9	63.1	63.3

Source: Author's calculations on the basis of the RSO

The regional analysis of external trade balance shows that largest shares in exports and imports were of the Region of Vojvodina (37.3% and 31.2%) and the Belgrade Region (24.7% and 46%), while the share of other two regions in exports was about 38.0%, and in imports about 22.8%. The indicator of export per capita shows that the Pirot District stands out.

The composite indicator of the level of regional competitiveness[2] for the period 2007-2012 points to:

- Large differences in levels of district competitiveness,
- The trend of declining regional disparities to the level of competitiveness: the ratio of the highest and the lowest value in 2012 was 1:7 (in 2007 1:29),

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2   A synthetic index that contains representative standardized indicators of productivity, exports, investments, and the level of education by districts

- In addition to the Region of Belgrade and the South Backa District, the most competitive districts in 2012 were Sumadija District (owing to the growth of exports and investments) and the Pirot District (owing to an enhanced level of education and the growth of exports),
- The largest improvement of the level of competitiveness was in Bor District (in relation to 2007 by 12 positions),
- Of 4 districts in 2007, Jablanica and Pcinja were still at the lowest competitiveness level,
- Regions with lowest performances are in the south of Serbia,
- All regions have development potentials, but some of them have better preconditions for attaining objectives.

Regional inequality and the middle class

Each research of transition inequality is focused on changes to income or consumption of the middle class. The middle class is a propeller of growth of every economy. The UN estimates clearly indicate that in 2050 the share of the middle class will equal almost a half of the global output [19, p. 14], by far exceeding the group of most developed countries G-7. In only ten years the share of the middle class in Europe and the US will decrease from 1/2 to less than 1/3 of the global output (from USD 1.8 bn to USD 3.2 bn in 2020).

Who belongs to the middle class? The definition of the UN and the OECD is rather broad and within the middle class subsumes everyone who earns or spends in the range of USD 10-100 a day. The UN stresses that in large states (China, India) this issue is tightly related to the process of industrialization of the state and the reason why poor states do not develop faster than rich ones. The strongest arguments are provided by the Feldstein-Horioka paradox, i.e. a long time ago detected high correlation between domestic savings and investments (the term paradox is used as the capital does not flow to underdeveloped countries although the rate of return is the highest).

The research of inequality and the status of the middle class in Europe mainly rely on similar methodological models, of which most representative ones are the descriptive and the quantile analysis, the Gini coefficient, Theil index,

and standard deviation [16, p. 7]. The transition analysis of family households in Serbia is focused on the change of the economic power of households due to various economic developments. The income reflects the real economic power of households. A balanced distribution of income is consistent with the efficiency of economy in the long run. Extreme inequality in income distribution adversely affects poverty reduction and economic growth of the country [21].

By applying the OECD equivalence scale one can approximate an average household income in Serbia for the period 2006-2012 (see Figure 6). An average household income was rising constantly in the period 2006-2009, reaching its maximum in 2009, and then in the period 2009-2012 it was in constant decline, and thus in 2012 it was at the level of 2006. In 2012 an average income of family households in Serbia fell sharply, a consequence of the second recession wave of the economic crisis and an economic downturn.

How did the middle class income develop? The standardized categorization of the series of household classes includes the first four deciles of income distribution; the middle class comprises a part of distribution from the fifth to the ninth decile, while the high class relates to the part of distribution that belongs to the tenth decile.

Throughout the transition period the income distribution was balanced, as confirmed by the Gini coefficient and Theil index, as well as standard deviation of income (see Table 11). The second recession wave led

to higher inequality of income distribution, whereby the rise in inequality of 2011/2010 is larger than the rise of 2012/2011.

