

Nuhanovic, Senija; Nurikic, Mirnesa Barakovic

Article

The Analysis of the Influence of Non-Tariff Barriers on Bosnia and Herzegovina Trade Within Cefta 2006

Economic Review: Journal of Economics and Business

Provided in Cooperation with:

Faculty of Economics, University of Tuzla

Suggested Citation: Nuhanovic, Senija; Nurikic, Mirnesa Barakovic (2016) : The Analysis of the Influence of Non-Tariff Barriers on Bosnia and Herzegovina Trade Within Cefta 2006, Economic Review: Journal of Economics and Business, ISSN 1512-8962, University of Tuzla, Faculty of Economics, Tuzla, Vol. 14, Iss. 2, pp. 33-43

This Version is available at:

<https://hdl.handle.net/10419/193862>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

THE ANALYSIS OF THE INFLUENCE OF NON-TARIFF BARRIERS ON BOSNIA AND HERZEGOVINA TRADE WITHIN CEFTA 2006

Senija Nuhanović*, Mirnesa Baraković Nurikić**

ABSTRACT

The ultimate goal of most European countries, especially of the Western Balkan countries, is to become full members of the European Union (EU). The mentioned countries are included in the Stabilisation and Association Process (with the Stabilisation and Association Agreement (SAA) as its main segment) and they are in a different stage of EU accession. Cooperation among the Western Balkan countries within the Central European Free Trade – CEFTA 2006, is the starting point for their future cooperation with the EU member states, allowing them to prepare for joining the common EU market more quickly and efficiently. By signing the Central European Free Trade Agreement (CEFTA 2006), Bosnia and Herzegovina (BiH) became a member of a free trade zone, together with other (non-EU) Western Balkan countries and Moldova. Removing trade barriers and improving trade cooperation was the primary goal of signing this agreement. Although the tariffs in the trade among inter-CEFTA countries were abolished, the existence of a large number of non-tariff barriers is evident, which significantly hampers most economic and trade relations in particular, within the mentioned regional group. Therefore, the starting point in this work is to study the impact of non-tariff barriers on the size of BiH import/export within CEFTA 2006. This paper presents the research results obtained on the basis of processing the secondary data sources using quantitative and qualitative methods. To check the main and supporting hypotheses we used the Spearman's correlation coefficient. Based on the analysis, it was found that there is a significant correlation between the non-tariff barriers and BiH import/export during this period.

Keywords: Bosnia and Herzegovina (BiH), CEFTA, EU, import, export, non-tariff barriers

JEL Classification: F13

1. INTRODUCTION

Modern business conditions urge more and more countries to organize their economies by joining some sort of regional integrations.¹ Constant efforts in terms of the realization of the idea for international trade to happen without tariff and non-tariff barriers, required the giving up on some sovereignty elements of the states that are active in such international trade [Arsić, Ikonić, (2011), p. 135].

The Stabilisation and Association Agreement between Bosnia and Herzegovina (BiH) and the European Union (EU) entered into force on 1 June 2016, replacing the Interim Agreement (IA) which had been effective as of 1 July 2008. Certain progress was made in terms of the harmonization with the EU legal legacy, mainly in the fields of public procurement, intellectual, industrial and commercial property rights, internal market, tariffs and taxes, and social inclusion of the Roma citizens.

The signing of CEFTA in 1992 by Hungary, Poland and Czechoslovakia resulted in the creation of the Central European zone of free trade. After its establishment, other countries also joined the group as follows: Slovenia in 1996, Romania in 1997, Bulgaria in 1999, Croatia in 2003, and Macedonia in 2006. In 2006, Bulgaria, Romania, Albania, BiH, Croatia, Macedonia, Kosovo, Moldova, Montenegro and Serbia negotiated the changes of the original name CEFTA into CEFTA 2006, the term which has been used since July 2007 [Mostetsching (2011), p. 29]. CEFTA is one of the largest agreements signed

* Associate Professor Faculty of Economics, University of Tuzla Univerzitetaska 8, 75000 Tuzla, BiH , e-mail: senija.nuhanovic@untz.ba

