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TRADE POTENTIAL OF THE «CEFTA 2006»

Trgovinski potencial držav CEFTA 2006

Abstract

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The aim of the paper is to present the establishment and development of CEFTA and its achievements in mutual trade of member countries. It has been determined that the countries of the region largely trade with the EU and very little (in absolute terms) among themselves, and the new gravity model has been made for CEFTA countries. Potential trade has been calculated based on the gravity model and it has been found that in the majority of cases real trade exceeds potential trade. Only Albania and Moldova have the potential to increase mutual trade with other CEFTA partners.

Key words: gravity model, SEE region, CEFTA, trade liberalization, trade potentials

Izvleček

Namen članka je predstaviti ustanovitev in razvoj sporazuma CEFTA in njegove dosežke pri vzajemni trgovini držav članic. Podatki kažejo, da države v tej regiji v veliki meri trgujejo z Evropsko unijo, redkeje pa med seboj. Zato smo ocenili gravitacijski model trgovine za države CEFTA. Na osnovi tega modela smo izračunali potencialne trgovinske tokove in ugotovili, da v večini primerov dejanska menjava presega ocenjeno potencialno trgovino. Le v Albaniji in Moldovi obstaja možnost za povečanje vzajemnega trgovanja z njunimi CEFTA trgovinskimi partnerji.

Ključne besede: gravitacijski model, jugovzhodna Evropa , CEFTA, liberalizacija trgovine, trgovinski potencial.

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1. Introduction

Signing the free trade agreement (FTA), which creates a free trade area among two or more countries, has become usual practice in international economic relations. Elimination of barriers in mutual trade has been creating preconditions for the growth of mutual trade and transfer of technology through the import of capital goods. After taking up full scale reforms of their economies, European countries in transition began their process of integration into the EU and the establishment of mutual cooperation, which resulted in the Central European Free Trade Agreement (CEFTA). Since the majority of member countries joined the EU, the further existence of CEFTA was uncertain. However, the new agreement, which enabled the countries of Southeast Europe (SEE) and Moldova to join the association, ensured the continuation of its activities.

The development of the original and the "CEFTA 2006" has not brought the desired degree of cooperation among countries so far. Although the SEE countries do not differ considerably according to their economic development, the current level of cooperation of these countries is not satisfactory due to recent wars or lack of interest and motivation to intensify relations with the countries of the region. The majority of these countries trade most with the EU[1]; they are focused on the process of integration into the EU and treated CEFTA as an agreement of a temporary character. CEFTA is also an artificial entity, especially regarding its new structure, and was established in order to meet one of the conditions that the EU demands from all countries with which it signs Association Agreements, and that is the proof of regional cooperation.

Due to these specific qualities, the question arises whether the "new" CEFTA (CEFTA 2006) may achieve more than the "old" one regarding the increase of trade. The aim of this paper is to explore the possibilities for growth of trade for new and enlarged CEFTA member countries. The analysis will include CEFTA's establishment and development, whose special features are very important for the explanation of its achievements, especially concerning trade. Relations of the member countries with the EU will be particularly highlighted, as well as the mutual trade of CEFTA countries. The gravity model will be created and applied explaining the extent of mutual trade between two countries on the basis of their GDPs and mutual distance. The obtained information will be used to deduct the extent to which the existing trade makes use of potentials, that is to say, see if there is an area to increase mutual trade.

[1] See Table 1.

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2. Establishment and development of CEFTA

At the beginning of 1990s, Central and Eastern Europe (CEE) turned to the establishment of market economies, integrated into global trends, and redirected their trade flows to EU countries. Each country started to develop its own relations with the EU, first through signing the trade agreement, which defines the process of asymmetrical and reciprocal trade liberalisation.

The EU demanded that these countries establish regional integration as a precondition of entry into full EU membership, i.e. to open their borders (liberalise trade) both with the EU and among themselves. Although initially they were set against the establishment of a new form of regional cooperation, signing of the document on the creation of the CEFTA represents great success in the encouragement of cooperation of CEE countries. The agreement was signed by the countries of the Visegrad group[2] in Krakow on 21 December 1992 (it entered into force in July 1994) aiming to liberalise trade. CEFTA consisted of four member countries after the breakdown of the Czechoslovakian Federation: Poland, Hungary, Czech Republic and Slovakia. The agreement guaranteed the member countries mutual reduction or abolition of customs limitations in their territory, i.e. total abolishment of customs duties until 2001.[3] The criteria to become a CEFTA member were: WTO membership, signed Agreement on Free Trade with the EU, signed Agreement on Free Trade with all CEFTA members, and unanimous approval by member countries. On that basis CEFTA was enlarged: Slovenia joined in 1996, Romania in 1997, Bulgaria in 1999, Croatia in 2003, and Macedonia in 2006.

