



## **ANALYSIS OF TRADE RELATIONS OF BOSNIA AND HERZEGOVINA WITHIN CEFTA**

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### **Abstract:**

*As a member of CEFTA, Bosnia and Herzegovina is trading with other countries in accordance with the principles of this organization since 2007. The subject of this paper is to analyse the trade relations of B&H within the CEFTA countries in the period from 2013 - 2015. As an analysis tool used is a modified Balassa RCA index for analysing the competitiveness of industry in B&H in comparison to other Member States. Analysing the top 10 export tariffs in comparison with other CEFTA countries, individual results showed that B&H is competitive in major export industries (in all cases over 50% of the top 10 export products is competitive), but, on the other hand, B&H has recorded constant aggregate deficit compared to other countries.*

### **Keywords:**

CEFTA, Bosnia and Herzegovina, Modified RCA Index, Trade Relations, Export

**JEL Classification:** F14, F15, F36

### **1. Introduction**

After a long time, Bosnia and Herzegovina (hereinafter: B&H), in some way, is at a crossroads of its development. First of all, on the 1st June of 2015, the Agreement on Stabilization and Association with the European Union entered into force, and on 11th December of 2015 the first meeting of the Council for Stabilisation and Association between B&H and the European Union was held. Also, B&H adopted the Reform Agenda for B&H for the period from 2015 to 2018. After large oppositions, B&H has received a permit for exports of dairy products on the territory of the European Union.

Everything stated represent a shift of B&H, both on the economic front as well as in terms of joining the European Union; however, we set several important questions: What is the current situation with the export of Bosnian companies? Are B&H companies export competitive? Is B&H, from an economic point of view, ready to join the European Union?

In this context, we want to analyse the export competitiveness of B&H, especially in relation to the member countries of CEFTA. It is important to present the export competitiveness of B&H, and see in what situation is B&H compared to CEFTA countries, where free trade regime is applied. One of the reasons we chose CEFTA is that other countries are a lot closer to B&H, in economic values, compared to other European countries. Looking at gross domestic product per capita, we can notice that the differences are not excessive. According to the World Bank, the highest GDP per capita in 2015 was in Montenegro in the amount of \$ 6,415. Next follows Serbia with \$ 5,144, B&H with \$ 4,198, Albania with \$ 3,965 and UNMIK with \$ 3,553. The lowest GDP per capita has Moldova with \$ 1,843. It follows that all countries have roughly similar GDP per capita, where no country does not deviate to a large extent (except Moldova).

CEFTA (Central European Free Trade Agreement) was founded in 1992 by Hungary, Poland and former Czechoslovakia. After four years, Slovenia joined CEFTA (1996), and afterward Romania (1997), Bulgaria (1999), Croatia (2003) and Macedonia (2006) (Zejnic-Zeljko, 2011). After joining European Union Czech Republic,

Hungary, Poland, Slovakia and Slovenia withdrew from CEFTA joining the EU in January 2004. In 2006 rest of the countries in CEFTA, Romania, Bulgaria, Croatia and Macedonia, joined with B&H, Serbia, Albania, Montenegro and Moldavia negotiated changed and extended CEFTA named CEFTA 2006. CEFTA 2006 came into force in July 2007 (Bjelic et al, 2013).

The CEFTA 2006 is a comprehensive free trade agreement (FTA) between the SEE countries. The markets are allowing fully liberalised trade aiming at supporting trade and investment among its members. The Agreement augmented previous 32 bilateral FTAs between the SEE countries (Mojsoska-Blazevski & Petreski, 2010).

Since 2012, there are not many studies on this topic. As stated by Petreski (2013, p.32), there are three main reasons for this case: “(1) the agreement is relatively new, now dating back only four years; (2) the CEFTA-2006 countries have less research capacity relative to the original CEFTA countries; and (3) the perception and possibly the evidence based on descriptive data is that these countries are oriented more toward trade relationships with the European Union than toward trade relationships among themselves, due to their desire to join the European Union, as has been envisaged with the SAA process”. Kurtovic et al. (2014) analyse the non-tariff barriers and their impact on trade flows within CEFTA 2006, and Mojsoska Blazevski and Petreski (2013) analyse Western Balkan's trade with the EU and CEFTA 2006: evidence from Macedonia. Other research articles we were not able to found.