** e-mail: mirnesa-barakovic@hotmail.com

by BiH and it is the second largest export market of our country after the EU. The membership in this free trade zone facilitates the country's preparation to join the EU, which is why CEFTA has a temporary character valid until all the signatories become the full members of the EU. The main reason for large export into the CEFTA countries is the similarity of economies, geographic positions, languages, customs, etc., along with the fact that the export prior to country's signing the agreement was largely oriented to the CEFTA member states. Regardless of the fact that domestic companies from BiH export to the CEFTA member states more easily due to lack of tariffs, non-tariff barriers still pose a significant problem. Apart from the trade component, the main reason for the establishment of CEFTA was to attract foreign investment to this region. However, even though tariffs among the CEFTA members were abolished, there are still numerous problems slowing down and preventing free cooperation of these states. While exporting from BiH, firms face many obstacles such as: complex administrative procedures, technical barriers, as well as a lengthy period for obtaining the necessary permits. One of the causes of non-tariff barriers is the fact that the EU standards are not identically adopted in all the countries. The problem is primarily in the fact that, unlike the tariff barriers, the non-tariff ones are not easily evident and transparent. In the context of joining the World Trade Organization (WTO) and the EU, the CEFTA member states need to implement the reforms for improving access to market, facilitate foreign ownership, and remove discriminatory policies against foreign companies. However, various political obstacles of the countries still limit the expansion of trade [Handjiski, Šestović, (2011), p. 4].

In accordance to the instruments used for the protection against foreign competitors, the basic division of foreign trade barriers is into tariff and non-tariff barriers. Tariffs bring a state the income and are seen as a certain tax on goods and services traded. Non-tariff

barriers are the procedures taken by one or several countries used to limit or "unnaturally" stimulate free trade. They are devised to protect domestic economy against foreign competition and their primary intention is not to increase budget income. In the last fifty years, or longer, trade liberalization significantly reduced the importance of tariffs as the traditional form of protection of national economies, leading to the significant development of non-tariff barriers. There are numerous researches on the influence of tariff barriers. On the other hand, non-tariff barriers are difficult to discover, which is why the research into this field is much more complex.

2. REVIEW OF PREVIOUS RESEARCH

By analyzing the literature in this field, one can conclude that there are numerous researches dealing with the influence of non-tariff barriers on trade relations between countries. This is particularly evident after the findings that tariff barriers are not the only ones that affect economic flows and that non-tariff barriers have a much more destructive role than high interest rates.

Kurtović, Šiljković and Dasić (2013) analyzed the effects of non-tariff barriers on BiH trade flow with the CEFTA 2006 member states. They concluded that the establishment of CEFTA 2006 improves the economic position of BiH when compared to the period of the Stability Pact for South Eastern Europe. By its membership in CEFTA 2006, BiH managed to reduce its trade deficit, i.e. import exceeding its export. After Croatia's exit from CEFTA on 1 July 2013, BiH and Serbia became the most important trade partners of CEFTA 2006. These authors also confirmed the fact that CEFTA 2006 made a significant advancement in removing non-tariff barriers in the countries. The elimination of non-tariff barriers among the member states and accepting the rules of the WTO and EU directives mean faster accession of these countries to the EU and their increased competitiveness. In this respect, the authors found that BiH did not completely fulfill the

EU directives related to the elimination of non-tariff barriers, which is why BiH reduces its role in trade with other member states. The authors concluded that if BiH wants to strengthen its competitiveness and thus reaches faster access to the EU, it needs to make and implement reforms in the area of technical, sanitary, and phytosanitary barriers.

Bjelić, Dragutinović Mitrović, and Popović Petrović (2013) studied non-tariff barriers in the Western Balkan countries and tested them based on the gravity model. They concluded that non-tariff barriers are becoming the main obstacle in international trade, after tariffs have been significantly reduced in multilateral trade negotiations. Some non-tariff barriers were regulated after the signing of the General Agreement on Tariffs and Trade (GATT) in 1947 and were termed as traditional non-tariff barriers, but other non-regulated non-tariff barriers in the GATT/WTO system, such as technical and administrative barriers, are some of more important protectionist measures used today. The Western Balkan countries intensively trade with the EU but also within CEFTA 2006. Some researches show that the application of non-tariff barriers differs depending on the target market. In other words, exporting countries are usually differently affected by technical and administrative barriers, depending on the structure of their export products and markets. The analysis of the Western Balkans indicates that technical barriers in trade are the major obstacle for goods to be exported into the EU. Administrative barriers are also an important factor affecting the trade between the Western Balkan countries and the EU, but these effects are not significantly larger than those valid for the trade among the Western Balkan countries. As these authors state, the reason lies in the fact that there is still a strong positive influence of the integration in CEFTA 2006 in the observed period.

