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Conference Paper — Manuscript Version (Preprint)

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*Suggested Citation:* Popović, Milenko; Čiymović, Mirjana (2013) : The Sources of Growth in the Former SFRY Countries: Comparative Analysis, International Scientific Conference: The Role and Responsibility of State in Ensuring Economic Growth, Faculty of Economics & RifiN, Zagreb, October 2013, Faculty of Economics & RifiN, Zagreb

This Version is available at:

<http://hdl.handle.net/10419/82825>

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International Scientific Conference:  
*The Role and Responsibility of State in Ensuring Economic Growth*  
Faculty of Economics & RifiN, Zagreb, October 2013

## **The Sources of Growth in the Former SFRY Countries: Comparative Analysis**

by

**Milenko Popović and Mirjana Čizmović<sup>1</sup>**

**Abstract:** The topic of this paper is comparative analysis of the economic growth in the former SFRY countries. The paper is primarily devoted to the analysis of the sources of economic growth in these countries. In this regard, apart from conventional decomposition of growth (contributions of capital, labor and total factor productivity), the demand and the industry composition sides of the sources-of-growth analyses have also been considered. Furthermore, the reserves for further rise in GDP per capita have been identified and estimated on the basis of obtained results. Special attention has been paid to possible increase in the total factor productivity induced by the advance in “broader knowledge” as well as to increase in the labor participation rate. Institutional and policy prerequisites for realization of these reserves of growth are also briefly analysed.

**Key Words:** sources of growth, growth reserves, convergence

**JEL code:** O40, O43, O47

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The common practice among modern theories of growth is to make distinction between “proximate” and “fundamental” causes of growth.<sup>2</sup> Proximate causes, usually comprised within the sources-of-growth analysis, are based and developed according to the Solow Growth Model. The end result of this analysis is decomposition of the GDP growth rate into the absolute and relative contribution of the increase in employment, the increase in capital and the increase in the total factor productivity (TFP). The growth rate of the TFP is further decomposed into the contribution of human capital (skills), advance in applied knowledge (sometimes referred to as embodied technological progress), the contribution of organizational innovation, structural changes and similar.<sup>3</sup> In one or the other form, it captures in the long run different kinds of knowledge and this is why the TFP is sometimes referred to as the advance in “broader knowledge”.

On the other hand, the so-called “fundamental” causes of growth refer mainly to institutional but also to cultural, geographical and some other factors, including pure luck. These factors determine the rate of growth by determining the rate of formation as well as an efficient usage of proximate factors enumerated above. While differences in income levels can be attributed to differences in the proximate causes, the answer to the question of why growth rates differ among countries and within the same country at different times can be obtained only after the analysis of fundamental factors.

This paper is primarily focused on the analysis of proximate causes of growth in the former SFRY countries. In the absence of long-term data series, caused mainly by changes in national accounting systems that took place at the end of the last century, these countries don't have such kind of analysis, with the exception of Croatia (IMF, 2012), Serbia (Popović, 2013) and Montenegro (World Bank, 2012; Popović, 2010). Now, after more than one decade, we have some decent time span data and it seems appropriate to make such an analysis. Some data are still missing and, for that reason, it was not possible to make a detailed sources-of-growth analysis. For the beginning, this paper estimates only decomposition of the GDP growth rate into the contribution of capital, labor and TFP. This kind of sources-of-growth analysis will, nevertheless, provide some important insight into anatomy of the economic growth of the former SFRY countries. The results are presented in the first and the second section of this paper.

Apart from this conventional sources-of-growth analysis, both the demand and the sectorial side of decomposition of the GDP growth rate are given here too. They are presented in the third and fourth section of this paper. The results of these different sources of growth approaches present a good basis to identify main institutional and policy factors that have determined an anatomy of the economic growth. Thus, first four sections briefly analyse fundamental factors as well. Apart from that, it was a good foundation for identifying and estimating growth reserves for future economic growth. Based on the above stated, it was possible to establish and analyse, although only briefly, policy and institutional prerequisites for liberation of the existing growth reserves and an increase in the future growth rate of the respective countries. This is given in the fifth section of the paper.

This is just the beginning of our research expected to provide all other SEE countries with a similar analysis of growth anatomy as well as to extend its area of research onto the influence of institutional and other fundamental factors on growth of SEE countries.

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<sup>2</sup> See for example Acemogly (2008).

<sup>3</sup> For more detailed insight into the sources of growth analysis see: Acemogly (2008), Agnion and Howit (2009), Romer (2001), Baro and Sala-i-Martin (1995), Crafts and Toniolo (1996), Mankiw (1995), Mankiw at all (1992), Madison (1982, 1987), Denison E. (1967, 1985), Jorgenson and Griliches (1967).

## *1. Sources of Growth Analysis*

Sources of growth analysis presented below are based on the Cobb-Douglas (CD) aggregate production function and Solow Growth Model (1956, 1957).<sup>4</sup> The analysis is produced for the period 1995-2011 as well as for the post-war recovery sub-period 1995-2000, pre-crisis sub-period 2000-2008 which, due to distortion caused by the economic crisis, better reflects long-run characteristics of the path of economic growth than the data pertaining to the entire period. The data about investment and employment were not available for 2012. More importantly, the data about gross value of capital as a common measure of “number of machines”, as well as the data about net value of capital do not exist for respective countries and we approximated it by using perpetual inventory method, based on the data available about investment.<sup>5</sup> In order to compare growth of the respective period with that of the socialist economy we used results from different measurements given either for the entire SFRY or for specific republics where available. The results are presented in Table 1.

First note significant differences in GDP rates of growth both among different countries and within different sub-periods. Bosnia and Herzegovina have experienced highest rate of growth during the entire period - 9,53%, obviously resulting from the initially low GDP caused by war's massive destruction. Growth rate of Montenegro's economy is also significant (5%) being close to its' 1965-1985 period level (5,14%; Popovic, 2010). GDP growth in all other countries is smaller than it was at its' pre-war level, varying between 2,64% in Croatia and 3,07% in Slovenia. These rates of growth can be regarded as very low having in mind, on one side, initial low level of GDP caused by war, breakup of SFRY and sanctions imposed by the U.N. Security Council and especially having in mind great potential for catch-up effect, on the other side. It is also noticeable that growth rates were particularly high during first five years of post-war recovery in Bosnia and Herzegovina (23,19%) and Montenegro (8,35%). Strangely enough, growth rates in other countries were not much higher during the first five post-war years than in the following eight years of a pre-crisis period. Naturally, GDP growth rates have dropped significantly during last three post-crisis years. With an exception of Macedonia, it has been negative in all the respective countries.

Looking at the data for the entire period 1995-2011, it can be noticed that the relative contribution of capital to economic growth varies from 24% of growth in Montenegro to almost 60% in Croatia. Looking at different sub-periods, it is noticeable that contribution of capital is much smaller in first five years of a post-war recovery than during the entire period and its' relative contribution increased significantly in the following eleven years (from around 37% of growth in Serbia to 75% in Croatia). If we compare contribution of capital to economic growth in observed countries with that in the former SFRY or with that in specific republics of the former SFRY, it can be noticed that, while absolute contribution of capital

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<sup>4</sup> Differentiating and dividing the CD production function  $Q = AC^aL^{1-a}$  with  $Q$  (GDP) we get the following well known decomposition of the GDP rate of growth:  $r_Q = ar_C + (1 - a)r_L + r_A$ . Note that  $r$  presents the rate of growth of the variable given in subscript ( $C$  for capital,  $L$  for labor, and  $A$  for TFP), while  $a$  and  $(1 - a)$  stand for partial elasticity of production with respect to capital and labor respectively. The growth rate of GDP is therefore decomposed in parts that measure the contribution of capital ( $ar_C$ ), the contribution of employment ( $(1 - a)r_L$ ), and the contribution of total factor productivity ( $r_A$ ). Based on previous measurements and on now widely used practice we assumed in this analysis  $a$  and  $(1 - a)$  to be equal to 0.34 and 0.66 respectively.

<sup>5</sup> We estimated and used gross value of capital which is supposed to be appropriate measure of “number of machine”. Estimation is based on assumption that constructions have life span of 70 years, while equipment and other elements of capital have life span of 10 years.

is smaller, its' relative contribution is quite higher than before breakup of Yugoslavia.<sup>6</sup> This contradicting fact is a result of reduced contribution of labour input.

One of the most obvious results of this measurement is that absolute and relative contribution of employment to economic growth in the whole period is very low for all the respective countries. This is particularly strange having in mind that almost all of those countries, with an exception of Slovenia, have high unemployment rate. In the socialist period the contribution of labor was the most important source of growth, which averagely accounted for 50% of growth in the period 1965 – 1985. Now, absolute contribution of employment in entire period varies from negative value in Serbia (-0,37%) to 1,01% in Montenegro and 1,16% in Bosnia and Herzegovina. In all other countries absolute contribution is well below 1%. We can therefore talk about weak and jobless growth not only in Serbia but in all these countries as well. Note also that situation is much better, although still very unsatisfactory, if we exclude after war recovery period and especially if we look at a pre-crisis period 2000-2008, having in mind high unemployment rate in all respective countries, with an exception of Slovenia.

However, what's most surprising is very high contribution of the TFP, with puzzling exception of Croatia. TFP's relative contribution varies during the entire period from 57, 44% for Bosnia and Herzegovina to amazing 80,80% for Serbia, while its' absolute contribution varies from 5,48% in Bosnia to 2,77% in Montenegro. This contribution of TFP is much higher than in the period of 1973-85 when it was almost negligible. It is even much higher than in SFRY or in any other country during the "bell époque" period of growth of 1945-1973. Again, puzzling exception is Croatia with absolute TFP's contribution of 0,37% and relative contribution of only 14%. Contribution of TFP was especially high during first five years of post-war recovery: relative contribution of TFP varies from about 73% in Slovenia to 97% in Serbia; Croatia is again an exception and its' relative contribution of TFP in that period is only 18%. Obviously, high contribution of TFP during the five post-war recovery years is not result of advance in 'broader knowledge' but the result of a sudden increase in utilization of existing capital and resulting increase in economic activity caused by peace agreements reached at about the beginning of that period.

Having in mind the above, if we exclude first five years and look only at results for sub-period of 2000-2011, one can notice natural decline in absolute and relative contribution of TFP. Now it is even negative for Bosnia and Herzegovina: absolute contribution is -0,11%. As regards other countries TFP's relative contribution varies from 11,6% in Croatia to 78,26% in Serbia. The mentioned results are largely influenced by movements that took place throughout post-crisis period and cannot be taken as a basis for approximation of the long-run growth rate of TFP. In order to isolate cyclical effects, it is good to take a look at the TFP growth for the pre-crisis period 2000-2008. The relative contribution of the TFP is now higher and varies from negative value of -2,59% in Bosnia to 68,22% in Serbia. It should also be noted that, with exceptions of Bosnia and Croatia, relative contribution of TFP is higher than 40% in all other countries (41% in Macedonia, 47% in Montenegro, 68% in Serbia, and 43% in Slovenia). This can be regarded as high level of TFP contribution especially having in mind that contribution of TFP was almost negligible in pre-war period. Therefore, we are faced with two puzzles that need to be solved. The first one refers to the issue of low level of TFP in Croatia and Bosnia. The second one refers to high TFP contribution to the growth within the remaining four countries of the former SFRY.

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<sup>6</sup> See Popovic (1985) for measurements for Yugoslavia and Popovic (2013) for Serbia and Montenegro.

The jobless growth accompanied by high increase in TFP in above mentioned four countries is puzzling indeed. The contribution of TFP is usually treated as a measure of the contribution of “broader knowledge” which includes the contribution of different forms of knowledge. Having this in mind, a logical question is: Does the recent high growth rate of TFP in Serbia, Macedonia, Montenegro and Slovenia really reflect high increase in “broader knowledge”? Not exactly - high TFP growth mostly results from peculiar privatizations and other economic reforms undertaken in the first decade of this millennium. Similarly, the high contribution of labor and the low contribution of TFP in the socialist period resulted from peculiar socialist economic system.

During the socialism, economic activity was mainly organized within the system of worker self-management characterized by strong “internal” solidarity among workers implying a decent wage flexibility, and low “external” solidarity due to low propensity to saving. In order to preserve power and social peace, the state or political nomenclature, as the company’s main stakeholder (or, better to say, “implicit” stockholder) created hidden unemployment within the company and provided financial assistance for companies in troubles. The implicit social contract between the nomenclature and the working class was that the nomenclature would provide job security to workers in return for political stability (Županov, J. 1983 and 1983a). This is how we got the high contribution of labor and the low contribution of TFP to the economic growth of that period. However, at the end, the implicit social contract between working class and political nomenclature turned out to be unsustainable. By somewhat modifying the prospect of upward mobility (POUM) hypothesis, it can be concluded that the mentioned implicit social contract broke down at the moment when the nomenclature became unable to provide the prospect of upward mobility to people.<sup>7</sup> This is mainly caused by the fact that deruralisation and urbanization, as the main sources of providing upward mobility and social promotion, were almost exhausted by the middle of the eighties. Even more important cause was lack of internal and external sources of capital necessary to create new jobs for remaining labor force not absorbed by hidden unemployment and emigration as well as to solve numerous other problems created in previous period. The economic crisis was followed with the constitutional and political crisis. The rest is known to everyone in the world.

