Revealed comparative advantage and competitiveness of clothing sector: Balkan countries vis-à-vis the EU-28

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Abstract

This paper presents an analysis of Balkans countries' relative competitiveness of the clothing industry and a comparison its trade vis-à-vis the EU-28. The RCA is analysed by two indices: the Balassa index and the Vollrath's revealed competitiveness during 2000–2015. Both evaluations of the RCA indices revealed the same findings that revealed comparative advantage for the clothing industry is decreasing for all countries in the Balkans. The main factors which influence the level of competitiveness of clothing products from the Balkans are the gross value added per employee and wages.

Key words: *competitiveness; comparative advantage; clothing industry; gross value; wages*

1 Introduction

No other industry comes close to equalize the important role the textile sector has held in the history of business, so in every developing nation, the textile industry has been the stepping stone for economic development, relying on textile and clothing exports to produce income. International competitiveness is influenced by numerous and interrelated factors. Our study is based on the microeconomic concepts and indicators of competitiveness who have a more consolidated theoretical base because they focus on the essential characteristics of producers in competition for market share and profits or the capability to export. The Balkans along with the East European countries, is economically the least developed region of Europe, and is significantly differentiated within itself by level of economic development. For all Balkan countries export plays an important role in promoting economic growth and development. They have been confronted with problems such as restructuring of economic system, changing trade markets and patterns, reduction of competitive ability, narrow export base, and

lower economies of scale. In presented context, we considered opportune to analysis the current situation from Balkan countries in the clothing European market.

The main aim of this paper is to examine and analyse Balkans countries' relative competitiveness of the clothing industry and to compare its trade vis-à-vis the EU-28. With respect to the object of this study we have decided in favour of a result-oriented indicator like revealed comparative advantage. This is analysed by two indices: the Balassa index and the Vollrath's revealed competitiveness during 2000–2015.

Methods of the scientific research that have been employed in the paper are scientific analysis and summarizing of literature, mathematic calculations, comparative analysis of statistic indexes.

2 Revealed comparative advantage and competitiveness

The concept of comparative advantages has the foundation in conventional trade theory and is widely used in modern economic literature to evaluate the patterns of trade and specialization of countries in commodities which have a competitive advantage. The index of revealed comparative advantage, introduced by Liesner but refined and popularized by Bela Balassa suggested that country's revealed comparative advantage in the trade of a certain industry is assessed by the share of that industry in the country's total exports relative to the industry's share in total world exports of manufactures.[1,2] RCA (known as Balassa index) is the ratio between the export share of a given commodity or sector in a country and the export share of that commodity or industry in the global market. On the basis of this index, a country is defined as being specialized in exports of a certain product if its market share in that product is higher than the average or, equivalently, if the weight of the product of the country's exports is higher than its weight of the exports of the reference area. When the RCA index exceeds unity, a comparative advantage is 'revealed' for the country in that particular sector. RCA was modified by Vollrath in order to avoid double counting between pairs of countries. He offered alternative measures of revealing a comparative advantage which include the effects of both the imports and exports of a country. According to Vollrath a positive values of the indices reveals a comparative advantage, while a negative value reveals a comparative disadvantage.[3] The revealed comparative advantage index provides information about movement in comparative advantage over the period, so that many studies used the concept by using export data. Some of the current studies who used the Balassa index - Revealed Comparative Advantage (RCA) index and Revealed Competitiveness (RC) suggested by

Vollrath in order to examine the pattern of comparative advantage for various countries over a certain period are listed below. Yuan, Tao & Xu, Fu presented the powerful advantage of textile industry of China regarding textile trade compared to the world's major developed countries in terms of RCA.[4] Karaalp and Yilmaz analysed the comparative advantage of four countries in the world: Bangladesh, China, Germany and Turkey with respect to the US and the EU-15 textiles and clothing markets by using Balassa's revealed comparative advantage index for the period 2000-2010.[5] In another study they analysed the Turkey's comparative advantage and competitiveness in the textile and clothing industries, for the period of 1988-2008 in the enlarged EU market, using Balassa's and Vollrath's indices.[6] The international competitiveness in Turkey's export of textile and apparel sector between the years 1993-2009 was study by Erkan. He used Balassa Index, Vollrath Index and Export-Import Rate Index and he calculated these indexes for 59 types of textile and for 37 types of apparel products.[7] Another analysis of the competitiveness of Turkey is conducted by Utku Utkulu and Dilek Seymen who analysed the competitiveness of Turkey with respect to the EU-15 state.[8] Yilmaz and Karaalp-Orhan analysed the comparative advantage and intra-industry trade of the major exporter countries of Eastern Europe in the global textile and clothing markets, for the period 2002-2013.[9]

