INFLUENCE OF FOREIGN TRADE WITH CEFTA AND EU ON GDP OF B&H

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Abstract: *The process of globalization shapes the international economic environment and affects all aspects of modern life. In today's world, no country functions in an economic isolation, but all are interconnected through the international movement of goods and services, production factors of labour and capital, international enterprises, technology, etc. thus creating great independence of national economies. Contrary to the globalization in terms of a single global market, there is the process of regional economic integration, which unites efforts to strengthen regional competitiveness. During the transition process, Bosnia and Herzegovina has opted for the EU integration. The step that is a part of that process is also CEFTA membership, as the EU authorities want to see the Western Balkans region in the "package". The paper analyses the foreign trade of Bosnia and Herzegovina with the EU and CEFTA through a regression analysis of the impact of the above mentioned exchange on the GDP of Bosnia and Herzegovina.*

INTRODUCTION

Dynamic changes in the international trade environment, especially emphasized at the end of the twentieth century by the strengthening of the process of globalization of the world economy, have brought many challenges in the contemporary theory of international trade. In conditions where international market interactions are increasingly less based on classical comparative advantages, respecting market imperfection and economy of scale become the dominant prerequisites of contemporary theoretical approach to the issues of international trade.

The fact is that there are many countries that have opened their markets, yet they have remained poor, but there are no examples of countries that have raised the standard of living, while at the same time they have remained less open to trade and capital. For this reason, "it is certain that the processes of globalization of the world economy will lead to further liberalization of trade, and that the ultimate goal is free world trade. But each country must find its place in the global trading system and determine the level of liberalization that enables economic growth while simultaneously engaging in the world economy.[16]

1. IMPORTANCE OF INTERNATIONAL TRADE FOR THE GLOBAL ECONOMY

International trade leads to economic development when the country's exports lead its economic growth. Export-led growth was a key instrument of industrial policy that enriched the great part of Asia and brought millions of people in those countries to far better lives than before. Famous

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economist Douglas A. Irwin[17] describes how imports in Chile in the 1970s resulted in an increase in the efficiency and competitiveness of domestic industries between 3 and 10 percent. It turned out that industries that were not exposed to imports did not increase productivity. Likewise, the benefits of external-oriented economic policy become apparent when comparing India and East Asia. From the 1960s to the 1980s, the East Asian nations adopted free trade, or external orientation, while India was turned inward to protect its industries. East Asia experienced a "miracle" of remarkable economic growth and wealth, while India stagnated during that period [18].

2. THEORETICAL DETERMINATIONS OF THE OPENNESS OF THE ECONOMY AND ECONOMIC DEVELOPMENT

The involvement of a certain national economy in the international flows of goods and capital is called the openness of the observed economy. The concept of openness is often used as a synonym for the level of liberalization of the conditions of foreign trade of a particular country, but the term is much broader than that. In this context, various indicators of openness have been created.

Previous empirical research has led to the conclusion that there is a positive and strong link between exports and economic growth and development.[19]

Researchers believe that such policies are a path to the process of poverty reduction in underdeveloped economies[20], and that the economies that are pushing for restrictive policies in international trade are lagging behind and facing a low standard and slow recovery and growth.[21] However, there is also a number of researchers who expressed a doubt about the

[17] Irwin gives several examples of how trade liberalization has improved the economies of developing countries. Between the early 1960s and 1999s, GDP per capita rose nine times in South Korea and tripled in Chile. Other studies have used mathematical models, so as to calculate that gain from trade liberalization amounts to between $ 254 billion and $ 2 trillion a year, about 43 percent of which fall on low-income countries (Goldstein, 2007, p. 37) Goldstein, N. (2007), Globalization and Free Trade, New York: Infobase Publising.

[18] However, although more liberalized trade has brought benefits, in some cases even spectacular advantages, critics suggest that Irwin limits its examples of success in the "second pillar" of developing countries that engage in free trade with some advantages, such as educated labor or even rudimentary infrastructure and institutions that incite the limited industrialization they have already gone through (Goldstein, p. 37).