Therefore, the aim of this analysis is to present the competitiveness of Bosnian industry compared to other member countries of CEFTA. With reference to the last 3 years, from 2013 - 2015, the total amount of B&H deficit in these trade relations is 2.352.445.000 BAM. The question is, if the country cannot be competitive in this environment how it can be in the territory of the European Union?

Our main hypothesis is: B&H has expressed comparative advantages in trade with other member countries of CEFTA?

In this context, we will use the modified Balassa RCA index, Sectorial-Bilateral Trade Intensity Ratios (SBTX) (Seymen, 2009) in order to gain insight about the bilateral competition between two countries.

This paper is structured as follows. In section 2 we present the literature review. In section 3 we will analyse Trade Relations in CEFTA in the period from 2013 - 2015, and in section 4 we will do an analysis of comparative advantage using the modified RCA index. In the last section we will conclude this paper and make recommendations for further work.

## 2. Literature Review

Since the emergence of the economy economists are trying to find an answer to the question why countries trade with each other and what determines the structure of this trade. One of the pioneers in this area, Adam Smith (1776), in his "Inquiry into the Nature and Causes of the Wealth of Nations" seeks to explain the principles and reasons for international trade.

The next theory was given by David Ricardo (1817) decades after Smith when he presented his law of comparative advantage. Commodity structure of international trade in the Ricardo model is determined by differences in the relative labour productivity of individual products, expressed in differences in labour costs per unit of product (Brkić, Balić, 2014). Comparative advantage in certain product will have a country whose ratio of unit production costs is lower than in other countries, which will result in a complete specialization. In Ricardo model country will produce and export products in which it has a comparative advantage, and import other products it needs.

The neoclassical theory of international trade accepted Ricardo's law in its original form. The original form of the law is based on the differences in the relative costs of products, resulting from the difference in the relative supply of factors of production countries or differences in the efficiency of these factors.

In the modern theory of international trade the law of comparative advantage is reformulated, and is based on the differences in relative prices, rather than differences in the relative costs. The differences in relative prices may occur due to differences on the supply side (cost terms), due to the difference in terms of demand or due to a combination of these two elements (Kenen, 1994:38.)

The main problem occurred and consisted in immeasurability of relative prices in the pre-trade position. The solving problem was the index of comparative advantage. The first index of comparative advantage was presented by Liesner (1958) and operationalized by Balassa, the concept of the so-called "Discovered" comparative advantage (revealed comparative advantages – RCA). Balassa was trying to determine whether a country has distinct comparative advantage, not pretending to set up their sources.

RCA index is presented as the ratio of the share of exports of specific products / industries that country in total world exports of that product / industry according to the share of total exports of the country concerned in the total world exports (Balassa & Noland, 1989):

$$RCA = (X_{ij}/X_j)/(X_{iw}/X_w)$$

Where X stands for exports, i, j and w refer to industry (product category), country and world respectively. (Erkan & Sarçoban, 2014).

The values of RCA can be equal to 1, greater than 1 or less than 1. In the first case (=1), no specialization or no disadvantage when the country's exports structure reflects the exact structure of global trade, in second (>1) the country has a comparative advantage in the concerned product and in the third one (<1) he country has a comparative disadvantage in the concerned product (Bojnec and Ferto, 2014).

To this day, the index of comparative advantage has seen many modifications, depending on the mode of observing countries, so it can be observed on global level (Vollrath, 1991), regional level or as a measurement of bilateral trade (Dimelis and Gatsios, 1995).

In order to closer explain trade relations between B&H and other countries of CEFTA in this paper will use bilateral RCA index which shows sectors of observed countries relatively export the most in bilateral trade agreements with its trading partner (Seymen, 2009).

