

COMPARATIVE ADVANTAGE OF THE MACEDONIAN EXPORT IN THE CROATIAN MARKET

ISSN 1857-9973

339.564(497.7):339.13(497.5)

Emilija Miteva-Kacarski¹

¹*University Goce Delcev Stip, Faculty of Economics, emilija.miteva@ugd.edu.mk*

Abstract

Croatia is an important foreign trading partner of Macedonia, and over the past period, it has been continuously placed on the list of the first fifteen countries with which our country has achieved the highest volume of trade. Because of this, in this paper, it has been made an analysis of the value, dynamics and structure of the foreign trade between the Republic of Macedonia and the Republic of Croatia for the time period of 2006-2013. It has also been analyzed the competitiveness of Macedonian products at the Croatian market in order to determine the product categories with a comparative advantage by using the Balassa Index. The results of the analysis point to the fact that according to the Standard International Trade Classification, the Republic of Macedonia has a comparative advantage in the export of most of the product categories, out of which there have been particularly highlighted the food products, beverages, and tobacco as well as the manufactured goods classified mainly by material.

Key words: Republic of Macedonia, Republic of Croatia, foreign trade exchange, comparative advantage, Balassa Index.

1. Introduction

The Croatian and the Macedonian markets are complementary, and there is cooperation between them and a margin for deepening it. The movement of Croatia towards the European Union i.e. its membership since 2013 represents a challenge for Macedonia too. This is so, first, due to the increase in the number of countries that will support Macedonia in achieving the Euro-Atlantic integrative goals. Second, it means that we will have one more member of our region in the European family, expecting that it will be a powerful supporter – defender of the Union's enlargement in general terms because it presents an interest of Croatia as a result of the close political and economic relations with the other countries of the region, especially with Macedonia. Third, namely, it means that Macedonia has one more member of the Union which places at her disposal not only the experiences of the accessible process, but also the experiences that are significant for drawing in resources from the EU funds.

The good political relations are a basis on which there have to be upgraded the economic ones, and there are conditions under which that can be realized in reality. The Republic of Macedonia has an advantage in the trade exchange because of the reason that there has been achieved a surplus in Macedonian favor, with the exception of 2012 and 2013 when the trade exchange between these two countries was reduced as a result of the Croatia's reconstruction for joining the European Union and getting out of CEFTA. A favorable balance in the trade exchange with Croatia has been achieved mainly through the metallurgy cooperating with the Croatian shipyard. Since 1st July 2013, when Croatia became a member of the EU and thus the 28th member state of the European family, the economic and trade cooperation has continued to be used in accordance with the Stabilization and Association Agreement between the Republic of Macedonia and the EU. The level of liberalization achieved as a result of the trade with the EU member states applies to Croatia as well.

There are not predicted any changes in the section of the industrial sector given the same level of liberalization (a complete liberalization) with the EU and Croatia in accordance with the CEFTA – Agreement (an agreement for free trade between the countries of the region). This means that there have not been any customs payments in the total trade between the country and the EU since 1st January 2011 and between Macedonia and Croatia since 2004. Considering the higher level of liberalization within the agricultural sector that Macedonia owns due to the Stabilization and Association Agreement between this country and the EU, and given the CEFTA-Agreement, the Macedonian export of lamb meat, cheese, tomatoes, cucumbers, gherkins, peppers, watermelons, apples, edible sunflower oil, processed meat, canned vegetables, cigarettes and tobacco in Croatia, which has been limited with non-tariff quotas up

till now, functions freely and with no quotas. However, these products have taken part of 40% in the total export of agricultural products in Croatia. On the other hand, the level of liberalization for importing agricultural products from the EU into Macedonia is 62%. In terms of the other 38%, Macedonia applies full customs duties, reduced customs duties or quotas without customs duties. Nowadays, Croatia presents a part of this 38%, and it is in a more unfavorable condition in relation to the liberalization that it has been applying to Macedonia within the framework of CEFTA. It has been applied a determined customs duty in terms of the most delicate agricultural products (yellow cheese, cheese, pork meat, milk, butter and other) up till the entrance of Macedonia in the EU.