[19] Balassa, B., Exports, policy choices, and economic growth in developing countries after the 1973 oil shock, Journal of Development Economics, Vol. 18 (23-35), 1985; Ram, R., Exports and Economic Growth: Some Additional Evidence, Economic Development and Cultural Change, Vol.33, 1985; Anwer, M, Samphat, M.K., Exports and Economic Growth, Western Agricultural Economics Association 1997; Ekanayake, E.M., Exports and Economic Growth in Asian Developing Countries: Cointegration and Error-Correction Models, Journal of economic development Volume 24, Number 2, 1999; Haddad, M., Shepherd, B., Export-led growth: Still a viable strategy after the crisis? World Bank, 2011

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consistency of the positive link of international trade and economic growth/development[22], mainly as a result of the lack of a conceptual definition of openness and its measurement[23]. In addition, a high ratio of openness to trade, i.e. high integration into the world economy implies a growing feeling of insecurity and vulnerability to external shocks[24]. Researches in the latest crisis suggest that highly open economies (small and transitional) are more exposed to external shocks[25].
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Kirmani et al.[26] constructed the index of total liberalization of the trading system by classifying customs systems according to the level of average nominal customs duties, with countries with a customs protection rate of up to 10% classified as open trading systems, countries with an average customs rate of 10-25% moderately open systems, and countries with a customs rate of over 25% as restrictive systems.

Cross-country regression analyses usually show a moderately positive relation of GDP per capita and trade openness, but the problem is, among other things, that the share of GDP exchange can be an endogenous variable and, accordingly, many other factors can condition the size of income. In a well-known study by Romer and Frankel[27], which proves that foreign trade has only a moderately significant and positive impact on growth, first isolation of the geographical characteristics of countries (distance) as the most important determinant of the total trade in the country is done (in order to determine the effect of foreign trade on income, the size of the country must be controlled across the distance)[28]. In the applied OLS (*ordinary least squares*, the least squares method) the regression model dependent variable is the logarithm of GDP per capita, while the independent variables are share of trade in GDP, the population logarithm and the country's surface logarithm. The survey covered 150 (or 98) countries and a statistically significant link was found between trade and GDP. Namely, the increase of the share of trade in GDP by 1% raises GDP per capita by 0.9%.

An analysis of the simultaneous statistical cross-section of Rruka[29], where the GDP growth per capita is dependent variable, while the explanatory initial level of GDP per capita, the number of phones per 1000 inhabitants, the lifetime (logarithm) shows that there is no significant link

[22] Rodriguez, F., Rodrik, D., Trade policy and economic growth: a skeptic's guide to the cross-national evidence, In NBER Macroeconomics Annual 2000, Volume 15(pp. 261-338). MIT Press, 2001; Baldwin,R.E., Openness and growth: What's the empirical relationship?. In Challenges to globalization: Analyzing the economics (pp. 499-526), University of Chicago Press, 2004; Rodrik, D., Subramanian, A., Trebbi, F., Institutions rule: the primacy of institutions over integration and geography in economic development, 2002; Rodrik, 2006; Rodriguez, 2006a; 2006b

[23] Baldwin, op.cit.

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[27] Romer D., Frankel, J., Does Trade Cause Growth? American Economic Review, Vol. 89, No 3, 379-399. 1999.

[28] This is justified by the fact that geographic characteristics do not depend on the income of the country or its economic potential, and that geographical characteristics have a positive impact on income only through the impact on trade. In the analysis of the exchange between 63 countries, the results are expected; the distance has a negative significance effect on bilateral trade. The trade between the countries " i " and " j " increases with the size " j " and its share of trade in GDP, and falls along with the size and surface of " j ". If the country does not have the sea, then trade drops by a third, while the common border "raises" the trade 2.2 times

[29] Rruka, D., Decoding the Effects of Trade Volume and Trade Policies on Economic Growth: A Cross-Country Investigation, International Trade, 2004

between the trade openness[30] and growth, when as the dependent variable is assumed GDP growth per capita in 2002.