3 Results and discussions

We calculated the Revealed Comparative Advantage Index (RCA) of Balassa (1965) and the Vollrath's revealed competitiveness (RC) index to analyse the trade patterns and changes in the Balcanic States, in the European Union (UE 28) clothing markets during the period of 2000-2015. The evolution of RCA for the clothing industry for the Balkan countries is presented in the Fig. 1 and 2. As can be seen from this evolution, the RCA is decreasing for all countries in the Balkans, whether they have or not the status of EU member.
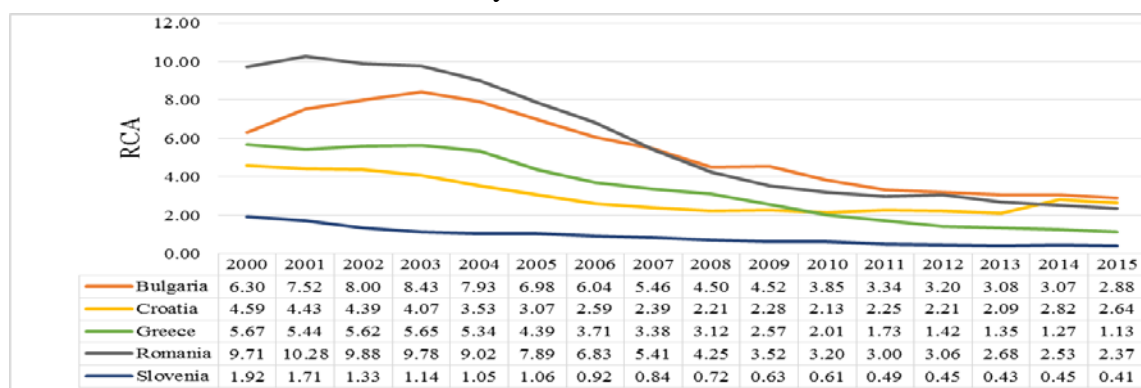

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Bulgaria	6.30	7.52	8.00	8.43	7.93	6.98	6.04	5.46	4.50	4.52	3.85	3.34	3.20	3.08	3.07	2.88
Croatia	4.59	4.43	4.39	4.07	3.53	3.07	2.59	2.39	2.21	2.28	2.13	2.25	2.21	2.09	2.82	2.64
Greece	5.67	5.44	5.62	5.65	5.34	4.39	3.71	3.38	3.12	2.57	2.01	1.73	1.42	1.35	1.27	1.13
Romania	9.71	10.28	9.88	9.78	9.02	7.89	6.83	5.41	4.25	3.52	3.20	3.00	3.06	2.68	2.53	2.37
Slovenia	1.92	1.71	1.33	1.14	1.05	1.06	0.92	0.84	0.72	0.63	0.61	0.49	0.45	0.43	0.45	0.41

Fig. 1 – Evolution of RCA of Balkan States, EU 28 member, reported to EU 28, 2000-2015.
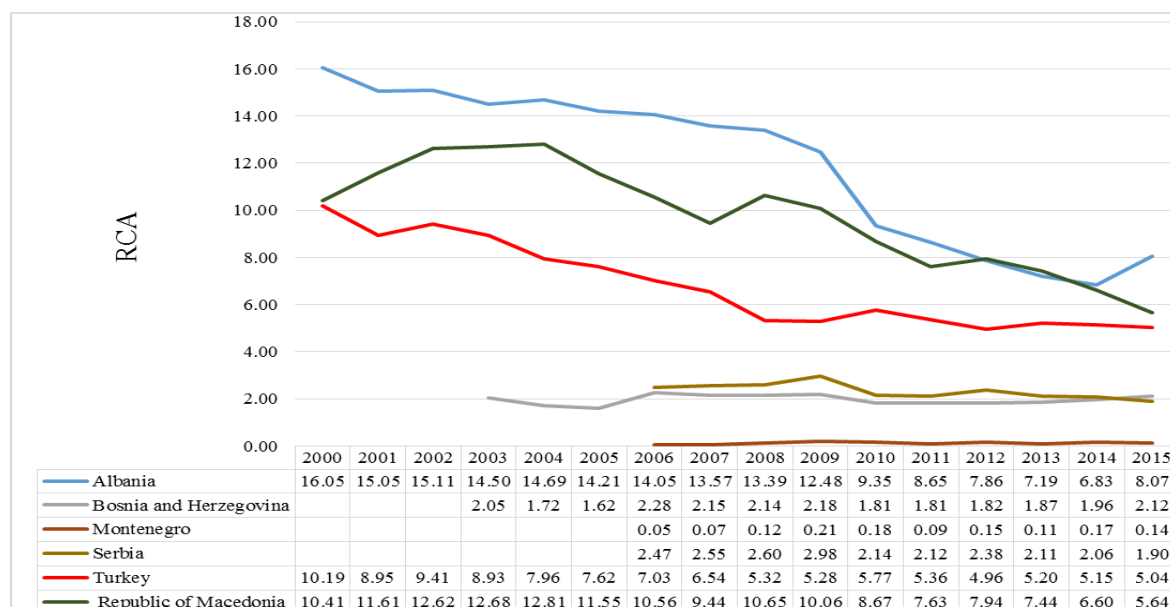
Fig. 2 – Evolution RCA (Ballasa indices) of Balkan -non EU States reported to EU 28, 2000-2015.

In 2015, countries with the highest index of competitiveness at garment industry on the EU market are non-EU countries - Albania (8.07), Republic of Macedonia (5.64) and Turkey (5.04).