After brake up of SFRY at the turn of the millennium, economies of new states were in a very bad shape. One decade was lost. The existing capacities were old and technologically obsolete, mainly built to serve the already non-existing Yugoslav market. Instead of adopting an active economic policy directed toward “rediscovering economy” (Hausmann at all, 2005), the new government(s) opted for all kinds of “neoliberal shocks”. These “shocks” almost destroyed the domestic economies. Adopted models of

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<sup>7</sup> POUM hypothesis, formulated by Benabou and Ok (2001), claims that we should take into account individuals’ expected stream of net benefits and, in that respect especially, a possibility of upward mobility to solve the puzzle that in democratic societies people do not vote for redistributive policy that would lead toward egalitarian society, something that might be natural to expect if we know that a share of those who have a below average income is much larger, around 75%, than a share of those who have higher than average income. Following the experience of communist countries, we can establish another, even more convincing and interesting, version of this hypothesis: human beings might be ready to give up democracy for an increased level of upward mobility. “Fighting for democracy” and “civil disobedience” was rare in communist countries as long as totalitarian regimes were able to provide high expectations regarding upward mobility. By using the strategy of “big push” and consequent rapid industrialization and urbanization, communist regimes were able to keep a high level of upward mobility and to hold power for so long. Similarly, the one-party-capitalism in China wouldn’t be possible without a huge reserve for further urbanization and industrialization that is supposed to generate long run expectations of a high level of upward mobility.

privatization were especially bad and destructive. Foreign direct investments, especially at the beginning, were mostly comprised within the so-called “brown-field” investment based on privatized companies. To make a long story short and relevant for the issue being discussed, it is important to emphasize that the new domestic or foreign owners of privatized companies reduced employment in their companies to technologically acceptable level. In other words, hidden unemployment disappeared and became explicit unemployment. New investments in new or old companies, on the other hand, were insufficient to compensate for this effect and increase employment significantly. Apart from that, these new investments were mainly directed toward industrial centers, very rarely to less developed and distant regions, so that number of “closed” companies especially increased in less developed areas that once had labor intensive capacities. As a result, number of employees increased very slowly and even decreased in Serbia (it decreased by about 400,000 workers from 2000 to 2011)?! From the sources of growth point of view the consequence is the reduced contribution of employment and the increased contribution of TFP to the economic growth.

Obviously, the recent high growth rates of TFP in Serbia, Macedonia and Montenegro results from an advance in “broader knowledge” only to a small extent. Most probably, this advancement in these countries was as low as it was in Croatia. The greatest portion of the TFP growth rate results from reduction in hidden unemployment accumulated in the previous phase of economic development. In other words, the TFP increase was the more “revealed” productivity of the already existing technology than the advance in “broader knowledge” brought with new investment. Bearing that in mind and knowing that this reserve of the TFP increase is already exhausted, we may expect this kind of TFP growth rate to retard in the future. On the other hand, having in mind large discrepancy between TFP of these countries and the countries on the technological frontier, we may conclude that possibilities to increase TFP via advance in “broader knowledge” are enormous. The “catch-up” effect, in other words, may be the crucial reserve for future growth of all former SFRY economies. How successfully the countries will exploit this reserve of growth depends crucially on an appropriate policy of the national innovation system (NIS) development. Not less important is the policy directed toward attracting good “green-field” foreign investment with a high degree of technological knowledge and with a strong “spillover” effect on productivity of domestic resources. Looking at the experience of countries that have been successful in implementation of mentioned policies, Ireland for example, we may suppose with a high level of certainty that this reserve might be around 2.40% per year.

Regarding the puzzle related to Croatian and Bosnian peculiar anatomy of growth, we hope that further research will bring some new insights that might explain this issue.

Table 1: Sources of economic growth

Country	GrwRate	Contrib	%	GrwRate	Contrib	%	GrwRate	Contrib	%	GrwRate	Contrib	%	GrwRate	Contrib	%
<b>B and H</b>	1995-2011			1995-2000			2000-2011			2000-2008			2008-2011		
Capital - C	8,51%	2,89%	30,36%	11,32%	3,85%	16,60%	7,26%	2,47%	64,33%	8,10%	2,75%	51,11%	5,06%	1,72%	-934,30%
Labour - L	1,76%	1,16%	12,20%	-0,55%	-0,37%	-1,58%	2,24%	1,48%	38,53%	4,20%	2,77%	51,48%	-2,81%	-1,85%	1007,20%
T F P	5,48%	5,48%	57,44%	19,70%	19,70%	84,97%	-0,11%	-0,11%	-2,87%	-0,14%	-0,14%	-2,59%	-0,05%	-0,05%	27,10%
G D P – Q	9,53%	9,53%	100,00%	23,19%	23,19%	100,00%	3,84%	3,84%	100,00%	5,39%	5,39%	100,00%	-0,18%	-0,18%	100,00%
<b>CROATIA</b>	1995-2011			1995-2000			2000-2011			2000-2008			2008-2011		
Capital - C	4.66%	1.58%	59.97%	3.73%	1.27%	37.37%	5.08%	1.73%	75.10%	5.36%	1.82%	42.46%	4.34%	1.48%	-52.19%
Labour - L	1.04%	0.69%	25.95%	2.32%	1.53%	45.04%	0.46%	0.31%	13.30%	1.87%	1.23%	28.71%	-3.19%	-2.10%	74.35%
T F P	0.37%	0.37%	14.08%	0.60%	0.60%	17.59%	0.27%	0.27%	11.60%	1.24%	1.24%	28.84%	-2.20%	-2.20%	77.83%
G D P – Q	2.64%	2.64%	100.00%	3.39%	3.39%	100.00%	2.30%	2.30%	100.00%	4.29%	4.29%	100.00%	-2.83%	-2.83%	100.00%
<b>MACEDONIA</b>	1995-2011			1995-2000			2000-2011			2000-2008			2008-2011		
Capital - C	3.12%	1.06%	37.59%	2.69%	0.91%	30.79%	3.31%	1.13%	40.92%	3.08%	1.05%	32.69%	3.96%	1.35%	85.19%
Labour - L	0.78%	0.51%	18.22%	-0.69%	-0.46%	-15.34%	1.45%	0.96%	34.84%	1.28%	0.84%	26.40%	1.92%	1.27%	80.26%
T F P	1.25%	1.25%	44.19%	2.51%	2.51%	84.54%	0.67%	0.67%	24.24%	1.31%	1.31%	40.91%	-1.03%	-1.03%	-65.45%
G D P – Q	2.82%	2.82%	100.00%	2.97%	2.97%	100.00%	2.75%	2.75%	100.00%	3.20%	3.20%	100.00%	1.58%	1.58%	100.00%
<b>MONTENEGRO</b>	1995-2011			1995-2000			2000-2011			2000-2008			2008-2011		
Capital – C	3.58%	1.22%	24.37%	1.64%	0.56%	6.69%	4.48%	1.52%	43.35%	3.70%	1.26%	25.22%	6.60%	2.24%	-732.41%
Labour – L	1.54%	1.01%	20.28%	0.51%	0.34%	4.02%	2.01%	1.33%	37.73%	2.10%	1.39%	27.82%	1.76%	1.16%	-380.10%
T F P	2.77%	2.77%	55.35%	7.46%	7.46%	89.29%	0.66%	0.66%	18.92%	2.34%	2.34%	46.96%	-3.71%	-3.71%	1212.51%
G D P – Q	5.00%	5.00%	100.00%	8.35%	8.35%	100.00%	3.51%	3.51%	100.00%	4.98%	4.98%	100.00%	-0.31%	-0.31%	100.00%
<b>SERBIA</b>	1995-2011			1995-2000			2000-2011			2000-2008			2008-2011		
Capital – C	2.63%	0.89%	32.62%	0.14%	0.05%	4.26%	3.78%	1.28%	36.92%	3.48%	1.18%	23.90%	4.59%	1.56%	-475.21%
Labour – L	-0.56%	-0.37%	-13.42%	-0.02%	-0.01%	-1.11%	-0.80%	-0.53%	-15.19%	0.59%	0.39%	7.88%	-4.42%	-2.91%	887.85%
T F P	2.21%	2.21%	80.80%	1.09%	1.09%	96.85%	2.72%	2.72%	78.26%	3.37%	3.37%	68.22%	1.03%	1.03%	-312.63%
G D P – Q	2.74%	2.74%	100.00%	1.13%	1.13%	100.00%	3.48%	3.48%	100.00%	4.94%	4.94%	100.00%	-0.33%	-0.33%	100.00%
<b>SLOVENIA</b>	1995-2011			1995-2000			2000-2011			2000-2008			2008-2011		
Capital – C	4.28%	1.46%	47.39%	3.81%	1.30%	29.85%	4.50%	1.53%	61.12%	4.92%	1.67%	39.08%	3.39%	1.15%	-55.08%
Labour – L	0.16%	0.11%	3.46%	-0.18%	-0.12%	-2.78%	0.32%	0.21%	8.37%	1.15%	0.76%	17.69%	-1.86%	-1.23%	58.78%
T F P	1.51%	1.51%	49.16%	3.16%	3.16%	72.93%	0.76%	0.76%	30.50%	1.85%	1.85%	43.23%	-2.01%	-2.01%	96.30%
G D P – Q	3.07%	3.07%	100.00%	4.34%	4.34%	100.00%	2.50%	2.50%	100.00%	4.28%	4.28%	100.00%	-2.09%	-2.09%	100.00%

Sources: Authors calculations based on national statistical offices data and on the basis of UN data set.



## 2. GDP per capita Sources of Growth

The analysis of the GDP per capita sources of growth that is given in the following Table 2, will be useful in focusing on and analysing another important reserve for future growth – the increase in the labor participation rate. Basically, taking  $P$  to present population and  $Q$  to present GDP, the growth of GDP per capita can be decomposed in the following way:

$$\frac{Q}{P} = \frac{L}{P} \frac{Q}{L} = \left(\frac{L}{P}\right) \frac{AC^a L^{(1-a)}}{L} = \left(\frac{L}{P}\right) A \left(\frac{C}{L}\right)^a \Rightarrow r_{Q/P} = r_{L/P} + r_{Q/L} = r_{L/P} + a r_{C/L} + r_A \quad (1)$$

where, as previously,  $r$  presents the rate of growth of the variable given in subscript. The growth of GDP per capita is decomposed into a part that measures the contribution of the increase in the employment share in the population (employment population ratio,  $r_{L/P}$ ), a part that measures the contribution of the increase in the capital labor ratio ( $a r_{C/L}$ ), and a part that measures the contribution of the TFP ( $r_A$ ).

The results presented in the Table 2 have been obtained by applying the above analytical framework on the existing data pertaining to our sample of countries. Note that the growth of GDP per capita is decomposed, first, into the contribution of the increase in the participation rate (labor-population ratio) and the contribution of the increase in labor productivity. After that, the contribution of labor productivity is decomposed into the contribution of the increase in capital labor ratio and the contribution of TFP. Many interesting conclusions can be derived from these results. We will discuss only those conclusions that are most important for the kind of analysis we intend to do.

Note first that, although far from perfect, the GDP per capita is usually regarded as a good proxy for the level of welfare and standard of living. The less developed the country, the better measure of welfare it is. Numerous researches, especially those related to economic of happiness, revealed that this does not apply to developed countries.<sup>8</sup> Secondly, usually the less developed the country, the more important source of its' rate of growth is the increase in the participation ratio. Finally, the increase in the employment population ratio, apart from increasing the standard of living, reduces economic inequality and eradicates poverty. In fact, it is the most powerful channel to reduce poverty. At the same time, it is the only sustainable way to do it.

Let us see how former SFRY countries position themselves against these issues. Looking at the entire period of 1995-2011 Bosnia and Herzegovina has again achieved the best result: GDP per capita has grown in this country at an annual rate of 8,79%. Note, however, that this growth is almost entirely attributable to the first five years of post-war recovery when GDP per capita grew at 21,11%. In the following period of 2000-2011 its' growth rate of GDP per capita does not differ significantly from that of the other countries, varying from 2,51% in Macedonia to 4,79% in Montenegro. No doubt, these are very slow rates of growth having in mind low initial level, high unemployment and high possibilities for catch-up effect. Situation is similar for a sub-period of 2000-2011. If we eliminate effect of economic crisis, and if we look solely at results for a sub-period of 2000-2008, certain improvement can be noticed in all countries. Rates of growth of GDP per capita now vary from 3,07% in Macedonia to 5,22% in Serbia and 5,12% in Bosnia and Herzegovina. Nevertheless, given the initially low level, high level of

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<sup>8</sup> For brief insights and references on the issue of economics of happiness see, for example, Layard (2003, 2005) and Graham (2010).

unemployment and high possibilities for catch-up effect, these results cannot be regarded as satisfactory at all.