Mojsoska-Blazevski and Petreski studied the specific features of the Macedonian trade with the neighboring countries, with the particular emphasis on the trade with the CEFTA and EU

member states. By applying the gravity model, they concluded that trade relations among the countries depend on the level of Gross Domestic Product per capita. They further stated that profit realized in free trade is not equal to the one realized within CEFTA 2006. It is important to mention that these authors did not identify extra profit to be made as a consequence of the CEFTA 2006 membership, due to non-tariff barriers (technical, sanitary, phytosanitary), time and costs of import and export, etc.

There are also the studies made by CEFTA 2006, such as *"Eliminations of non-tariff barriers in CEFTA (2012)"* or those made by the Agency for Statistics in BiH - *"Trade exchange of Bosnia and Herzegovina with foreign countries"*, The Central Bank of BiH - Bulletin, etc.

3. RESEARCH METHODOLOGY

The main research hypothesis is postulated as follows: Non-tariff barriers, primarily administrative, technical, sanitary, and phytosanitary, affect BiH import/export within the free trade zone CEFTA.

On the basis of this research hypothesis, independent and dependent variables can be identified. Independent variables are non-tariff barriers including administrative, technical, sanitary, and phytosanitary barriers, while the dependent variable is BiH import/export.

Apart from the research hypothesis, the following working hypothesis is postulated:

- Enforcement of non-tariff barriers by one country affects the introduction of counter-barriers by another country.

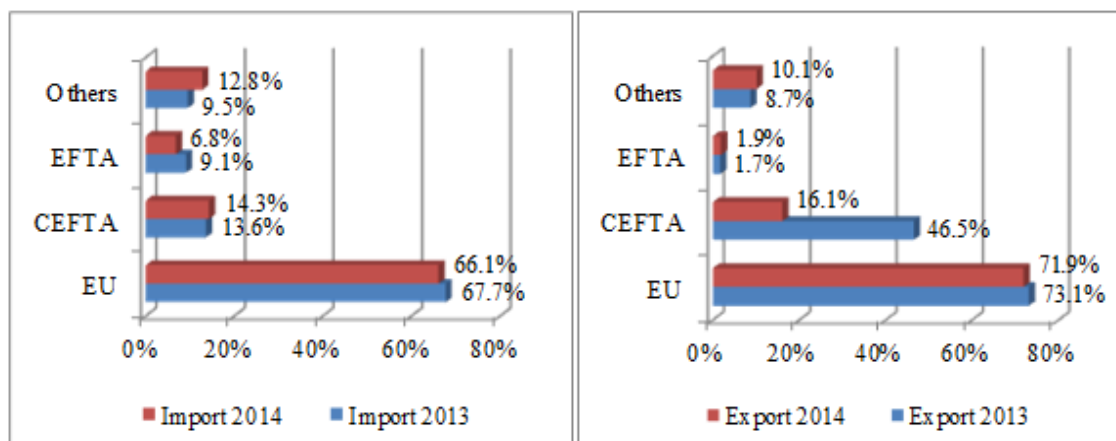
The research is based on the qualitative and quantitative analysis of foreign trade among certain countries, with the usage of secondary data sources related to the available referential literature and websites offering statistical and general data necessary for the research. The methods used include analysis and synthesis, induction and deduction, classification, systematization, and generalization. Based on the collected data,

statistical methods (correlation coefficient and arithmetic mean) are used as well as the comparative method. The ranges of administrative, technical, sanitary, and phytosanitary barriers serve as the indicators of these measures in the selected countries. The correlation coefficient is used to explain the relationship between dependent and independent variables. The results are explained based on the postulated hypotheses.

4. RESULTS AND DISCUSSION

Different levels of adaptation to the EU rules created differences among countries. The CEFTA members attempt to solve these issues

in order to ensure free trade. BiH, as one of the CEFTA 2006 member states, exports a considerable part of its products into the neighboring countries and imports from them as well. As it can be seen in Graph 1, the largest export and import market for BiH in 2013 and 2014 is the market of the EU. The second position is occupied by export and import to the CEFTA member states, which means that this market is a very important segment for BiH. As Perčo (2014) claim, similar economies of the member states made the CEFTA market one of the most attractive markets for domestic companies, already traditionally inclined to the markets of the neighboring countries.



