

Macroeconomic Performance, Trade and Competitiveness of South-East European Countries

Dr. Goran Buturac, Dr. Željko Lovrinčević, and Dr. Davor Mikulić¹

Abstract

The purpose of this paper is to analyse macroeconomic performance of the selected countries reflected by GDP growth, inflation, unemployment and overall economic competitiveness and especially to assess the impact of global crisis on domestic economies. As a key aspect of overall competitiveness, changes in the trade patterns of selected south-eastern European countries are also analyzed. The period from 2000 to 2008 can be characterized as successful for Western Balkan countries due to the narrowing development gap in comparison to EU countries, but the recent global economic crisis had a strong negative impact on this region. However, due to domestic absorption growth and export of services, Albanian economy was growing even in 2009, a period when most European countries recorded significant drops in economic activity. On the other hand, the highest negative growth rates were recorded in Croatia and Montenegro. In all countries the global economic crisis resulted in decreasing comparative advantages and export competitiveness in most export products. Most of the observed countries have complementary export structures. This kind of situation offers a strengthening of mutual economic cooperation and joint efforts on the international markets especially in the circumstances of the global economic crisis.

Introduction

Countries of south-eastern Europe in the last two decades have witnessed an abundance of significant political and economic events. Establishment of independent states, the collapse of central planning and transition towards market economic system were the most important factors influencing macroeconomic performance. Although, significant macroeconomic improvements are recorded, there is still significant room for further reforms oriented to rising of overall competitiveness which will result in higher living standard of population.

All these countries face the challenge of more active inclusion in the European integration process, and one of the key factors in this path is the improvement in trade patterns and export competitiveness. The changes of export structure towards higher value added products are a precondition of growth in export

¹ Authors are associated with the Institute of Economics, Zagreb, Croatia. Dr. Buturac is a Research Associate, while Dr. Lovrinčević and Dr. Mikulić are Senior Research Associates.

competitiveness. The latest trends on the international markets are characterized by a significant fall in demand and a strengthening of competitive pressure. In this context the ability of the adjustment to new market circumstances is especially important for the achievement of continual growth in production and in exports. Present theoretical knowledge supports open policies of international trade. The liberalization and openness of the markets and global reduction of demand create new challenges for strengthening export competitiveness (Buturac and Grzinic, 2009).

The purpose of this paper is to analyse macroeconomic performance of the selected countries reflected by GDP growth, inflation, unemployment and overall economic competitiveness and especially to assess the impact of global crisis on domestic economies. The analysis comprises the following countries: Albania, Bosnia and Herzegovina, Croatia, Macedonia, Montenegro and Serbia. ²

The paper is divided into three parts. After the introduction, the second part is related to the analysis of macroeconomic performance of Western Balkan Countries. The results of empirical research of the openness, dispersion and concentration, comparative advantages, export competitiveness and export similarities are shown in the third part. Brief conclusions are then drawn.

Macroeconomic Performance of Western Balkans Countries

In the literature on macroeconomic performance of the European economy, the region comprising of the so-called Western Balkan countries is usually neglected due to the low impact on the rest of the European economy or simply due to a lack of comparable data. However, the EU expansion process has a strong impact on the Western Balkans region, not only in political, but also in economic terms. Although each analyzed country has specific features in terms of economic development stage, in the medium or long term, EU integration is expected for the entire region.

The Western Balkans region is usually treated as the European periphery in the economic literature, connected to negative economic developments. Barlett (2009) argues that the conflicts of the 1990s pushed the countries into the European „super-periphery” characterized by deindustrialization and high unemployment,

² Republic of Kosovo is not included in the analysis because of the lack of data
66

political turmoil and instability. As opposed to new EU member states, the Western Balkans significantly lag behind in foreign capital inflows and are consequently recording slow progress in terms of technological catch-up and weak international competitiveness.

Relationship between research and development and competitiveness of South East-eastern Europe is explored by Radošević (2007). He found that SEE countries are quite diverse in terms of competitiveness levels which should have strong effects on the role of R&D. Results showed that innovation policy is essential for knowledge based growth in SEE countries.

One of the important aspects of successful convergence to EU is international trade. Establishment of regional free trade agreements could be important in terms of attractiveness for FDI inflow and interregional trade. Grupe and Kusic (2005) estimated that gain from an increase of interregional trade will be moderate. In this paper we will try to show the relationship between macroeconomic performance measured primarily through speed of EU convergence process and trade competitiveness.