The index is represented by the following formula:

Where:

$X_{ijk}$  - exports of country i to country j in the industry group k;

$X_{ijt}$  - total exports of country i to country j;

$X_{ikt}$  - total exports of country i in industry group k

$X_{it}$  - total exports of the country.

The share of a country's exports in a certain industry group in total exports of that country is compared to the share of the country's exports of the relevant industry in its total exports. In the case that SBTX index is greater than 1, this leads to the conclusion that the country in question intensifies the trade of the relevant industry group within the bilateral trade with the trading partner (Seymen and Gumustekin, 2012).

### 3. Data and Methodology

For evaluating comparative advantages of an industry we will use SBTX index introduced by Seymen (2009). For the purposes of this study "sector" means a group of products in the two-digit level of aggregation by HS classification or "head" Customs Tariff . For the analysis of comparative advantage of B&H will analyse the 10 leading export

tariffs in comparison to other country members of CEFTA. All the data was collected from the website of Foreign Trade Chamber of B&H and calculated by author

#### 4. Analysis of Trade Relations of B&H in CEFTA in the Period 2013 -2015

As noted previously, B&H became a member of CEFTA in 2007. After Romania and Bulgaria left CEFTA in 2007 and Croatia in 2013, remaining CEFTA members were the following countries: B&H, Serbia, Montenegro, Albania, Macedonia, Moldova, and Kosovo (at first as part of Serbia, later as UNMIK).

In total export of B&H in 2015, the export to CEFTA countries was around 15.5% of total exports, which declined compared to 2014. B&H mostly trades with EU countries, and according to data from the last year the volume was 69.5% of total exports, and followed by trade with CEFTA countries in the amount of 15.4% (Table 1).

Table 1. Total volume, export and import of B&H

	2014			2015		
	Volume	Import	Export	Volume	Import	Export
EU	68,2%	66,1%	71,9%	69,5%	68,5%	71,2%
<b>CEFTA</b>	<b>14,9%</b>	<b>14,3%</b>	<b>16,1%</b>	<b>15,4%</b>	<b>15,4%</b>	<b>15,5%</b>
EFTA	5,0%	6,8%	1,9%	3,8%	5,0%	1,8%
Other	11,8%	12,8%	10,1%	11,3%	11,1%	11,6%

Source: obtained by authors by using data from <http://komorabih.ba/vanjskotrgovinska>

In the context of the analysis of the trade relations with the CEFTA member countries, B&H has a constant negative overall balance (Table 2). If we take into account the aggregate balance for the past 3 years, we will see that B&H has a negative balance in the amount of over 2 billion. (Table 3).

Table 2. Trade relations of B&H with CEFTA countries in the period from 2013 - 2015 (in 000 BAM)

Country	Moldova	Albania	UNMIK	Macedonia	Montenegro	Serbia	
Import	1.665	6.404	8.729	152.466	48.202	1.799.815	2013
Export	3.001	47.980	160.729	102.278	290.263	814.472	
Volume	4.666	54.384	169.458	254.744	338.465	2.614.287	
<b>Balance</b>	<b>1.336</b>	<b>41.576</b>	<b>151.999</b>	<b>-50.187</b>	<b>242.062</b>	<b>-985.343</b>	
Import	1.716	7.152	7.913	147.424	80.263	2.007.101	2014
Export	3.062	50.722	124.157	103.310	310.762	849.846	
Volume	4.778	57.874	132.070	250.734	391.024	2.856.948	
<b>Balance</b>	<b>1.346</b>	<b>43.570</b>	<b>116.243</b>	<b>-44.113</b>	<b>230.499</b>	<b>-1.157.255</b>	
Import	1.821	11.978	14.681	148.460	62.091	2.133.816	2015
Export	2.900	47.001	150.913	125.157	286.586	816.113	
Volume	4.721	58.980	165.595	273.617	348.676	2.949.928	
<b>Balance</b>	<b>1.079</b>	<b>35.023</b>	<b>136.232</b>	<b>-23.303</b>	<b>224.495</b>	<b>-1.317.703</b>	

Source: obtained by authors by using data from <http://komorabih.ba/vanjskotrgovinska-razmjena>

According to Table 2 we can see that the largest volume of trade B&H has with Serbia, however, the balance is also consistently negative in the previous three years. Constant positive balance B&H has with Montenegro, UNMIK and Albania, Macedonia with negative or declining, while trade with Moldova is negligible. As shown in Table 3, the overall positive balance achieved with 3 countries in the end is cancelled in trade relations with Serbia. Table 3 shows the average value of coverage of import to export in the past 3 years.

