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COMPARATIVE ADVANTAGE OF CLOTHING SECTOR IN THE EU-28 MARKET

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Abstract: *The study presented here is aimed at analyzing the comparative advantages 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. For all Balkan countries export plays an important role in promoting economic growth and development and the clothing industries play a significant role and continue to contribute to the economic prosperity in this countries. The evolution of the RCA index for garment industry is decreasing for all countries in the Balkans. The evolution of the Lafay index is also decreasing in the most Balkan countries (except Greece, Montenegro and Slovenia) but still the values for Lafay index is positive what indicating that in these countries the sale of garments contribute positively to balance the trade balance of countries analyzed. Negative value of the Lafay index may be due to the fact that the garment industry is one of the key industries in the economy of that country and also because the earnings from garment industry in these countries is high. 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.*

Key words: *comparative advantage, clothing, Balassa index, Lafay index*

1. INTRODUCTION

The textile industry is a vital to the economic development for a many country because has provided both products and jobs needed by humans around the world. 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. Globalization affects the economies of most of the world's countries, as capital is free flowing over the world, seeking a host country where the costs are as low as possible. So, the international context in trade of clothing has changed dramatically in the last few years and will probably continue to do so under the impact of the global crisis, liberalization and globalization, which resulted in a relocation of production and capital, a greater mobility of production factors. Consequently, intense competition grew, as most countries produced textile wares for the same markets in more wealthy countries.

The EU personality has proved to be an exceptional one, because with the EU signing of international agreements there has been no economic disaster. The European Union is based on five principles of good governance: openness, participation, accountability, efficiency and coherence. [1]

For all Balkan countries export plays an important role in promoting economic growth and development. These country 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 these context, we considered opportune to analyses the current situation from Balkan countries (Albania, Bulgaria, Bosnia and Herzegovina, Croatia, Greece, Montenegro, Serbia, Slovenia, Republic of Macedonia and Turkey) in the clothing's European market. With respect to the object of this study, the clothing industry as an individual sector, we have decided in favor of a result-oriented indicator like revealed comparative advantage (RCA). The RCA is analyzed by two indices: the Balassa index (BI) and the Lafay Index (LFI).

Scope and objective of the research

The main aim of this paper is to examine and analyze Balkans countries' comparative advantages of the clothing industry and to compare its trade vis-à-vis the EU-28. We present the analysis of indices which reveal comparative advantage of Balkan State clothing industry during 2000–2015.

Methodology and methods

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.

To analyze the trade patterns and changes in the mentioned countries in the European Union (UE 28) clothing markets we used the Revealed Comparative Advantage Index (RCA) of Balassa (1965) and Lafay index LFI.

The paper is organized as follows: the first part present the theoretical foundations for the analysis of the RCA and LFI. The results of the selected indices are presented in the second part where we calculated and analyzed the RCA and LFI of the Balkan States. The final part draws some conclusions based on the findings.

2. REVEALED COMPARATIVE ADVANTAGE

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.[2] One of the most widely used methods involves the concept of "revealed comparative advantage" developed by Balassa (1965). The Balassa index basically measures normalized export shares, with respect to the exports of the same industry in a group of reference countries.[3] RCA 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, as shown in next equation:

$$RCAij = (Xij / Xit) / (Xnj / Xnt) \quad \textbf{(1)}$$

where X is exports, i is the country, j is the commodity/industry, n is the world or a set of countries, and t is all product groups.

When the RCA index exceeds unity, a comparative advantage is 'revealed' for the country in that particular sector. There is some criticism of this method. The RCA has been criticized for taking only the exports into consideration while ignoring the imports. Another objection is the fact

that if the country has a “comparative disadvantage” the index ranges from zero to one, whereas if it has a “comparative advantage”, the index ranges from one to infinity. [4]

Although pros and cons of the Balassa index are still debated in the literature, it stands as the most widely used revealed comparative advantage index. [5]

Several attempts have been made in the literature to overcome the former empirical weakness of the pure Balassa index. One of this is Lafay index who combines together trade and production variables.[6] The Lafay index shows with respect to alternative measures of specialization, especially that of taking into account both exports and imports flows, which is a quite important fact due the increasing role of intra-industry trade all over the world. The LFI index enables to analyze the position of every specific product within the foreign trade structure of every specific analyzed country or a group of countries.[7]

Lafay index LFI [8] defined as where:

$$LFI_j = 100\left(\frac{x_j - m_j}{x_j + m_j} - \frac{\sum_{j=1}^{N}(x_j - m_j)}{\sum_{j=1}^{N}(x_j + m_j)}\right)\frac{x_j + m_j}{\sum_{j=1}^{N}(x_j + m_j)} \quad \textbf{(2)}$$

where:

x and m represent exports and imports of “j” product realized by country or a group of countries with respect to the rest of the world or with respect to a selected business partner (partner country). “N“ is the number of analyzed items.