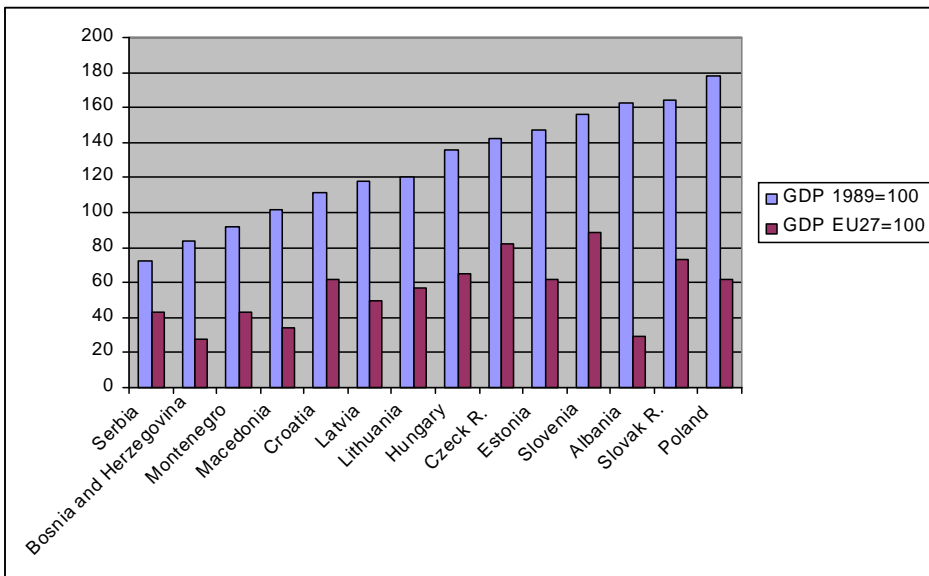
EU Convergence

The economic convergence process can be defined as the reduction of the development gap between the less developed countries in comparison to developed economies. The process is broadly explored in the economic literature, especially in the context of EU expansion (Angeloni, Flad i Mongelli, 2005). Based on economic theory and empirical research, factors determining the speed of convergence are: initial conditions, success of structural reforms, and macroeconomic stability (Fischer and Sahay, 2000). In the later phases of transition, determinants of economic growth of less developed countries are more or less the same as in the most developed economies and are related to quality of human and fixed capital in the broadest sense.

Graph 1 presents comparison of current GDP per capita in transitional economies to the pre-transition period. As shown, although the Western Balkans in recent years recorded relatively high growth, some are still below the development levels in the socialist era. The war and market disintegration had a very strong

negative impact on ex-Yugoslav countries. Apart from the physical destruction, those countries have been isolated from the EU integration process which implied slower process of structural reforms and lower attractiveness for FDI inflow. Albania is the only country from the group of Western Balkans countries which significantly improved economic development in comparison to 1989.

Graph 1. GDP per capita



Source: WIIW (2010), EBRD transitional report.

In the period 2000-2010, WB countries have significantly reduced the development gap in terms of EU 27 average in terms of GDP measured by purchasing parity standard (Table 1). Although in less favorable conditions, macroeconomic convergence of WB countries was comparable to new EU member states (NMS 12). Confirming economic theory, less developed countries in initial transition phase have a potential for higher growth, and that is the factor behind a rapid “catching-up” process in Albania and Montenegro. However, despite a low base, Macedonia and Bosnia and Herzegovina have recorded lower levels of progress.

Table 1. GDP PPP per capita, EU 27 =100

	2000	2005	2010	Index 2010/2000	Average annual reduction of development gap, in terms of EU 27 average GDP
Albania	18	22	29	161,1	1,1
Bosnia and Herzegovina	21	23	28	133,3	0,7
Croatia	49	56	62	126,5	1,3
Macedonia	27	28	34	125,9	0,7
Montenegro	29	31	43	148,3	1,4
Serbia	32	32	43	134,4	1,1
Average WB countries	29	32	40	138,3	1,1
NMS-12	45	52	61	135,6	1,6

Source: WIIW (2010).

In 2010, Croatia recorded real per capita GDP on the same level as the NMS-12 average, despite slightly slower convergence process. EU accession in the near future could help Croatia to speed up the convergences process. Abolition of administrative trade burdens can promote Croatian exports and FDI inflows. In addition, as a full member state, Croatia will be the net beneficiary of EU structural funds which could give a new momentum to investment and growth.

Macroeconomic stability

Apart from the relative success in “catching up” with EU countries in last period, Western Balkans countries recorded significant progress in assuring macroeconomic stability in terms of price stability and improvement of public finances. On the other hand unemployment and trade competitiveness are areas with unsatisfactory results.

Although Croatia, Bosnia and Herzegovina and Macedonia managed to keep inflation under control for a longer period, some Western Balkans countries in the last decade of the 20th century still recorded high inflation levels³. The main anchor used to lower inflation rates were more or less fixed exchange rates, with the euro

³ For example in 1998 CPI inflation was 20,6% in Albania, 32,4% in Montenegro and 305 in Serbia.

used as the anchor currency. While Montenegro is euroized, Bosnia and Herzegovina has established a currency board system and a managed floating system with narrow band around the euro is used in other WB countries, apart from Serbia (Belke and Zenkić, 2007). The credibility of the Central Banks plays an important role in terms of monetary stability in the transition countries (Coats et al 2002). In order to gain the necessary credibility, the five Western Balkans countries institutionally strengthened central banks enabling them to act independently in order to conduct a policy ensuring monetary stability in this region.