Graph 1. BiH import and export by regions for 2013 and 2014

Source: Authors' calculations based on the data available at: http://komorabih.ba/wp-content/uploads/2013/05/cefta_eu_efta_2014_bih.pdf, accessed 21 December 2015

Non-tariff barriers include a wide range of measures which can significantly affect trade flows in general as well as trade flows among the CEFTA 2006 members. All non-tariff barriers can be divided into administrative, technical, sanitary, and phytosanitary barriers. Each of the given types has several manifestations but only the basic ones are discussed in the article.

Administrative non-tariff barriers in international trade are a group of non-tariff barriers that are the result of application of either the administrative rules in the form of laws and decrees or the procedures negatively affecting the realization of foreign trade – import and export – and which function as

protectionist measures in many countries of the world [Popović-Petrović (2012), pp. 30-31]. Baldwin (1970) states that the fact that these measures are the barriers to international trade is supported by their very name *administrative hindrances to trade*.

Technical barriers to trade can be said to be the obstacles to free international trade resulting from the implementation of various technical regulations, their appropriate standards and other administrative requirements related to the characteristics and quality of products, introduced by countries for the protection of consumers' health and safety and sometimes misused as a protectionist measure [Bjelić (2004), p. 152].

Sanitary and phytosanitary measures are a heterogeneous group which includes the following: various laws, orders, regulations, procedures, and assessment criteria for processing methods; procedures for testing, controlling, issuing certificates and permits; procedures for sampling and risk assessment; as well as the requirements related to package and labeling of goods, provided that they ensure food safety [Popović-Petrović (2012), p. 64].

The CEFTA 2006 members precisely defined the final deadline for the harmonization of the following types of barriers [Jelisavac and Zirojevic (2008), p. 104]:

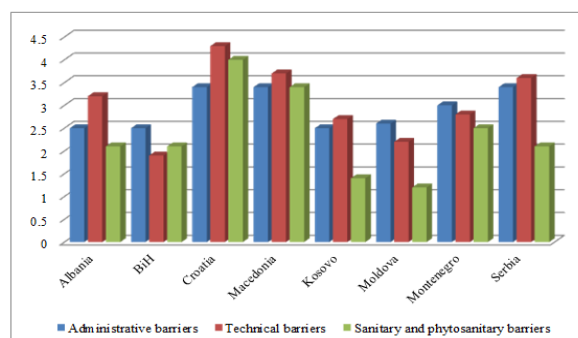
- technical trade barriers – until 31 December 2010 all the member states are obliged to harmonize the procedure;
- competitiveness – until 1 May 2010 – all the companies, including the public ones, start implementing the principles of competitiveness;
- public procurement – until 1 May 2010 all the member states should have secured the non-discrimination and equal treatment for all the participants;
- protection of intellectual property – until 1 May 2014 all the countries must respect the previously adopted rules.

The Organization for Economic Cooperation and Development (OECD) study titled *Elimination of non-tariff barriers in CEFTA*, conducted in 2010, covered the following types of non-tariff measures (measures can be given the values 1 to 5, whereby 1 is the lowest grade which denotes low quality, and the highest grade being 5, meaning excellent regulation) [CEFTA (2012), pp. 21-87]:

1. *Administrative barriers to trade* – ABT – creating national websites with high quality information, establishing enquiry points for customs, involvement of the trade community, advance rulings, appeal procedures, fees and charges, documents and electronic automation, customs procedures and processes, and

domestic and international agency cooperation.

2. *Technical barriers to trade* – TBT – standardization and external cooperation, transposition of EU technical regulations into priority sectors, adoption of EU standards in priority sectors, accreditation and external cooperation, infrastructure and procedure conformity assessment, and information and notification mechanism.
3. *Sanitary and phytosanitary measures* – SPS – institutional framework for SPS measures, level of cooperation among SPS agencies at the intra-CEFTA and external levels, framework legislation of SPS measures, transposition of EU SPS measures, and information and notification mechanism.



Graph 2. Administrative, technical, sanitary, and phytosanitary barriers in the countries in the region

Source: Authors' calculations based on the data obtained through the CEFTA study titled *Elimination of Non-Tariff Barriers in CEFTA*

The following table shows the data for the CEFTA 2006 countries obtained in the study titled *Doing business 2015* conducted by the World Bank. The study was aimed at providing information on the countries' ranking by quality and quantity of their foreign trade. The indicators taken for measurement included time and costs, either necessary or emerging, for export or import of goods into the country by sea (not including customs duties) and the number of documents required for all the related procedures. The best ranked country among the CEFTA 2006

members is Montenegro, primarily since it does not require a large number of documents for the goods going through the customs and the export/import costs per container are not as high as in other countries. The second place is taken by Macedonia, which requires fewer days for export and import but the export/import costs are significantly higher.