2. Trade exchange between the Republic of Macedonia and the Republic of Croatia

By developing the countries' domestic markets, it has been made a contribution to strengthening, promotion and further development of the economic cooperation and bilateral relations. The trade exchange between the Republic of Macedonia and the Republic of Croatia in the time period of 2006-2013 is shown in table 1.

Table 1 Trade exchange between the Republic of Macedonia and the Republic of Croatia in the time period of 2006-2013 (in thousands of dollars)

	2006	2007	2008	2009	2010	2011	2012	2013
Export	124707	165129	230488	152739	123729	139622	98502	100415
Import	79 030	110846	137769	118396	113286	133163	120960	115103
Total	203737	275975	368257	271135	237015	272785	219462	215518
Trade Surpluse/Deficit	45677	54283	92719	34343	10443	6459	-22458	-14688
Import/Export ratio	157.79	148.97	167.30	129.00	109.21	104.85	81.43	87.23

The parameters shown in table 1 point to the fact that the Republic of Macedonia realized a surplus in the trade exchange with the Republic of Croatia in the period of 2006-2011. The largest scope of trade exchange realized within the analyzed period amounted to 368 million US dollars in 2008 [6]. The values of products exported from the Republic of Macedonia to the Republic of Croatia in the time period of 2006-2013 are shown in table 2.

Table 2 Structure of the export of products from the Republic of Macedonia to the Republic of Croatia (2006-2013) in thousands of dollars

Product	2006	2007	2008	2009	2010	2011	2012	2013
0-Food products	15 263	21 338	24 749	25 502	26 256	27 678	27 915	31 806
1-Beverages and tobacco	12 879	13 951	17 357	14 678	13 996	13 513	13 715	17 943
2-Crude materials, except fuels	1 082	1 224	1 039	1 366	1 948	2 685	2 232	1 718

3-Mineral fuels, lubricants and related materials	23	28	139	159	67	117	122	238
4-Animal and vegetable oils and fats	173	39	96	0	0	0	0	0
5-Chemicals and related products	8 643	10 947	9 473	9 073	9 878	12 275	12 322	12 421
6-Manufactured goods classified mainly by material	69 950	99 107	153 696	86 370	57 835	70 599	30 898	26 658
7-Machinery and transport equipment	8 150	8 787	11 932	6 538	5 220	5 217	4 730	2 850
8-Miscellaneous manufactured articles	8 544	9 695	12 000	9 044	8 528	7 536	6 528	6 721
9-Special transactions and commodities not classified according to kind	0	13	9	8	2	3	41	59
Total	124 707	165 129	230 488	152 739	123 729	139 622	98 502	100 415

More important products comprising the export from Macedonia to Croatia are the following ones: hot and cold rolled products made of iron and welded tubes, products of food processing industry, alcoholic and non-alcoholic beverages, retail of medicines and cosmetic preparations as well as finished textile products. According to the SITC, the export of product categories from the Republic of Macedonia to the Republic of Croatia is shown in percentage terms in table 3:

Table 3 Structure of the export of products from RM to RC (2006-2013) in percentage

Product	2006	2007	2008	2009	2010	2011	2012	2013
0- Food products	12.239	12.922	10.737	16.696	21.220	19.823	28.339	31.674
1- Beverages and tobacco	10.327	8.448	7.530	9.609	11.311	9.678	13.923	17.868
2- Crude materials, except fuels	0.867	0.741	0.450	0.894	1.574	1.923	2.265	1.710
3- Mineral fuels, lubricants and related materials	0.018	0.016	0.060	0.104	0.054	0.083	0.123	0.237
4- Animal and vegetable oils and fats	0.138	0.023	0.041	0	0	0	0	0
5- Chemicals and related products	6.930	6.629	4.109	5.940	7.983	8.791	12.509	12.369
6- Manufactured goods classified mainly by material	56.091	60.017	66.682	56.547	46.746	50.564	31.367	26.547
7- Machinery and transport equipment	6.539	5.321	5.176	4.280	4.218	3.736	4.801	2.838

8- Miscellaneous manufactured articles	6.851	5.871	5.206	5.925	6.892	5.397	6.627	6.693
9- Special transactions and commodities not classified according to kind	0	0.012	0.009	0.005	0.002	0.005	0.046	0.064
Total	100							