Country is considered to have a comparative advantage (disadvantage) in a given commodity when the balance in relation to GDP (Gross Domestic Product) exceeds (is less than) the attributed balance, i.e. exceeds (is less than) zero. The comparative advantage neutral point is thus when the net exports marks zero, i.e. .

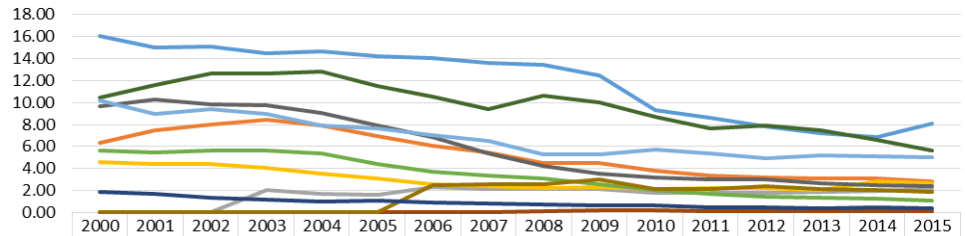
3. MEASURING REVEALED COMPARATIVE ADVANTAGE OF CLOTHING SECTOR: BALKAN COUNTRIES VIS-À-VIS THE EU-28

We calculated the Revealed Comparative Advantage Index (RCA) of Balassa (1965) to analyze the trade patterns and changes in the Balcanic States, in the European Union (UE 28) clothing markets during the period of 2000-2015.

In the Figure 1, the most remarkable changes of the Balassa indexes are presented.

The evolution of RCA for the clothing industry for the Balkan countries is presented in the figures 1. 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.

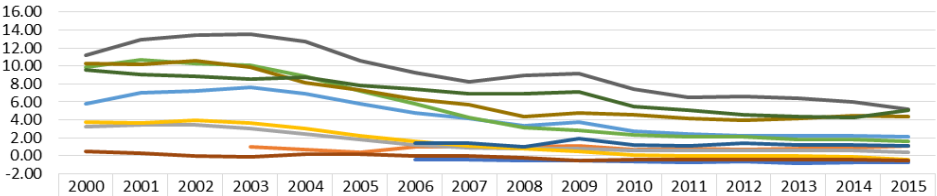
In 2015, countries with the highest Revealed Comparative Advantage Index (RCA) at garment industry on the EU market are Albania (8.07), Republic of Macedonia (5.64) and Turkey (5.04).



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Albania	16.05	15.05	15.11	14.50	14.69	14.21	14.05	13.57	13.39	12.48	9.35	8.65	7.86	7.19	6.83	8.07
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
Bosnia and Herzegovina				2.05	1.72	1.62	2.28	2.15	2.14	2.18	1.81	1.81	1.82	1.87	1.96	2.12
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
Montenegro							0.05	0.07	0.12	0.21	0.18	0.09	0.15	0.11	0.17	0.14
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
Serbia							2.47	2.55	2.60	2.98	2.14	2.12	2.38	2.11	2.06	1.90
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
Republic of Macedonia	10.41	11.61	12.62	12.68	12.81	11.55	10.56	9.44	10.65	10.06	8.67	7.63	7.94	7.44	6.60	5.64
Turkey	10.19	8.95	9.41	8.93	7.96	7.62	7.03	6.54	5.32	5.28	5.77	5.36	4.96	5.20	5.15	5.04

***Fig. 1**: Evolution of Balcanic states, (Balassa index) for clothing in the period 2000-2015. Calculated by the author according to the WTO dates.*

We calculated the LFI index to analyze the position of every specific product within the foreign trade structure of every specific analyzed country. Country is considered to have a comparative advantage in a given commodity when the balance in relation to GDP exceeds the attributed balance, i.e. exceeds zero. As can be seen from figure 2, in the most Balkan countries (except Greece, Montenegro and Slovenia), in 2015, Lafay index has positive values who indicating that in these countries the sale of garments contribute positively to balancing the trade balance of the countries surveyed.