However, closer look at the anatomy of growth reveals even worse situation, which is considerably far from being welfare improving. In fact, due to the already discussed negligible employment increase, the participation rate contribution to the GDP per capita growth was insignificant. In the whole period 1995-2011 its' relative contribution was even negative in Serbia (-14,15%) and Slovenia (-1,28%). In Serbia situation is even worse having in mind that Serbia experienced decline of population during the whole period, what in fact reduced negative impact of labor participation rate. In Bosnia and Herzegovina (11,57%), Macedonia (18,68%) and Montenegro (27,69%) its' relative contribution is also very small having in mind high level of unemployment. Exception is Croatia with relative contribution of labor participation rate of 46,71%. Note, however, that almost one third of this contribution is attributable to the decline of population that Croatia has experienced in respective period. In first five years of post-war recovery relative contribution of labor participation rate was negative in Bosnia (-12,24%), Macedonia (almost -60%), Serbia (-9,70%) and Slovenia (-4,88%). In Montenegro it was almost insignificant (2,43%). These results are quite compliant with what someone would expect having in mind nature of recovery period: sudden increase in resource utilization and consequent increase in economic activity. Croatia again represents an interesting and puzzling exception: relative contribution of Croatian labor participation rate is even more significant than in the entire period (75,82% versus 46,71%).

If we take look at post recovery sub-period, we can notice that Bosnia and Herzegovina records quite encouraging relative contribution of labor participation rate: 56,77% in sub-period 2000-2011 and 76,83% in pre-crisis period 2000-2008. Note, however, that this period is characterised by negative TFP rate of growth and that productivity growth is entirely explained by an increase in capital labor ratio. In Croatia relative contribution of labor participation is small in whole post-recovery period 2000-2011 - about 22%; it is, however, very decent in pre-crisis period 2000-2008 - around 43%. In the case of Macedonia, relative contribution of labor participation rate is decent in both sub-periods: about 50% in whole period 2000-2011 and 37% in period 2000-2008. Similar situation is with Montenegro: 55% and 37% for same sub-periods respectively. In same sub-periods Serbia and Slovenia show small contribution of labor participation rate, what might be regarded as normal situation as far as Slovenia is concerned, having in mind its' level of development and low level of unemployment, while it definitely signals deep distortion in chosen path of Serbia's economic growth. In whole post recovery period 2000-2011 relative contribution of labor participation is even negative, around -13%, while in pre-crisis period it is only 16,64%.

The remaining growth of GDP per capita is further explained by an increase in labor productivity. On the other hand, growth of productivity is explained by an increase in the capital labor ratio and increase in TFP. Plenty of interesting results are, in that respect, presented in the table. To save space we will not further comment them leaving it to the readers.

Obviously, apart from the already discussed reserves related to an increase in "broader knowledge" and, in that way, generated high growth rate of the TFP, an increase in the employment population ratio is the most important reserve for further development of the all above analysed economies. It is especially important growth reserve for Serbia, being simultaneously most urgent problem of Serbian and all other analysed countries and the best way to increase the standard of living, eradicate poverty, and improve the

demographic picture of all analysed countries. This reserve of growth, of course, has its limits: once 70% to 75% of the active population becomes employed it is not possible to rely heavily on this source of growth. Taking Serbia for example – simple exercise shows that if we assume those reserves to be exhausted over the next 40 years (assuming no further decline in population), then we can afford the absolute contribution of the participation rate to the growth of GDP per capita to be around 1.75% per year. This is a significantly better result than what we had in the last decade. The more ambitious growth of employment, the one that assumes these reserves to be exhausted over the next 30 years, implies the contribution of the participation rate to be around 2.3% per year. Even more ambitious plan that assumes the labor reserves to be exhausted within next 20 years implies the contribution of the participation rate to be 3.5%. Note that, since we assumed no further decline in population, these rates of growth also present growth rates of employment.<sup>9</sup> Similar exercise can be made for other countries with similar results.

Having in mind that employment is not only the main reserve of growth, but also the most important problem of all analysed countries, we can conclude that even most ambitious plan (the one that assumes the rate of employment growth of 3.5% per year in Serbia and similar for other countries) can bring these countries to a socially acceptable level of employment only after long period of two-decade intensive development. This growth scenario, without doubt, should be taken as a policy target. Note, however, that this scenario is intensive not only regarding the investment rate necessary to support it, but also regarding the institutional reforms and policy prerequisites necessary to make all those investments and other material requirements attainable. In this respect, we should again stress the crucial importance of completing the national innovation system (NIS). As the systematic generator of business ideas, NIS should be especially completed in the less developed regions of analysed countries. After all, capitals of observed states and possibly some other university centers do not have such big problems in generating business ideas. Less developed regions are those in bad need of new business ideas. They have been most heavily wounded by the model of growth inaugurated at the beginning of the century, especially by the liberalization of capital account and the consequent world market arbitrage in local spatial processes. Not less important are social innovations referring to the missing elements of the financial system. On the one side, we need to find way to increase domestic saving as a source of investment and, on the other hand, to find way to support those business ideas that the commercial banking cannot follow. This especially refers to small and medium sized companies located or expected to be located again in less developed regions. A good thing about this regional policy, among plenty of others, is the fact that this orientation allows development of activities that are much less capital intensive or, in other words, activities that require much smaller investment per worker. In other words, regional development oriented toward now neglected regions would require much smaller investment rate necessary to reach the targeted employment growth rate which is supposed to eradicate problem of unemployment within next couple of decades.

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<sup>9</sup> See Popovic (2013).

Table 2: Sources of growth of GDP per capita<sup>1</sup>

Country	GrwRate	Contrib	%	GrwRate	Contrib	%	GrwRate	Contrib	%	GrwRate	Contrib	%	GrwRate	Contrib	%
<b>B and H</b>	1995-2011 (0.74%)			1995-2000 (2.08%)			2000-2011 (0.14%)			2000-2008 (0.27%)			2008-2011 (-0.19%)		
Labor partic rate – L/P	1,02%	1,02%	11,57%	-2,64%	-2,64%	-12,49%	2,10%	2,10%	56,77%	3,93%	3,93%	76,83%	-2,62%	-2,62%	-26173,70%
Labor productiv – Q/L	7,77%	7,77%	88,43%	23,74%	23,74%	112,49%	1,60%	1,60%	43,23%	1,19%	1,19%	23,17%	2,63%	2,63%	26273,70%
Capital labor rat – C/L	6,75%	2,30%	26,12%	11,88%	4,04%	19,13%	5,02%	1,71%	46,21%	3,90%	1,32%	25,89%	7,87%	2,68%	26772,93%
T F P	5,48%	5,48%	62,31%	19,70%	19,70%	93,35%	-0,11%	-0,11%	-2,98%	-0,14%	-0,14%	-2,72%	-0,05%	-0,05%	-499,24%
G D P per capita – Q/P	8,79%	8,79%	100,00%	21,11%	21,11%	100,00%	3,69%	3,69%	100,00%	5,12%	5,12%	100,00%	0,01%	0,01%	100,00%
<b>CROATIA</b>	1995-2011 (-0.37%)			1995-2000 (-1.06%)			2000-2011(-0.05%)			2000-2008 (0.02%)			2008-2011 (-0.23%)		
Labor partic rate – L/P	1.40%	1.40%	46.71%	3.38%	3.38%	75.82%	0.51%	0.51%	21.76%	1.85%	1.85%	43.20%	-2.95%	-2.95%	113.79%
Labor productiv – Q/L	1.60%	1.60%	53.29%	1.08%	1.08%	24.18%	1.84%	1.84%	78.24%	2.43%	2.43%	56.80%	0.36%	0.36%	-13.79%
Capital labor rat – C/L	3.62%	1.23%	40.93%	1.41%	0.48%	10.79%	4.62%	1.57%	66.87%	3.49%	1.19%	27.81%	7.53%	2.56%	-98.63%
T F P	0.37%	0.37%	12.37%	0.60%	0.60%	13.39%	0.27%	0.27%	11.37%	1.24%	1.24%	28.99%	-2.20%	-2.20%	84.84%
G D P per capita – Q/P	3.01%	3.01%	100.00%	4.46%	4.46%	100.00%	2.35%	2.35%	100.00%	4.27%	4.27%	100.00%	-2.60%	-2.60%	100.00%
<b>MACEDONIA</b>	1995-2011 (0.31%)			1995-2000 (0.68%)			2000-2011 (0.14%)			2000-2008 (0.13%)			2008-2011 (0.19%)		
Labor partic rate – L/P	0.47%	0.47%	18.68%	-1.37%	-1.37%	-59.66%	1.31%	1.31%	50.19%	1.15%	1.15%	37.53%	1.73%	1.73%	124.55%
Labor productiv – Q/L	2.04%	2.04%	81.32%	3.66%	3.66%	159.66%	1.30%	1.30%	49.81%	1.92%	1.92%	62.47%	-0.34%	-0.34%	-24.55%
Capital labor rat – C/L	2.34%	0.80%	31.68%	3.38%	1.15%	50.13%	1.86%	0.63%	24.24%	1.80%	0.61%	19.88%	2.04%	0.69%	49.81%
T F P	1.25%	1.25%	49.64%	2.51%	2.51%	109.53%	0.67%	0.67%	25.57%	1.31%	1.31%	42.59%	-1.03%	-1.03%	-74.36%
G D P per capita – Q/P	2.51%	2.51%	100.00%	2.29%	2.29%	100.00%	2.61%	2.61%	100.00%	3.07%	3.07%	100.00%	1.39%	1.39%	100.00%
<b>MONTENEGRO</b>	1995-2011 (0.21%)			1995-2000 (0.31%)			2000-2011 (0.16%)			2000-2008 (0.40%)			2008-2011 (-0.46%)		
Labor partic rate – L/P	1.33%	1.33%	27.69%	0.20%	0.20%	2.43%	1.84%	1.84%	55.07%	1.70%	1.70%	37.11%	2.22%	2.22%	1433.33%
Labor productiv – Q/L	3.46%	3.46%	72.31%	7.84%	7.84%	97.57%	1.50%	1.50%	44.93%	2.88%	2.88%	62.89%	-2.07%	-2.07%	-1333.33%
Capital labor rat – C/L	2.05%	0.70%	14.53%	1.13%	0.39%	4.80%	2.47%	0.84%	25.09%	1.60%	0.54%	11.84%	4.83%	1.64%	1058.53%
T F P	2.77%	2.77%	57.78%	7.46%	7.46%	92.77%	0.66%	0.66%	19.85%	2.34%	2.34%	51.05%	-3.71%	-3.71%	-2391.87%
G D P per capita – Q/P	4.79%	4.79%	100.00%	8.04%	8.04%	100.00%	3.35%	3.35%	100.00%	4.58%	4.58%	100.00%	0.16%	0.16%	100.00%
<b>SERBIA</b>	1995-2011 (-0.28%)			1995-2000 (-0.32%)			2000-2011 (-0.42%)			2000-2008 (0.08%)			2008-2011 (-0.15%)		
Labor partic rate – L/P	-0.41%	-0.41%	-14.15%	-0.10%	-0.10%	-9.70%	-0.48%	-0.48%	-12.75%	0.87%	0.87%	16.64%	-4.00%	-4.00%	-4528.36%
Labor productiv – Q/L	3.30%	3.30%	114.15%	1.15%	1.15%	109.70%	4.28%	4.28%	112.75%	4.35%	4.35%	83.36%	4.09%	4.09%	4628.36%
Capital labor rat – C/L	3.18%	1.08%	37.50%	0.16%	0.05%	5.22%	4.58%	1.56%	41.01%	2.89%	0.98%	18.78%	9.00%	3.06%	3466.34%
T F P	2.21%	2.21%	76.65%	1.09%	1.09%	104.49%	2.72%	2.72%	71.74%	3.37%	3.37%	64.57%	1.03%	1.03%	1162.02%
G D P per capita – Q/P	2.89%	2.89%	100.00%	1.05%	1.05%	100.00%	3.80%	3.80%	100.00%	5.22%	5.22%	100.00%	0.09%	0.09%	100.00%
<b>SLOVENIA</b>	1995-2011 (0.20%)			1995-2000 (0.03%)			2000-2011 (0.27%)			2000-2008 (0.22%)			2008-2011 (0.42%)		
Labor partic rate – L/P	-0.04%	-0.04%	-1.28%	-0.21%	-0.21%	-4.88%	0.04%	0.04%	1.91%	0.92%	0.92%	22.80%	-2.28%	-2.28%	90.88%
Labor productiv – Q/L	2.91%	2.91%	101.28%	4.52%	4.52%	104.88%	2.18%	2.18%	98.09%	3.13%	3.13%	77.20%	-0.23%	-0.23%	9.12%
Capital labor rat – C/L	4.12%	1.40%	48.74%	3.99%	1.36%	31.49%	4.18%	1.42%	63.82%	3.77%	1.28%	31.61%	5.25%	1.78%	-71.18%
T F P	1.51%	1.51%	52.54%	3.16%	3.16%	73.40%	0.76%	0.76%	34.27%	1.85%	1.85%	45.59%	-2.01%	-2.01%	80.30%
G D P per capita – Q/P	2.88%	2.88%	100.00%	4.31%	4.31%	100.00%	2.23%	2.23%	100.00%	4.06%	4.06%	100.00%	-2.51%	-2.51%	100.00%

Sources: Authors calculations based on national statistical offices data and on the basis of UN data set.