CEFTA represented the leading regional initiative in the post-socialist period among European transitional countries (Bakos, 1993). Trade increased among CEFTA member countries (taking into consideration absolute indicators), but the share of trade with CEFTA partners remained at low levels because all member countries were fully aware of their final aim, entry into the EU. Therefore, they regarded CEFTA as an interim agreement serving as a preparation for full EU membership.

Only three member countries have remained within CEFTA following the accession of 5 CEFTA countries to the EU in 2004: Romania, Bulgaria and Croatia. Future prospects are doubtful after the planned and accomplished entry of Romania and Bulgaria into the EU in 2007. Dangerfield (2006) asked if the countries of Southeast Europe should become CEFTA members (which would lead to crucial alternations of its basic postulates as well as membership criteria), or if they should simply grow into Stability Pact (SP) zones.[4] The establishment of the new Southeast European Free Trade Area (SEEFTA) was also mentioned as a possibility (EC, 2005).

After a few meetings of ministers of SP zone countries, in April 2006 the Bucharest Declaration was concluded with the aim of transforming bilateral FTAs into a single FTA through the enlargement and modernisation of the original CEFTA agreement. In December of 2006 Albania, Romania Bulgaria, Croatia, Macedonia, Montenegro, Kosovo, Moldova and Serbia signed the Agreement on CEFTA Enlargement, which marked a new stage of development of CEFTA. This agreement is a substitute for the network of bilateral agreements among SEE countries. The agreement is in line with the WTO provisions (countries must adjust their trade systems with global trade systems) and Stabilisation and Association Agreements. Membership conditions are partly alleviated regarding WTO membership, and a commitment to respect all WTO regulations was added. The members of "new" CEFTA are not in the same position with respect to the WTO: some of them are members, while others do not have WTO compatible rules and regulations. The experiences of some transition countries that are members of the WTO (in the initial stage of their market reform process) show that countries are facing difficulties because acceptance of commitments reduces their room for manoeuvring at a time when their domestic economic situation is still not stabilised. The countries also differ according to their prospects of joining the EU (some countries are in the process of negotiations to become EU members, while others do not have a signed Stabilisation and Association Agreement). Therefore, the criteria for CEFTA membership are easier, but the possibility of being a part of CEFTA may result in better and closer cooperation among SEE countries (exchange of experiences, which would lead to better market functioning).

Some of the goals of CEFTA membership are: trade liberalisation, increase of mutual trade and direct investments in SEE, facilitation of running a business, and improvement and strengthening of overall trade and economic relations in the region. (Official Gazette 6/2007)

The new CEFTA Agreement came into force in July 2007 and the creation of the free trade area is scheduled for 31 December 2010 at the latest.

Trade of industrial products should be liberalised on the day of entry into force of the agreement (that is, until the end of 2008 at the latest), while the customs duties on trade in agricultural products are reduced in accordance with the agreed schedule. All quantitative restrictions on imports, exports and other measures with the same effect should be abolished with the entrance into force of the CEFTA agreement. The agreement also includes reinforcement of trade in service, encouragement and protection of investments, and up to date provisions for the protection of market competition and intellectual property rights (Official Gazette 6/2007).

[2] Czechoslovakia, Hungary and Poland.

[3] It already occurred in 1998, three years before the scheduled deadline, but the liberalization was partial (customs duties on agricultural products were retained), and occasionally protective customs were temporarily reintroduced.

[4] Stability Pact for South and East Europe, see chapter 3.

3. Economic characteristics of "CEFTA 2006" member countries

Economic trends of the majority of countries (those established after the breakdown of Yugoslavia) are largely correlated not only with their socialist inheritance, as this is the case with CEE countries, but also with military conflicts from the past decade. Conflicts had many consequences, which led to the termination of cooperation influencing the extent of trade flows. Since the conflicts lasted and spread for quite a long time, the international community tried in different ways to pacify the situation. The most serious and complex attempt was the Stability Pact for South Eastern Europe (as a comprehensive, long-term conflict prevention strategy) in 1999 following an EU initiative, and it included more than 40 partner countries and organisations. It was based on experience and lessons in solving crises all over the world. Prevention of conflicts and creation of peace are successful only if there is simultaneous progress within three sectors: the creation of a secure environment, the promotion of sustainable democratic systems, and the promotion of economic and social well being (Stability Pact).

