Received: 30 January 2020

UDC 339.92/339.5]:330.34\*497.6(,,2004/2018") DOI: 10.7251/ZREFIS2020093R Professional Paper

## Emina Resić

School of Economics and Bussines, University of Sarajevo, Bosna and Herzegovina

⊠ emina.resic@efsa.unsa.ba

# Zijada Rahimić

School of Economics and Bussines, University of Sarajevo, Bosna and Herzegovina

⊠ zijada.rahimic@efsa.unsa.ba

# COMPARATIVE ANALYSIS OF FOREIGN TRADE OF BOSNIA AND HERZEGOVINA FROM 2004 – 2018

## KOMPARATIVNA ANALIZA SPOLJNE TRGOVINE BOSNE I HERCEGOVINE U PERIODU 2004-2018. GODINE

**Summary:** The aim of this paper is to identify the basic characteristics of foreign trade of Bosnia and Herzegovina in terms of determining the volume, trends, geographic orientation, production structure and level of concentration of export-import flows in the selected time period, with emphasis on its trade with major partners, such as the EU and CEFTA. A special emphasis has been placed on exports as a driver of growth and development of the domestic economy. In order for the economy of Bosnia and Herzegovina to grow, creating jobs and increasing economic welfare of its citizens, it must focus on international trade, particularly the increase in the volume and value of exports. To say that the export is a requirement for survival may sound dramatic, but there can be no doubt that our country needs to improve its trading result. This reflects the importance of foreign trade. The focus of the analysis is placed on the dynamics and structure of the total exchange of B&H in the period from 2004 to 2018. Analysis was done using the appropriate method of dynamic analysis (index methods, average annual growth rate). The main results indicate not so positive trends for international trade of Bosnia and Herzegovina.

Keywords: foreign trade, import, export, EU, CEFTA

JEL classification: F15, O24

**Rezime:** Cilj ovog rada je identificirati osnovne karakteristike spoljne trgovine Bosne i Hercegovine u smislu utvrđivanja obima, trendova, geografske orijentacije, strukture proizvodnje koncentracije izvozno-uvoznih tokova u odabranom vremenskom periodu, s naglaskom na trgovinu sa glavnim partnerima, poput EU i CEFTA. Poseban naglasak stavljen je na izvoz kao pokretač rasta i razvoja domaće ekonomije. Da bi ekonomija Bosne i Hercegovine mogla rasti, stvarajući radna mjesta i povećavajući ekonomsku dobrobit svojih građana, mora se usredotočiti na međunarodnu trgovinu, posebno na povećanje obima i vrijednosti izvoza. Reći da je izvoz potreban za opstanak može zvučati dramatično, ali nema sumnje da naša zemlja treba da poboljša svoje trgovinske rezultate. Ovo odražava važnost spljne trgovine. Fokus analize je stavljen na dinamiku i strukturu ukupne razmjene BiH u razdoblju od 2004. do 2018. Analiza je rađena primjenom odgovarajućih metoda dinamičke analize (indeksni brojevi, prosječna godišnja stopa rasta). Glavni rezultati ukazuju na ne tako pozitivne trendove u međunarodnoj trgovini Bosne i Hercegovine.

Ključne riječi: spoljna trgovina, izvoz, uvoz, EU, **CEFTA** 

JEL klasifikacija: F15, O24

Paper presented at the 9th Scientific Conference with International Participation "Jahorina Business Forum 2020: Real and Financial Sector in the Light of New Technologies, New World Trends and New Challenges" Jahorina, 23-25th March 2020

## 1. INTRODUCTION

Expectations from the transition process in B&H were particularly significant regarding the economy's external sector. In line with the adopted neoliberal view of the economic development, foreign trade after the reform was supposed to be the leading sector of B&H economy. For this reason, the sector of foreign economic relations, along with the banking sector, was the first in which a radical reform was carried out in a very short time, mainly based on the liberalization of foreign trade.