1) Population growth rate is given within brackets in cells referring to the particular sub-periods.

### 3. Demand Side of Sources of Growth

The analysis of the demand side of the sources of growth provides an additional insight into anatomy of economic growth. Results are presented in set of tables whose enumeration start with number 3. Two tables are given for each country. The first table presents absolute and relative contributions of different parts of demand to the GDP growth rate, while the second one outlines structural changes caused by these movements.<sup>10</sup> At the bottom of second table, we presented for each country ratio of net export to gross capital formation.

As we can see from each country's first table, the final consumption (household consumption, NPIS, government consumption) is most important part of aggregate demand. In whole period final consumption growth rate is smaller than that of GDP in B&H, Croatia and only slightly in Slovenia. In other countries its' growth rate is higher than that of GDP. Its' relative contribution to economic growth in whole period 1995-2011 varies from very high degree in Serbia (138%, data only for period 2000-2010), Montenegro (121%), Macedonia (102%), and B&H (99%) to much smaller degree in Croatia (51%) and Slovenia (79%). Note also that, in Croatia, Serbia, Montenegro and Macedonia relative contribution of final consumption increased in pre-crisis period 2000-2008, while in Slovenia and B&H it declined due to quite different reasons. The second table on the other side, describing development of demand structure in each country, proves that share of final consumption in GDP in B&H has experienced significant decline in all respective years. Similar and clear but less significant trend can be noticed in the case of Croatia. Less clear situation is in Slovenia, characterized by certain decline in final consumption in pre-crisis period (2008 compared to 1995 and 2000) and return to almost same situation in 2011 as a result of economic crisis. In another three countries we have quite opposite situation from that in Croatia and B&H. Final consumption's share in GDP has especially increased in Montenegro: both household and government part of final expenditure increased significantly in pre-crisis period; in the whole period we can notice same increase in household expenditure and relatively important decline in government part of expenditure. Similar, but less pronounced trend can be noticed in Macedonia. Serbia is the most interesting case. Comparing data for 2008 to that of previous years, we can notice increase in household consumption and significant decline in government part of final consumption. Afterwards we witnessed dramatic changes in only three post-crisis years: both household and government consumption declined dramatically.

Next important element of aggregate demand is the gross fixed capital formation. Generally speaking we may say that it have experienced strong growth and have had significant contribution to the GDP growth rate. Nevertheless, as we already know from previous analysis, it was not at the level that would be of much help in optimizing welfare increase in analysed countries. Its' relative contribution to the growth rate of GDP in whole period 1995-2011 varies from 21% in Slovenia to around 34% in B&H and Croatia. While in B&H its' contribution decrease when we compare period 2000-2008 to whole period of analysis (from 34% to 22%) it increase dramatically in the case of Montenegro (from 22% to 81%) and somewhat

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<sup>10</sup> The contribution of different elements of aggregate demand to the GDP growth rate is here basically calculated following next expression:  $r_{di} = S_i r_{Di}$ , where  $r_{di}$  presents absolute contribution of  $i$ -th part of demand do GDP economic growth,  $r_{Di}$  stands for rate of growth of  $i$ -th part of aggregate demand, while  $S_i$  presents share of respected part of aggregate demand in GDP (in particular case we used moving shares for every particular year). Obviously, GDP growth rate is here decomposed in the following way:  $r_Q = \sum r_{di} = \sum S_i r_{Di}$ .

less dramatically in the case of Macedonia (from 27% to 37%) and in the case of Croatia (from 34% to 49%). Not surprisingly, in the period 2000-2011 its' contribution is, due to economic crisis, less important than in period 2000-2008. Its' share in GDP increased in period 1995-2008 in all observed countries: in Montenegro for 22%, in B&H for 15%, in Croatia for 14%, in Serbia for 13%, in Slovenia for 7% and in Macedonia for 4,45%. In last three post-crisis years its' share dropped in all countries as compared to 2008.

Finally and most interestingly, the negative value of net export characteristic for all countries in all years (except for Slovenia), also had the high absolute and relative contribution to the GDP growth rate in almost all countries. Its relative contribution to the GDP growth rate in whole period varies from -47% in Montenegro to -5,67% in Slovenia. Its' relative contribution especially increased during sub-period 2000-2008. As a consequence, the share of negative net export especially increased during the pre-crisis period between 2000 and 2008. The share of net export in GDP was especially high in Montenegro (-55% in 2008 and -33% in 2011), markedly smaller in Serbia (-27% in 2008 and -17% in 2011), B&H (-29% in 2008 and -21% in 2011) and Macedonia (-25% in 2008 and -20% in 2011), and almost negligible in Croatia (-8% in 2008 and -0,1% in 2011) and Slovenia (-2,52% in 2008 and +1,22% in 2011). So, final consumption and investment expenditures of all countries, with exception of Slovenia and Croatia, can be regarded as highly dependent on negative net export.

Notice also that a share of net export in GDP compared to share of investment in GDP was significant in all years for all countries, again with exception of Slovenia and Croatia (last row of second tables). In B&H net export was higher than investment in all respective years (416% in 1995, 169% in 2000, 107% in 2008 and 109% in 2011). Similar situation is with Montenegro (88% in 1995, 85% in 2000, 143% in 2008, and 154% in 2011). Somewhat better is situation in Macedonia (59% in 1995, 92% in 2000, 121% in 2008, and 95% in 2011) and Serbia (60% in 1995, 42% in 2000, 113% in 2008, and 86% in 2011). Since the negative value of net export is covered with the positive value of capital account, it means that, apart from having the low investment rate, investments in these four countries are most probably mainly covered with external sources. Domestic saving is, in other word, probably very weak. The countries with such growth model can, therefore, be described as the one in which direct foreign investment (DFI) and other foreign sources present the main engine of growth. Such extreme growth model can be questioned on the basis of its' long run sustainability and on the basis of its' macroeconomic stability and external vulnerability. Investments, in general, are regarded as residual spending. Consequently, DFI can be treated as residual of residual. Being addicted to such a volatile variable, and it is the case with all our economies, is extremely dangerous indeed. On the other hand, this growth model is problematic from the point of view of its long run sustainability. It is very difficult to determine what long run sustainable level of the foreign capital inflow is, and consequently, the long run level of the sustainable level of negative net export. In the case of here observed countries, so far, the main channel for foreign capital was that of privatization of existing companies. This source is already exhausted and these economies have to find some other good foreign investors in "green-field" investment. This, however, requires improvement of business environment. Finally, and probably most importantly, it is necessary to increase domestic saving as the source of investment. This is not only a good way to increase the rate of investment and to make it less volatile, but also has some very important positive social consequences, like faster development of domestic "productive" business elite, to mention just one.

Table 3a-1: Demand side sources of growth for BOSNIA AND HERZEGOVINA

Sources of Growth	1995-2011			2000-2008			2000-2011		
	GrwtRate	ApsContr	%	GrwtRate	ApsContr	%	GrwtRate	ApsContr	%
Households including NIPIS	7,51%	7,27%	77,85%	2,85%	2,64%	52,83%	1,96%	1,82%	51,21%
Government	9,00%	1,96%	20,98%	4,72%	0,98%	19,63%	3,94%	0,82%	23,03%
Gross fixed capital formation	12,55%	3,11%	33,33%	5,12%	1,11%	22,26%	0,40%	0,05%	1,35%
Changes in inventory	-100,00%	-0,25%	-2,64%	0,00%	-0,18%	-3,58%	-17,50%	-0,23%	-6,49%
Export of goods and services	13,46%	3,53%	37,80%	7,06%	2,07%	41,33%	6,02%	1,79%	50,29%
Import of goods and services	7,94%	5,97%	63,97%	2,75%	1,78%	35,48%	1,19%	0,70%	19,74%
Net Export	3,51%	-4,14%	-44,35%	-0,70%	0,15%	2,90%	-3,56%	0,83%	23,24%
GDP - Gross Domestic Product	9,53%	9,33%	100,00%	5,39%	5,00%	100,00%	3,84%	3,56%	100,00%

Table 3a-2: Dynamics of demand structure for BOSNIA AND HERZEGOVINA

Evolution of Expend Structure	1995	2000	Δ00-95	2008	Δ08-00	Δ08-95	2011	Δ11-08	Δ11-00	Δ11-95
Households including NIPIS	108,30%	98,24%	-10,1%	80,83%	-17,41%	-27,47%	80,35%	-0,48%	-17,89%	-27,95%
Government	22,77%	20,85%	-1,92%	19,82%	-1,03%	-2,96%	21,08%	1,26%	0,23%	-1,69%
Gross fixed capital formation	12,27%	27,46%	15,19%	26,91%	-0,55%	14,64%	18,96%	-7,95%	-8,51%	6,69%
Changes in inventory	7,71%	0,00%	-7,71%	1,38%	1,38%	-6,33%	0,27%	-1,11%	0,27%	-7,45%
Export of goods and services	20,41%	28,53%	8,12%	32,37%	3,85%	11,96%	35,85%	3,48%	7,32%	15,44%
Import of goods and services	71,47%	75,07%	3,61%	61,30%	-13,77%	-10,17%	56,50%	-4,80%	-18,57%	-14,96%
Net Export	-51,06%	-46,55%	4,51%	-28,93%	17,62%	22,13%	-20,65%	8,27%	25,89%	30,40%
GDP - Gross Domestic Prod	100,00%	100,00%	0,00%	100,00%	0,00%	0,00%	100,00%	0,00%	0,00%	0,00%
NetExport/FixedCapitFormat	-416,2%	-169,5%	246,7%	-107,5%	61,99%	308,65%	-108,96%	-1,45%	60,54%	307,20%

Sources: Authors calculations based on national statistical offices data and on the basis of UN data set.

Table 3b-1: Demand side sources of growth for CROATIA

Sources of Growth	1995-2011			2000-2008			2000-2011		
	GrwtRate	ApsContr	%	GrwtRate	ApsContr	%	GrwtRate	ApsContr	%
Households	1.86%	1.16%	43.84%	3.69%	2.22%	51.73%	1.96%	1.21%	52.59%
NIPIS	0.68%	0.01%	0.40%	-1.78%	-0.03%	-0.69%	-1.46%	-0.02%	-1.00%
Government	1.01%	0.18%	6.98%	2.04%	0.37%	8.69%	1.20%	0.22%	9.42%
Gross fixed capital formation	4.76%	0.89%	33.88%	9.19%	2.09%	48.61%	2.22%	0.53%	22.83%
Changes in inventory	2.99%	0.07%	2.57%	0.02%	0.50%	11.55%	-245.39%	0.28%	12.12%
Export of goods and services	4.14%	1.61%	60.89%	4.41%	1.86%	43.35%	2.32%	1.00%	43.61%
Import of goods and services	2.69%	1.24%	46.99%	5.69%	2.74%	63.71%	1.68%	0.86%	37.37%
Net Export	-22.37%	0.25%	9.48%	16.92%	-0.89%	-20.65%	-25.40%	0.06%	2.57%
GDP - Gross Domestic Product	2.64%	2.64%	100.00%	4.29%	4.29%	100.00%	2.30%	2.30%	100.00%

Table 3b-2: Dynamics of demand structure for CROATIA

Evolution of Expend Structure	1995	2000	Δ00-95	2008	Δ08-00	Δ08-95	2011	Δ11-08	Δ11-00	Δ11-95
Households	65.73%	60.37%	-5.36%	57.64%	-2.73%	-8.09%	58.19%	0.55%	-2.18%	-7.54%
NIPIS	1.31%	1.45%	0.14%	0.90%	-0.55%	-0.41%	0.96%	0.06%	-0.49%	-0.35%
Government	25.67%	22.39%	-3.28%	18.79%	-3.60%	-6.88%	19.88%	1.09%	-2.51%	-5.79%
Gross fixed capital formation	13.54%	18.95%	5.41%	27.35%	8.40%	13.81%	18.79%	-8.56%	-0.16%	5.25%
Changes in inventory	2.16%	-0.05%	-2.21%	3.08%	3.13%	0.92%	2.28%	-0.80%	2.33%	0.12%
Export of goods and services	33.13%	41.69%	8.56%	42.06%	0.38%	8.94%	41.78%	-0.28%	0.09%	8.65%
Import of goods and services	41.54%	44.80%	3.26%	49.83%	5.03%	8.29%	41.88%	-7.95%	-2.92%	0.34%
Net Export	-8.41%	-3.11%	5.30%	-7.76%	-4.65%	0.65%	-0.10%	7.67%	3.02%	8.31%
GDP - Gross Domestic Product	100.00%	100.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
NetExport/FixedCapitFormat	-62.11%	-16.42%	45.69%	-28.39%	-11.97%	33.72%	-2.47%	25.92%	13.95%	59.64%

Sources: Authors calculations based on national statistical offices data and on the basis of UN data set.