Table 3. Trade relations of B&H with CEFTA countries in the period from 2013 - 2015 (in 000 BAM) - collective balance

Country	Total for the period from 2013 to 2015				
	Import	Export	Volume	Balance	Coverage
Serbia	5.940.732	2.480.431	8.421.163	-3.460.301	41,93%
Montenegro	190.556	887.611	1.078.167	697.055	483,67%
Macedonia	448.350	330.745	779.095	-117.605	73,83%
UNMIK	31.323	435.799	467.122	404.476	1479,37%
Albania	25.534	145.703	171.237	120.169	616,93%
Moldova	5.202	8.963	14.165	3.761	172,60%

Source: obtained by authors by using data from <http://komorabih.ba/vanjskotrgovinska-razmjena>

According to Table 3, B&H has a more than positive balance compared with Montenegro, Albania and Kosovo, and the coverage rate well above 100% on average in the previous three years. Export-import ratio in relations with Serbia and Macedonia is below 100%, and coverage in the average amount in the previous three years is 41.93% and 73.83%. Also, B&H has coverage of over 100% in the average amount of the last three years with Moldova.

However, when we look at the absolute value, the total positive balance in relations with the four countries where coverage is over 100% is 1.225.461.000 BAM, while only with Serbia; B&H has a negative balance in the last three years totalling 3.460.301.000 BAM. If we add the negative balance in relation to Macedonia, we come to the amount of -2.352.445.000 BAM in the last three years.

If we look according to sectors (according to the Customs Tariff of B&H), B&H has exported a total of 30 different tariffs in 2015, according to customs tariffs in CEFTA countries. The most exported products are under tariff no. 27 - Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes a percentage of 32,92%, then tariff no. 72 - Iron and steel in amount of 20,18%, tariff no. 44- Wood and wood products; charcoal with 7,75%. The values of all other tariffs are below 5%. (see Appendix 1)

As far as the total imports in 2015, B&H has imported products that fall under 37 different tariffs. In percentage values B&H has mostly imported products under tariff no. 16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates in the amount of 25,38%, then under tariff no. 17- Sugars and sugar products in the amount of 24,75%, tariff no. 19 - Cereal based products, flour, starch or milk; confectionery (16,78%) and tariff no. 15 - Fats and oils of animal or vegetable origin and their cleavage products; prepared edible fats; animal or vegetable waxes (11,30%). All other rates do not exceed the value over 3%. (see Appendix 2)

## 5. An Analysis of Comparative Advantage Using The Modified RCA Index

In the analysis of comparative advantages, we will use data from 10 leading exporting tariffs into countries of CEFTA for 2015. In this context, we will explain the analysis for each country.

### 5.1. Albania

As far as trade relations between B&H and Albania, we can see that B&H has achieved a surplus in trade with Albania in the last three years in the amount of 120.169.000 BAM.

The top ten export tariffs in Albania for 2015 are as follows: 72 – Iron and steel, 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes, 44 – Wood and wood products; charcoal, 24 – Tobacco and manufactured tobacco substitutes, 21 – Miscellaneous food products, 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere, 66 – Umbrellas, sun umbrellas, walking sticks, whips and their parts, 48 – Paper and paperboard; articles of paper pulp, paper or paperboard, 19 – Cereal based products, flour, starch or milk; confectionery and 64 – Footwear, gaiters and the like; parts of such articles. The total of these 10 export tariffs represent 86% of total exports to Albania in 2015. Using SBTX index in Table 4 are presented the results in comparison with Albania.