Table 2. Main macroeconomic indicators for WB countries

	Inflation	Public deficit	Public debt		Current account deficit	Foreign debt		Unemployment		
	GDP deflator	in percentage of GDP							in % of active population	
		Av. 2005-08	2005	2008	Av. 2005-08	2005	2008	2005	2008	
Albania	3.4	-4.0	58.1	52.6	-9.7	20.7	29.5	14.1	12.7	
Bosnia and Herzegovina	4.8	1.2	25.6	27.6	-11.9	25.6	17.2	44.1	40.6	
Croatia	3.9	-2.1	38.3	33.5	-6.9	71.8	83.8	17.8	13.7	
Macedonia	4.4	-0.2	46.9	28.7	-6.2	54	50.9	37.3	33.8	
Montenegro	7.2	2.5	38.6	26.8	-20.9	28.3	15.6	25.2	14.4	
Serbia	11.5	-1.3	50.5	25.8	-11.7	66.2	69.2	27.2	24	
Average	5.9	-0.6	43.0	32.5	-11.2	44.4	44.4	27.6	23.2	

Source: WIIW (2010) and EBRD.

High growth rates realized in the analyzed period with tax systems primarily oriented toward consumption taxation helped a group of Western Balkans countries to improve the stability of public finances. Public deficit was even lower when compared to NMS countries⁴ which, coupled with high growth of GDP and privatization receipts in some countries, made it possible to reduce public debt in terms of GDP share.

On the other hand, price convergence to EU levels and rising wages and salaries negatively affected trade competitiveness of Western Balkans countries, resulting in high current account deficits (11.2% of GDP on average). In Croatia and Serbia, a rising share of foreign debt connected with significant amount of interest

⁴ According to EBRD data, NMS countries in the analyzed period recorded a public deficit of slightly below 3% GDP on average.

payments to external economies could present a serious obstacle for further growth based on investment financed with foreign capital inflow. A high share of debt in foreign currency and the euro-indexation of loans mean that monetary authorities cannot resort to exchange rate depreciation as a tool for strengthening competitiveness without threatening debt servicing (WIIW, 2010). Other WB economies still have a significantly lower share of foreign debt in comparison to new member states but persistent current account deficits could deteriorate their position in the future, especially in an environment marked by slower global growth.

Low competitiveness of Western Balkans countries and rising unit labor costs, apart from high current account deficits, resulted in high unemployment which on average exceeded 20% of the labor force. High GDP growth in period prior up to 2008 was not accompanied with significant labor market improvements. Rising overall productivity through restructuring of privatized companies and the deindustrialization process are factors behind relatively low demand for labor and persistent unemployment.

Table 3 presents a comparison of unit labor costs in Western Balkans countries based on purchasing parity standards. Average worker in Austria is more than twice expensive as average worker in WB countries according to PPS⁵. Labor costs in WB increased almost 10 percentage points (in terms of Austrian wages) in only four years which significantly deteriorated competitiveness of domestic exporters. The highest growth of unit labor costs is recorded in Montenegro (21.7 percentage points), but it is interesting to note the increase of 16.1 percentage points growth of unit labor costs in Bosnia and Herzegovina while in the same period, unemployment rate is exceeding 40%. The slowest growth of unit labor costs at purchasing parity standards are recorded in Croatia and Serbia.

⁵ According to the market exchange rate, the difference in wages is significantly higher.

Table 3. Unit labor costs, Austria=100, PPP adjusted

	2005	2006	2007	2008	2009	Growth 2009-2005
Albania	22.7	23.1	33.8	30.2	28.0	5.3
Bosnia and Herzegovina	31.3	39.2	41.7	47.0	47.4	16.1
Croatia	54.9	55.1	55.2	57.8	56.7	1.8
Macedonia	36.6	38.7	38.8	40.3	46.2	9.6
Montenegro	31.9	32.9	46.8	52.5	53.6	21.7
Serbia	30.5	33.3	39.5	44.8	33.6	3.1
Average	34.7	37.1	42.6	45.4	44.3	9.6

Source: WIIW (2010).

Impact of global crisis on Western Balkans economies

The period from 2000 to 2008 can be characterized as successful for Western Balkans countries due to the narrowing development gap in comparison to EU countries, but the recent global economic crisis had a strong negative impact on this region. Due to persistent external imbalances and risk aversion of global investors, Western Balkans countries were not able to implement expansionary fiscal policies to compensate for the drop in external demand.

All macroeconomic indicators, apart from the current account deficit worsened in 2009 compared to previous periods. Albania is the only WB country with positive economic growth during the global crisis. Drop of external demand has limited impact on Albanian manufacturing industry because of the low share of export of goods in GDP⁶. Due to domestic absorption growth (personal consumption and gross fixed capital formation) and export of services, Albanian economy was growing even in 2009, a period when most European countries recorded significant drops in economic activity.

The highest negative growth rates were recorded in Croatia and Montenegro. Economic performance in those two countries was worse than the EU 27 average which temporarily stopped economic convergence. Other Western Balkans countries have recorded lower negative growth rates but unemployment rose in each of analyzed country.

⁶ The share of goods exports in Albanian GDP was 8.5% in 2009, very low compared to other Western Balkans countries and NMS.