Table 3c-1: Demand side sources of growth for MACEDONIA

Sources of Growth	1995-2011			2000-2008			2000-2011		
	GrwtRate	ApsContr	%	GrwtRate	ApsContr	%	GrwtRate	ApsContr	%
Households including NIPIS	3.23%	2.39%	84.78%	4.17%	3.19%	99.83%	2.84%	2.15%	78.14%
Government	2.73%	0.50%	17.69%	3.23%	0.57%	17.72%	2.81%	0.50%	18.14%
Gross fixed capital formation	4.24%	0.76%	26.86%	6.58%	1.18%	36.85%	5.01%	0.90%	32.84%
Changes in inventory	4.67%	0.21%	7.59%	0.00%	0.12%	3.83%	2.09%	0.09%	3.43%
Export of goods and services	6.14%	2.49%	88.29%	3.79%	1.72%	53.74%	3.89%	1.70%	61.63%
Import of goods and services	6.45%	3.48%	123.29%	5.57%	3.59%	112.24%	4.25%	2.56%	92.79%
Net Export	7.41%	-1.16%	-41.14%	10.27%	-1.97%	-61.74%	5.36%	-1.02%	-37.03%
GDP - Gross Domestic Product	2.82%	2.82%	100.00%	3.20%	3.20%	100.00%	2.75%	2.75%	100.00%

Table 3c-2: Dynamics of demand structure for MACEDONIA

Evolution of Expend Structure	1995	2000	Δ00-95	2008	Δ08-00	Δ08-95	2011	Δ11-08	Δ11-00	Δ11-95
Households including NIPIS	70.42%	74.44%	4.02%	80.25%	5.81%	9.82%	75.09%	-5.16%	0.65%	4.67%
Government	18.58%	18.20%	-0.38%	18.24%	0.04%	-0.34%	18.31%	0.07%	0.11%	-0.27%
Gross fixed capital formation	16.53%	16.22%	-0.32%	20.99%	4.77%	4.45%	20.60%	-0.39%	4.38%	4.06%
Changes in inventory	4.22%	6.04%	1.81%	5.83%	-0.21%	1.60%	5.62%	-0.21%	-0.42%	1.40%
Export of goods and services	33.01%	48.63%	15.62%	50.90%	2.27%	17.89%	54.86%	3.96%	6.23%	21.85%
Import of goods and services	42.77%	63.52%	20.75%	76.20%	12.67%	33.43%	74.48%	-1.72%	10.95%	31.71%
Net Export	-9.76%	-14.89%	-5.14%	-25.30%	-10.41%	-15.54%	-19.62%	5.68%	-4.73%	-9.86%
GDP - Gross Domestic Prod	100.00%	100.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
NetExport/FixedCapitFormat	-59.01%	-91.84%	-32.82%	120.56%	28.72%	61.54%	95.26%	-25.30%	3.42%	36.25%

Sources: Authors calculations based on national statistical offices data and on the basis of UN data set.

Table 3d-1: Demand side sources of growth for MONTENEGRO

Sources of Growth	1995-2011			2000-2008			2000-2011		
	GrwtRate	ApsContr	%	GrwtRate	ApsContr	%	GrwtRate	ApsContr	%
Households including NIPIS	6,68%	5,08%	101,55%	8,52%	6,68%	134,02%	6,21%	4,80%	136,64%
Government	3,61%	0,95%	18,99%	5,39%	1,26%	25,23%	2,00%	0,58%	16,46%
Investment in fixed asset	6,11%	1,09%	21,79%	16,29%	4,03%	80,79%	4,91%	0,88%	25,18%
Changes in inventory	1,46%	0,21%	4,29%	-5,28%	-0,03%	-0,66%	-7,27%	-0,08%	-2,17%
Net Export	10,46%	-2,33%	-46,63%	24,10%	-6,94%	-139,38%	11,62%	-2,67%	-76,12%
GDP - Gross Domestic Prod	5,00%	5,00%	100,00%	4,98%	4,98%	100,00%	3,51%	3,51%	100,00%

Table 3d-2: Dynamics of demand structure for MONTENEGRO

Evolution of Expend Struct	1995	2000	Δ00-95	2008	Δ08-00	Δ08-95	2011	Δ11-08	Δ11-00	Δ11-95
Households including NIPIS	72.06%	69.97%	-2.09%	91.22%	21.25%	19.16%	92.89%	1.67%	22.92%	20.83%
Government	23.10%	21.93%	-1.17%	22.62%	0.69%	-0.48%	18.66%	-3.96%	-3.27%	-4.44%
Investment in fixed asset	16.54%	16.87%	0.33%	38.25%	21.38%	21.71%	21.20%	-17.05%	4.33%	4.66%
Changes in inventory	2.85%	5.51%	2.67%	2.42%	-3.09%	-0.43%	0.00%	-2.42%	-5.51%	-2.85%
Net Export	-14.56%	-14.30%	0.26%	-54.52%	-40.22%	-39.96%	-32.75%	21.77%	-18.46%	-18.20%
GDP - Gross Domestic Prod	100.00%	100.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
NetExport/InvsFixAss	-87.99%	-84.72%	3.27%	-142.54%	-57.82%	-54.55%	-154.50%	-11.96%	-69.78%	-66.51%

Sources: Authors calculations based on national statistical offices data and on the basis of UN data set.



Table 3e-1: Demand side sources of growth for SERBIA

Sources of Growth	2000-2008			2000-2010		
	GrwtRate	ApsContr	%	GrwtRate	ApsContr	%
Individual consumption	5,53%	4,90%	99,18%	4,52%	3,97%	108,07%
Collective consumption	0,33%	-0,01%	-0,17%	-0,59%	-0,07%	-1,83%
Gross fixed capital formation	14,47%	2,29%	46,29%	8,77%	1,17%	31,99%
Changes in inventory	-100,76%	1,51%	30,64%	-94,10%	0,56%	15,22%
Export of goods and services	24,43%	3,86%	78,09%	20,94%	3,44%	93,84%
Import of goods and services	29,27%	7,61%	154,04%	22,60%	5,41%	147,29%
Net Export	39,68%	-3,75%	-75,95%	27,86%	-1,96%	-53,45%
GDP - Gross Domestic Prod	4,94%	4,94%	100,00%	3,67%	3,67%	100,00%

Table 3e-2: Dynamics of demand structure for SERBIA

Evolution of Expend Struct	1997	2000	Δ00-97	2008	Δ08-00	Δ08-97	2011	Δ11-08	Δ11-00	Δ11-97
Individual consumption	81,82%	86,51%	4,69%	90,05%	3,54%	8,23%	77,90%	-12,15%	-8,61%	-3,92%
Collective consumption	12,79%	10,69%	-2,10%	7,06%	-3,63%	-5,73%	6,06%	-1,00%	-4,63%	-6,73%
Gross fixed capital format	10,41%	12,71%	2,30%	23,76%	11,05%	13,35%	19,84%	-3,92%	7,13%	9,43%
Changes in inventory	1,28%	-4,56%	-5,84%	5,97%	10,53%	4,69%	-0,61%	-6,58%	3,95%	-1,89%
Export of goods and serv	18,47%	11,33%	-7,14%	31,39%	20,05%	12,92%	37,35%	5,96%	26,02%	18,88%
Import of goods and serv	24,77%	16,69%	-8,08%	58,25%	41,56%	33,48%	54,46%	-3,79%	37,77%	29,69%
Net Export	-6,30%	-5,36%	0,94%	-26,86%	-21,50%	-20,56%	-17,11%	9,75%	-11,75%	-10,81%
GDP - Gross Domestic Pr	100,00%	100,00%	0,00%	100,00%	0,00%	0,00%	100,00%	0,00%	0,00%	0,00%
NetExport/FixedCapitFor	-60,5%	-42,14%	18,4%	-113,04%	-70,9%	-52,53%	-86,22%	26,82%	-44,1%	-25,7%

Sources: Authors calculations based on national statistical offices data and on the basis of UN data set.

Table 3f-1: Demand side sources of growth for SLOVENIA

Sources of Growth	1995-2011			2000-2008			2000-2011		
	GrwtRate	ApsContr	%	GrwtRate	ApsContr	%	GrwtRate	ApsContr	%
Individual consumption	3,02%	2,13%	69,26%	3,25%	2,23%	52,20%	2,74%	1,87%	74,77%
Collective consumption	4,04%	0,31%	10,22%	4,21%	0,37%	8,72%	3,66%	0,28%	11,12%
Gross fixed capital formation	2,58%	0,16%	5,20%	5,55%	1,29%	30,04%	-0,05%	-0,32%	-12,82%
Changes in inventory	163,80%	0,65%	20,99%	357,32%	0,16%	3,64%	237,14%	0,80%	32,09%
Export of goods and services	5,95%	5,96%	194,04%	7,50%	4,08%	95,30%	5,81%	6,24%	249,25%
Import of goods and services	5,70%	6,14%	199,71%	7,19%	3,85%	89,90%	5,28%	6,37%	254,41%
Net Export	20,24%	-0,17%	-5,67%	39,90%	0,23%	5,40%	10,68%	-0,13%	-5,16%
GDP - Gross Domestic Prod	3,07%	3,07%	100,00%	4,28%	4,28%	100,00%	2,50%	2,50%	100,00%

Table 3f-2: Dynamics of demand structure for SLOVENIA

Evolution of Expend Structure	1995	2000	Δ00-95	2008	Δ08-00	Δ08-95	2011	Δ11-08	Δ11-00	Δ11-95
Individual consumption	70.90%	68.50%	-2.40%	63.27%	-5.23%	-7.62%	70.18%	6.91%	1.68%	-0.72%
Collective consumption	7.37%	7.54%	0.18%	7.45%	-0.09%	0.09%	8.48%	1.03%	0.93%	1.11%
Gross fixed capital formation	21.77%	26.23%	4.45%	28.63%	2.40%	6.85%	18.51%	-10.12%	-7.72%	-3.27%
Changes in inventory	1.90%	1.20%	-0.70%	3.16%	1.97%	1.26%	1.62%	-1.54%	0.42%	-0.28%
Export of goods and services	49.59%	53.70%	4.11%	67.91%	14.21%	18.32%	72.44%	4.52%	18.74%	22.84%
Import of goods and services	51.53%	57.17%	5.64%	70.43%	13.26%	18.90%	71.22%	0.79%	14.05%	19.69%
Net Export	-1.94%	-3.47%	-1.53%	-2.52%	0.95%	-0.58%	1.22%	3.73%	4.69%	3.15%
GDP - Gross Domestic Prod	100.00%	100.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
NetExport/FixedCapitFormat	-8.9%	-13.23%	-4.3%	-8.80%	4.4%	0.10%	6.57%	15.36%	19.8%	15.5%

Sources: Authors calculations based on national statistical offices data and on the basis of UN data set.

#### ***4. Sectoral Side of Sources of Growth***

The results of sectoral side sources-of-growth-analysis are presented in the following set of tables which enumeration starts with number 4. Each country is presented with two tables. The analysis of contributions of different sectors to the economic growth is given in the first table. The resulting changes of the sectoral structure of the economy are presented in the second table that follows after that.

The presented results on trends and structural changes are not surprising, having in mind the existing model of growth in which foreign capital plays the most important role in the dynamics of the economy. Most interesting result is the negligible absolute and relative contribution of industry and within it of manufacturing. As a result, share of whole industry and especially of highly value added manufacturing declined substantially in almost all countries. This trend is especially pronounced in Serbia (decline of industry share in GDP for almost 7% from 2000 till 2010 and decline of manufacturing for 5,69% in a same period), Montenegro (decline of industry share for 6,10% and of manufacturing for 4,70% in respected decade), Macedonia (decline of industry for 7,75 from 1995 till 2011), and Croatia (decline of industry for 4,05% and of manufacturing for 4,41% from 1995 till 2011). Although less pronounced, same trend can be clearly noticed for Slovenia where industry share dropped for 3,23% while manufacturing dropped for 3,79% from 1995 to 2011. Interestingly enough, we cannot notice same trend in the case of Bosnia and Herzegovina: industry share is here almost unchanged in last decade of its growth. Having in mind, however, that its' share in GDP in respected period, about 17%, is much smaller than what it used to be before war, we can with certainty conclude that B&H have experienced same transformation. In general we can rightfully speak about dramatic deindustrialization of whole region.