By analyzing the structure of export of products from the Republic of Macedonia to the Republic of Croatia, it can be stated that according to the Standard International Trade Classification, dominant product categories in the different time periods are the following ones: food products, beverages and tobacco, chemicals and related products as well as manufactured goods classified mainly by material. The percentile share of food products increased from 12.23% in 2006 to 31.67% in 2013 [4] [11]. The increased export of food from the Republic of Macedonia, above all, is due to the growth in production as a result of state assistance in the agricultural sector. On the one hand, more modern agricultural methods are applied to the existing areas, new cultures are cultivated, and the products have a higher quality. On the other hand, the agricultural products have reached higher prices. The percentile share of beverages and tobacco increased from 10.32% in 2006 to 17.86% in 2013. According to the data of the State Statistical Office, tobacco continues to be a culture number one that has crossed the borders, both by quality and quantity [11]. The tapped and packed wine is second on the list being followed by the lamb meat. However, the largest foreign exchange inflow is realized by exporting fruit and vegetables. The nominal amount of products imported from the Republic of Croatia into the Republic of Macedonia is shown in table 4:

Table 4 Structure of the import of products from the Republic of Croatia into the Republic of Macedonia (2006-2013) in thousands of dollars

Product	2006	2007	2008	2009	2010	2011	2012	2013
0-Food products	21 821	32 032	36 623	34 702	36 209	41 249	44 691	33 569
1-Beverages and tobacco	2 935	4 087	5 258	5 296	6 018	7 405	7 265	7 922
2-Crude materials, except fuels	1 913	2 463	3 545	2 385	1 996	3 241	2 661	2 926
3-Mineral fuels, lubricants and related materials	1 155	1 171	2 094	4 138	1 200	2 881	1 669	2 071
4-Animal and vegetable oils and fats	222	436	1,479	261	492	294	333	177
5-Chemicals and related products	20 517	23 439	25 618	24 164	25 655	28 649	26 741	28 677

6-Manufactured goods classified mainly by material	18 157	23 421	29 161	24 256	20 129	21 981	19 069	17 305
7-Machinery and transport equipment	7 507	17 175	24 196	17 039	14 946	18 461	12 306	13 949
8-Miscellaneous manufactured articles	4 804	6 621	9 776	6 156	6 640	9 002	6 223	8 500
9-Special transactions and commodities not classified according to kind	0	2	18	0	0	0	1	6
Total	79 030	110 846	137 769	118 396	113 286	133 163	120 960	115 103

Dominant products comprising the structure of import from the Republic of Croatia are the following ones: consumables, alcoholic and non-alcoholic beverages, active washing and cleaning preparations, miscellaneous glass containers, medicines, ceramic tiles, etc. According to the SITC, the percentile share of product categories imported from the Republic of Croatia into the Republic of Macedonia is shown in table 5:

Table 5 Structure of the import of products from RC into RM (2006-2013) in percentage

Product	2006	2007	2008	2009	2010	2011	2012	2013
0- Food products	27.611	28.897	26.582	29.310	31.962	30.976	36.946	29.164
1- Beverages and tobacco	3.713	3.687	3.816	4.473	5.312	5.560	6.006	6.882
2- Crude materials, except fuels	2.420	2.222	2.573	2.014	1.716	2.433	2.199	2.542
3- Mineral fuels, lubricants and related materials	1.461	1.056	1.519	3.495	1.108	2.163	1.379	1.799
4- Animal and vegetable oils and fats	0.280	0.393	1.073	0.220	0.434	0.225	0.275	0.153
5- Chemicals and related products	25.961	21.145	18.594	20.409	22.646	21.514	22.107	24.914
6- Manufactured goods classified mainly by material	22.978	21.129	21.166	20.487	17.768	16.506	15.764	15.034
7- Machinery and transport equipment	9.498	15.494	17.569	14.393	13.193	13.863	10.173	12.118
8- Miscellaneous manufactured articles	6.078	5.973	7.095	5.199	5.861	6.760	5.144	7.384
9- Special transactions and commodities not classified according to kind	0	0.004	0.013	0	0	0	0.007	0.01
Total	100							

The percentile share of food products, chemicals and related products and manufactured goods classified mainly by material was the highest in the structure of import from the Republic of

Croatia into the Republic of Macedonia within the analyzed period. The percentile share in the import of food was the highest in 2012 (about 37% out of the structure of total import) [10]. Generally speaking, 2012 presents a year when was realized the largest import of food, and its value was estimated to be 530 million euros. The drought which stroke down the world including the Republic of Macedonia and caused a hard blow over the Macedonian agriculture is pointed out as one of the reasons for the increased import of food. The high percentile share of the category of chemicals and related products is also noticeable in the structure of total import. It amounted nearly 25% out of the total import from Croatia in 2013 [11].