Since the Stability Pact was conceptualised as a temporary initiative to last until February 2008, it was transformed and the Council for Regional Cooperation was established in 2007, including all SEECP (South East European Cooperation Process) participants, the European Commission and the international community.

At the same time, the European Union started with its special policy towards countries of Southeast Europe and established the Stabilisation and Association Process (SAP) in 1999 as a framework for political dialogue, economic and trade cooperation and for providing help. The most important element is the new type of agreement created by the EU for countries included into the process of Stabilisation and Association Agreements (SAA) that the EU has signed with all countries of the region except Kosovo. It is

Table 1. *Main economic indicators of CEFTA countries in 2007*

Countries	GDP p. c. at PPP (USD)	Unemployment rate in %	Inflation in % (CPI)	Total exports (USD millions)	Total imports (USD millions)	Trade balance	Share of EU in total exports (%)	Share of EU in total imports (%)	Foreign debt in % of GDP
Albania	6580	13.2	2.9	1078	3961	-2883	83	63	18,2
BiH	7700	42.5	1.5	4237	9914	-5677	57	48	18,3
Croatia	15050	9.6	2.9	12598	25528	-12930	59	63	87,8
Macedonia	8510	34.9	2.3	3346	4953	-1607	57	43	48,4
Moldova	2930	...	11.62*	1342	3690	-2348	51	46	...
Montenegro	10290	19.3	4.2	860	2949	-2089	68	29	19,1
Serbia	10220	18.8	7.0	8825	18554	-9729	50	50	59,9

* data refers to 2006.

Source:WIIW Handook of statistics 2008; Statistical yearbook of analysed countries.

Table 2. *Intra-regional trade of CEFTA countries in 2007 in millions $*

Exports to									
	Albania	BiH	Croatia	Macedonia	Moldova	Serbia	Montenegro	Total to CEFTA partners	% of total exports
Albania	-	0.3	0.9	19.2	3.1	1.7*	...	25.2	2.3
BiH	10.4	-	762.4	34.05	0.8	486.7 (52.3)*	108.9	1455.6	35.0
Croatia	35.3	1782.6	-	116.9	3.4	664.9	154.9	2758.0	22.3
Macedonia	...	88.0	163.8	-	...	639.4	...	891.2	26.6
Moldova	1.4	0.5	0	0.4	-	6.5*	...	8.8	0.6
Montenegro	12.9	27.9	8.55	1.51	0	199.7	-	250.61	29
Serbia	80	1042	331	437	...	-	951	2841.0	32.2
Imports from									
	Albania	BiH	Croatia	Macedonia	Moldova	Serbia	Montenegro	Total from CEFTA partners	% of total imports
Albania	-	18.4	42.3	92.5	...	43.6*	...	196.8	4.7
BiH	4.8	-	1712.0	96.9	2.1	911.4 (73.7)*	19.8	2820.7	29.0
Croatia	3.0	733.9	-	221.7	6.6	329.5	6.7	1301.4	5.0
Macedonia	...	34.5	109.7	-	...	448.4	...	592.6	24.9
Moldova	0	0.9	1.9	0.2	-	3.8*	...	6.8	0.2
Montenegro	19.6	140.3	166.4	26.2	0	896.0	-	1248.5	46
Serbia	...	518	531	309	...	-	133	1491	8.0

* exports to and imports from Serbia and Montenegro

Source: Statistical yearbooks of Albania, BiH, Croatia, Macedonia, Moldova, Serbia, Montenegro.

interesting to note that the EU signed such an agreement with Serbia as well at the end of April 2008, although Serbia did not offer evidence of its cooperation with the International Criminal Tribunal for the former Yugoslavia (ICTY) in the Hague (at that time), which was strictly insisted upon when Croatia was negotiating the signing of SAA. Due to the opposition of Netherlands and Belgium, the ratification of SAA and entry of the Interim Agreement into force will begin only after Serbia achieves full cooperation with the ICTY. Nevertheless, such an approach to the signing of SAA with Serbia has no precedent in the politics of the EU towards the countries of South-eastern Europe.