The last country is Moldova, with a record-high number of days necessary for goods to pass its territory. All this leads us to the conclusion that complicated procedures, meaning administrative and technical barriers, affect international trade flows. The data presented are for the period 2014-2015.

Table 1. The CEFTA 2006 members' free trade ranking

	Foreign trade (rank)	Number of documents export	Export time (in days)	Export costs (US \$ per container)	Number of documents import	Import time (in days)	Export costs (US \$ per container)
Montenegro	52	6	14	985	5	14	985
Macedonia	85	6	12	1,376	8	11	1,380
Albania	95	7	19	745	8	18	730
Serbia	96	6	12	1,635	7	15	1,910
BiH	104	8	16	1,260	8	13	1,200
Kosovo	118	8	15	1,695	7	15	1,730
Moldavia	152	9	23	1,510	11	27	1,870

Sources: Adopted pursuant to the data obtained in the study *Doing Business 2015*

In order to examine the influence of administrative and technical barriers on countries' foreign trade, we use the data presented in Graph 2. A more detailed analysis requires the data on the volume of

export and import within CEFTA 2006 for the last three available years (2012, 2013, and 2014), as these data are available and taken from the CEFTA 2006 official website.

Table 2. Non-tariff barriers, import into the CEFTA 2006 members and export from the CEFTA 2006 members for 2012, 2013 and 2014 (export and import data given in thousands of BAM)

	ABT	TBT	SPS	Import into the CEFTA 2006 members			Export from the CEFTA 2006 members		
				2012	2013	2014	2012	2013	2014
Albania	2.5	3.2	2.1	163,828	134,360	248,644	76,469	98,963	188,366
BiH	2.5	1.9	2.1	915,259	866,922	858,583	626,105	642,963	682,942
Macedonia	3.4	3.7	3.4	273,735	277,668	495,317	369,069	309,926	566,711
Moldavia	2.6	2.2	1.2	6,180	7,504	15,236	1,154	1,573	3,054
Montenegro	3.0	2.8	2.5	384,071	367,268	687,091	109,117	123,718	185,771
Serbia	3.4	3.6	2.1	581,732	521,494	754,958	1,193,092	1,233,786	2,397,243
Kosovo	2.5	2.7	1.4	370,520	352,855	676,233	48,841	51,591	104,514
Total CEFTA2006	2.97	2.9	2.4	2,695,325	2,528,071	3,736,062	2,423,847	2,462,519	4,128,601

Source: http://192.232.255.119/~cefta/sites/default/files/Cefta_trade_statistics_1HY2014-low.pdf, http://www.cefta.int/sites/default/files/Cefta_trade_statistics_1H-2013-2k.pdf, http://www.cefta.int/sites/default/files/Cefta_trade_1h2012.pdf accessed: 15 December 2015

In order to confirm the postulated hypothesis, Spearman's correlation coefficient is used, calculated by the following formula:

$$r_s = 1 - 6 * \frac{\sum_{i=1}^n d_i^2}{n^3 - n}$$

whereby:

$d_i = r_x - r_y$, where d_i – the difference between the dependent and independent variables, r_x – the rank of variable x (the dependent variable), r_y – the rank of variable y (the independent variable), n is the number of variables, r_s – rank correlation. The correlation coefficient can take the values $-1 \leq r_s \leq 1$, when $r_s < 0$ there is a negative correlation (increase in the variable x decreases the variable y), $r_s > 0$ there is a positive correlation (increase in the variable x increases the variable y), the closer

r_s is to -1 or 1 there is a perfect negative or perfect positive correlation, respectively.

Since the calculation of this coefficient requires the ranking of the dependent and independent variables, the following part shows the ranks for ABT, TBT, and SPS (labeled as R_A , R_T and R_S respectively); import (R_I); export (R_E); competitiveness (R_C), while d_i marks the differences between the variables.

The comparison of the ratio of import and administrative, technical, sanitary, and phytosanitary barriers for three observed years (2012, 2013, and 2014) may bring the conclusions about their mutual relation for the observed period, which leads to the general conclusion on their correlation.