Table 11: Indicators of inequality in income distribution

	2006	2007	2008	2009	2010	2011	2012
Gini coefficient	0.353	0.338	0.301	0.300	0.296	0.299	0.301
Theil index	0.242	0.211	0.163	0.151	0.148	0.159	0.158
Standard deviation (RSD)	17167	15685	12110	11359	10735	12257	10466

Source: Author's calculations

Recession waves affected the constellation of income classes, both in Serbia and in adjacent transition countries (as best illustrated by changes to the share of income classes, and the ratio of the tenth and the first decile of income distribution). On the other hand, the analysis of the cumulative relative change of the income in the period 2008-2012 shows that in Serbia there was no redistribution of income among the three income classes. Countries in the region experience somewhat different tendencies: in Bulgaria and Romania changes were significant and related to the redistribution of income at the benefit of middle and low income class, while in Hungary a portion of the total income spilled from the high to the low income class. By analyzing the EU member countries, which have "felt" significant effects of the global economic crisis, one cannot make a clear conclusion as to changes to the

Figure 6: Changes to standardized income classes of households
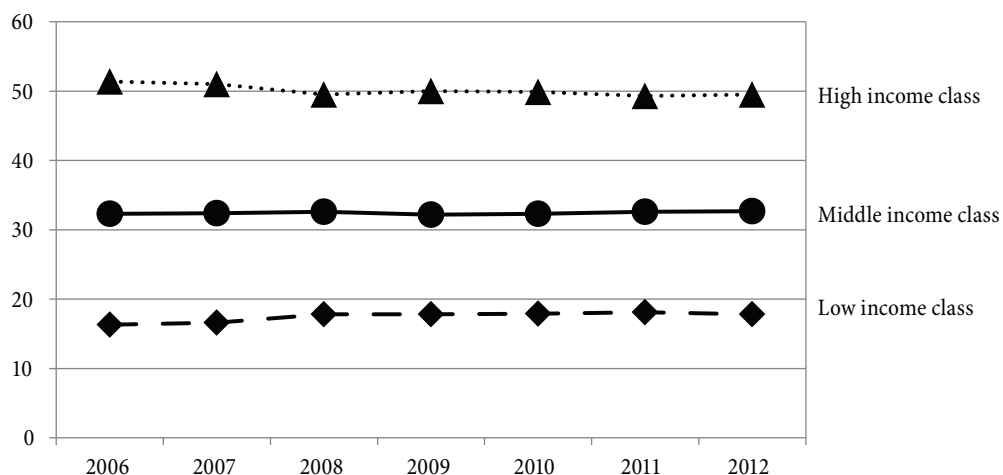
Source: Author's calculations on the basis of the RSO (2008-2013).

position of economic classes. In France changes are almost non-existent; in Greece, Italy and Spain the high income class is growing stronger at the cost of a lower share of the low class, while in Germany the middle and low income classes grew stronger (see Table 12).

A very much used indicator of inequality between the richest and the poorest household groups (the ratio of the value of the tenth and the first decile) suggests that Serbia saw a moderate rise in inequality. In Bulgaria and Romania inequality in income distribution is decreasing (a negative difference in the period 2008-2012), while in Greece, Spain, and Italy inequalities increased (see Table 13).

The Gini coefficient as the indicator of the change in inequality in the period 2008-2012 did not change markedly in any of selected transition countries, except in countries that are hit hardest by the economic crisis (Spain, Greece, and Italy).

Approximation of regional inequalities and income and consumption indicates a substantial reduction of inequality for all four macro regions (see Figures 7-8). Largest inequalities in terms of both income and consumption are detected in the region of Vojvodina (Gini 0.276 and 0.305), and even larger than differences at the national level (Gini 0.267 and 0.302). Significantly lower are inequalities in the region of Belgrade (the fall in the Gini coefficient with

Table 12: Change of the share of income classes in the period 2008-2012

|	Bulgaria	Hungary	Romania	Serbia	Germany	Greece	Spain	France	Italy
Low class	1.0	-1.0	1.2	0.0	0.8	-1.0	-1.8	-0.3	-0.5
Middle class	1.2	0.0	2.4	0.0	1.3	1.3	0.4	0.0	-0.2
High class	-2.1	1.0	-3.2	0.0	-1.9	1.2	1.5	0.5	0.6

Source: Author's calculations on the basis of the Eurostat (2008-2013) and RSO (2008-2013).