Table 4. Key macroeconomic indicators – the impacts of the global crisis

	GDP growth		Public deficit		Current account deficit		Foreign debt		Unemployment	
	Average 2005-08	2009	Average 2005-08	2009	Average 2005-08	2009	Average 2005-08	2009	2008	2009
Albania	6.3	4.2	-4.0	-7.0	-9.7	-3	22	35	12.7	12.8
Bosnia and Herzegovina	5.6	-3.0	1.2	-3.0	-11.9	-7.8	21	20	40.6	43
Croatia	4.2	-5.8	-2.1	-2.9	-7.0	-5.5	77	95	13.7	16.7
Macedonia	4.7	-2.0	-0.2	-2.8	-6.2	-7	50	55	33.8	34
Montenegro	7.6	-5.0	2.5	-2.0	-21.0	-15	21	18	14.4	14.5
Serbia	5.8	-2.9	-1.3	-5.0	-11.7	-7	64	74	24	25
Average	5.7	-2.4	-0.6	-3.8	-11.2	-7.6	42	50	23.2	24.3

Source: WIIW (2010).

Due to lower tax base and non-elastic government expenditures, a group of Western Balkans countries recorded deteriorating stability in public finances. On the other hand, current account deficit was reduced because of adjustments of domestic absorption. Despite lower current account deficits, the share of foreign debt in GDP significantly rose in 2009. Therefore, improvements in trade competitiveness are crucial for future macroeconomic performance of Western Balkans countries and features of international trade of Western Balkans countries are explored in detail in the next chapter.

According to EBRD (2009), significant cross-country differences regarding the speed and shape of recovery are likely. The fastest growth can be expected in internationally competitive economies with relatively sound pre-crisis banking systems, as well as in some commodity producing countries, whose financial systems are smaller and were less affected by the crisis. The continuing credit crunch is likely to act as the most significant brake on growth in countries with high non-performing loans and weaker institutional frameworks for debt restructuring.

Empirical Analysis of Trade and Competitiveness

Methodology

The empirical analysis of changes in the trade and competitiveness of selected south-eastern European countries was calculated using the following indicators:

- trade entropy index (TEI) for the analysis of the dispersion and concentration;
- revealed comparative advantages (RCA) for the analysis of comparative advantages;
- Grubel-Loyd Index (GL) for the analysis of intra-industry trade;
- the indicator of export competitiveness;
- the indicator of export similarities (ES).

The dispersion and concentration of export and import structure are analyzed applying empirical calculations TEI indicator („Trade Entropy Index“) which is calculated according to the following expression:

$$I_{xi} = \sum_j b_{ij} \ln \left(\frac{1}{b_{ij}} \right) ; \quad 0 < b_{ij} < 1; \quad \sum_j b_{ij} = 1$$

where b_{ij} is the share of the export of individual product i in total export of manufacturing j . The same is valid for imports. The higher value of the indicator reveals a higher level of export dispersion, i.e. a lower level of export concentration. Conversely, the lower value of entropy index means lower dispersion, i.e. higher concentration. A high concentration or low dispersion implies a high share of product or several products in total export structure. Otherwise, low concentration or high dispersion reveals the fact that none of the products has significantly higher share in export structure relative to other products.

The RCA indicator is used for the analyses of comparative advantages. The methodology for calculating the RCA indicator was originally developed by Bela Balassa (1965). Later, numerous derivations originated from this indicator. The RCA indicator is useful for the purpose of comparing comparative advantages for individual product groups⁷. The RCA indicator is calculated by the formula:

⁷ See more details about the use of RCA indicator in Balassa (1965), Lafay (1992), and for transition economies Kaminski and Ng (2001), Yilmaz (2005), Buturac (2005).

$$RCA = \ln \left[\frac{X_i}{M_i} \right] \times \left(\frac{\sum_{i=1}^n X_i}{\sum_{i=1}^n M_i} \right) \times 100$$

X is defined as the value of exports, while M is the value of imports. Index i is the product group classified according to SITC. A positive value indicates that the country has comparative advantages in the corresponding product group. Conversely, a negative sign for the RCA indicator implies that there are no comparative advantages. An alternative for RCA indicators is the Lafay's RCA index. Compared to Balassa's RCA indicator, Lafay's index takes in regard the flows of trade inside each sector of the economy, GDP as well as exports and imports for each group of products.⁸

The GL index shows the level of intra-industry trade specialization. The methodologies and calculations of the GL index were developed and applied by Grubel and Lloyd (1975).⁹ For individual product groups the GL index is calculated using the formula:

$$GL_i = \frac{\sum_{i=1}^n (X_i + M_i) - \sum_{i=1}^n |X_i - M_i|}{\sum_{i=1}^n (X_i + M_i)} * 100$$

GL_i is the value of the Grubel-Lloyd index for product group i . X is defined as the value of exports, and M is the value of imports. The coefficient can vary from 0 to 1. The closer it is to 1, the higher the degree of specialization in intra-industry trade. A lower value of the coefficient shows that the country has a higher level of specialization in inter-industry trade.

⁸ See more details about the use of Lafay's index in Lafay (1992).

⁹ See more details about the use of index of intra-industry trade specialization in transition economies in Kaminski and Ng (2001).