The parallel processes of unilateral, bilateral or regional, and multilateral liberalization, launched by B&H in the late 1990s, took place at an accelerated pace and were supposed to get the country closer to the step of creating a small developed open economy. (Bjelić 2011)

Thus, in the period after 2002, free trade agreements with the countries of Southeast Europe have been revived and progress has been made in the process of convergence with European integrations. Therefore, significant shifts in foreign trade, primarily in exports, compared to the period immediately after the war, were characterized by enormous trade deficit of B&H. (Kurtovic et al. 2017).

The research consists out of the analysis of B&H foreign trade with the world, and in particular trade with 6 CEFTA and 28 EU member countries. As a region that gravitates geographically, politically and economically, a narrow area of the Western Balkans has been selected, which are also CEFTA members - besides B&H there are, Albania, Montenegro, Croatia (now EU member, but geographically belongs to the Western Balkans), Kosovo, North Macedonia and Serbia. There are several reasons for taking a narrower definition of a region. One of the reasons are similarities of these countries in terms of size, level of economic development and production structures, and identical and very specific processes and events that have hit the majority of countries in the recent past, which influenced their economies and foreign relations. The Western Balkan countries, as well as the Central and Eastern European countries in transition, have experienced radical political and economic transformation over the last two decades. (Haley 2018) For most of them, the situation is further complicated by the collapse of the common state and war which, compared to other parts of the world at that time, has led to strong disintegration processes. The consequence of all these events was inevitably the new political and economic geography of the region, which among other things significantly influenced trade flows.

One of the reasons for focusing on the narrower region is also the fact that most countries of the Western Balkans (except Albania) share some specific characteristics such as: similar ethnic and cultural features, especially the similarity of languages, common border, common history in terms of belonging to a single state during a period of 70 years (Kingdom of SHS, Kingdom of Yugoslavia, SFRY). A significant criterion is belonging to the same regional integration - the new CEFTA (formed in 2006), and the same or similar level of relations with the European Union. Finally, the last but not the least important reason is the fact that, except for Albania, the regional countries are one of the largest trading partners of B&H, meaning that with the region as a whole B&H performed an average of 30% of its total foreign trade in the observed period. The European Union has been selected as a group to which B&H is gravitating politically and economically, and with which it signed the Stabilization and Association Agreement in 2008. It can be said that CEFTA is the present, and the EU the future of B&H.

This paper presents the empirical research and analysis of B&H imports and exports with the EU and CEFTA member countries. The analysis includes exports and imports as a statistical category, published by the Agency for Statistics of B&H. A series of data used to describe the movement includes the period from 2004 to 2018. This period is long enough to be feasible as a representative to see certain trends in imports and exports. It also refers to the past, but future trends can also be predicted.

Basic precondition for a long-term economy growth is the involvement in international trades and exchange of goods, services and capital. In other words, establishing an open economy, which is most of the time used as a synonym for liberalization. Research shows that in the last decades, open economies had a faster growth compared to the closed ones. (World Bank 2015).

Economies with a highly developed and established foreign trade have key benefits in the following four areas (Knight and Scacciavillani 1998):

- Great international market has a spillover effect for new technologies and the necessary knowledge:
- Economy of scale in R&D;
- Incentives for innovation and new products;
- Better information and faster information flow;

The openness of an economy is measured by its involvement in the foreign trade and GDP. According to this criteria, small economies are more dependent to foreign trade and the openness level is much higher relative to bigger economies and countries. In practice, as an economy becomes more open, it implies that the level of market liberalization is higher, which is very interesting for small and highly developed countries (Krajišnik 2013).

In this paper an empirical research and import/export analysis of B&H with EU and CEFTA countries was shown. For the analysis, data provided by the Agency for Statistics of B&H from the period of 2004 until 2018 were taken. For statistical purposes this period is long enough to observe specific trends in the import and export, which can be in addition used to predict those trends for the future.

#### 2. FOREIGN TRADE VOLUME AND MOVEMENT OF B&H

High foreign trade deficit is one of the biggest problems of B&H economy, which is mainly due to poor competitiveness in the international market, as well as high import-export dependence. One of the reasons for the small amount of exports is that the products do not comply with international standards and norms. Additionally, there is always a lack of financial resources, and export procedures themselves are very difficult.