Otherwise, this study of Rruke is practically based on Yanikkaya research[31], which covers the period 1970-97 and shows that commercial openness has a positive impact on economic growth, but that trade barriers have a positive effect on economic growth, which the author explains by the fact that customs can cause the reallocation of production resources to goods in which the country has comparative advantages and thereby positively influences growth[32].

Dowrick and Duc-Tho[33] does not doubt that the openness of the economy, even with the elements of protectionism, promotes growth. Thus, the research by this author points to the fact that the dynamic benefits of trade are indisputable, but there is a possibility that in many countries "immiserizing growth" occurs (growth with impoverishment), i.e. deterioration of the "exchange relationship" because trade liberalization stimulates growth in the world economy (stimulating international flows of knowledge and innovation and “allowing“ economies to specialize), but at the same time some economies can specialize in areas where low work qualifications are needed, or in slowly growing sectors[34].

Should small countries fully liberalize their trade with foreign countries? This is a question that in theory is largely no longer being posed. The advantages of integrating into the international trading system are such that autarchy is not a real alternative. Even famous Neo-Kejnsians, like Krugman, believe that free trade "*though not perfect, is rather good*," and that "*any attempt to get away from free trade will end up with more harm than good*.[35]"

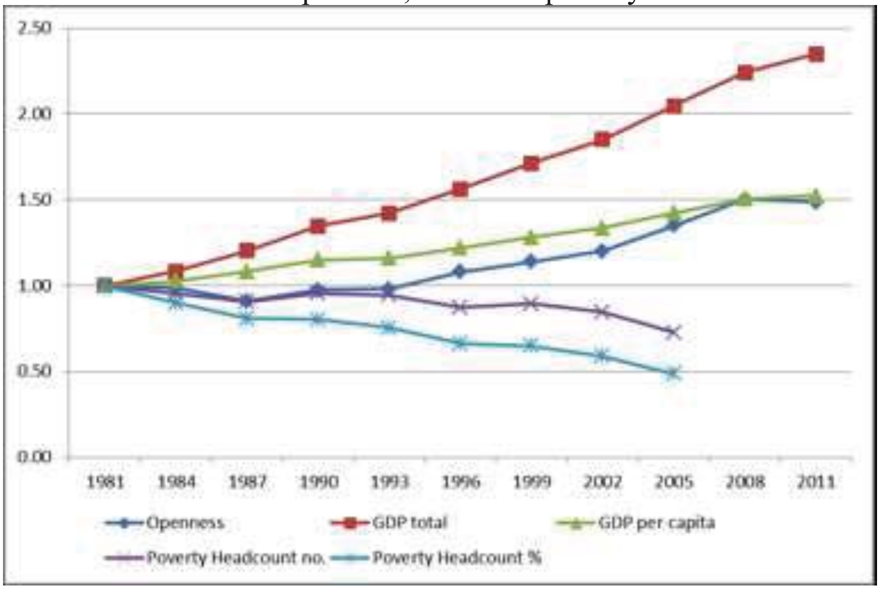
While there are at least occasional discussions about the advantages and disadvantages of free trade and free flows of capital for the big and developed countries, for small and underdeveloped countries, there are almost no such debates. Thus, the argument about the advantages of specialization of small countries is added the fact that there are many goods that most of these countries simply cannot produce, which includes a diverse group of products from high technology products to tropical fruits and vegetables, where non-importing of these products would lead to technological lags and fall in the living standard of citizens. In addition to these two "classic" arguments for the benefit of free trade, there is also a whole set of additional arguments theoretically shaped in the endogenous theories of economic development and growth first developed by Romer,[36] and Lucas,[37] and which claims that there is at least six channels through which free trade positively affects economic development and growth, including a positive impact on avoiding price distortions, encourages faster introduction of new products and services, encourages investment in research and development (R & D), encourages