Export competitiveness is analyzed applying the indicator of competitiveness¹⁰. It is the ratio between exports of the product, i , to observed market c and total imports of this product from the market c :

$$Ic_i(a, c) = \frac{EX_i(a, c)}{\sum_{i=1}^n IM_i(c)} \times 100$$

$EX_i(a, c)$ is the export of the product, i , of country, a , to the market c . The total import product, i , from market, c , is $\sum_{i=1}^n IM_i(c)$.

Export Similarities - ES indicator shows the level of similarities in the structure of exports between two countries. It is calculated using the following formula:

$$ES(ab, c) = \sqrt{\sum_i \left[EX_i(ac) - \frac{EX_i(ac) + EX_i(bc)}{2} \right]^2}$$

ES indicator is used for measuring the different structures of exports of county a and of country b in country c . $EX_i(ac)$ describes a part of export products i of country a in country c in total exports of country a in country c . In this way the indicator is calculated assuming values in the interval from 0 to 1. The closer the ES indicator is to 1 the more similar the structure of exports between two countries is.¹¹

Analysis of export and import trends

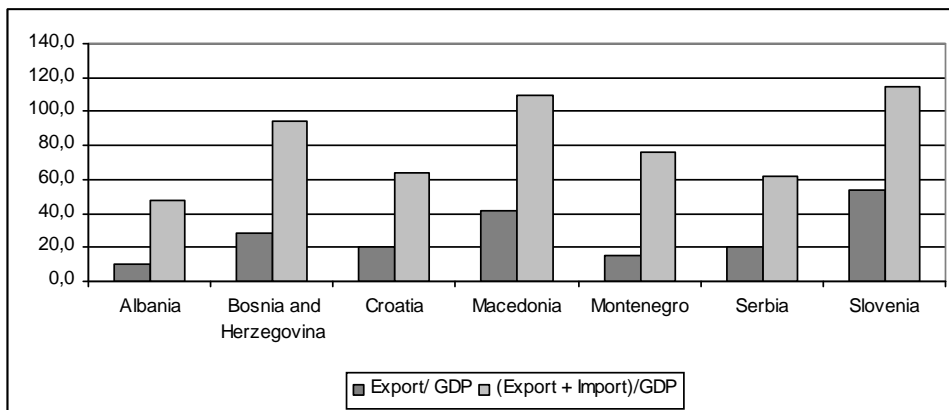
The periods of transition were characterized by a process of accelerated opening and integration of south-eastern European countries into the international market. Therefore, in this introductory part of the empirical analysis basic indicators and trends in international trade and rising trade openness are presented. In all analyzed countries, trade rose rapidly relative to the rate of growth in GDP, which has resulted in a considerable growth in the share of trade in GDP. It is evident that, besides Albania and Serbia, Croatia has a lower level of openness measured by the total share

¹⁰ See more details about indicators of competitiveness in Yilmaz (2005).

¹¹ For details about the concept of the ES indicator see in Finger and Kreinen (1979).

of trade in GDP (Graph 2). On the other hand, Slovenia is the most opened economy in 2008. Except Slovenia, in all countries the share of import in GDP is considerable higher than the share of export in GDP.

Graph 2. The share of exports and imports in GDP in 2008



Source: WIIW Handbook of Statistics, 2009.

The growth of openness and liberalization of domestic markets had strong impacts on import growth. In all countries export growth was recorded, but it was less than import growth (apart from Albania and Serbia). Average annual export and import growth rates from 2002 to 2008 were the lowest in Croatia (Table 5).

Table 5. Basic indicators of exports and imports

Country	Annual average export growth rate ¹² (2002-2008)	Annual average import growth rate (2002-2008)	Relative deficit ¹³ (2008)	Export concentration (TEI) (2008)	Import concentration (TEI) (2008)	Share of top 3 export markets (2008)
Albania	21.85	19.55	-0.59	3.08	3.60	79.0
Bosnia and Herzegovina	5.60	7.05	-0.41	3.26	3.33	45.9
Croatia	4.48	5.23	-0.37	3.38	3.32	45.3
Macedonia	6.44	8.93	-0.29	2.75	3.32	43.7
Montenegro	18.35	24.14	-0.66	2.13	3.65	73.8
Serbia	26.85	22.32	-0.35	3.60	3.32	34.3
Slovenia	4.81	5.72	-0.07	3.21	3.39	39.6

Source: COMEXT, own calculations.

It is clear that the movements in exports and imports of goods determined corresponding movements in the balance of trade. All economies face a trade deficit. It is interesting that the relative deficits of Bosnia and Herzegovina, Croatia and Serbia were in 2008 at approximately the same level. Slovenia recorded the lowest relative deficit. At the same time, Montenegro had the highest relative deficit.

Comparative advantages and intra-industry trade¹⁴

¹² Average annual export growth rate is calculated using the formula:

$$AAGR_{T,T-n} = \left[\left(\frac{X_T}{X_{T-N}} \right)^{1/n} - 1 \right] \times 100$$

where X = the value of export, T = final year, n = number of year

¹³ Relative deficit is defined as $\frac{x-m}{x+m}$, where x is the value of merchandize export, and m the value of merchandize import.