Table 13: The ratio of the tenth and the first decile and Gini coefficient 2008-2012

	2008		2009		2010		2011		2012		Difference	Difference
	X:I	Gini	X:I	Gini	X:I	Gini	X:I	Gini	X:I	Gini	X/I deciles	Gini
Bulgaria	11.5	0.359	9.7	0.334	9.6	0.332	11.4	0.350	11.0	0.336	-0.4	-0.023
Hungary	5.3	0.252	5.1	0.247	4.8	0.241	5.7	0.268	6.0	0.269	0.7	0.017
Romania	12.6	0.360	12.2	0.349	10.2	0.333	10.9	0.332	11.1	0.332	-1.5	-0.028
Serbia	7.8	0.307	7.2	0.300	7.4	0.296	6.7	0.299	8.0	0.302	0.2	-0.005
Germany	8.1	0.302	7.1	0.291	7.1	0.293	7.2	0.290	6.6	0.283	-1.5	-0.019
Greece	10.6	0.334	10.6	0.331	9.8	0.329	10.9	0.335	13.9	0.343	3.4	0.009
Spain	10.6	0.319	15.7	0.330	18.8	0.344	16.1	0.345	16.5	0.350	5.9	0.031
France	7.0	0.298	7.0	0.299	7.1	0.298	7.4	0.308	7.1	0.305	0.1	0.007
Italy	8.8	0.310	8.9	0.315	9.1	0.312	10.5	0.319	10.1	0.319	1.3	0.009

Source: Author's calculations on the basis of the Eurostat (2008-2013) and RSO (2008-2013)

Figure 7-8: Regional inequalities income and consumption
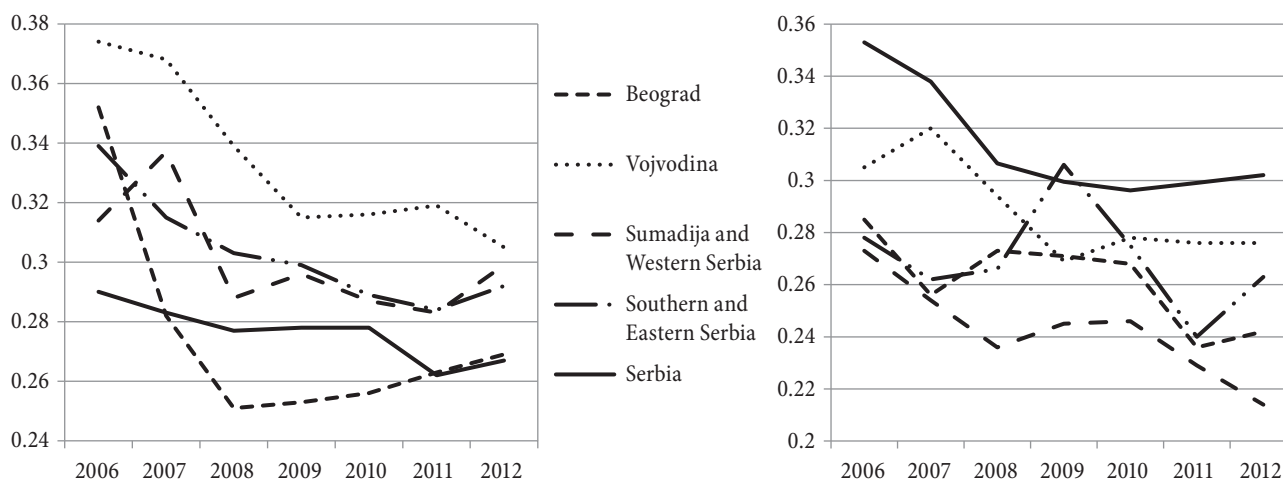
Source: Author's calculations on the basis of the RSO (2006-2013).

income from 0.285 to 0.242, and with consumption from 0.352 to 0.269), which is particularly significant as in the structure of consumption in Belgrade consumption is by 25% higher and income by as much as 30% higher than the average of the Republic. The least developed region of Southeast Serbia registered the smallest fall in inequality.

Social cohesion

The concept of social inclusion presents an integral part of the social process in the EU that aims for including various factors and forms of deprivation some individuals and groups are exposed to. Social cohesion presents a society's ability to provide for all of its members the access to systems that have a crucial impact on human development (health care, education, social protection, etc.) in order to create conditions for each citizen to develop their full potential, which would result in the strengthening of social capital i.e. common welfare.