On the other hand, the EU has a close relationship with Moldova and it is a partner country within the European Neighbourhood Policy, but it is not in the process of accession for membership in the EU.

It is evident from the table that it is a matter of countries falling into the group of middle-income countries (except Moldova). Their common characteristics are high unemployment rates and high trade deficits. The EU is a significant foreign trade partner of all countries except Moldova. Croatia and Serbia stand out as countries with the highest overall foreign indebtedness of all sectors. Croatia stands out because of its development and achieved indicators.

Although the degree of stability in the region has increased in the last few years, some countries still have reported ethnic conflicts (Serbia, Macedonia). On February 17, 2008 Kosovo declared independence (Serbia did not support this decision), while Macedonia is still in conflict with Greece due to its name. In Bosnia and Herzegovina, politicians cannot agree on the future functioning of the state (as a whole, or each entity separately), which creates a confusing picture for partners from other countries. Stated characteristics definitely affect the overall trade and especially the geographic structure of trade.

The next part of the paper will research the characteristics of foreign trade of CEFTA member countries as well as potential for increases in trade.

4 Trade potential of the new CEFTA

4.1. Regional trade of CEFTA members

When exploring possibilities for increases in mutual trade among the countries of the enlarged CEFTA, it is important to mention that it is a form of South-South integration and therefore it is necessary to explore the theoretical characteristics of such an integration. The establishment of integration gives rise to two types of effects: static and dynamic. Static effects include the trade creation effect, which marks an increase of trade among the integration countries due to the elimination of customs and other protective measures. On the other side, there is trade diversion, reduction of trade with third countries. Frequently it is a matter of redirection of imports from a country (producer) that used to produce a product more efficiently, to the integration country (producer), which is not as efficient but, due to the elimination of barriers in mutual trade, is in a situation to offer a product for a cheaper price.

In the case of South-South regional integration, the effect of trade diversion is achieved as well as a smaller overall gain for that particular integration when mutual preferences set in and the autonomous trade policy towards other countries is retained. This is because these countries continue to import from other (third) countries after the establishment of regional integration so that prices, production, consumption and imports remain the same and there is no possibility of trade creation. The worst is for the countries with the weakest comparative advantages, especially in cases where the partner country has a comparative advantage in products that the first country used to import from the rest of the world.

Although the region of South-eastern Europe was quite fragmented in economic and political terms, common history, geographical position and the level of development may be very conductive to regional coordination, cooperation and economic integration. The process of reintegration should be regarded as a step back to normality (Grupe & Kusic, 2006).

Prior to the creation of the gravity model for CEFTA countries, their mutual trade will be analysed.

The importance of CEFTA intra-regional trade is not the same for all member countries. Bosnia and Herzegovina carries out one third of its foreign trade with the mentioned countries, in the first place with Croatia and Serbia and Montenegro. Macedonia exported and imported one fourth of its trade with CEFTA countries in 2007, particularly to Serbia and Montenegro. Croatia exports about one fifth of its exports to CEFTA partners, while it imports only 5% from these countries. Moldova is particularly notorious for a small amount of trade with CEFTA countries. It conducts the majority of its trade with Commonwealth of Independent States (CIS) countries (40%) due to their vicinity and resemblance, and also with Romania and Bulgaria.

It is interesting to highlight the increase in mutual trade in 2007 in relation to the year 2006 in all countries where CEFTA's market is more significant for exports (for Croatia, Bosnia and Herzegovina, Montenegro and Serbia), while Bosnia and Herzegovina, Macedonia and Montenegro have high import shares from this integration (over 20%).

4.2. Empirical research

4.2.1. Methodology

While estimating the extent of trade flows of CEFTA member countries, the gravity model will be applied (Head, 2003) and dealt with in this paper for this group of countries. It is often applied to estimate the extent of trade between two countries. It has been in use for many years, and the idea to explain trade analogously to Newton's law of gravitation appeared in the 1960s, when Tinbergen (1962) and Pöyhönen (1963) suggested independently from each other that a similar functional form could be applied to international trade flows. The basic idea behind the model is that bilateral trade from one country to another can be explained by factors that:

(1) capture the potential of a country to export goods and services;

(2) capture the propensity of a country to import goods and services;

(3) either promote or inhibit bilateral trade.

One must bear in mind that this equation is not a demand or supply function. Rather, it gives the equilibrium that is reached through the interaction between these functions.