¹⁴ Empirical research of intra-industry trade began in the mid-1960s. The first results were exposed by Balassa (1965). The most well known work on intra-industry trade was made by Grubel and Lloyd (1975). This research was then followed by what we know today as the theory of intra-industry trade (Krugman 1980, 1981; Lancaster 1980; Helpman 1981). The role and significance of intra-industry trade in the process of globalization and integration of transition economies on international markets is becoming more important than previously. Research in the field of international trade shows that intra-industry trade is the fastest

The results show that the period before the economic crisis, from 2002-2008, was characterized by an increase in the volume of international trade. Increasing market openness and liberalization favored dynamic import growth. At the same time there was no significant growth of exports. Openness of the economy increased primarily due to increasing imports as a share in GDP. In contrast, a comparison of the share of exports in GDP of the south-east European countries with those that joined the EU in 2004 shows that the countries of south-east Europe are still poorly competitive with regard to export orientation. The key question is: does an increase in trade volume and openness correspond to positive changes in trade structure? A positive change in the trade structure implies a change of comparative advantages towards higher value added sectors and products as well as a higher level of trade specialization. The comparison of comparative advantages for selected south-east European countries is analysed by the RCA indicator. The empirical results are displayed in table 6.

A common characteristic for all countries (except Slovenia) is the presence of comparative advantages in low value added sectors. Also, there is no correlation between the values of the RCA indicator and the share of individual products in the total export structure. In most countries leading export products do not have comparative advantages. The exceptions are Macedonia and Slovenia.

Table 6. Comparative advantages and intra-industry trade for the first five products concerning the share of exports in total export structure in 2008

<i>Albania</i>	%EXPORT	RCA	GL
64 Footwear	16.8	0.31	0.46
62 Clothing, accessories, not knit	14.6	0.14	0.74
61 Clothing, accessories, knit	11.1	0.05	0.91
72 Iron and steel	10.0	-0.15	0.72
27 Mineral fuels, oils	8.9	-0.50	0.25
<i>Bosnia and Herzegovina</i>	%EXPORT	RCA	GL
27 Mineral fuels, oils	9.84	-0.57	0.40
76 Aluminum	9.77	0.44	0.51

growing segment in the international trade of transition economies (Aturupane, Djankov and Hoekman 1997; Kaminski and Ng, 2001). Also, an increase of intra-industry trade specialization had an extremely positive impact on economic growth in the most developed transition economies.

84 Boilers, machinery	9.11	-0.41	0.54
73 Articles of iron and steel	8.13	-0.04	0.95
94 Furniture	7.69	0.29	0.66
<i>Croatia</i>	%EXPORT	RCA	GL
27 Mineral fuels, oils	12.86	-0.50	0.50
89 Ships, boats	12.38	0.14	0.85
85 Electrical, electronic equipment	9.44	-0.25	0.73
84 Boilers, machinery	9.02	-0.45	0.54
44 Wood and articles of wood	4.16	0.19	0.79
<i>Macedonia</i>	%EXPORT	RCA	GL
72 Iron and steel	32.33	0.20	0.82
62 Clothing, accessories	16.90	1.35	0.15
73 Articles of iron and steel	5.98	0.43	0.62
26 Ores, slag and ash	4.92	0.06	0.95
62 Articles of apparel, knit or crochet	4.10	0.89	0.32
<i>Montenegro</i>	%EXPORT	RCA	GL
76 Aluminum	43.15	0.16	0.62
72 Iron and steel	19.22	0.03	0.92
27 Mineral fuels, oils	9.59	-0.27	0.42
22 Beverages	4.92	-0.22	0.51
73 Articles of iron and steel	3.13	-0.41	0.23
<i>Serbia</i>	%EXPORT	RCA	GL
72 Iron and steel	13.87	0.21	0.78
85 Electrical, electronic equipment	6.83	-0.32	0.67
84 Boilers, machinery	6.34	-0.65	0.41
39 Plastics and articles thereof	5.40	-0.26	0.73
74 Copper and articles thereof	4.20	0.23	0.76
<i>Slovenia</i>	%EXPORT	RCA	GL
87 Vehicles	14.66	0.02	0.99
84 Boilers, machinery	13.38	-0.04	0.98
85 Electrical, electronic equipment	10.67	0.12	0.93
30 Pharmaceutical products	7.79	0.80	0.56
94 Furniture	4.72	0.69	0.62

Source: own calculations.

However, while Slovenian leading export products are higher value added (electronic equipment, pharmaceutical products, machinery), Macedonian are low value added (iron and steel, clothing, knit ware).

Observing intra-industry trade specialization (GL), the results show that all countries have a higher level of intra-industry trade specialization in labour-intensive sectors: textiles, base metal, wood, footwear, skins and leather (Table 6). At the same time, inter-industry trade prevails for capital intensive sectors and high technology

sectors: vehicles, chemicals, precision instruments. Slovenia is an exception in the group of observed countries. In all Slovenian leading export products prevails intra-industry trade specialization ($GL > 0.50$).