Table 4. SBTX index for 10 leading tariffs in comparison with Albania in 2015

SBTX for 72 – Iron and steel	4,50
SBTX for 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	2,80
SBTX for 44 - Wood and wood products; charcoal	2,43
SBTX for 24 – Tobacco and manufactured tobacco substitutes	20,48
SBTX for 21 – Miscellaneous food products	12,02
SBTX for 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere	5,24
SBTX for 66 – Umbrellas, sun umbrellas, walking sticks, whips and their parts	23,13
SBTX for 48 – Paper and paperboard; articles of paper pulp, paper or paperboard	1,06
SBTX for 19 – Cereal based products, flour, starch or milk; confectionery	3,20
SBTX for 64 – Footwear, gaiters and the like; parts of such articles	0,26

Source: author's calculation

According to Table 4 B&H has the index greater than 1 in 9 of the 10 products. The greatest competitive advantage has in export tariff no. 66 - Umbrellas, sun umbrellas, walking sticks, whips and their parts, then 24 – Tobacco and manufactured tobacco substitutes. Index is less than 1 per tariff no. 64– Footwear, gaiters and the like; parts of such articles, and minimal advantage in export tariff no. 48– Paper and paperboard; articles of paper pulp, paper or paperboard.

### 5.2. Serbia

The largest volume of trade B&H is in relations with Serbia, however, this relationship is in the last three years consistently negative with total over 3 billion.

The top ten export tariffs in Serbia for 2015 are as follows: 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes, 72 – Iron and steel, 44 – Wood and wood products; charcoal, 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof, 76 – Aluminium and aluminium products, 48 – Paper and paperboard; articles of paper pulp, paper or paperboard, 39 – Plastic masses and plastic products, 30 – Pharmaceutical products, 08 – Edible fruit and nuts; peel of citrus fruits or melons, 73 – Products of iron and steel. These tariffs account for 70% of total exports to Serbia.

Table 5. SBTX index for 10 leading tariffs in comparison with Serbia in 2015

SBTX for 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	4,15
SBTX for 72 – Iron and steel	2,27
SBTX for 44 – Wood and wood products; charcoal	0,96
SBTX for 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof	0,54
SBTX for 73 – Products of iron and steel	0,60
SBTX for 48 – Paper and paperboard; articles of paper pulp, paper or paperboard	1,29
SBTX for 76 – Aluminium and aluminium products	0,50
SBTX for 30 – Pharmaceutical products	2,42
SBTX for 39 – Plastic masses and plastic products	0,98
SBTX for 08 – Edible fruit and nuts; peel of citrus fruits or melons	2,45

Source: author's calculation

According to Table 5 B&H has a comparative advantage in 5 of the 10 top exported products. The greatest comparative advantage is in exporting tariff no. 27– Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes, (4,15) while the lowest comparative advantage in export of tariff no. 84– Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof (0,54).

### 5.3. Montenegro

B&H has a positive trade balance in comparison with Montenegro in the last 3 years, and B&H has achieved the second largest amount of volume (1.078.167.000 BAM).

The top ten export tariffs in Montenegro for 2015 are as follows: 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes, 28 – Inorganic chemicals; organic and inorganic compounds of precious metals, rare earth metals, radioactive elements and isotopes, 72 – Iron and steel, 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere, 76 – Aluminium and aluminium products, 73 – Products of iron and steel, 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof, 64 – Footwear, gaiters and the like; parts of such articles, 85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles, 39 – Plastic masses and plastic products. These tariffs account for 68% of total exports to Montenegro.