The evolution of RC for the clothing industry for the Balkan countries is presented in the table 1 and 2.

Table 1 – Evolution of RC (Volrath indices) Balkan states, EU member, 2000-2015

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Bulgaria	2.00	1.96	1.88	1.91	2.02	2.14	2.14	2.10	2.04	2.02	1.83	1.87	1.85	1.78	1.74	1.69
Croatia	1.43	1.65	1.84	1.77	1.61	1.44	1.17	0.96	0.93	0.93	0.82	0.79	0.78	0.81	0.68	0.66
Greece	1.71	1.65	1.94	1.88	1.72	1.41	1.24	1.00	0.89	0.75	0.54	0.47	0.43	0.40	0.34	0.16
Romania	2.54	2.60	2.55	2.61	2.69	2.63	2.62	2.41	2.08	1.91	1.89	1.82	1.76	1.68	1.64	1.58
Slovenia	0.57	0.50	0.34	0.29	0.51	0.56	0.42	0.32	0.09	-0.11	-0.06	-0.24	-0.24	-0.23	-0.24	-0.27

Table 2 – Evolution of RC (Volrath indices) Balkan non EU States, reported to EU 28, 2000-2015

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Albania	2.11	2.11	2.06	1.98	2.02	2.06	2.01	1.97	2.10	2.36	2.00	1.96	1.86	1.67	1.68	1.74
Bosnia and Herzegovina				1.26	1.10	0.76	1.13	1.18	1.22	1.30	1.08	1.15	1.09	1.10	1.13	1.22
Montenegro							-2.02	-2.08	-1.91	-1.28	-1.52	-2.27	-1.81	-2.24	-1.72	-1.86
Serbia							1.85	1.62	0.89	1.63	1.51	1.32	1.53	1.38	1.33	1.37
Republic of Macedonia	4.21	3.93	4.10	3.83	3.77	2.81	2.95	2.95	3.17	3.15	3.12	3.19	3.16	3.03	2.98	2.83
Turkey	4.22	3.94	4.06	3.90	3.65	3.56	3.28	3.04	2.63	2.46	2.46	2.48	2.55	2.54	2.53	2.46

Slovenia (EU member) and Montenegro (non-EU) - have negative values of the index RC developed by Vollrath - which takes into account not only the exports but also imports. This

means that these countries have a comparative disadvantage at the garment export on the EU 28 market. In 2015, the biggest value of the index RC was registered in Macedonia 2.83 and in Turkey 2.46 - non EU countries. Among the EU member states, the biggest value of the index RC was registered in Bulgaria (1.69) and Romania (1.58).

The level of competitiveness of clothing products is tightly correlated to the gross value added per employee. It has the lowest values, respectively 4.3; 5.1 and 6.3 in the countries with the highest value of competitiveness index RC (Republic of Macedonia, Bulgaria and Romania). High competitiveness of clothing industry in the EU candidate countries could be due to the low level of wages on this sector. Small salaries have the employees of garment firms from Bulgaria and Romania, where RCA have the highest values for EU member countries (except Croatia). In Slovenia and Greece where the wages are highest, 10.02 EURO / hour respective 8.51 EURO / hour, is recorded the lowest values of RCA - 0.45 in Slovenia and 1.27 in Greece.

4 Conclusions

The study presented here is aimed at analysing the competitiveness in the European clothing sector with the focus on Balkan states. The dynamics of change over a 15-year period following economic reforms are revealed. The clothing industries play a significant role and continue to contribute to the economic prosperity of countries with an inexpensive labour force. Based on the present analysis several conclusions can be drawn with respect to the clothing export competitiveness of Balkans. For most Balkan States clothing's export plays an important role in promoting economic growth and development – for example, exports of garments was in 2015, 16.81% of Albania exports, Republic of Macedonia 11.75% of its exports, in Turkey10.51% etc. Both evaluations of the RCA indices revealed the same findings that revealed comparative advantage for the clothing industry is decreasing for all countries in the Balkans, whether or not members of the European Union. In 2015, countries with the highest index of competitiveness at garment industry on the EU market are non-EU countries - Albania (8.07), Republic of Macedonia (5.64) and Turkey (5.04). At the opposite pole are Montenegro (0.14) and Slovenia (0.41). Comparative advantage can be based on the characteristics of the labour force, technology, local endowments, quality and availability of infrastructure, and proximity to input and product markets. The main factors which influence the level of competitiveness of textile products from the Balkans are the gross value added per employee and wages. When the producers of the Balkan countries will create products with higher added value in garment industry the competitiveness of these countries will decrease.

Also rising wages in this industry, as a result of trade union pressure or government policy, will lead to decreasing competitiveness of these products on the EU market and implicitly to the decrease of exports of garments from these countries. The main challenges that must face the Balkan States are related to restructuring of economic system, changing trade markets and patterns, declining of domestic demand of most merchandise, reduction of competitive ability, narrow export base, and lower economies of scale. The main opportunities that most of these countries can exploit are related to their geographical position, infrastructure in garment sector, and highly skilled workforce.

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