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Bulgaria	5.77	6.97	7.25	7.60	6.88	5.81	4.77	4.17	3.31	3.70	2.75	2.42	2.27	2.20	2.26	2.09
Bosnia and Herzegovina				0.98	0.71	0.40	1.02	0.97	0.97	1.14	0.73	0.79	0.74	0.80	0.89	1.06
Croatia	3.25	3.45	3.48	3.08	2.45	1.84	1.22	0.90	0.77	0.82	0.58	0.57	0.57	0.58	0.56	0.42
Greece	3.77	3.64	3.96	3.69	3.06	2.18	1.58	1.08	0.82	0.49	0.12	0.03	-0.01	-0.06	-0.15	-0.42
Montenegro							-0.40	-0.44	-0.49	-0.53	-0.62	-0.76	-0.67	-0.81	-0.74	-0.71
Romania	9.84	10.69	10.27	10.10	8.81	7.19	5.80	4.30	3.13	2.82	2.33	2.13	2.10	1.85	1.80	1.64
Serbia							1.43	1.39	0.95	1.96	1.19	1.12	1.36	1.22	1.20	1.13
Slovenia	0.46	0.31	-0.02	-0.09	0.15	0.18	0.02	-0.07	-0.24	-0.51	-0.41	-0.47	-0.41	-0.40	-0.47	-0.48
Republic of Macedonia	11.17	12.94	13.46	13.56	12.77	10.56	9.29	8.21	8.99	9.11	7.38	6.54	6.62	6.41	6.01	5.15
Turkey	10.30	10.14	10.56	9.87	8.14	7.32	6.27	5.70	4.40	4.77	4.56	4.13	3.93	4.17	4.42	4.38
Albania	9.60	9.07	8.82	8.59	8.71	7.83	7.40	6.94	6.93	7.09	5.48	5.07	4.61	4.33	4.30	5.12

***Fig.2**: Evolution of Balcanic states, (Lafay index) for clothing in the period 2000-2015. Calculated by the author according to the WTO dates.*

LFI negative value index registered in Montenegro may be because the garment industry is one of the key industries in the country's economy - exports of garments representing 0.3% of total exports of this country. LFI negative index for Slovenia and Greece have been influenced by the earnings from the garment industry in these countries, which led to lower levels continuously in recent years the importance of clothing in the export structure of these countries. As can be seen in figure 3 of these countries wages in the garment industry are the largest - Slovenia 10.02 EURO / hour and Greece 8.51 EURO / hour.

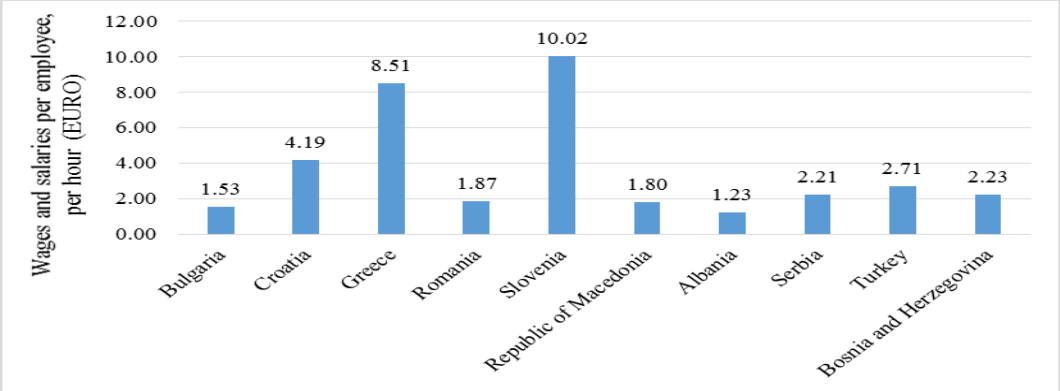


Fig. 3: *Wages and salaries per employee in full-time equivalents, per hour in manufacture of wearing apparel, in EURO.*

4. CONCLUSIONS

Based on the present analysis several conclusions can be drawn with respect to the comparative advantages of Balkan countries. The evolution of the RCA index for garment industry is decreasing for all countries in the Balkans. In 2015, countries with the highest Revealed Comparative Advantage Index (RCA) at garment industry on the EU market are Albania (8.07), Republic of Macedonia (5.64) and Turkey (5.04). At the opposite pole are Montenegro (0.14) and Slovenia (0.41).

The evolution of the Lafay index is also decreasing in the most Balkan countries (except Greece, Montenegro and Slovenia) but still the values for Lafay index is positive what indicating that in these countries the sale of garments contribute positively to balance the trade balance of countries analyzed.

Negative value of the Lafay index may be due to the fact that the garment industry is one of the key industries in the economy of that country and also because the earnings from garment industry in these countries is high.

The main factors that influence the level of level of competitiveness of textile products from the Balkans country 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.

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