Table 3. The ranking of import and administrative, technical, sanitary, and phytosanitary barriers (2012, 2013 and 2014)

	R_{I1}	R_{I2}	R_{I3}	R_A	R_T	R_S	$d_i(IA)$	$d_i(IT)$	$d_i(IS)$	$d_i(IA)^2$	$d_i(IT)^2$	$d_i(IS)^2$
Albania	6	6	6	5	3	3	1	3	3	1	9	9
BiH	1	1	1	6	7	4	-5	-6	-3	25	36	9
Macedonia	5	5	5	1	1	1	4	4	4	16	16	16
Moldavia	7	7	7	4	6	7	3	1	0	9	1	0
Montenegro	3	3	3	3	4	2	0	-1	1	0	1	1
Serbia	2	2	2	2	2	5	0	0	-3	0	0	9
Kosovo	4	4	4	7	5	6	-3	-1	-2	9	1	4
TOTAL:										60	64	48

R_{I1} – the rank of import for 2012, R_{I2} – the rank of import for 2013, R_{I3} – the rank of import for 2014

Source: Authors' calculations

Table 3 shows that the ranks of import for all the three observed years remained the same (unchanged), which is why their correlation coefficients are equal. This is why the correlation coefficients are calculated for one year and those for the remaining two years shall remain the same.

After including the obtained data in the above given formula for calculating the correlation coefficient, we obtain the following:

The correlation coefficient between ABT and import: $r_s = -0.071$

The correlation coefficient between TBT and import: $r_s = -0.14$

The correlation coefficient between SPS and import: $r_s = 0.14$

Since the obtained correlation coefficients for administrative and technical barriers are negative, it means that there is a negative correlation between the observed variables. In other words, increase in administrative and technical barriers in mutual trade affects the decrease of BiH import. Sanitary and phytosanitary barriers, sometimes regarded as a part of administrative barriers, have a positive correlation with import.

The situation for export is somewhat different. When a country exports some product into other countries within CEFTA

2016, its total export into other CEFTA countries needs to be compared to the total non-tariff barriers existing in those countries.

The following two tables show the data for the observed period.

Table 4. The ranking of export and administrative, technical, sanitary, and phytosanitary barriers (2012 and 2013)

	R_{E1}	R_{E2}	R_A	R_T	R_S	$d_i(EA)$	$d_i(ET)$	$d_i(ES)$	$d_i(IE)^2$	$d_i(ET)^2$	$d_i(ES)^2$
Albania	5	5	1	5	3	4	0	2	16	0	4
BiH	2	2	2	1	4	0	1	-2	0	1	4
Macedonia	3	3	6	7	7	-3	-4	-4	9	16	16
Moldavia	7	7	4	2	1	3	5	6	9	25	36
Montenegro	4	4	5	4	6	-1	0	-2	1	0	4
Serbia	1	1	7	6	5	-6	-5	-4	36	25	16
Kosovo	6	6	3	3	2	3	3	4	9	9	16
TOTAL:									80	76	96

R_{E1} - the rank of export for 2012, R_{E2} - the rank of export for 2013

Source: Authors' calculations

Table 5. The ranking of export and administrative, technical, sanitary, and phytosanitary barriers (2014)

	R_E	R_A	R_T	R_S	$d_i(EA)$	$d_i(ET)$	$d_i(ES)$	$d_i(EA)^2$	$d_i(ET)^2$	$d_i(ES)^2$
Albania	4	1	5	3	3	-1	1	9	1	1
BiH	2	2	1	4	0	1	-2	0	1	4
Macedonia	3	6	7	7	-3	-4	-4	9	16	16
Moldavia	7	4	2	1	3	5	6	9	25	36
Montenegro	5	5	4	6	0	1	-1	0	1	1
Serbia	1	7	6	5	-6	-5	-4	36	25	16
Kosovo	6	3	3	2	3	3	4	9	9	16
TOTAL:								72	78	90

Source: Authors' calculations

As in the previous case, after including the obtained data in the above given formula for calculating the correlation coefficient, we obtain the following values for the years 2012 and 2013 (since the ranks of export in that period were identical):

The correlation coefficient between ABT and export: $r_s = -0.43$

The correlation coefficient between TBT and export: $r_s = -0.36$

The correlation coefficient between SPS and export: $r_s = -0.71$

The correlation coefficients for the year 2014 have the following values:

The correlation coefficient between ABT and export: $r_s = -0.26$

The correlation coefficient between TBT and export: $r_s = -0.39$

The correlation coefficient between SPS and export: $r_s = -0.61$

According to the calculated coefficients for the entire observed period there is a negative correlation between the observed variables, which confirms the second supporting hypothesis that administrative, technical, sanitary, and phytosanitary barriers affect export in such a way that the increase in these barriers leads to the decrease of BiH export. Sanitary and phytosanitary barriers affect the export of goods and services most since the obtained values of their correlation coefficients are the highest.

