FOREIGN-TRADE EXCHANGE OF BOSNIA AND HERZEGOVINA WITH FISHING PRODUCTS

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SPOLJNOTRGOVINSKA RAZMJENA BOSNE I HERCEGOVINE PROIZVODIMA RIBARSTVA

Apstrakt

Ovim radom je obuhvaćena spoljnotrgovinska razmjena Bosne i Hercegovine (BiH) proizvodima ribarstva za petogodišnji vremenski period (2010-2014). Cilj ovog rada je sagledavanje trgovinske razmjene proizvodima ribarstva (CT 0301-0307) BiH, te najčešćih destinacija u pogledu izvoza i uvoza. Rezultati istraživanja pokazuju da vrijednosti uvoza nadmašuju vrijednosti izvoza čime BiH u okviru glave 3 harmonizovanog sistema carinske tarife bilježi deficit u spoljnotrgovinskoj razmjeni. Analizirajući strukturu navedene glave pojedine carinske tarife i pored toga imaju pozitivne bilanse, ali nedovoljne za pokrivanje ukupnog deficita u okviru ribe i ljuskari, mekušci i ostali vodeni beskičmenjacima. BiH izvozi proizvode ribarstva uglavnom regionalnim partnerima u Srbiju i Hrvatsku, dok je uvoz najvećim dijelom iz zemalja EU.

Ključne riječi: izvoz, uvoz, trend kretanja, destinacija
Keywords: export, import, trend, destination

INTRODUCTION

Fish is highly valued food and it is in demand on the market. It has a major significance in the nutrition of people and its consumption has been increased since 1995 when the world began to realize its nutritional value (Baltić et al. 2009). Fishing, with its full economic, tech-

nological, social and other segments can be a significant factor in the common development of local (B&H) food production (Pavličević, 2004). B&H represents a small consumer portion, but that should not be an obstacle to the appearance of many countries with rich offer of fish and fish products in it. B&H has a significant hydro-potential, about 10.000 km of running watercourses, 400 ha of natural lakes, 18.207 ha of water accumulations, 3.300 ha of carp ponds and 10 ha of trout ponds. The length of sea coast is 24 km, and the sea surface covers 1.400 ha (Pavličević et al. 2011, 2014). The aim of this work is to observe trade exchange of the fishing products (CT 0301-0307) of B&H and the most common destinations concerning the export and import.

MATERIALS AND METHODS

For the purposes of this work a research has been conducted by the collection of secondary data from the Indirect Taxation Authority of B&H. This research refers to the five years period (2010-2014). It analyses the structure of export and import of fish, crustaceans and molluscs, as well as the most important destinations of export and import. Considering the type of used data, the method "*desk research*" has been applied. For the tracking of total import and export values a method of trends has been used. The selection of the best adapted trend line has been made on the basis of the value of standard error of the trend. The descriptive statistics for the analysis of the observed phenomena has been applied and the stability of the import and export has been observed through the variation coefficient (C_V). The intensity of the increase or decrease has been analysed with the usage of annual average increase rate. According to the harmonized customs tariff system (CT 01-24) of B&H, the article three „fish and crustaceans, molluscs and other water invertebrates" except from the customs tariff 0308 ("water invertebrates except from the crustaceans and mollusc") has been analysed for the purposes of this work.

RESULTS AND DISCUSSION

Export of the fishing products

During the analysed period B&H has achieved an average value from the export of fishing products (CT 0301-0307) of 17 million BAM. The intensity of the trend of the observed phenomena is best represented by the parabolic trend $\hat{y}_t = 17829.5429 + 495.8*x - 64.5714*x**2$, whereas the deviation of actual value from the trend line is Sy = 978.6421. The export of the fishing products from B&H has a positive increase rate and during the observed period it has been increased on an average annual rate of 4.41%. During the period from 2010 to 2014 on the level of the article 3 its value was in a range from 15 to 18 million BAM (Table 1).

Table 1. Export of fishing products according to their type from 2010 to 2014 (value is shown in BAM)

CT	Product	Year				
		2010	2011	2012	2013	2014
0301	Live fish	3.642.993	3.660.903	3.421.449	2.688.444	1.932.595
0302	Fresh or cooled fish	5.504.268	6.084.916	6.833.853	6.034.263	6.081.952
0303	Frozen fish	1.723.068	1.461.285	928.132	982.877	721.022
0304	Fish fillets and other fish meat, fresh, cooled or frozen	290.425	53.937	145.539	26.864	19.208
0305	Dried fish, salted or in brine, smoked fish	3.570.426	2.947.745	1.196.359	1.516.009	677.482
0306	Live, frozen or dried crustaceans	245.354	5.275	10.508	94.700	21.105
0307	Live, fresh, frozen, dried molluscs	918.435	4.780.903	4.224.382	6.617.459	9.437.614
	TOTAL	15.894.968	18.994.963	16.760.222	17.960.616	18.890.979

From the analysis of the structure within the article 3 it is evident that B&H has achieved the highest average value of export in terms of customs tariff 0302 with around 6 million BAM. Except from this customs tariff, others had negative trend rates for the observed period. It is interesting that the most intensive increase was registered with CT 0307, that is, with products that are produced in very small amounts in B&H. According to the data of Pavličević et al. (2014), the production of molluscs in B&H is limited to small amounts and its total is around 70 tons pro year.