The global economic crisis resulted in decreasing comparative advantages and export competitiveness in most export products. During the crisis Croatia shows a strong drop in exports of oil derivatives, chemical products and machinery and Bosnia and Herzegovina in aluminum¹⁵. The most important Macedonian export products with comparative advantages (iron, steel, and articles thereof) are hardest hit by the crisis. Other Macedonian export goods, such as textiles, are also having a hard time on the European and regional markets. The global economic crisis has an extremely negative impact on the Slovenian car industry which is the main exporting sector in Slovenia. Total export competitiveness for Montenegro is strongly dependent on the aluminum sector which is recording a decrease of comparative advantages and export competitiveness during the crisis.

The analysis of comparative advantages, intra-industry trade and trade specialization does not reveal an unambiguous conclusion for overall trade patterns. On the one hand, there are sectors with comparative advantage, while on the other hand there are sectors which do not have comparative advantage. At first sight the unfavourable ratio on behalf of the sectors without comparative advantage does not have to necessarily lead to a conclusion about unfavourable trade structures. The reason is a characteristic of small countries where it is expected that comparative advantages and trade specialization will be found in a smaller number of sectors and products. However, the results of the correlation analysis for all products at the three digit level of SITC show that products with a higher level of comparative advantage do not have a higher ratio between the unit value of exports and imports. This points to unfavourable trade patterns.

¹⁵ For example, exports of the aluminum producer *Aluminij* dropped by 60% year on year (Q 1 2009) (wiiw Country reports)

Export Competitiveness to EU markets

The European Union is the most important export destination for all observed countries. That is why in this part of the paper the emphasis is on the analysis of export competitiveness to EU markets. As an indicator of export competitiveness we use the ratio between the export share of individual product *i* to observed markets and total import of that product from observed market.

Table 7. The indicator of export competitiveness in 2008

SITC	SITC Sections	Albania	Bosnia and Herzegovina	Croatia	Macedonia	Montenegro	Serbia
0	Food and live animals	0.037	0.048	0.459	0.110	0.000	0.587
1	Beverages and tobacco	0.016	0.016	0.429	1.016	0.016	0.159
2	Crude materials	0.121	0.377	0.680	0.303	0.025	0.256
3	Mineral fuels	0.016	0.008	0.058	0.001	-	0.009
4	Animal and vegetable oils	-	0.063	0.088	-	-	0.705
5	Chemicals	0.002	0.061	0.393	0.024	0.006	0.346
6	Manufactured goods	0.069	0.279	0.518	0.401	0.121	0.903
7	Machinery and transport	0.009	0.097	0.356	0.022	0.003	0.164
8	Miscellaneous articles	0.170	0.310	0.491	0.287	0.002	0.279
9	Commodities and transactions	0.008	0.025	0.075	0.014	0.003	0.097

Source: COMEXT, own calculations.

According to the indicator of competitiveness Croatia has the best position to the EU 25 markets relative to the other observed countries. The obtained results lead to the conclusion that Croatia has a significantly better position compared to other countries in the following products: crude materials, mineral fuels, chemicals, machinery and transport equipment and miscellaneous products (Table 7). Serbia has the highest indicator of competitiveness for food and live animals, animal and vegetable oils and manufactured goods. Macedonia shows the highest level of export competitiveness in beverages and tobacco.

Export Similarities

The paper so far has analysed changes in basic trends, comparative advantages, intra-industry trade and trade specialization. However, now we discuss the question of export similarities, analysing whether the observed countries have complementary or competitive export structures.

Table 8. Matrix of the ES indicator in 2008

	Albania	Bosnia and Herzegovina	Croatia	Macedonia	Montenegro	Serbia	Slovenia
Albania	-	0.46	0.25	0.64	0.15	0.45	0.02
Bosnia and Herzegovina	0.46	-	0.36	0.57	0.55	0.56	0.24
Croatia	0.25	0.36	-	0.24	0.06	0.41	0.25
Macedonia	0.64	0.57	0.24	-	0.23	0.80	0.27
Montenegro	0.15	0.55	0.06	0.23	-	0.24	0.01
Serbia	0.45	0.56	0.41	0.80	0.24	-	0.44
Slovenia	0.02	0.24	0.25	0.27	0.01	0.44	-

Source: own calculations.

The empirical results displayed in table 8 shows that the most similar export structures are found in Serbia and Macedonia. On the other hand, the highest difference is between Slovenia and Montenegro. The values of the ES indicator for most countries are closer to 0 than to 1, which reveals a conclusion that most of the observed countries have complementary export structures. This kind of situation offers a strengthening of mutual economic cooperation and joint efforts on the international markets especially in the circumstances of the global economic crisis. Even though there is a constant growth in international trade between South-east European countries, the efforts towards enhancing all levels of economic cooperation are still on the agenda.