*Table 1. Total Trade of B&H 2004 – 2018* 

Mil. KM

	Export		Import		VOLUME (total)			import-
year	value	rate of change	value	rate of change	value	rate of change	deficit	export coverage (%)
2004	3,012.76	24.07	9,422.97	12.65	12,435.73	15.22	-6,410.21	31.97
2005	3,783.20	25.57	11,180.80	18.65	14,964.00	20.33	-7,397.60	33.84
2006	5,164.29	36.51	11,388.78	1.86	16,553.07	10.62	-6,224.49	45.35
2007	5,936.89	14.96	13,898.71	22.04	19,835.60	19.83	-7,961.82	42.72
2008	6,711.69	13.05	16,286.06	17.18	22,997.75	15.94	-9,574.37	41.21
2009	5,530.38	-17.60	12,348.47	-24.18	17,878.85	-22.26	-6,818.09	44.79
2010	7,095.50	28.30	13,616.20	10.27	20,711.70	15.84	-6,520.70	52.11
2011	8,222.11	15.88	15,525.43	14.02	23,747.54	14.66	-7,303.32	52.96
2012	7,858.34	-4.42	15,253.04	-1.75	23,111.38	-2.68	-7,394.70	51.52
2013	8,380.27	6.64	15,169.79	-0.55	23,550.06	1.90	-6,789.52	55.24
2014	8,681.74	3.60	16,199.28	6.79	24,881.02	5.65	-7,517.54	53.59
2015	8,987.31	3.52	15,851.86	-2.14	24,839.17	-0.17	-6,864.55	56.70
2016	9,418.11	4.79	16,161.01	1.95	25,579.12	2.98	-6,742.90	58.28
2017	11,055.38	17.38	18,185.64	12.53	29,241.02	14.32	-7,130.26	60.79
2018	11,969.77	8.27	19,355.54	6.43	31,325.31	7.13	-7,385.77	61.84

Source: Agency for Statistics of B&H 2018

Note: Since the data for 2018 are not available, an estimation was created based on information for the period January – November 2018

The volume of B&H's exchange in absolute terms more than doubled compared to 2000, from BAM 8.85 billion to the level of BAM 31.32 billion. The same trend, which is attributed primarily to post-war recovery and long-term regulation of trade relations with the most important partners (from the region and the European Union), was recorded in all Western Balkan countries after 2000.

One of the key features of B&H's foreign trade is high and continuous deficit in the exchange with the world, which was in particular pronounced in 2008 when it reached the level of BAM 9.5 billion (which is 150% of the export amount). After a decrease in 2009, the foreign trade deficit in recent years has again a slight tendency of growth, almost 30% of GDP. Exports of goods in 2004 were slightly more than BAM 3 billion, and recorded constant growth, except for two years in the observed period, which was due to the global financial crisis. The export declined by 17.60% in 2009 and in 2012 the export declined by 4.63% compared to the year before.

Later, the export started to grow and in 2018 was BAM 11.99 billion. Imports of goods were also growing, where in 2018 it reached the value of BAM 19.35 billion. The trade balance observed during the whole period was negative and ranged between BAM 6.4 billion (2004) and BAM 7.4 billion (2018). The largest deficit was recorded in 2008 when it amounted to more than BAM 9.5 billion. The analysis of the import and export trends for 2018 continued to indicate a slight decrease in the trade deficit growth rate on an annual basis, which was caused by an increase in the export growth rate and a further reduction in the import growth rate. Much higher import than export of goods, indicates a negative contribution of the commodity sector (observing the foreign trade) to GDP growth of Bosnia and Herzegovina, which in that period achieved growth rates. This would suggest that export demand was not a generator of economic growth, but rather a domestic demand financed from abroad. Such situation is unsustainable in the long run, thus the process of strengthening the competitiveness of entities and stronger export orientation is a condition for the country's prosperity. Import-export coverage for 2018 was 62%. It was significantly improved compared to 2004, when it was only 32% thanks to a higher growth rate of exports relative to the growth rate of imports. However, the unfavorable exports and imports of goods is still visible, since on average 1 BAM of imported goods equals to 0.62 BAM of exported goods (data for 2018).