Table 6. SBTX index for 10 leading tariffs in comparison with Montenegro in 2015

SBTX for 28 – Inorganic chemicals; organic and inorganic compounds of precious metals, rare earth metals, radioactive elements and isotopes	2,32
SBTX for 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	1,90
SBTX for 72 – Iron and steel	2,01
SBTX for 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere	10,29
SBTX for 73 – Products of iron and steel	1,53
SBTX for 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof	0,43
SBTX for 39 – Plastic masses and plastic products	0,89
SBTX for 85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles	0,56
SBTX for 76 – Aluminium and aluminium products	1,12
SBTX for 64 – Footwear, gaiters and the like; parts of such articles	0,40

Source: author's calculation

Compared with Montenegro in 6 of the 10 tariffs B&H has a competitive advantage, and the biggest in the tariff no. 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere (10,29). In other tariffs B&H has the advantage, but it is not expressed, it is little above 1. In 4 of 10 tariffs B&H does not have a competitive advantage, and the lowest index is for tariff no. 64 – Footwear, gaiters and the like; parts of such articles (0,40).

#### 5.4. UNMIK

With UNMIK or the Republic of Kosovo, B&H has a positive trade balance in the last three years; however, the amount is not too large, although higher than in relations with Albania and Moldova (467.122.000 BAM).

The top ten export tariffs in UNMIK for 2015 are as follows: 72 – Iron and steel, 16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates, 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere, 44 – Wood and wood products; charcoal, 30 – Pharmaceutical products, 85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles, 15 – Fats and oils of animal or vegetable origin and their cleavage products; prepared edible fats; animal or vegetable waxes, 24 – Tobacco and manufactured tobacco substitutes, 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof, 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes and these tariffs account for 80% of total exports in UNMIK.



Table 7. SBTX index for 10 leading tariffs in comparison with UNMIK in 2015

SBTX for 72 – Iron and steel	7,16
SBTX for 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	0,34
SBTX for 16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates	16,15
SBTX for 44 – Wood and wood products; charcoal	0,64
SBTX for 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere	9,67
SBTX for 30 – Pharmaceutical products	3,45
SBTX for 15 – Fats and oils of animal or vegetable origin and their cleavage products; prepared edible fats; animal or vegetable waxes	2,16
SBTX for 85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles	0,77
SBTX for 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof	0,46
SBTX for 24 – Tobacco and manufactured tobacco substitutes	10,08

Source: author's calculation

Compared to UNMIK, B&H has a competitive advantage in 6 of the 10 leading tariffs exported to this country in 2015. It should be noted that in most of these tariffs, B&H has a strong competitive advantage (in 4 of the 6 has an index greater than 7). The highest index B&H has in the tariff no. 16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates. B&H has a competitive disadvantage in 4 of the 10 leading export tariffs in UNMIK in 2015, and the lowest index is for tariff no. 27– Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes (0,34).

### 5.5. Macedonia

In trade relations with Macedonia, B&H in the last 3 years has the third largest amount of trade (779.095.000 KM), however, the final sum is negative for B&H (-117.605.000 BAM).

The top ten export tariffs in Macedonia for 2015 are as follows: 72 – Iron and steel, 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere, 16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates, 17 – Sugars and sugar products, 44 – Wood and wood products; charcoal, 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof, 18 – Cocoa and cocoa products, 48 – Paper and paperboard; articles of paper pulp, paper or paperboard, 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes, 85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles and tariffs account for 68% of total exports in Macedonia.

Table 8. SBTX index for 10 leading tariffs in comparison with Macedonia in 2015

SBTX for 72 – Iron and steel	2,16
SBTX for 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere	16,70
SBTX for 16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates	18,23
SBTX for 17 – Sugars and sugar products	19,13
SBTX for 44 – Wood and wood products; charcoal	1,16
SBTX for 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof	0,52
SBTX for 18 – Cocoa and cocoa products	12,47
SBTX for 48 – Paper and paperboard; articles of paper pulp, paper or paperboard	1,54
SBTX for 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	0,47
SBTX for 85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles	0,65

Source: author's calculation

In trade relations with Macedonia, B&H has a competitive advantage in 7 of the 10 export tariffs, and in 4 of the 10 has an index of over 12. The largest is for the tariff no. 17 – Sugars and sugar products in amount of 19,13. As for the comparative disadvantages, B&H does not have a comparative advantage in 3 of the 10 export products, and the lowest index is for tariff no. 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes (0,47).