Table 2. Export of fish, crustaceans and molluscs from B&H (2010 - 2014)

Customs tariff	**Average (000 BAM)**	**Variation interval**		**C_V (%)**	**Variation rate (%)**
		min	**max**		
0301	3.069.2	1.933	3.661	24.38	-14.65
0302	6.107.8	5.504	6.834	7.76	2.53
0303	1.163.2	721	1.723	35.59	-19.57
0304	107.2	19	290	106.44	-49.41
0305	1.981.4	677	3.570	61.78	-34.01
0306	75.4	5	245	134.84	-45.89
0307	5.195.8	918	9.437	60.42	79.06

1 € = 1.955830 KM (BAM), Central Bank of Bosnia and Herzegovina on April 28th 2010.

The most intensive decrease of the export from B&H has been registered for the group of products 0304. The export of this group of products has been almost halved, that is, it is decreased for 49%. In the export structure of article 3 the tariff 0302 is dominant with the proportion of 35%.

B&H mostly exports to Serbia and Croatia, and a bit different situation is with the export of „live, fresh, frozen, dried molluscs" which is directed to the countries of EU.

Import of fishing products

During the period 2010-2014 B&H registered higher values of import over export for the observed customs tariffs. Similar to the export, parabolic trend curve best represents the empirical data ($\hat{y}_t$ = 26248.6 + 1247.3*x – 56.5*x*2) with deviation of actual value from the trend line being Sy = 894.1303. Import has increased during the given period on the average annual rate of 5.7%. Average import of fishing products amounted 26 million BAM, namely, its range was from 23 to 29 million BAM, with the C_V of 8.47%.

Table 3. Import of fishing products according to their type from 2010 to 2014 (shown in BAM)

CT	Product	Year				
		2010	2011	2012	2013	2014
0301	Live fish	580.613	870.775	1.785.475	2.215.279	1.975.622
0302	Fresh or cooled fish	2.301.381	2.481.724	1.308.197	1.603.411	1.250.166
0303	Frozen fish	8.990.561	8.970.373	10.249.897	8.991.608	9.493.482
0304	Fish fillets and other fish meat, fresh, cooled or frozen	4.659.424	5.131.761	6.223.730	5.040.249	5.085.860
0305	Dried fish, salted or in brine, smoked fish	471.128	360.677	778.472	409.746	587.501
0306	Live, frozen or dried crustaceans	1.592.089	1.490.974	1.684.350	1.487.847	2.482.577
0307	Live, fresh, frozen, dried molluscs	4.709.076	5.720.947	5.315.587	6.145.762	8.231.392
	TOTAL	23.304.272	25.027.231	27.345.707	25.893.903	2.9106.600

By observing the import structure (Table 4), the greatest value was recorded in terms of customs tariff 0303 (9.3 mill. BAM). The increase of this group of products in terms of the article 3 is very modest and it amounts 1.4%. This is affirmed by the C_V which indicates a pretty stable import trends for this product (5.94%). The most intensive variation rate (35.8%) has been marked with CT 0301 despite the fact that the value of this article in relation to the other customs tariffs is the smallest and it amounts in average of 1.4 million BAM. Negative rate in the increase (-14.2%) of the import was only registered with CT 0302.

Table 4. Import of fish, crustaceans and molluscs to B&H (2010 - 2014)

Customs tariff	Average (000 BAM)	Variation interval		C_V (%)	Variation rate (%)
		min	max		
0301	1.485.6	581	2.215	48.30	35.80
0302	1.788.8	1.250	2.482	31.86	-14.15
0303	9.339.2	8.970	10.250	5.94	1.37
0304	5.228.2	4.659	6.224	11.24	2.22
0305	521.5	361	778	31.98	5.70
0306	1.747.6	1.488	2.483	23.98	11.75
0307	6.024.6	4.709	8.231	22.28	14.98

The most stable import is the one of products from CT 0303 and 0304 with C_V from 5.94% and 11.24%. In the structure of B&H import the most common proportion during the five years period is in average connected to CT 0303 with 35.7%.

Observation of destinations from which the fishing products have been imported to B&H indicates that the destinations from region are not as represented as in export. Dominant place in the countries of region takes Croatia, concerning the import for CT 0301 and 0302. Its proportion when it comes to these two groups is 58% and 70% and this is also supported by the quotes of Knjaza (2007) that Croatia has a positive trend in terms of export of freshwater fish to the countries of EU and Macedonia, B&H, Serbia and Montenegro.