3. Comparative advantage of the export from the Republic of Macedonia to the Republic of Croatia

The anticipation of international trade inflows presents one of the key issues in the economic theory. The classical trade theory is based on the anticipation that the international trade directions are determined out of the comparative advantage. According to this, the country which has a comparative advantage in the manufacturing of a certain product needs to export that product and to import those products in whose manufacturing it is less productive. Thus, preconditions for international trade are created. Despite the influence and usefulness of trade theories, the application of a theoretical concept of comparative advantage on empirical analyses deals with certain difficulties, especially when some efforts are made in order to measure the comparative advantage within the analysis of trade performances.

One of the first attempts to measure the comparative advantage is the index of comparative advantage created by Balassa Bela in 1965 which is most often used in the analysis of comparative advantages (also known as Balassa's Index BI) [1]. Although this index is quite often used for calculating the comparative advantages, it is also connected to a range of technical inconsistencies and problems, especially when comparing the obtained values. Because of that, there have been made numerous attempts at adjusting and transforming this index, and suggestions of alternative indices of measuring the comparative advantage (as for instance, Bowen, 1983, Ballance et al., 1987, Vollrath, 1991, Dalum et al., 1998, Proudman and Redding, 2000, Laursen, 2000, Yu et al., 2009, Laursen, 2015).

In this paper, by using the Standard International Trade Classification, the Balassa Index is calculated as a ratio between the share of a certain product in the state's export to another country and the share of that product in the country's total export i.e.:

$$BI = \frac{x_{ij}^k / X_{ij}}{x^k / X_j}$$

where

x_{ij}^k is an export of product k from the country i to the country j

X_{ij} - total export from the country i to the country j

x^k - total export of product k

X_i - total export from the country i

The results obtained out of the calculations made by using the Balassa Index are shown in table 6:

Table 6 Comparative advantage in the trade exchange between the Republic of Macedonia and the Republic of Croatia

Product	2006	2007	2008	2009	2010	2011	2012	2013
0-Food products	1,533	1,754	1,389	1,594	2,164	2,378	3,351	3,728
1-Beverages and tobacco	2,515	1,37	1,373	1,321	1,872	1,844	2,352	2,844
2-Crude materials, except fuels	0,387	0,148	0,066	0,139	0,203	0,299	0,343	0,264
3-Mineral fuels, lubricants and related materials	0,024	0,003	0,008	0,014	0,007	0,01	0,019	0,096
4-Animal and vegetable oils and fats	12,99	0,326	0,134	0	0	0	0	0
5-Chemicals and related products	17,71	1,693	0,906	0,934	0,701	0,527	0,737	0,635
6-Manufactured goods classified mainly by material	2,809	1,348	1,66	1,985	1,581	1,836	1,213	1,107
7-Machinery and transport equipment	3,673	1,193	1,108	0,756	0,711	0,473	0,483	0,213
8-Miscellaneous manufactured articles	0,301	0,249	0,233	0,215	0,322	0,289	0,341	0,349
9-Special transactions and commodities not classified according to kind	0	0,151	0,11	0,17	0,023	0,034	1,771	0,759

In the analyzed period of time, the comparative advantage of Macedonian export of the categories food products and beverages and tobacco is constantly present in the Croatian

market. The results of the analysis affirm the real state. Namely, the Republic of Macedonia produces both qualitative food and qualitative wine. The analysis of the trade with wine points out the following several countries as major destinations for export of Macedonian wine: Germany, the Czech Republic and Slovenia (as member states of EU), and Serbia, Croatia and Bosnia and Herzegovina (as former Yugoslavian markets), and the USA and Russia as other markets. Despite the fact that the biggest portion of Macedonian wine ends up in the EU markets, the former Yugoslavian markets remain to be a very important export destination because the export value of these markets is bigger due to the export of wine in bottles. The comparative advantage is also continuously present in the category of manufactured goods classified mainly by material as a result of the export of hot and cold rolled products made of iron and welded tubes. The category of machinery and transport equipment recorded a comparative advantage in the period of 2006-2008 whereas the category of chemicals and related products recorded a comparative advantage in 2006 and 2007.