## 3. THE STRUCTURE OF B&H'S COMMODITY EXCHANGE BY ITS CATEGORIES

A comparative analysis of the exports and imports structure of goods can, to a certain extent, indicate causes of the trade imbalance. In the case of B&H, it can help in determining whether a steady and growing deficit is a result of an excessive consumption, together with an insufficient domestic production and its inability to adapt to a more sophisticated domestic demand or it is potentially a natural consequence of the economic growth and restructuring of a less developed, post-war and transitional economy, faced with a rising international competition, lack of foreign direct investment and absence of adequate macroeconomic policies.

The geographic structure of commodity flows indicates the country's orientation according to a geographical, political or economic pattern. Observing the export structure in the period from 2004 to 2018, insufficient international competitiveness was noticed. The products that contributed most to exports were predominantly resource-intensive and/or labor intensive: wood and wood products, iron and steel, iron and steel products, furniture, clothing, footwear. As the main export components, products of lower processing phases, with lower added value, have been identified. Those are less important in the modern international trade, characterized by the global price competition and fewer financial effects.

The participation of the primary sector in exports was not negligible, except in the case of agricultural products. In the structure of exports there was a small share of products that are technologically more intense, and goods with high quality, which contribute to the international competitiveness of the country. It is clear that the structure of exports was and remained unfavorable. Export data of Bosnia and Herzegovina show that the reason for such a high deficit in the foreign trade balance is the structure of traded goods, given that products with lower value added are mainly exported, while the structure of imports shows that high value-added goods are imported.

Therefore, it is more than necessary to work on the development of existing and new export products, as well as to adequately promote exports from Bosnia and Herzegovina. Most important import components are crude oil and petroleum products, machines, metals (dominantly aluminum, iron and steel) and metal products. Half of the imports in the observed period consisted of the following production groups: mineral fuels and oils, nuclear reactors, vehicles and its parts, electrical machinery and equipment, plastic and plastic products, iron and steel, iron and steel products, alcohol and vinegar, and pharmaceutical products. The structure of imports, observed globally, reveals a significant dependence the economy has on imported consumer goods (especially food), raw materials and fuels.

## 4. STRUCTURE OF BOSNIA AND HERZEGOVINA TRADE BY REGION

When it comes to the geographic concentration of foreign trade in B&H, an analysis has been carried out for certain markets, such as the European Union, CEFTA, EFTA, large countries, etc., since B&H has different conditions in conducting foreign trade with each of these markets. The analysis of the geographical concentration of exports and imports was made for 2017 using the Gini-Hirschman coefficient, with which the degree of geographical concentration of exports and imports was measured. The model for calculating the geographical concentration of exports (imports) coefficient can be represented by following relations (Jošić, 2008):

$$G_{jX} = 100 \sqrt{\sum_{i} \left(\frac{X_{ij}}{Xj}\right)^{2}}$$

$$G_{jM} = 100 \sqrt{\sum_{i} \left(\frac{M_{ij}}{Mj}\right)^{2}}$$

 $X_{ij}$  – export of country j to market i and  $X_i$  – total export of country j,  $M_{ij}$  – import of country j on market i and  $M_i$  – total import of country j.

 $G_{iX}$  $G_{iM}$ 

Table 2. B&H Foreign Trade Geographical Concentration in 2017

EU 71.17 60.91 **CEFTA** 16.20 12.75

**EFTA** 1.77 0.69 **UoST** 3.90 4.22 Other 6.96 21.44

Source: Agency for Statistics of B&H 2018 *Note: UoST – Countries with a Free Trade Agreement (Turkey)* 

Using the mentioned export data of Bosnia and Herzegovina to individual markets and applying the above model, as shown in Table 2, the geographical exports concentration coefficient of the European Union was obtained:  $G_{ix} = 71.2$ . In the same way, the geographical imports concentration coefficient was obtained:  $G_{im} = 60.91$ .