As the data are available for the import into the CEFTA 2006 members and for the export from the CEFTA 2006 members, they can be used so as to show the situation with the introduction of counter barriers. The ranking of import and export gives the correlation coefficient with the value of $r_s = 0.32$, which

indicates the existence of a positive correlation between the variables. This confirms the hypothesis that the enforcement of administrative, technical, sanitary, and phytosanitary barriers by one country affects the introduction of counter-barriers by another country.

Table 6. The ranking of import and export by the CEFTA 2006 members

	RI	RE	$d_i(\text{IE})$	$d_i(\text{IE})^2$
Albania	6	4	2	4
BiH	1	2	-1	1
Macedonia	5	3	2	4
Moldavia	7	7	0	0
Montenegro	3	5	-2	4
Serbia	2	1	1	1
Kosovo	4	6	-2	4
TOTAL:				18

Source: Authors' calculation

By confirming the supporting hypotheses, we confirmed the main research hypothesis that administrative, technical, sanitary, and phytosanitary barriers indeed affect international trade flows.

5. CONCLUSION AND RECOMMENDATIONS

One of the basic goals of BiH is to increase its share in international trade. To achieve this, the state, among other things, signs bilateral or regional trade agreements, which include considerable trade liberalization. One of the most important agreements is certainly CEFTA 2006, whose signing made BiH a member of the free trade zone. However, even though the trade within CEFTA 2006 increased due to the lifting of tariffs, the existence of non-tariff barriers makes intra-regional trade rather complex and limited. When it comes to export, the exporting countries face complicated procedures at border crossings such as red tape or inappropriate working hours of customs and inspection services. In addition, a serious problem is seen in obtaining certificates due to the fact that the country still lacks internationally acknowledged bodies for accreditation and certification. An insufficient

number of authorized institutions and laboratories as well as nonrecognition of quality certificates are still not recognized enough as the problems in the proper functioning of international trade. Domestic standards are not harmonized with international standards and each country has its own controls and equipment testing. Consequently, some goods happen to be tested and checked two times. Transport and other infrastructure are rather undeveloped, followed by complicated regimes of issuing permits. The increasing presence of smuggling as well as corruption additionally hinders international trade of BiH and other countries in the region. These are only some of the non-tariff barriers present on the market of BiH.

Based on the analysis of the data for non-tariff barriers (administrative, technical, sanitary, and phytosanitary) and for import and export, certain important conclusions were reached about their correlation. A significant correlation was identified between non-tariff barriers and BiH import/export within CEFTA and it was proved that the enforcement of non-tariff barriers indeed affects the import and export volume. The increase in administrative and technical barriers affects the reduction of import. Sanitary and

phytosanitary barriers mostly affect the export of goods and services since the obtained values of their correlation coefficients are the highest. Furthermore, the enforcement of administrative, technical, sanitary, and phytosanitary barriers by one country affects the introduction of counter-barriers by another country.

What the country needs to do in the following period is to pass and implement the law as specified by the EU, since that would solve the issue of both export into the EU but also to the CEFTA member states. As a trade agreement, CEFTA 2006 has a temporary character which enables the Balkan non-EU members facilitated and better economic cooperation with the final aim of joining the EU. However, the presence on the CEFTA market needs to be kept until the very moment of joining the EU, since trade among these countries is to remain until all the countries of the region become the members of the European Union.