Not less obvious are the results on the contribution of the broadly defined "trade" (row G) and other service sectors to the economic growth. Its absolute and relative contribution to the GDP growth rate was significant in all countries. As a consequence, share of these sectors increased dramatically. These changes are in fact mirror image of the above discussed trend of deindustrialisation. Needless to say, there is nothing wrong in development of service sectors. On the contrary, development of nations is followed with increase of service sectors share. However, if we take a closer look at our sample of countries we will notice that service sectors they have been developing so far are speculative in its' nature and not sustainable in the long run. In that respect Serbia is paradigmatic, where share of broadly defined 'trade' almost doubled in respective period: its' share increased from 6,7% in 2000 to 12,36% in 2008. Similar trend can be noticed in Macedonia (increase of 'trade' from 11% to almost 14% in 2011), Bosnia and Herzegovina (increase from 8% to 13%), and even in Slovenia. In the case of Croatia and Montenegro we can't notice such trend: share of 'trade' is almost unchanged in respective periods. However, if we take look at the share of 'trade' in these two countries reached at the beginning of respective periods we can notice that it already was at the very high level reached by other countries from our sample during first decade of this century. For example, share of 'trade' in 2000 was 12,80% in Montenegro. In Croatia it was a bit lower but still very high – 10,83%. So, we can, with great certainty, conclude that all of the former SFRY countries have experienced speculative 'trade' bubble at end of the last and at the beginning of this century.

So what we got in our region is deindustrialization followed with a bubble of the 'trade' sector. All this can be explained with the same factors with which we can explain changes in the demand structure of the economy. In fact, the industry structure changes are the mirror image of the demand structure changes. As

a result of the appreciation of the real exchange rate, caused by positive net capital inflow and high level of remittances, the terms of trade in our countries changed in a way that have had the negative effect on the growth of export-related activities, mostly the “industry” sector and especially manufacture, and the positive effect on the growth of import-related activities, such as the broadly defined ‘trade’. Needless to say, this ‘trade’ bubble is the result of the same global processes that produced bubbles in the financial sectors of developed countries.

Table 4a-1: Sectoral sources of growth for BOSNIA AND HERZEGOVINA

SECTORS	2000-2008			2000-2011		
	GrwthRat	ApsolCon	%	GrwthRat	ApsolCon	%
A+B Agriculture, hunting, forestry and Fishing	2,56%	0,22%	4,11%	1,07%	0,10%	2,72%
C+D+E Mining and quarrying, Manufacturing and Electricity, gas and water supply	5,82%	0,98%	18,12%	4,25%	0,72%	18,75%
F Construction	4,34%	0,19%	3,58%	0,33%	0,01%	0,21%
G Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	11,62%	1,25%	23,14%	8,12%	0,88%	22,96%
H Hotels and restaurants	1,89%	0,05%	0,87%	1,41%	0,04%	0,92%
I Transport, storage and communication	4,53%	0,34%	6,24%	3,44%	0,26%	6,66%
J+K+O Financial intermediation, Real estate, renting and business act, Other community, social and personal service activities (Imputed rents are also included)	3,39%	0,54%	9,94%	3,10%	0,48%	12,53%
L+M+N Public administration and defence, compulsory social security, Education, Health and social work	4,97%	0,85%	15,84%	4,12%	0,71%	18,56%
Less: Financial intermediation services indirectly measured (FISIM)	14,54%	0,29%	5,38%	10,70%	0,22%	5,71%
Value Added	5,06%	4,11%	76,38%	3,64%	2,96%	77,18%
Net taxes on products	6,92%	1,26%	23,44%	4,79%	0,88%	22,98%
GDP - Gross Domestic Product	5,38%	5,38%	100,00%	3,84%	3,84%	100,00%

Table 4a-2: Dynamics of sectoral structure for BOSNIA AND HERZEGOVINA

SECTORS	2000	2008	Δ08-00	2011	Δ11-08	Δ11-00
A+B Agriculture, hunting, forestry and Fishing	9,29%	7,48%	-1,81%	6,90%	-0,57%	-2,38%
C+D+E Mining and quarrying, Manufacturing and Electricity, gas and water supply	17,04%	17,61%	0,57%	17,81%	0,20%	0,77%
F Construction	5,86%	5,41%	-0,45%	4,02%	-1,40%	-1,84%
G Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	8,41%	13,33%	4,91%	13,13%	-0,20%	4,72%
H Hotels and restaurants	2,63%	2,01%	-0,62%	2,03%	0,02%	-0,60%
I Transport, storage and communication	7,16%	6,71%	-0,45%	6,86%	0,15%	-0,30%
J+K+O Financial intermediation, Real estate, renting and business act, Other community, social and personal service activities (Imputed rents are also included)	16,13%	13,84%	-2,28%	14,92%	1,07%	-1,21%
L+M+N Public administration and defence, compulsory social security, Education, Health and social work	18,33%	17,76%	-0,57%	18,88%	1,12%	0,55%
Less: Financial intermediation services indirectly measured (FISIM)	1,42%	2,76%	1,34%	2,87%	0,11%	1,45%
Value Added	83,43%	81,40%	-2,04%	81,69%	0,29%	-1,75%
Net taxes on products	16,57%	18,60%	2,04%	18,31%	-0,29%	1,75%
GDP - Gross Domestic Product	100,00%	100,00%	0,00%	100,00%	0,00%	0,00%

Sources: Authors calculations based on national statistical offices data and on the basis of UN data set.

Table 4b-1: Sectoral sources of growth for CROATIA

SECTORS	1995-2011			2000-2008			2000-2011		
	GrwtRat	Contrib	%	GrwtRat	Contrib	%	GrwtRat	Contrib	%
A) Agriculture, forestry and fishing	0,63%	0,03%	1,27%	1,36%	0,06%	1,40%	0,48%	0,02%	0,98%
B,C,D,E) Manufacturing, mining and quarrying and other industries	1,32%	0,26%	9,89%	1,70%	0,31%	7,30%	1,07%	0,21%	8,91%
of which C) Manufacturing	0,88%	0,15%	5,64%	1,70%	0,25%	5,93%	0,68%	0,11%	4,99%
F) Construction	2,83%	0,17%	6,26%	11,74%	0,65%	15,13%	4,19%	0,22%	9,74%
G,H,I) Wholesale and retail trade, repair of motor vehicles and motorcycles, transportation, storage, accommodation and food service activities	2,22%	0,43%	16,24%	5,83%	1,06%	24,67%	2,80%	0,53%	23,09%
J) Information and communication	4,23%	0,16%	6,16%	5,14%	0,21%	5,00%	2,65%	0,11%	4,90%
K) Financial and insurance activities	6,37%	0,28%	10,75%	9,26%	0,43%	9,97%	7,01%	0,33%	14,48%
L) Real estate activities	3,05%	0,24%	9,26%	4,89%	0,39%	9,00%	3,58%	0,29%	12,41%
M,N) Professional, scientific, technical, administrative and support service activities	6,54%	0,29%	10,83%	11,79%	0,56%	13,15%	6,96%	0,33%	14,16%
O,P,Q) Public administration and defence, compulsory social security, education, human health and social wr	3,48%	0,44%	16,79%	1,06%	0,11%	2,50%	0,88%	0,09%	3,99%
R,S,T,U) Other service activities	5,72%	0,10%	3,76%	6,53%	0,13%	3,07%	3,88%	0,08%	3,41%
GGROSS VALUE ADDED = sum A to U	2,84%	2,38%	90,25%	4,67%	3,92%	91,26%	2,60%	2,18%	94,58%
Taxes on products less subsidies on products	1,56%	0,27%	10,20%	2,32%	0,38%	8,75%	0,72%	0,14%	6,09%
GROSS DOMESTIC PRODUCT	2,64%	2,64%	101,4%	4,29%	4,29%	99,94%	2,30%	2,30%	102,15%

Table 4b-2: Dynamics of sectoral structure for CROATIA

SECTORS	1995	2000	Δ00-95	2008	Δ08-00	Δ08-95	2011	Δ11-08	Δ11-00	Δ11-95
A) Agriculture, forestry and fishing	6,06%	5,38%	-0,68%	4,28%	-1,10%	-1,78%	4,41%	0,13%	-0,97%	-1,65%
B,C,D,E) Manufacturing, mining and quarrying and other industries	21,61%	20,1%	-1,55%	16,40%	-3,67%	-5,21%	17,56%	1,16%	-2,51%	-4,05%
of which C) Manufacturing	18,26%	16,5%	-1,76%	13,50%	-3,01%	-4,76%	13,85%	0,35%	-2,66%	-4,41%
F) Construction	4,98%	4,19%	-0,79%	7,28%	3,08%	2,30%	5,13%	-2,15%	0,94%	0,15%
G,H,I) Wholesale and retail trade, repair of motor vehicles and motorcycles, transportation, storage, accommodation and food service activities	18,61%	16,5%	-2,11%	18,55%	2,04%	-0,06%	17,42%	-1,13%	0,91%	-1,19%
of which G) Trade and similar	10,83%	9,04%	-1,79%	10,73%	1,69%	-0,10%				
J) Information and communication	3,26%	4,02%	0,75%	4,28%	0,27%	1,02%	4,17%	-0,11%	0,15%	0,91%
K) Financial and insurance activities	3,59%	3,87%	0,29%	5,62%	1,74%	2,03%	6,35%	0,74%	2,48%	2,77%
L) Real estate activities	8,68%	8,08%	-0,61%	8,45%	0,38%	-0,23%	9,26%	0,80%	1,18%	0,57%
M,N) Professional, scientific, technical, administrative and support service activities	3,33%	3,70%	0,37%	6,46%	2,75%	3,12%	6,05%	-0,41%	2,34%	2,72%
O,P,Q) Public administration and defence, compulsory social security, education, human health and social wr	11,61%	15,4%	3,80%	11,98%	-3,44%	0,36%	13,22%	1,24%	-2,19%	1,61%
R,S,T,U) Other service activities	1,35%	1,83%	0,48%	2,17%	0,34%	0,82%	2,17%	0,00%	0,34%	0,82%
GGROSS VALUE ADDED = sum A to U	83,09%	83,1%	-0,03%	85,46%	2,40%	2,37%	85,73%	0,27%	2,67%	2,64%
Taxes on products less subsidies on products	16,91%	16,9%	0,03%	14,54%	-2,40%	-2,37%	14,27%	-0,27%	-2,67%	-2,64%
GROSS DOMESTIC PRODUCT	100,00%	100%	0,00%	100,00%	0,00%	0,00%	100,00%	0,00%	0,00%	0,00%

Sources: Authors calculations based on national statistical offices data and on the basis of UN data set.