Serbia is characterized by major regional social discrepancies manifested through dimensions of social exclusion and deprivation. The analysis of the composite index of social cohesion[3] in 2012 points to the following characteristic segments of high regional heterogeneity (see Figure 9):

- Disparities at the level of Serbia by the composite index show that social cohesion of the population in the municipality of Sokobanja is four times larger than that in the municipality of Zitoradja;

Table 14: Social cohesion index 2002-2012 (Serbia=100)

Area	2002	2008	2012
Belgrade Region	129.2	150.0	141.7
Region of Vojvodina	99.8	90.7	96.4
Region of Sumadija and Western Serbia	101.6	86.5	93.0
Region of Southern and Eastern Serbia	91.8	81.2	79.5
Districts (25)	97.1	87.1	88.9
Cities (23)	102.1	105.7	106.9
Municipalities (122)	91.6	72.9	73.5
UDA (46)	81.9	65.6	64.3

Source: Author's calculations

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3   Includes 4 dimensions presented through 7 representative indicators.

- Regional disparities in disbursed earnings are very prominent (the ratio of municipalities of Lajkovac and Arilje is 2.5:1);
- An average pension is almost three times higher in Belgrade than in the municipality of Malo Crnice;
- The access to social welfare services in Uzice is 24 times more favorable than in Svrljig;
- The availability of health care services in the municipality of Krupanj is 9 times lower than in Cuprija.

The transition regional analysis for the period 2002-2012 (see Table 14) shows that only the population of the city of Belgrade registers high, above average values of the composite index of social cohesion and the highest growth trend. Other regions register a drop in the composite index, which is particularly marked in the region of Southern and Eastern Serbia (-13%). The comparative analysis of selected dimensions of social cohesion has shown that at the territory of these districts there is a mixture of problems, such as: high unemployment, low earnings and pensions, the rise in the coefficient of economic dependence, the rise in the number of beneficiaries of social welfare benefits,

Figure 9: Composite index of social cohesion 2012

and the fall in the number of newly built flats. Still, a key impact on the living conditions of individuals is that of differences as to the level of revenues.

Conclusion

Although all transition models forecast that inequality will mount, in practice it varies from country to country, depending on effects, the volume, and the speed of key transition determinants, changes to distribution of earnings, employment, growth of entrepreneurship and applied social and regional models.

Economic growth in the transition period 2001-2008 in Serbia was among the highest in Europe (an average GDP growth rate of 4.9%), but the high growth did not stem from any marked changes to the economic structure. Growth in Serbia was based on the state of low technological equipment, declining employment, and inadequately employed labor. The dynamics of structural changes since 2001 has not ensured establishment of a new industrial structure based primarily on high-tech industries that would provide qualitative growth and stronger competitiveness of foreign markets [10].

On the other hand, high economic growth was not conducive to reduction of regional and social inequalities in Serbia that have constantly been on a high level (*hypothesis 1*). The trend of regional economic concentration in 23 towns (more than 80% of the total newly created value, assets, revenues, income, employment), of which shares of cities of Belgrade and Novi Sad equaled more than 60%, determined all forms of regional and social inequalities in Serbia. The rate of poverty risk is the highest in Europe (24.3%), persons aged below 18 are most exposed to the poverty risk (30.0%), while the lowest rate of poverty risk is registered with people older than 65 (19.5%). The compact

extremely undeveloped area in Serbia (25 municipalities have constantly been extremely undeveloped for more than 40 years, which equals 25% of the territory and 11% of the population) is faced with intensive processes of depopulation (over the last two decades averagely -10,000 persons a year), extremely high unemployment (more than 60%), economic backwardness (rising losses, the economic share is less than 2%). In a climate of high regional and social inequalities, macroeconomic vulnerability mounted (*hypothesis 1*).