Conclusion

Western Balkans countries have significantly reduced the development gap in terms of EU 27 average in terms of GDP measured by purchasing parity standard in the period 2000-2010. Confirming economic theory, less developed countries in initial transition phase have a potential for higher growth, and that is the factor behind a rapid “catching-up” process in Albania and Montenegro. In spite of these positive processes, the recent global economic crisis had a strong negative impact on this region. An exception is Albanian economy which was growing even in 2009, a period when most European countries recorded significant drops in economic activity. On the other hand, the highest negative growth rates were recorded in Croatia and Montenegro.

Apart from the relative success in “catching up” with EU countries in last period, Western Balkans countries recorded significant progress in assuring macroeconomic stability in terms of price stability and improvement of public finances. On the other hand unemployment and trade competitiveness are areas with unsatisfactory results. Common characteristic for all analyzed countries is the existence of comparative advantages and trade specialization in low value added products: iron and steel, footwear, clothing, wood.

In all countries the global economic crisis resulted in decreasing comparative advantages and export competitiveness in most export products. Most of the observed countries have complementary export structures. It reveals the conclusion about great possibilities of a strengthening of mutual economic cooperation and joint efforts on the international markets especially in the circumstances of the global economic crisis.

References

Angeloni I., Flad M., F. Mongelli, F (2005). “Economic and Monetary Integration of the New Member States: Helping to Chart the Route”, *ECB Occasional Paper No. 36*.

Aturupane, C., Djankov, S., Hoekman, B. (1997). “Determinants of Intra-Industry Trade between East and West Europe”, *World Bank Policy Research Working Paper*, No. 1850, World Bank, Washington.

Balassa, B. (1965). “Trade Liberalization and Revealed Comparative Advantage”, *Manchester School of Economic and Social Studies*, 33 (2): 99-123.

Bartlett, W. (2009). “Economic development in the European super-periphery: evidence from the Western Balkans”, *Economic Annals*, Volume LIV, No.181.

Belke A., Zenkić A. (2007). "Exchange-rate Regimes and the Transition Process in the Western Balkans", *Intereconomics: Review of European Economic Policy*, Springer, 42(5): 267-280.

Buturac, G. (2005). “Comparative Advantages and Intra-industry Trade: Transition Economies and Russian Federation”, *Proceedings of the International Round Table Conference: Comparative Analysis of Economic Transition - Russian Federation, Croatia and the CEE Countries*, Teodorović, I., Grinberg, R., Glinkina, S., Lovrinčević, Ž., (ur.), Zagreb: Ekonomski institut, Zagreb, pp. 59-79.

Buturac, G., Grzinic, J. (2009). “The Competitiveness of Croatian Export to EU Markets”, *Zagreb International Review of Economics & Business*, XII (1): 39-51.

EBRD (2009) Transition Report 2009: Transition in crisis?, 2009.

Finger, J. M., Kreinin, E. M. (1979). "A Measure of Export Similarity and its possible Use", *Economic Journal*, 89 (1): 905-912.

Fischer S., Sahay R., (2000). "The Transition Economies After Ten Years", *IMF Working paper* 2000/30.

Grupe, C., Kušić, S. (2005). "Intra-regional cooperation in the Western Balkans: Under which conditions does it foster economic progress?", *Centre for the Study of Global Governance London School of Economics and Political Science Houghton Street, London*.

Grubel, H., Lloyd, P. (1975). *Intra-industry Trade: The Theory and Measurement of International Trade in Differentiated Products*. London: Macmillan.

Helpman, E. (1981). "International trade in the presence of product differentiation, economies of scale, and monopolistic competition: a Chamberlain-Heckscher-Ohlin approach", *Journal of International Economics*, 11 (1): 305-340.

Kaminski, B. and Ng, F. (2001). "Trade and Production Fragmentation: Central European Economies in EU Networks of Production and Marketing", *Policy Research Working Paper Series*, No: 2611, World Bank, Washington.

Krugman, P. R. (1980). "Scale Economies, Product Differentiation, and the Pattern of Trade", *American Economic Review*, 70 (5): 950-959.

Krugman, P.R. (1981). "Intra-industry specialization and gains from trade", *Journal of Political Economy*, 89 (5): 959-973.

Lafay, G. (1992). "The Measurement of Revealed Comparative Advantages", in M.G. Dagenais and P.A. Muet (eds), *International Trade Modelling*, London: Chapman & Hall, London.

Lancaster, K. (1980). "Intra-industry trade under perfect monopolistic competition", *Journal of International Economics*, 10 (2): 151-175.

Radošević, S. (2007). "Research and Development and Competitiveness of South Eastern Europe: Asset of liability for EU integration?", *Economics Working Paper No. 75, Centre for the Study of Economic and Social Change in Europe*, UCL School of Slavonic and East European Studies Gower Street, London.

WIIW (2010). "Current Analyses and Forecasts", *Economic Prospects for Central, East and Southeast Europe*, No. 5, February 2010 'Crisis Is Over, but Problems Loom Ahead', WIIW.

wiiw Handbook of Statistics (2009). *Central, East and Southeast Europe (2009.)*, Vienna: The Vienna Institute for International Economic Studies.

Yilmaz, B. (2005). "The Foreign Trade Pattern and Foreign Trade Specialization in the European Union", *Eastern European Economics*, 43 (1): 77-103.