4. Conclusion

Macedonia and Croatia need an improvement of their economic cooperation. Even though Croatia joined the European Union right after which the CEFTA Agreement ceased to be valid, what is necessary is the establishment of business contacts between companies with different economic activities, as well as not only an exchange of mutual information but also a common appearance at third markets. A key question is how to improve the production, domestic expenditure and export between the two countries. On the one hand, a legal framework has already been established by signing about 25 bilateral agreements. On the other hand, the conditions for production and the products are traditionally known and positioned, and relations have been established. According to the results of the analysis, the Republic of Macedonia has a comparative advantage in the export of the following product categories: food products, beverages and tobacco and manufactured goods classified mainly by material.

The decreased trade exchange between these two countries in 2013 was due to the reconstruction of Croatia for joining the EU and getting out of CEFTA. Right after the entrance of Croatia in the EU, the economic and trade cooperation continued to exist in accordance with the Stabilization and Association Agreement (SAA) between the Republic of Macedonia and EU. Croatia has no more privileges of the CEFTA Agreement. It has additional expenses for its products. The analyses of Macedonian institutions have shown that Croatian products will become more expensive for 10% on the average. The Austrian Erste Group has estimated that the departure of Croatia from CEFTA will decrease both the competitiveness and the export of their products in the whole region. The projections refer to the fact that Croatian companies would make some efforts to invest directly in Macedonia i.e. to set up companies in the Republic of Macedonia in order not to import any longer but to use the CEFTA advantages directly out from the Republic of Macedonia and to export in the Western Balkan countries.

References:

- 1 Balassa, B. Trade liberalization and revealed comparative advantage. The Manchester School of Economic and Social Studies, 1965, 33, 99-123.

- 2 Ballance, R. H., Forstner, H. & Murray, T. Consistency tests of alternative measures of comparative advantage. *Review of Economics & Statistics*, 1987, 69, 157-161.
- 3 Bowen, H. On the theoretical interpretation of indices of trade intensity and revealed comparative advantage. *Review of World Economics*, 1983, 119, 464-472.
- 4 State statistical office of the Republic of Macedonia. "Commodity international exchange of the Republic of Macedonia, 2006". Internet: <http://www.stat.gov.mk/Publikacii/7.4.8.01.pdf>
- 5 State statistical office of the Republic of Macedonia. "Commodity international exchange of the Republic of Macedonia, 2007". Internet: <http://www.stat.gov.mk/Publikacii/7.4.9.01.pdf>
- 6 State statistical office of the Republic of Macedonia. "Commodity international exchange of the Republic of Macedonia, 2008". Internet: <http://www.stat.gov.mk/Publikacii/7.4.10.01.pdf>
- 7 State statistical office of the Republic of Macedonia. "Commodity international exchange of the Republic of Macedonia, 2009". Internet: <http://www.stat.gov.mk/Publikacii/7.4.11.02.pdf>
- 8 State statistical office of the Republic of Macedonia. "Commodity international exchange of the Republic of Macedonia, 2010". Internet: <http://www.stat.gov.mk/Publikacii/7.4.12.02.pdf>
- 9 State statistical office of the Republic of Macedonia. "Commodity international exchange of the Republic of Macedonia, 2011". Internet: <http://www.stat.gov.mk/Publikacii/7.4.13.01.pdf>
- 10 State statistical office of the Republic of Macedonia. "Commodity international exchange of the Republic of Macedonia, 2012". Internet: <http://www.stat.gov.mk/Publikacii/7.4.14.01.pdf>
- 11 State statistical office of the Republic of Macedonia. "Commodity international exchange of the Republic of Macedonia, 2013". Internet: <http://www.stat.gov.mk/Publikacii/7.4.15.01.pdf>
- 12 Dalum, B., Laursen, K. & Villumsen, G. Structural change in OECD export specialisation patterns: de-specialisation and 'stickiness'. *International Review of Applied Economics*, 1998, 12, 423-443.