The initial gravity models are very simple and practical to implement. Trade is a function of the trading countries' GDPs (or GDPs per capita) and the distance between these countries. Trade volume, regardless of whether it is exports or imports, is a direct function of GDP and an inverse function of distance.

According to this approach, the size of GDP positively influences the extent of mutual foreign trade, while distance has a negative impact (because distance increases transportation expenses). Additional encouragement for the development of mutual trade could be provided by certain common characteristics of countries, such as the use of the same language, being part of the same integration, the vicinity of countries sharing a border, etc. In such cases, if predicted by the model, the dummy variable acquires value 1, while in other situations (in the absence of mutual characteristics) it amounts to 0. The gravity model of trade has been used widely as a baseline model for estimating the impact of a variety of policy issues, including regional trading groups, currency unions, political blocs, patent rights, and various trade distortions (Sen & Smith, 1995).

There are a few versions of the gravity model in the literature explaining trade flows among countries. Gravity models differ in the number of variables, number of examined countries, examined periods, emphasis on export and import, real versus nominal values, and measuring distance (Breuss & Egger, 1997).

The events related to the opening of Central European and East European countries which have marked the past decade encouraged further gravity model research, in the course of which the effects on mutual trade flows after the entry of these countries into the EU were explored. The integration is particularly important for the countries of Central and Eastern Europe due to the fact that the current trade flows are below their potential, which for the countries of similar economic and institutional structure are primarily determined by the effective level of supply and demand and the existence of hurdles in the form of trade policy and geographical distance. Recent data indicate that a part of these effects have already come true, resulting in the EU's biggest share in exports and imports from these countries through the liberalisation of trade within the framework of European Agreements (WIIW Handbook of statistics).

Since the new CEFTA is a new integration, there is no estimate on the significance of the integration for the development of foreign trade of its member countries. However, there are researches on trade growth opportunities between the EU and CEE countries, as well as inside SEE-6 countries (Albania, Bosnia and Herzegovina, Croatia, Macedonia, Serbia, and Montenegro).

4.2.2. Literature review

In his research, Rosati (1992) analysed 17 European countries, including the countries of the European Economic Community, EFTA and Yugoslavia, and made three gravity models in 1987. He found that 14 out of 30 trade flows exceeded theoretical values in 1989, especially within the Council for Mutual Economic Assistance (CMEA) among the Soviet Union, Czechoslovakia and Bulgaria. The overall trade within CMEA was 21% higher than the theoretical level. That situation deteriorated after the breakdown of CMEA and redirection of trade flows towards developed countries of Western Europe, which in turn influenced the deterioration of foreign trade balance flows of CEE countries due to the increase of imports from the EU. Although the EU enabled more liberal access to products from these countries to its market, these countries considerably increased imports from the EU because production declined in the transitional period, and restructuring and privatisation of companies occurred. Furthermore, it was not possible to produce competitive and quality products because technology was outdated, domestic demand for domestic goods declined, and after a long period of closed borders consumers manifested great demand for "western" products.

According to Christie (2002), trade flows between Croatia and the Socialist Republic of Yugoslavia are lower than potentials existing on the basis of their GDP, while on the other hand the trade between Bosnia and Herzegovina and Croatia, Socialist Republic of Yugoslavia and Macedonia, and the trade between Macedonia and the countries of the region are above potential values. There are great oscillations in the degree of trade flows inside Southeast Europe, which are either abnormally high or abnormally low. The author thinks that it is a consequence of military clashes in that region, but at the same time points out that there is an area for the reintegration of these countries.

Gaucaite Wittich (2005) made a detailed analysis of flows and characteristics of foreign trade of the countries of Southeast Europe in the period between 1996 and 2004. She found that there was a change in the commodity and geographical trade structure of the countries of Southeast Europe,[5] but that these countries had a lower level of trade openness and lower income growth rate from exports with respect to CEE countries. One of the reasons for such a situation lies in the absence of a multilateral approach to intraregional trade liberalisation in the past decade. Ultimate results about the possibility of growth of mutual trade are

5 However, she warns of the high share of textile, clothing and footwear products in their exports and exposure of these products to firm competition from Asian countries.

not unequivocal because there is no significant difference in the relative availability of factors of production, differences in technological level of development are slight, and these countries import machinery, equipment and modern technology. They might benefit from mutual integration only if they develop new competitive advantages in order to gain an area for growth of intraregional exchange.