Balance of foreign trade with fishing products (CT 0301-0307)

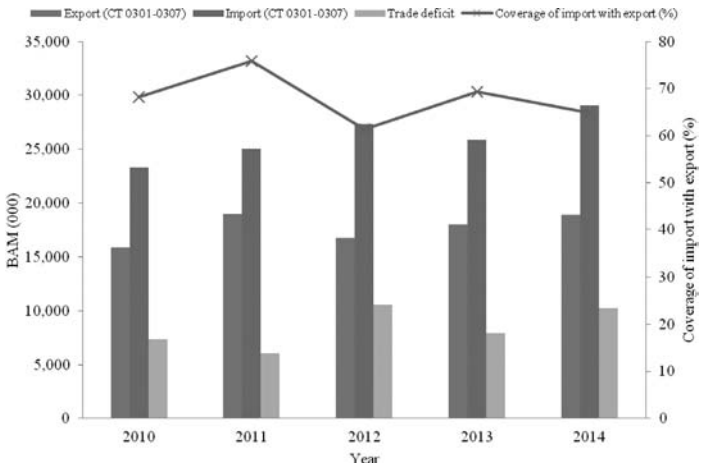

Chart 1. Balance of total foreign exchange of fish, crustaceans and molluscs

B&H has accomplished a negative balance from foreign trade during the analysed period in terms of the article 3. Average deficit for the period 2010-2014 amounted around 8 million BAM. It can be concluded that both the trend of export (Cv_E=7.63%) and import Cv_I= 8.47%) were stable, when observed on the whole level. Export and import have positive average increase rate pro year, but the variation rate of the import (5.72) is more intensive in relation to that of export (4.41). This data explains the deficit due to the fact that the import of fish and crustaceans, molluscs and other water invertebrates to B&H is more intensive than the export (Chart 1).

According to the shown data, B&H had a constant deficit during the observed period in terms of foreign exchange with the fishing products (CT 0301-0307). The increase of deficit in 2014 in relation to 2013 for almost 30% is worrying. This sector has a high level of coverage of imports by exports considering the situation of B&H in frames of agro-industry sector, which shows the more significant deficit according to the results of Ostojić et al. (2010). Vlahović et al. (2011) believe that the exchange deficit could be eliminated also by the improvement of the products quality, by applying the marketing concept and by improvement of technical-technological production, what can affect the price competitiveness of agricultural and food products. The level of coverage of imports with exports was averagely 68%, and maximal value of 75% was realized in 2011 (Chart 2).

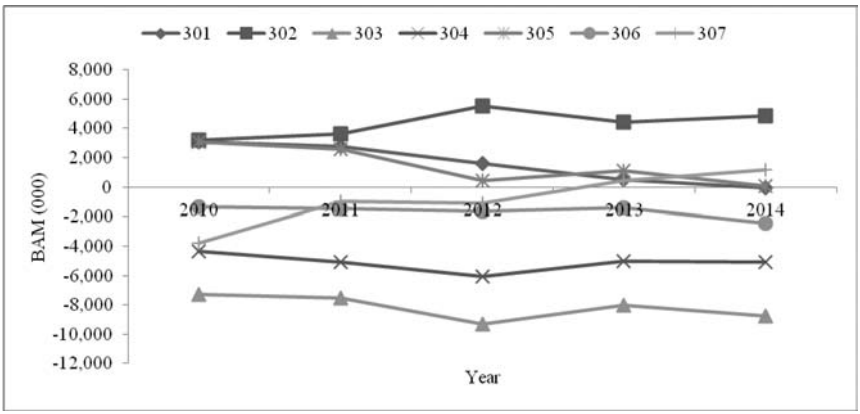

Chart 2. Balance of foreign trade exchange according to CT (0301-0307)

During the whole period CT 0302 have positive balance and the average surplus was around 1.5 mill BAM. Also, the CT 0305 indicates a positive exchange trend with a tendency of constant decrease and if that continues it will most likely have a negative trend in the following period. It can be generally observed that CT 0301 had a tendency of decrease and a negative trend in the last year of the observed period, CT 0302 had a positive trend, CT 0303, 0304 and 0306 indicate a permanent deficit with increase tendency and CT 0307 had a negative balance until 2012, which became positive since 2013 with an increase tendency of export in relation to the import. This is considered interesting due to the fact that this production is on a very modest level in B&H.

CONCLUSION

Generally, it can be concluded that B&H had a more intensive import of fishing products than export during the observed period for CT 0301-0307.The value of import increases on a higher average annual level than the value of export. Analysis of the observed time period, on the basis of standard errors established that the parabolic trend expresses the long-term development tendency in trends of export and import in general ("fish and crustaceans, molluscs and other water invertebrates"). In the total export structure the highest proportion take products from the group "fresh and cooled fish", whereas in the import the group „frozen fish". Certain customs tariffs from the article 3 of the harmonised system also indicate surplus in the foreign exchange, mostly the products from the group "fresh and cooled fish"; however this is not enough to compensate the decrease trends of exports in relation to the imports for other groups of products. We can determine a high level of coverage of imports with exports for the fishing products (average 68%) in relation to other agro-industry products. B&H exports most of its products to the countries in region, mostly to Serbia and Croatia, whereas the proportion of the import from the countries of region is negligible. The existing trade exchange deficit should be decreased through the improvement of the quality of export products, through the improvement of technical-technological production and marketing.

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