[30] This indicator incorporates the average customs rates, tariff variability, hidden import barriers, import costs, country size, “black market” premium, access to foreign capital, restriction in capital transactions with foreigners, size of the trade sector (adjusted in accordance with the country's geographic characteristics).
[31] Yanikkaya, H. Trade openness and economic growth: a cross-country empirical investigation, Journal of Development Economics, Elsevier, vol. 72(1), pages 57-89, 2002
[32] "Panel section" includes 108 developing countries and developed countries 1970-97. The dependent variable is the GDP growth per capita, while the explanatory are the initial level of GDP per capita, the number of phones per 1000 inhabitants, the lifetime (logarithm), regime, war, climate, water, trade openness.
[33] Dowrick,, S., Duc-Tho, N., OECD Comparative Economic Growth 1950-1985: Catch-Up and Convergence. American Economic Review, 79 (5): 1010-1030, 1989.
[34] Possible specialization in " natural resource based activities " reduces educational and 'skills' initiatives
[35] Krugman, P., On the Relationship Between Trade Theory and Location Theory, Review of International Economics, p 364, 1993.
[36] Romer, P., Increasing Returns and Long-Run Growth, Journal of Political Economy, 94: 1002-1037, 1986.
[37] Lucas, R. E., On the Mechanics of Economic Development’, Journal of Monetary Economics, 22(1), 3–42, 1988.

the production of intermediary inputs that make 56% of trade in goods today and about 70% of trade in services.[38]

Chart 1 shows the trend of openness of economies, GDP, GDP per capita and poverty levels in the period from 1981 to 2011. There is a significant increase in total GDP, as well as the degree of openness, somewhat lower GDP growth per capita, and in terms of poverty level, there has been a decline.

Chart 1: Openness, GDP and poverty level



Source: Winters, L.A, Trading Up: The Impact of Trade Liberalization on Poverty, World Politics Review, May 2013.

3. ECONOMETRIC ANALYSIS OF THE IMPACT OF BIH'S FOREIGN TRADE EXCHANGE WITH CEFTA AND EU ON GDP

The foreign trade coefficient (the coefficient of openness of the economy) measures the overall dependence of the country on foreign trade. It is obtained as a ratio of foreign trade (exports and imports) and gross domestic product.

The table 1 shows the coefficient of openness of the B&H economy. There is a high degree of openness, which is not surprising because it is a small country, which has to seek its place in the global market through the exchange.

Table 1: Foreign trade coefficient of B&H

Million BAM

Year	GDP	Volume of Foreign trade exchange	Foreign trade coefficient
2008	26165	23004	0,88
2009	25921	17666	0,68
2010	25995	20623	0,79
2011	26799	23556	0,88

[38] Miroudot, S., Lanz, R., Ragoussis, A., Trade in. Intermediate Goods and Services", OECD Trade Policy, 2009, page 17

2012	27492	23123	0,84
2013	28374	23450	0,83
2014	28365	24729	0,87
2015	29666	24618	0,83
2016	30977	26030	0,84
2017	31885	29832	0,94

Source: Central bank of B&H

The table 2 separates the export / import preferences coefficients. The result points to the underdeveloped export sector, with some progress, but still far from the required level for the adequate coverage of imports and remediation of the trade deficit.

Table 2: Coefficients of export / import preferences for B&H

Year	Export, million	Coefficients	Imports, million	Coefficients
2008	6712	0,26	13898	0,53
2009	5531	0,21	16292	0,63
2010	7095	0,27	12355	0,48
2011	8222	0,31	13616	0,51
2012	7858	0,29	15525	0,56
2013	8380	0,30	15253	0,54
2014	8682	0,31	15170	0,53
2015	8987	0,30	15170	0,51
2016	9416	0,30	16199	0,52
2017	11385	0,36	18447	0,58

Calculation of author’s

Comparison with countries in the region speaks about a similar level of foreign trade coefficient, with essentially the same reasoning as in B&H (Table 3).