### 5.6. Moldova

As far as trade between B&H and Moldova, it should be noted that the volume of trade is extremely small, i.e. 0.12% of the total volume of trade with the CEFTA. We consider that analysing comparative advantage with Moldova we could get results that will send the wrong conclusions, and all for the reason of very little amount of export or import with this country.

According to previously made analysis, state of comparative advantage of B & H in relation to the other member countries CEFTA is as follows: B&H has a comparative advantage in 9 out of 10 leading export tariffs in Albania, 5 out of 10 in Serbia, 6 out of 10 in Montenegro and UNMIK and 7 out of 10 in Macedonia. In this case, we can confirm the hypothesis that B&H is competitive compared to other member countries of CEFTA, because according to every country 50% of the tariffs (total 10) of B&H have an advantage over the analysed country.

## 6. Conclusion

In this paper we have tried to as concise and detailed introduce trading relationship of B&H and other member countries of CEFTA. As previously mentioned, B&H is a member of CEFTA since 2007, however, we have followed the trading relationship in the past 3 years (2013 -2015) because we believe that this analysis is extremely important for analysing relations with the countries economically similar to B&H. The main question was whether B&H competitive compared to other member countries of CEFTA. Final results are twofold: B&H, according to an analysis of the top 10 export products in other Member States for the most part has a majority competitive

advantage in these products; however, the aggregate balance of relations with CEFTA countries is negative and over 2 billion. It should be noted that this amount comes from the majority of relations with Serbia, with which in the past 3 years, B&H has a negative balance in the amount of over \$ 3 billion, and with Macedonia, which is about 100 million. In relations to other countries B&H achieved a positive balance of trade relation; however, the sheer volume of trade is still quite small. Finally, with Moldova, trade volume is very small (0.12%) and there should be a lot of work on this issue.

We consider that this analysis can help policy-makers of the future to see the actual situation of exports of B&H, because if we cannot be competitive and achieve a positive balance in relation to CEFTA countries (realistically economically weaker in relation to the EU), what can we expect from the future joining the European Union. According to the author, B&H certainly should raise the ratio of trade with countries with which they have a majority competitive advantage, and try to stabilize the relationship with Serbia in the context of reducing the overall balance of trade.

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## APPENDIX 1

Bosnia and Herzegovina total export in CEFTA countries in 2015, according to customs tariffs of B&H

Tariff	Total value (in BAM)	Percent (%)
04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere	162.289.980	5,18
08 – Edible fruit and nuts; peel of citrus fruits or melons	22.379.303	0,71
15 – Fats and oils of animal or vegetable origin and their cleavage products; prepared edible fats; animal or vegetable waxes	11.089.399	0,35
16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates	68.653.577	2,19
17 – Sugars and sugar products	48.662.925	1,55
18 – Cocoa and cocoa products	7.877.506	0,25
19 – Cereal based products, flour, starch or milk; confectionery	4.675.498	0,15
21 – Miscellaneous food products	6.236.323	0,20
24 – Tobacco and manufactured tobacco substitutes	24.708.663	0,79
27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	1.030.567.862	32,92
28 – Inorganic chemicals; organic and inorganic compounds of precious metals, rare earth metals, radioactive elements and isotopes	109.636.474	3,50
29 – The organic chemical compounds	12	0,00
30 – Pharmaceutical products	89.973.447	2,87
38 – Miscellaneous chemical products	21	0,00
39 – Plastic masses and plastic products	91.233.087	2,91
44 – Wood and wood products; charcoal	242.553.756	7,75
48 – Paper and paperboard; articles of paper pulp, paper or paperboard	97.956.486	3,13
49 – Printed books, newspapers, pictures and other products of the printing industry, manuscripts, printed texts and maps	2.744	0,00