Table 4c-1: Sectoral sources of growth for MACEDONIA

SECTORS	1995-2011			2000-2008			2000-2011		
	GrwtRat	Contrib	%	GrwtRat	Contrib	%	GrwtRat	Contrib	%
A+B Agriculture, hunting, forestry and Fishing	2,20%	0,23%	8,17%	3,18%	0,33%	10,18%	2,48%	0,25%	10,16%
C+D+E Mining and quarrying, Manufacturing and Electricity, gas and water supply	0,22%	0,06%	2,30%	2,27%	0,45%	13,93%	-0,06%	0,00%	0,15%
F Construction	3,80%	0,21%	7,46%	1,42%	0,08%	2,60%	3,18%	0,18%	7,09%
G Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	3,99%	0,49%	17,45%	4,86%	0,60%	18,67%	4,52%	0,56%	22,47%
H Hotels and restaurants	-0,38%	0,00%	0,12%	3,03%	0,04%	1,40%	-1,18%	-0,01%	-0,33%
I Transport, storage and communication	4,76%	0,36%	12,73%	1,78%	0,14%	4,45%	1,60%	0,12%	4,99%
J+K+O Financial intermediation, Real estate, renting and business activities, Other community, social and personal service activities (Imputed rents are also included)	6,14%	0,87%	30,99%	8,85%	1,20%	37,56%	7,38%	1,06%	42,28%
L+M+N Public administration and defence, compulsory social security, Education, Health and social work	2,54%	0,35%	12,38%	2,65%	0,36%	11,16%	2,88%	0,39%	15,59%
Value Added	2,99%	2,57%	91,19%	3,70%	3,17%	99,00%	2,96%	2,54%	101,66%
Net taxes on products	1,66%	0,23%	8,33%	0,33%	0,01%	0,18%	-0,26%	-0,06%	-2,25%
Gross Domestic Product	2,81%	2,81%	100,0%	3,20%	3,20%	100,00%	2,50%	2,50%	100,00%

Table 4c-2: Dynamics of sectoral structure for MACEDONIA

SECTORS	1995	2000	Δ00-95	2008	Δ08-00	Δ08-95	2011	Δ11-08	Δ11-00	Δ11-95
A+B Agriculture, hunting, forestry and Fishing	10,97%	10,06%	-0,92%	10,04%	-0,01%	-0,93%	10,04%	0,00%	-0,02%	-0,94%
C+D+E Mining and quarrying, Manufacturing and Electricity, gas and water supply	24,36%	22,49%	-1,87%	20,92%	-1,57%	-3,44%	16,61%	-4,32%	-5,88%	-7,75%
F Construction	5,30%	5,65%	0,35%	4,92%	-0,73%	-0,38%	6,12%	1,20%	0,47%	0,82%
G Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	11,45%	10,75%	-0,70%	12,21%	1,46%	0,76%	13,58%	1,37%	2,84%	2,13%
H Hotels and restaurants	1,52%	1,46%	-0,05%	1,45%	-0,02%	-0,07%	0,94%	-0,50%	-0,52%	-0,57%
I Transport, storage and communication	6,11%	8,99%	2,88%	8,05%	-0,94%	1,94%	8,10%	0,05%	-0,90%	1,98%
J+K+O Financial intermediation, Real estate, renting and business activities, Other community, social and personal service activities (Imputed rents are also included)	11,62%	10,72%	-0,90%	16,42%	5,70%	4,80%	18,73%	2,30%	8,01%	7,10%
L+M+N Public administration and defence, compulsory social security, Education, Health and social work	14,55%	13,36%	-1,19%	12,81%	-0,56%	-1,75%	13,98%	1,17%	0,61%	-0,58%
Value Added	85,89%	83,48%	-2,41%	86,82%	3,33%	0,92%	88,09%	1,27%	4,61%	2,20%
Net taxes on products	14,11%	16,52%	2,41%	13,18%	-3,33%	-0,92%	11,91%	-1,27%	-4,61%	-2,20%
Gross Domestic Product	100,0%	100,00%	0,00%	100,00%	0,00%	0,00%	100,00%	0,00%	0,00%	0,00%

Sources: Authors calculations based on national statistical offices data and on the basis of UN data set.

Table 4d-1: Sectoral sources of growth for MONTENEGRO

	2000-2008			2000-2010		
	GrwthRate	Contribut	%	GrwthRate	Contribut	%
Agriculture, hunting and forestry	2,36%	0,24%	4,91%	1,93%	0,20%	5,49%
Fishing	8,12%	0,00%	-0,06%	6,44%	0,00%	-0,07%
Mining and quarrying	2,05%	0,02%	0,38%	-3,23%	-0,02%	-0,42%
Manufacturing	0,95%	0,08%	1,58%	-2,76%	-0,10%	-2,86%
Electricity, gas and water supply	-0,99%	0,03%	0,54%	2,01%	0,18%	4,99%
Construction	8,91%	0,37%	7,48%	4,01%	0,14%	3,82%
Wholesale & retail trade and repair of	11,46%	1,34%	26,76%	7,02%	0,85%	23,48%
Hotels and restorans	9,26%	0,28%	5,61%	7,58%	0,24%	6,59%
Transport, storages and communications	5,87%	0,58%	11,63%	6,11%	0,60%	16,57%
Financial intermediation	-1,49%	-0,02%	-0,45%	-0,80%	0,00%	-0,06%
Real estate, renting and business activ	-1,96%	-0,16%	-3,20%	-0,70%	-0,05%	-1,49%
Public admin, defence, compuls. Soc.sec	0,98%	0,08%	1,54%	0,90%	0,07%	1,99%
Education	-0,04%	0,00%	-0,03%	0,02%	0,00%	0,02%
Helth and social work	-1,62%	-0,06%	-1,15%	-1,58%	-0,06%	-1,57%
Other community, social & personal actv	-1,64%	-0,03%	-0,62%	1,80%	0,04%	1,10%
Private household with employed persons	0,09%	0,00%	0,00%	0,07%	0,00%	0,00%
Extra teritorial organizations and bodies	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
FISM	-0,36%	0,00%	0,03%	-0,29%	0,00%	0,04%
GROS VALUE ADDED (basic prices)	3,31%	2,70%	54,21%	2,48%	2,04%	56,44%
TAXES LESS SUBSIDIES ON PRODUCTS	17,44%	2,26%	45,30%	12,40%	1,58%	43,62%
GROSS DOMESTIC PRODUCT	4,99%	4,99%	100,00%	3,62%	3,62%	100,00%

Sources: Background paper for World Bank (2012).

Table 4d-2: Dynamics of sectoral structure for MONTENEGRO

	2000	2008	Δ08-00	2010	Δ10-08	Δ10-00
Agriculture, hunting and forestry	11,30%	7,50%	-3,80%	7,70%	0,20%	-3,60%
Fishing	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Mining and quarrying	2,60%	1,20%	-1,40%	1,20%	0,00%	-1,40%
Manufacturing	9,20%	5,40%	-3,80%	4,50%	-0,90%	-4,70%
Electricity, gas and water supply	5,50%	4,20%	-1,30%	5,50%	1,30%	0,00%
Construction	3,90%	6,20%	2,30%	5,10%	-1,10%	1,20%
Wholesale & retail trade and repair of	12,80%	12,40%	-0,40%	12,20%	-0,20%	-0,60%
Hotels and restorans	2,50%	4,30%	1,80%	5,20%	0,90%	2,70%
Transport, storages and communications	9,50%	9,40%	-0,10%	9,60%	0,20%	0,10%
Financial intermediation	3,20%	3,90%	0,70%	4,00%	0,10%	0,80%
Real estate, renting and business activ	11,60%	8,10%	-3,50%	8,70%	0,60%	-2,90%
Public admin, defence, compuls. Soc.sec	8,10%	8,70%	0,60%	8,20%	-0,50%	0,10%
Education	4,00%	3,80%	-0,20%	4,50%	0,70%	0,50%
Helth and social work	3,80%	3,50%	-0,30%	4,00%	0,50%	0,20%
Other community, social & personal actv	2,50%	1,70%	-0,80%	3,00%	1,30%	0,50%
Private household with employed persons	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Extra teritorial organizations and bodies	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
FISM	-0,20%	0,00%	0,20%	0,00%	0,00%	0,20%
GROS VALUE ADDED (basic prices)	90,70%	80,30%	-10,40%	83,40%	3,10%	-7,30%
TAXES LESS SUBSIDIES ON PRODUCTS	9,30%	19,70%	10,40%	16,60%	-3,10%	7,30%
GROSS DOMESTIC PRODUCT	100,00%	100,00%	0,00%	100,00%	0,00%	0,00%

Sources: Background paper for World Bank (2012).

Table 4e-1: Sectoral sources of growth for SERBIA

	2000-2008			2000-2010		
	GrwthRate	Contributn	%	GrwthRate	Contributn	%
A Agriculture, forestry, Fishing	2,28%	0,25%	5,14%	1,85%	0,21%	5,61%
B Mining & Quarrying	0,99%	0,01%	0,21%	0,55%	0,00%	0,13%
C Manufacturing	1,74%	0,27%	5,40%	-0,26%	0,00%	0,05%
D Electricity, Gas, Steam and similar	2,09%	0,06%	1,17%	1,30%	0,04%	0,99%
E Water supply; Sewerage, Waste management	-2,44%	-0,04%	-0,82%	-1,86%	-0,03%	-0,86%
F Construction	10,08%	0,35%	7,16%	4,88%	0,17%	4,70%
G Wholesale, retail and similar	13,29%	1,19%	24,05%	9,82%	0,88%	23,86%
H Transportation and storage	4,90%	0,23%	4,62%	3,63%	0,17%	4,68%
I Accommodation & food services	0,12%	0,00%	0,01%	-1,13%	-0,01%	-0,29%
J Information and communication	17,03%	0,60%	12,12%	15,10%	0,57%	15,55%
K Finance & insurance	6,38%	0,15%	3,10%	6,37%	0,16%	4,38%
L Real estate	2,12%	0,22%	4,54%	2,17%	0,23%	6,22%
M Professional, scientific, technical	3,00%	0,07%	1,48%	3,49%	0,09%	2,37%
N Administrative & support services	7,18%	0,06%	1,29%	7,62%	0,07%	1,96%
O Public administration	1,44%	0,07%	1,37%	1,22%	0,06%	1,53%
P Education	-0,60%	-0,03%	-0,54%	-0,59%	-0,03%	-0,69%
Q Human health and social activities	0,61%	0,03%	0,68%	0,63%	0,03%	0,90%
R Arts, entertainment, recreation	1,89%	0,02%	0,32%	2,29%	0,02%	0,55%
S Other	0,94%	0,01%	0,15%	-0,19%	0,00%	-0,08%
T Household and similar activities	0,75%	0,00%	0,01%	1,29%	0,00%	0,03%
U Extraterritorial entities	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
GROSS VALUE ADDED	4,09%	3,53%	71,45%	3,02%	2,63%	71,60%
Net Taxes	4,94%	1,41%	28,55%	3,67%	1,04%	28,40%
<b>G D P</b>	4,94%	4,94%	100,00%	3,67%	3,67%	100,00%

Source: Popović, M. (2013)

Table 4e-2: Dynamics of sectoral structure for SERBIA

	2000	2008	Δ08-00	2010	Δ10-08	Δ10-00
A Agriculture, forestry, Fishing	10,82%	8,81%	-2,01%	9,07%	0,26%	-1,75%
B Mining & Quarrying	2,06%	1,51%	-0,54%	1,52%	0,00%	-0,54%
C Manufacturing	17,76%	13,85%	-3,90%	12,07%	-1,79%	-5,69%
D Electricity, Gas, Steam and similar	3,24%	2,60%	-0,64%	2,57%	-0,03%	-0,67%
E Water supply; Sewerage, Waste management	2,11%	1,18%	-0,93%	1,22%	0,04%	-0,89%
F Construction	2,94%	4,31%	1,37%	3,30%	-1,01%	0,36%
G Wholesale, retail and similar	6,70%	12,36%	5,66%	11,93%	-0,44%	5,22%
H Transportation and storage	4,55%	4,54%	-0,01%	4,53%	0,00%	-0,02%
I Accommodation & food services	1,39%	0,96%	-0,44%	0,87%	-0,09%	-0,53%
J Information and communication	2,36%	5,64%	3,28%	6,72%	1,07%	4,36%
K Finance & insurance	2,57%	2,87%	0,30%	3,33%	0,46%	0,76%
L Real estate	12,20%	9,81%	-2,39%	10,54%	0,74%	-1,65%
M Professional, scientific, technical	2,91%	2,51%	-0,40%	2,86%	0,36%	-0,05%
N Administrative & support services	0,87%	1,03%	0,16%	1,27%	0,24%	0,40%
O Public administration	4,68%	3,57%	-1,11%	3,68%	0,12%	-1,00%
P Education	5,07%	3,28%	-1,78%	3,33%	0,05%	-1,74%
Q Human health and social activities	6,06%	4,33%	-1,73%	4,50%	0,18%	-1,56%
R Arts, entertainment, recreation	1,21%	0,95%	-0,25%	1,06%	0,10%	-0,15%
S Other	1,29%	0,94%	-0,34%	0,88%	-0,06%	-0,41%
T Household and similar activities	0,12%	0,08%	-0,03%	0,09%	0,01%	-0,02%
U Extraterritorial entities	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
GROSS VALUE ADDED	90,90%	85,13%	-5,77%	85,32%	0,20%	-5,58%
Net Taxes	9,10%	14,87%	5,77%	14,68%	-0,20%	5,58%
<b>G D P</b>	100%	100%	0,00%	100%	0,00%	0,00%

Source: Popovic, M. (2013)