As it can be seen, the geographic exports concentration coefficient is higher than the geographic imports concentration coefficient, which is immanent for smaller and less developed countries. The greater diversification of production, or the higher the level of economic and industrial development, the product placement directions are becoming more and more diverse (Krajišnik, 2013). If the country has a high degree of geographic exports concentration, it should never be understood that the country's exports are concentrated in a small and limited market. As a rule, this is an export to a large market. However, high level of export concentration means high dependence on the given market where the export occurs. The B&H geographic imports concentration coefficient of 71.2% is high (in developed countries it is generally less than 40) and shows a higher dependence on export than on the import.

This is not surprising, since Bosnia and Herzegovina exported almost 90% in 2018 to EU and CEFTA markets. After the extension of the European Union, the geographical concentration of B&H's exports and imports becomes even greater. In other words, B&H becomes even more dependent on the European Union market, which should certainly be kept in mind for the future.

Table 3. Export and import of B&H by regions for the period 2014 - 2017

Mil. BAM

Region	2017		2014		2017		2014	
	Export	%	Export	%	Import	%	Import	%
EU	7,867.87	71.17	6,266.55	72.18	11,075.97	60.91	9,543.93	58.92
CEFTA	1,790.46	16.20	1,358.23	15.64	2,319.23	12.75	1,863.08	11.50
EFTA	196.13	1.77	172.01	1.98	124.61	0.69	93.94	0.58
UoST	431.09	3.90	243.39	2.80	766.73	4.22	582.20	3.59
Other	769.83	6.96	641.56	7.39	3,899.10	21.44	4,166.13	25.41
Total	11,055.38	100.00	8,681.74	100.00	18,185.64	100.00	16,199.28	100.00

Source: Agency for Statistics of B&H 2018

Note: Croatia became an EU member on 1<sup>st</sup> of July 2013. However, for the needs of the analysis and according to the Eurostat recommendations, Croatia should be taken as an EU member for the previous period

The EU and CEFTA, given the level of participation, are the most important export partners of B&H, which points out the importance of these markets, as well as the geographical concentration in only a few countries. When we observe the coverage rate of import by export, in 2017 it was 71.03% with the countries of the European Union. Furthermore, 71.17% of B&H exports were placed in these countries, and on the other hand, the share of imports from the EU was 60.91%.

We encounter a somewhat more favorable situation in the exchange with the countries of the region, specifically with the countries of CEFTA. Namely, the percentage of import coverage by export with this group, in 2017, was 77.2%. The export share was 16.2%, while the share of imported goods from these countries in the total import is slightly lower (12.75%).

The only group with which we have a surplus in trade exchange is EFTA. The coverage of import by export amounted to 157.39% in 2017. However, these countries are not very important foreign trade partners, since only 1.77% of total exports are done with their market, while imported products from the EFTA countries on the market of Bosnia and Herzegovina accounted for only 0.69%.

The situation with Turkey is rather unfavorable in 2017, as the coverage rate is only 56.22%. The share of goods from Bosnia and Herzegovina in Turkey is only 3.9%, while vice versa it is 4.22%.

Analysis of the geographical structure of foreign trade points to a problem that is reflected in the fact that B&H realizes a foreign trade deficit with all major foreign trade partners, except Austria. The coverage of imports by exports with Serbia and Croatia is on an average level. Thus, the economic structure and foreign trade policy in B&H let to an absurd situation that high foreign trade deficits were achieved with large and fast-growing markets such as Russia and the CEFTA countries. In addition, Serbia and Croatia are two neighboring countries with no customs barriers and, according to the gravitational model of international trade, B&H is geographically oriented to them. With these markets there are good traffic connections, numerous economic and social connections and there are no language barriers.