Tariff	Total value (in BAM)	Percent (%)
63 – Other made-up textile products; sets; used clothing and used textile products; rags	5.645	0,00
64 – Footwear, gaiters and the like; parts of such articles	8.826.673	0,28
66 – Umbrellas, sun umbrellas, walking sticks, whips and their parts	1.626.751	0,05
72 – Iron and steel	631.669.181	20,18
73 – Products of iron and steel	141.967.499	4,54
76 – Aluminium and aluminium products	102.993.446	3,29
84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof	153.336.188	4,90
85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles	37.538.717	1,20
87 – Vehicles, except rail vehicles and their parts and accessories	4.644	0,00
94 – Furniture; mattress; products of bedding and similar products (mattresses, pillows, and similar stuffed furnishings); Lamp and lighting fittings, not elsewhere specified or included elsewhere; illuminated signs, illuminated nameplates or the like; prefabricated buildings	16.003.179	0,51
96 – Various products	4.038.278	0,13
98 – Consignments	13.821.145	0,44

## APPENDIX 2

Total import in Bosnia and Herzegovina from CEFTA countries in 2015, according to customs tariffs of B&H

Tariffs	Total value (in BAM)	Percent (%)
01 – Living animals	7.088.170	0,21
02 – Meat and edible offal	9.071.924	0,26
03 – Fish and crustaceans, molluscs and other aquatic invertebrates	551.025	0,02
07 – Edible vegetables and certain roots and tubers	1.470.646	0,04
08 – Edible fruit and nuts; peel of citrus fruits or melons	3.675.939	0,11
10 – Cereals	489.480	0,01
12 – Oil seeds and fruits; miscellaneous grains; seeds; industrial and medicinal plants; straw and fodder	334.744	0,01
15 – Fats and oils of animal or vegetable origin and their cleavage products; prepared edible fats; animal or vegetable waxes	387.199.699	11,30

Tariffs	Total value (in BAM)	Percent (%)
16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates	869.239.125	25,38
17 – Sugars and sugar products	847.793.776	24,75
18 – Cocoa and cocoa products	213.068.517	6,22
19 – Cereal based products, flour, starch or milk; confectionery	574.599.444	16,78
20 – Vegetable products, fruit, nuts or other parts of plants	46.812.576	1,37
22 – Beverages, spirits and vinegar	56.933.591	1,66
23 – Residues and waste from the food industries; prepared animal fodder	1.492.436	0,04
24 – Tobacco and manufactured tobacco substitutes	1.431.290	0,04
26 – Ores, slag and ash	1.296.621	0,04
27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	52.891.855	1,54
30 – Pharmaceutical products	5.747.470	0,17
32 – Tanning or dyeing; tannins and their derivatives; dyes, pigments and other substances dyeing; paints and varnishes; putty and other mastics; printing, paint and ink	4.865.723	0,14
39 – Plastic masses and plastic products	10.878.450	0,32
40 – Rubber and rubber products	842.387	0,02
41 – Raw hides and skins with the hair or no hair (except fur) and leather	1.630.645	0,05
44 – Wood and wood products; charcoal	1.947.900	0,06
48 – Paper and paperboard; articles of paper pulp, paper or paperboard	174.612	0,01
52 – Cotton	151.888	0,00
62 – Apparel and clothing accessories, not knitted or crocheted	2.966.036	0,09
64 – Footwear, gaiters and the like; parts of such articles	75.583.156	2,21
70 – Glass and glassware	55.936.489	1,63
72 – Iron and steel	39.913.581	1,17
73 – Products of iron and steel	88.537.428	2,58
76 – Aluminium and aluminium products	49.625.030	1,45
79 – Zinc and articles thereof	5.702.162	0,17
84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof	4.608.893	0,13

<b>Tariffs</b>	<b>Total value (in BAM)</b>	<b>Percent (%)</b>
85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles	529.619	0,02
87 – Vehicles, except rail vehicles and their parts and accessories	19.517	0,00
94 – Furniture; mattress; products of bedding and similar products (mattresses, pillows, and similar stuffed furnishings); Lamp and lighting fittings, not elsewhere specified or included elsewhere; illuminated signs, illuminated nameplates or the like; prefabricated buildings	175	0,00