REFERENCES

1. Arsić N., Ikonić D., *Spoljnotrgovinski režimi carina u međunarodnoj trgovini*, professional article, Škola biznisa, no. 2/2011, pp. 134-142, available at: <http://www.vps.ns.ac.rs/SB/2011/6.12.pdf>, accessed: 22 January 2016
2. Baldwin R. E., (1970), *Nontariff Distortions of International Trade*, Washington: Brookings Institution
3. Bjelić, P. (2004), *Necarinske barijere u međunarodnoj trgovini*, Beograd: Prometej.
4. Bjelić P., Dragutinović Mitrović R., Popović Petrović I, (2013), *Administrative barriers to trade as predominant nontariff barriers in the Western Balkans trade*, ICITI, available at: <http://sites.uom.ac.mu/wtochair/attachments/article/83/Predrag%20Bjelic%20-%20ADMINISTRATIVE%20BARRIERS%20TO%20TRADE%20AS%20PREDOMINANT%20NON-TARIFF.pdf> accessed: 18 December 2015
5. CEFTA issues paper 4 (2012), *Elimination of Non-Tariff Barriers in CEFTA*, OECD, CEFTA, available at: <http://www.oecd.org/globalrelations/CEFTA%20Issues%20Paper%204%20Elimination%20of%20NTBs%20in%20CEFTA.pdf>, accessed: 10 October 2015
6. Handjiski B., Šestović L., (2011), *Barriers to Trade in Services in the CEFTA Region*, World Bank study, Washington, available at: <http://siteresources.worldbank.org/ECAEXT/Resources/BarrierstoTradeinServicesintheCEFTARegion.pdf>, accessed: 14 November 2015
7. Jelisavac S., Zirojevic M., (2008), *Cooperation in the region of southeastern Europe within the framework of the CEFTA agreement*, Megatrend Review, vol.5 (1)
8. Karić D., (June, 2012), *Zapadni Balkan i euro integracije*, Socioeconomica – The Scientific Journal for Theory and Practice of Socio Economic Development, Vol. 1, N. 1, pp. 52 – 61. available at: <file:///C:/Users/063%20045510%20servis/Downloads/CEEOL%20Article.PDF> accessed: 18 December 2015
9. Kurtović S., Šiljković B., Dasić B., (December 2013), *The effect of non-tariff barriers on trading flows of Bosnia and Herzegovina within CEFTA 2006*, CEA Journal of Economics, Volume 8, Issue 2, pp. 5-22, available at: <http://www.cea.org.mk/documents/journal/CEA%20Journal%208-2.pdf> accessed: 18 December 2015
10. Mojsoska-Blazevski, N., Petreski, M., (2010), *Western Balkan's trade with the EU and CEFTA 2006: Evidence from Macedonian data*, MPRA Paper No. 41942, University American College, Skopje, available at: https://mpra.ub.uni-muenchen.de/41942/1/MPRA_paper_41942.pdf, accessed: 28 December 2015
11. Mostetsching, A. M., (2011), *CEFTA and The European Single Market: an appropriate preparatory exercise?*, Thesis of the degree of Master of Arts in European Interdisciplinary Studies, College of Europe Natolin Campus
12. Perčo A., (12.05.2014.), *CEFTA: Necarinske barijere ograničavaju izvoz bh. kompanija*, Novo vrijeme news portal, available at: <http://novovrijeme.ba/cefta-necarinske-barijere-ogranicavaju-izvoz-bh-kompanija/> accessed: 18 December 2015
13. Popović-Petrović I., (2012.), *Administrativne barijere i izgradnja institucionalnog kapaciteta u međunarodnoj trgovini*, (Doctoral dissertation), University of Belgrade, Faculty of Economics, available at: <https://fedorabg.bg.ac.rs/fedora/get/o:6271/bdef:Content/get>, accessed: 12 December 2015

14. World Bank, (2014), *Doing Business 2015: Going Beyond Efficiency*, Washington, DC: World Bank, available at: <http://www.doingbusiness.org/~media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB15-Full-Report.pdf>, accessed: 21 December 2015

Internet web sites:

1. http://komorabih.ba/wp-content/uploads/2013/05/cefta_eu_efta_2014_bih.pdf, accessed: 21 December 2015
2. <https://i-tip.wto.org/goods/Forms/MemberView.aspx?mode=modify&action=search>, accessed: 15 December 2015
3. <http://wits.worldbank.org/CountryProfile/en/Country/BIH/StartYear/2010/EndYear/2014/TradeFlow/Import/indicator/TRF-NMBR-AGGRMNT>, accessed: 2 October 2015
4. <http://www.cefta2006.com/>, accessed: 14 November 2015
5. <http://www.fzs.ba/>, accessed: 20 December 2015
6. http://192.232.255.119/~cefta/sites/default/files/Cefta_trade_statistics_1HY2014-low.pdf, accessed: 15 December 2015
7. http://www.cefta.int/sites/default/files/Cefta_trade_statistics_1H-2013-2k.pdf, accessed: 15 December 2015
8. http://www.cefta.int/sites/default/files/Cefta_trade_1h2012.pdf, accessed: 15 December 2015

¹ Approximately one third of regional trade agreements currently in force is related to the developing countries