## 5. CONCLUSION

Foreign trade is of great importance for the development of a small, open and developing economy, such as it is for Bosnia and Herzegovina. In this paper we presented the issues and an empirical research of its foreign trade in the period from 2004 to 2018. This period was specific because different sub periods were shown: the period of recovery from war destruction, the period of the financial and economic crisis, and in the end recovery from it. Apart from the movement of total exchange, the structure of the exchange by goods was additionally examined including the most important partners. Special emphasis is given to exports as a key factor for the development of the economy.

The results achieved in foreign trade in the previous period are extremely unfavorable. The foreign trade deficit is constant and high, as the coverage of import by export is only about 61%. The positive fact is that the coverage has been steadily growing during the observed period, except for few years. Bosnia and Herzegovina has a deficit with all major foreign trade partners. Particularly worrying is the negative balance of trade with neighboring countries, to which, according to the gravity model, other economic and non-economic reasons, the external trade of Bosnia and Herzegovina is oriented. The production structure, exports and imports are generally unfavorable. since the products are dominated by products of lower processing phase, i.e. resource-intensive, laborintensive and capital-intensive products. On the other hand, many products are imported on a large scale for which there are preconditions to be produced not only for the needs of the domestic market, but also for export.

The most important partner of B&H is certainly the European Union, with which the majority of the exchange takes place. The geographical concentration of exports and imports is high and is further enhanced by the enlargement of the European Union, and so far the Republic of Croatia has been individually the largest foreign trade partner. Furthermore, the incredibly high coefficient of trade importance that Bosnia and Herzegovina has with the European Union points to its great trade dependence.

When it comes to foreign trade with the CEFTA countries, the volume of trade grew during the observed period, but in this group Bosnia and Herzegovina made large deficits. However, in 2013 it made a surplus for the first time. The reason was the exiting of Croatia from this group, with which greatest deficits are being realized. It means that this result is an apparent rather than a real situation.

#### REFERENCES

Bhagwati, Jagdish. 2002. Free trade today. Princenton: Princenton University.

Bjelić, Predrag. 2011. Međunarodna trgovina. Beograd: Ekonomski fakultet. Centar za izdavačku djelatnost.

Ćudina, Andrijana, and Gordi Sušić. 2013. "Uticaj pristupanja Hrvatske Europskoj uniji na trgovinske i gospodarske odnose sa zemljama CEFTA-e". Ekonomski pregled 64: 376-396.

Dangerfield, Martin. 2001. Subregional economic cooperation in Central and Eastern Europe. Cheltenham:

Jošić, Mislav. 2008. "Struktura vanjske trgovine i komparativne prednosti Republike Hrvatske." Specijalistički poslijediplomski rad. Ekonomski fakultet, Univerzitet u Zagrebu.

Krajišnik, Milenko. 2013. "Spoljna trgovina Bosne i Hercegovine i proširenje Evropske unije". Svarog 7: 230-

Kurtovic Safet, Belrim Halili, and Nehat Maxhuni. 2017. "The Effect of Trade Liberalization of Bosnia and Herzegovina with the Leading Trade Partners." Duncker & Humblot GmbH 634: 341-368.

Haley, James A. 2018. "Did Trade Liberalization Go Too Far? Trade, Inequality and Unravelling the Grand Bargain". CIGI Papers 168.

Holzner, Mario. 2013. "Impact of Croatian EU Accession on Regional Trade Patterns". The Vienna Institute for International Economic Studies Policy Notes and Reports 10.

Kaminski, Bartolomej, and Francis, Ng. 2010. "Bosnia and Herzegovina's Surprising Export Performance Back to the Past in a New Veil but Will It Last'. The World Bank Policy Research Working Paper 5187.

Mamuti, Agim. 2013. "The Competitiveness of the Economy of Bosnia and Herzegovina". International Journal of Academic Research in Accounting, Finance and Management Sciences 3(4): 130–137.

BHAS. 2020. Agencija za statistiku BiH Accessed January http://www.bhas.ba/index.php?option=com\_publikacija&view=publikacija\_pregled&ids=2&id=7&n=Vanjs ka%20trgovina.

Bank. 2015 Liberalization: Why So World Trade Much Controversy? http://www1.worldbank.org/prem/lessons1990s/chaps/05-Ch05 kl.pdf