The analysis of interdependence of the transition speed of structural reforms and inequalities clearly shows that in periods of rapid transitional reforms, regional and social inequalities increased (*hypothesis 2*). The largest positive leaps of transition EBRD indicators were registered in 2002 (0.48), 2005 (0.17), and 2007 (0.15), when inequalities were the highest. In the period 2010-2013 when no positive changes whatsoever were registered, inequalities were decreasing. What is also interesting are results of interdependence of the coefficient of efficiency of privatization, and regional and social inequalities: most developed regions had much better coefficients of privatization and much better Gini improvements and, vice versa, the least developed region of Southern and Eastern Serbia had the weakest coefficient of privatization, inequality decreased least, and it had the lowest composite index of social cohesion (see Table 15).

Economic recession only further deepened the problems in Serbian economy (in the period 2009-2012 an average GDP growth rate was at -0.7). A large decrease in aggregate demand, the decline in economic activity, and the mounting of non-liquidity of enterprises, coupled with an additional burden put on debtors through dinar depreciation, have led to the plunge of output in the first half of 2009, which also created the decrease in the number of the employed

Table 15: Interdependence of transition and regional inequality

Regions NUTS-2	BDP PPS p.c. (EU-27=100)	Coefficient of privatization (Serbia=100)	Difference in Gini consumption 2006-2012	Difference in Gini income 2006-2012	Composite index of social cohesion
Serbia	35	100.0	0.023	0.051	100.0
Belgrade	60	112.1	0.082	0.043	141.7
Vojvodina	35	112.5	0.070	0.029	96.4
Sumadija and Western Serbia	23	92.2	0.014	0.059	93.0
Southern and Eastern Serbia	21	74.7	0.047	0.015	79.5

Source: Author's calculations

and earnings, and thus in 2009 the rate of fall of -3.5% was registered. Overall labor productivity of Serbia in 2012 fell to the level of 2009. Regional inequalities in the course of recession in the majority of regions decreased, although there are differences between most developed and least developed regions (*hypothesis 3*). At the level of the state, income inequalities are larger (Gini 0.300) than inequalities with consumption that in the course of recession decreased (Gini coefficient fell from 0.277 to 0.267, and Theil index fell from 0.242 in 2006 to 0.158 in 2012). The most developed region of Belgrade in the course of recession lessened income inequalities (Gini from 0.273 to 0.242), but inequalities in consumption increased (Gini from 0.253 to 0.269). In undeveloped regions inequalities are falling (the example of Southern and Eastern Serbia where Gini of income fell from 0.306 to 0.263). These conclusions are supported by the analysis of the trend of regional extremes (extreme ranges in earnings per capita fell from 1:12 to 1: 10.7, with the unemployment rate they fell from 8.8:1 to 8.3:1, and with local budget revenues they fell from 5.5:1 to 4.5:1, etc.).

The analysis of interdependence of transition effects and regional-social inequality has its demographic dimension as well, since changes to the age structure of the population affect redistribution of consumption through the raising of the share of public consumption on pensions and health care for the elderly, i.e. reduction of public consumption for working age population and children. The raising of the age limit of the population substantially increases challenges in the definition of the new social model of the EU. Over the past 50 years life expectancy lengthened by 15 years, which directly impacts on the health care systems [21]. The focus of the new social model of the EU will be on the development of a more inclusive labor market, whereby the priority focus will be on the young, women, and the elderly.

Transition development of regional and social inequalities in Serbia in the following period will depend primarily on: (a) the speed of transition reforms (post-privatization restructuring, structural reforms, investments), (b) educational reforms [3, pp. 83-84], and (c) regional models of endogenous growth [4, p. 38] and social inclusion. The focus of structural reforms will certainly be on areas where the degree of inclusion gap is the largest: institutional reforms [3, p. 90], reforms on the labor market, and reforms in education [7, p. 40], [17, p. 12].

By changing the regional economic structure, the state forms its future economic development. Over the previous period there has been no anticipated reindustrialization, the growth of output of tradable goods, and economic recovery of Serbian economy. Not only that a more efficient economic structure with new, competitive products has not been established, but products that were produced some twenty years ago are no longer produced. The target of regional interventions should be:

- Reduction of regional disparities,
- Structural reforms in regions with the focus on highly productive export industrial products,
- Regional economic diversification so as to improve regions' resistance to external shocks,
- Greater social cohesion, and improvement of the quality of life,
- Maintenance of cultural and social diversity.

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