Table 4f-1: Sectoral sources of growth for SLOVENIA

SECTORS	1995-2011			2000-2008			2000-2011		
	GrwtRat	Contrb	%	GrwtRat	Contrb	%	GrwtRat	Contrib	%
A Agriculture, forestry and fishing	0,77%	0,03%	0,88%	0,97%	0,03%	0,67%	0,73%	0,02%	0,93%
B C D E Industry	3,39%	0,85%	27,70%	4,67%	1,13%	26,46%	2,66%	0,67%	26,98%
of which: C manufacturing	3,62%	0,79%	25,77%	4,91%	1,02%	23,93%	2,75%	0,60%	24,18%
F Construction	1,69%	0,10%	3,12%	5,95%	0,37%	8,57%	-0,05%	0,00%	-0,06%
G H I Trade, accommodation, transport	3,35%	0,57%	18,43%	5,18%	0,88%	20,64%	3,17%	0,54%	21,73%
J Information and communication	6,61%	0,21%	6,79%	7,88%	0,27%	6,31%	5,49%	0,19%	7,63%
K Financial and insurance activities	5,96%	0,25%	7,99%	7,81%	0,32%	7,55%	5,54%	0,23%	9,21%
L Real estate activities	1,86%	0,12%	4,03%	2,81%	0,18%	4,30%	2,09%	0,14%	5,53%
M N Professional, technical and other business	2,50%	0,17%	5,60%	3,59%	0,26%	5,98%	2,46%	0,18%	7,10%
O P Q Public administration: defence; edu, hlth	2,85%	0,40%	12,95%	2,82%	0,40%	9,40%	2,44%	0,35%	13,97%
R S T U Other activities	1,41%	0,04%	1,31%	0,99%	0,02%	0,57%	0,32%	0,01%	0,35%
Total gross value added, basic prices	3,10%	2,70%	87,55%	4,42%	3,87%	90,35%	2,62%	2,30%	91,25%
Taxes on products less subsidies on products	2,82%	0,38%	12,45%	3,30%	0,41%	9,65%	1,68%	0,22%	8,75%
GROSS DOMESTIC PRODUCT	3,07%	3,07%	100,0%	4,28%	4,28%	100,00%	2,50%	2,50%	100,00%

Table 4f-2: Dynamics of sectoral structure for SLOVENIA

SECTORS	1995	2000	Δ00-95	2008	Δ08-00	Δ08-95	2011	Δ11-08	Δ11-00	Δ11-95
A Agriculture, forestry and fishing	3,73%	2,93%	-0,81%	2,05%	-0,88%	-1,68%	2,30%	0,25%	-0,62%	-1,43%
B C D E Industry	24,56%	24,45%	-0,12%	22,19%	-2,26%	-2,37%	21,33%	-0,86%	-3,11%	-3,23%
of which: C manufacturing	21,44%	21,30%	-0,14%	18,74%	-2,56%	-2,69%	17,65%	-1,09%	-3,65%	-3,79%
F Construction	5,05%	5,79%	0,74%	7,41%	1,62%	2,36%	5,22%	-2,19%	-0,57%	0,17%
G H I Trade, accommodation, transport	16,40%	16,37%	-0,02%	18,40%	2,02%	2,00%	17,87%	-0,53%	1,50%	1,48%
J Information and communication	2,50%	3,36%	0,86%	3,47%	0,11%	0,97%	3,54%	0,07%	0,18%	1,04%
K Financial and insurance activities	4,77%	4,24%	-0,53%	4,13%	-0,11%	-0,64%	4,59%	0,46%	0,35%	-0,17%
L Real estate activities	6,77%	6,87%	0,10%	6,41%	-0,46%	-0,36%	6,76%	0,35%	-0,11%	-0,01%
M N Professional, technical and other business	5,63%	6,17%	0,54%	7,79%	1,62%	2,16%	7,75%	-0,04%	1,58%	2,12%
O P Q Public administration, defence; edu, hlt	13,48%	14,04%	0,56%	13,60%	-0,45%	0,12%	15,34%	1,74%	1,29%	1,85%
RSTU Other activities	2,71%	2,90%	0,20%	2,29%	-0,61%	-0,41%	2,37%	0,07%	-0,54%	-0,34%
Total gross value added, basic prices	85,60%	87,13%	1,53%	87,75%	0,61%	2,15%	87,08%	-0,66%	-0,05%	1,48%
Net taxes on products	14,40%	12,87%	-1,53%	12,25%	-0,61%	-2,15%	12,92%	0,66%	0,05%	-1,48%
Total - gross domestic product	100,00%	100,00%	0,00%	100,00%	0,00%	0,00%	100,00%	0,00%	0,00%	0,00%

Sources: Authors calculations based on national statistical offices data and on the basis of UN data set.



## ***5. Policy and Institutional Prerequisite for Liberation of Growth Reserves***

As already explained, two kinds of growth reserves are crucial for the future growth rate of the economies being analysed here. Firstly, it was already told that these economies could (and should) increase the participation ratio growth rate to the level that would help unemployment to be eradicated in next couple of decades. Secondly, it is also shown that the existing sources of TFP growth are exhausted and that these countries should rely in the future on the advance of “broader knowledge” as a source of its growth. Defined in that way, TFP can grow at the rate of 2.4% per year. What are, however, “soft” prerequisites for liberation of these reserves? No doubt, what all of these countries need is an active economic policy oriented toward ‘reinventing’ their economies (Housmann at all, 2005).

There are two important limitations that should be overcome or, at least, taken in account when deciding about kind of economic policies that can be implemented. The first limitation is related to the existing political economy at the national level. This is a complicated issue and can't be properly covered within one paragraph. A safe way to make a story short and relevant for the issue is to focus on broadly defined corruption. A degree of corruption is at such level that almost all SEE countries can be treated as “state captured”. Corruption wedges and its distortions are obviously much higher than those of all taxes and other wedges. Since any economic policy assumes, in one way or another, redirecting of income, further strengthening of the state role in the economy would, in that circumstance, make things much worse than what they are now. It would just open new “markets” for corruptive and rent seeking activities. Some economists believe and argue that the only way to eradicate corruption is further privatization and further reduction of the state role in the economy. Unfortunately, experience so far shows that this is not the cure. Privatizations of energy sectors and water supply systems, for example, show that corruption in fact flourished to the astonishing level not only during the process of privatization but even worse after that. On the other hand, further unselective liberalization and reduction of the state role in the economy would make us unable to eliminate market failures and distortions caused by them. Those failures are especially numerous and strong in small countries like all SEE countries (non-competitive market, spillovers, coordination of complementary activities, information issues, and other). Not rarely, without eliminating or, at least, mitigating market failures it might happen to be impossible to jump on the converging growth path. Consequently, corruption can be treated as “distortion of all distortions”. So, the first thing to do in order to get out of this “straightjacket” and to start thinking about possible economic policies is to eradicate corruption entirely.

The second limitation is related to the globally attained level of liberalization. For example, if we want to use benefits of the global and EU markets we should follow rules imposed by WTO and EU. We, therefore, cannot use trade policies. Given that, technically speaking, trade policies are less expensive and provide immediate effects and given that all analysed countries have a lot of “infant industry” arguments (or, better, “recovering” industry arguments), it might be regarded as a serious limitation. Note, however, that the trade policy has hard political economy that very often can stimulate the chosen industry to remain “infant” (“recovering”) forever. Similarly, capital account liberalization, aimed at attracting additional sources of capital, assumes giving up the active exchange rate policy. When matched with the growth model that relies too heavily on foreign capital, it is a serious limitation: strong inflow of foreign capital inevitably leads to appreciation of domestic currency which in turn has an adverse effect on domestic industries. However, when, on top of that, this policy is matched with “eurization” through the

banking system, as in all analysed countries, it has an even more adverse effect: net export accounts loose ability to stabilize economy via expected depreciation of domestic currency when the capital inflow is reduced. This serious limitation is one that can be and should be eliminated as soon as possible. The Serbian and Croatian banking systems, in other words, should be returned to local currencies. The “only” problem is that this cannot be done so quickly. This can be attained only in the long run. So, at the moment it seems impossible to apply any other radically different exchange rate policy. On the long run, however, it seems appropriate to develop and identify the optimal policy of the exchange rate.<sup>11</sup>

Having the above in mind, it is clear that the most powerful policy tools are currently within the active and selective industrial policy. Once the problem of corruption is overcome, it can be a powerful tool to eliminate and mitigate all those distortions that are the result of numerous market failures. This is the only way to find an optimal combination of the “invisible” hand of the market and the “visible” hand of the state. SEE countries are currently using active industrial policy tools but they seem to be unsystematic, pretty expensive (one year workers’ salary paid by the state in Serbia, for example), and oriented almost solely toward attracting foreign investors. An effort to develop a systematic set of industrial policy tools should consider the following issues. First of all, in order to overcome the problem of generating business ideas and, in that way induced, the problem of small absorption capacity on the side of investment demand, arising due to “spillovers” and a lack of big companies able to develop their own R&D units, SEE countries should complete its national innovation system (NIS). At the functional level it assumes redefining the role of universities (strengthening and focusing the research line of “business”) and existing institutes, developing new and strengthening existing incubators and business centers, stimulating clusters development, integrating activities of universities and institutes with those of incubators, and similar. Not less important is the geographical level which assumes covering remote and undeveloped regions with part of this unique architecture of knowledge (mainly with incubators and business centers). Secondly, since the commercial banking system is not able to either provide a high level of domestic saving or to follow all investors with good business ideas (lack of collateral), it is necessary to create some new financial institution(s) (developing bank or fund, or something else) that would fill this gap. It seems reasonable that this institution should be closely related with NIS, maybe, part of it. Thirdly, the state should identify all possible activities that have problems in coordinating complementary activities

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<sup>11</sup> It is interesting that the concept of optimal exchange rate is still not developed within the economic theory. Instead, economist developed the concept of the long run equilibrium real exchange rate. Theoretically, later can be defined as the rate at which conditions for both, internal and external macroeconomic stability are satisfied (Baffes et al., 1997; Montiel, 1997, 1999, 2001; Taulaboe, 2001). Internal macroeconomic stability assumes that demand and supply for untradeables are equal. External macroeconomic stability, on the other hand, assumes compatibility between the current account position and the long-run sustainable capital account inflow / outflow (Krugman and Obstfeld, 2009). The problem with this concept is that it does not explain clearly what is either the long-run or sustainable level of capital account inflow / outflow. In different econometric exercises it has been defined pretty arbitrarily. The concept of optimal exchange rate is much more relevant and it, naturally, should be developed within the framework of welfare economics and the framework of optimal inter-temporal allocation within the international trade context. As far as I know there is only one research that explicitly uses the concept of the optimal exchange rate (Rodrik, 2008). Although not defined in the framework of welfare economics, but as the exchange rate that maximizes the GDP growth rate, this research is very important, especially its findings that almost all episodes of high growth rates in different countries from 1954 to 2004 have been accompanied by the depreciated real exchange rate.

and find way to mitigate these problems. The agro-complex (farmers - food industry - trade) is a notorious and well understood example that comes under this heading. Nevertheless, SEE countries still have not developed a strong and reliable policy in that strategic activity. Less understood is the case of the construction complex and a problem of coordination between construction services, production of materials for construction services, education of labor for that activity, lack of spatial and urban plans and similar. It seems that former SFRY countries, countries that made a lot of great projects around the world, are currently having great problems when they have, like Serbia for example, to make the bridge across the Danube or 200 km of highway. These are just the most important examples. Fourthly, all the above mentioned and other policies should be designed in a way to stimulate development of less developed regions. Other policy measures should be developed. Demographic policy measures might be especially important and powerful. Finally, all those measures that go under the heading of elimination of administrative barriers are of crucial importance. They are already very well understood and advocated. Realization of the proposed measures is the only thing that is missing here.

### ***7. Concluding Remarks***

In this paper we presented just first results of our broader research endeavour aimed at analysing economic growth in all 12 SEE countries. Further research will first identify proximate causes of growth in other 6 SEE countries not covered by this paper: Hungary, Romania, Bulgaria, Greece, Albania and Kosovo. At the same time we will try to improve analysis presented here especially data used and estimated on the basis of the existing sources.

Second, our research will be oriented toward institutional and other fundamental causes of growth in SEE countries. Only after this kind of analysis we will be able to fully understand anatomy of growth in SEE countries and envisage policy and institutional prerequisite for, now badly needed, faster economic growth in all of these countries. It is the absence of such analysis that makes us hesitant in making other conclusions that someone might be tempted to do when faced with such seemingly rich body of results. Nevertheless, we hope that results and conclusions offered here will be insightful and useful even at this stage of research.

## **Izvori rasta u zemljama bivšim članicama SFRJ: komparativna analiza**

**Milenko Popović i Mirjana Čizmović**

**Sažetak:** Predmet ovog rada je komparativna analiza ekonomskog rasta u zemljama bivšim članicama SFRJ. Članak je prvenstveno posvećen analizi izvora ekonomskog rasta tih zemalja. U tom smislu, pored konvencionalnog razčlanjivanja stope rasta na doprinose rada, kapitala i totalne produktivnosti, data je i analiza izvora rasta sa stanovišta strukture tražnje i sektorske strukture privrede. Dalje, na bazi dobijenih rezultata utvrđene su i procenjene najvažnije rezerve budućeg rasta BDP-a po glavi stanovnika posmatranih zemalja. Posebna pažnja posvećena je mogućem porastu totalne produktivnosti resursa, indukovano rastom znanja shvaćenog u najširem smislu te reči, kao i mogućem porastu učešća zaposlenih u ukupnom stanovništvu. Institucionalni i ekonomsko politički preduslovi za realizaciju i oslobađanje ovih rezervi rasta su takođe ukratko razmatrani.

**Ključne riječi:** izvori rasta, rezerve rasta, konvergencija

**JEL klasifikacija:** O40, O43, O47

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