Table 3: Foreign trade coefficient of relevant neighbouring countries

Year/Country	AL	SER	FYRM
2000	0,6	0,2	0,8
2007	0,8	0,8	1,1
2008	0,9	0.8	1,1
2009	0,8	0,7	0,9
2010	0,9	0,8	1,0
2011	0,9	0,8	1,1
2012	0,9	0,9	1,1
2013	0,9	0,9	1,0
2014	0,8	1,0	1,1
2015	0,7	1,1	1,1

Source: Central banks of mentioned countries

Further in the text, there is a list of the results of the regression analysis of the impact of volume and structure of foreign trade of B&H on GDP. Table 4 shows the significant linkage of B&H's foreign trade exchange with GDP, with very high coefficients.

Table 4: The result of a regression analysis of the impact of B&H's foreign trade exchange with the EU and CEFTA on GDP

Model	R	R Square	Adjusted R Square
	,965[a]	,930	,910
a. Predictors: (Constant), EU exchange, CEFTA exchange			
b. Dependent Variable: GDP			

If the volume of trade with CEFTA and the EU is separated (Table 5), there is an incomparably lower importance of the exchange with CEFTA in relation to the EU, where coefficient is even above 1.

Table 5: Coefficients of the impact of trade with the EU and with CEFTA, individually

Model	Standardized Coefficients	Sig.
	Beta	
(Constant)		,000
CEFTAexchange	,254	,077
EUexchange	1,090	,000

a. Dependent Variable: GDP

By further explaining the components of imports and exports (Table 6), a negative coefficient is observed in the exchange with CEFTA both regarding the import and the export, which indicates the absence of the impact of this exchange on GDP, as confirmed by the coefficient of significance, which is above the level of significance.

Table 6: Impact of exchange components on GDP of B&H

Model	Standardized Coefficients	Sig.
	Beta	
(Constant)		,000
Import CEFTA	-, 411	,238
Export CEFTA	-,314	,377

a. Dependent Variable: GDP

When it comes to foreign trade with the EU, the situation is completely different. Connection coefficients are very high when it comes to the total exchange volume, and also in terms of individual imports and exports (Table 7). There is certain lack of logics regarding the EU imports, because it is to be expected that this coefficient is negative. This is explained by the import of technology and the large number of concluded service providing arrangements with EU partners.

Table 7: Influence of components of B&H's exchange with the EU on GDP of B&H

Model		Standardized Coefficients	Sig.
		Beta	
	(Constant)		,000
	Import from EU	,940	,000
	Export to EU	,926	,000

a. Dependent Variable: GDP

Since Croatia left the CEFTA zone in 2013 by integrating itself into the EU, this in some way contaminates the results for CEFTA. Therefore, an analysis with Croatia within CEFTA has been made, transferring foreign trade with this country within CEFTA region (Table 8). This resulted in a somewhat more significant coefficient for CEFTA, but still in a very low significance zone and reduced the coefficient with the EU, which remains in the range of a very high significance.

Table 8: Foreign trade of B&H with CEFTA and EU, corrected exchange with Croatia

Model		Standardized Coefficients	Sig.
		Beta	
	(Constant)		,000
	Exchange with CEFTA	,206	,141
	Exchange with EU	,851	,000

a. Dependent Variable: GDP

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CONCLUSION

Importance of the involvement of all countries in the flow of international trade is important for every national economy. This is especially obvious in small countries, which cannot be self-sufficient. This is the case with Bosnia and Herzegovina, as well as with all countries in the region. Regarding B&H, from all above stated, it follows that the EU market is dominant for B&H, and that the potential for the CEFTA zone has not been fully used. From the standpoint of B&H's commitment to EU integration, the results suggest that there will be no turbulent negative developments in the trade field at the moment of integration, but in the meantime, it is necessary to find ways of better B&H trade position in foreign trade with CEFTA zone.

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