Kaminski and Rocha (2003) also warn that trade liberalisation and integration within the framework of the Stabilisation and Association Process (integration into EU) and an established network of bilateral trade agreements (intraregional liberalisation), without adding the third dimension – multilateral (MFN – based liberalisation), may be counterproductive leading to trade diversion and losses in national economic welfare. Gains from integration into the EU do not come by default, as the experience of some Central European 'associates' of the EU demonstrates. FTA countries benefit from cummulation of the rules of origin because they substitute bilateral with diagonal cummulation of the rules. By applying the gravity model, they have found that the existing trade within SEE countries is below their potential (although between particular members, e.g. Croatia and Bosnia and Herzegovina trade exceeds their potential). [6]

Uvalic (2006) analysed the trade structure of SEE countries (in the period before 1990, in 1998 and in the 2000s) and the effects of two processes of trade liberalisation: in regional trade in SEE countries and in their trade with the EU. She pointed out that some countries (Bosnia and Herzegovina, Serbia and Macedonia) are mostly oriented on the SEE market, while for others an increase in their trade with SEE countries could be an indicator of deep structural problems, which derive from limited competitiveness on EU markets.

Although the theoretical approach and results of the existing South-South FTA research are not optimistic concerning static effects, we should not neglect dynamic effects resulting from the contemporary theory of integration, which regards economic integration as an open and progressive process of linking national economies. They include enhanced efficiency through mutual learning, increased competition between peers in development, the enablement of economies of scale and scope, increased attractiveness to FDI, and greater bargaining power. It is difficult to single out the most important elements of these effects, but since it concerns small countries, FTA will enable placement of goods on a wider market, which may influence the achievement of the economy of scale and export growth. It is also very important to create a positive environment and bigger area for the inflow of foreign capital, indispensable in the process of encouraging economic growth in transitional countries.

[6] Albania's inclusion in the analysis results in greater trade potentials.

Kaminski and Rocha (2003), in their attempt to estimate potential trade flows among countries of South-eastern Europe, didn't make a gravity model for the countries of South-eastern Europe. Due to the lack and nontransparency of data, they applied an earlier one. Hereinafter the new gravity model for these countries will be created and presented. There are still some problems concerning statistics and borders. It is worth mentioning that Montenegro separated from Serbia in 2006, so they had common data up to then and as such it will be used in this paper as well. On the other hand, Kosovo proclaimed its independence at the beginning of 2008 but it will not be indicated in the model because it will cover the period up to 2007.

4.2.3. Gravity model for CEFTA countries

Since the aim of this paper is to examine the potential for further growth in trade among CEFTA countries, it was decided to include a dummy variable. This variable represents Stabilisation and Association Agreements, i.e., if the country has become a candidate for joining the EU. The expected sign is positive since these agreements foster the liberalisation of trade.

The analysis will include six countries that are members of CEFTA. A panel data approach is used since there are three years of data (2005, 2006 and 2007) and it offers advantages over cross section regression.

Since it was decided to include a dummy variable as an explanatory variable on the right-hand side, several issues arise if cross-section regression is applied.

The majority of studies typically assume an exogenous right-hand-side (RHS) dummy variable to represent the FTA treatment. In reality, FTA dummies are not exogenous random variables. Rather, countries likely select endogenously into FTAs and are possibly correlated with the level of trade. If we were to run separate cross section regressions for each of the two years, empirical estimates would probably be biased, and the effects of FTA would be over or under estimated.

If any of the RHS variables are correlated with the error term, ϵ_{ij}, that variable is considered "endogenous" and ordinary least squares (OLS) may yield biased and inconsistent coefficient estimates. Potential sources of endogeneity bias of coefficient estimates for RHS variables generally fall under three categories: omitted variables, simultaneity, and measurement error.

In the cross-section data, these problems require the use of instrumental variables and complex econometric procedures associated with them.

A ready alternative to cross-section data is the use of panel data. There are three possible techniques: fixed effects, random effects and differencing the data and using OLS.

The final model is:

$$\log(M) = \Theta X_{it} + u_i + v_{it}$$

where M is the flow of imports into country M from country X; Xit is a vector of explanatory variables (namely GDP of importing and exporting country, distance between capital cities and a dummy variable capturing the effects of signing the Stabilisation and Association Agreements), ui captures any country-specific effects (not included in the analysis), and vit is a disturbance term. The country specific term ui may be either fixed parameters that can be estimated ("fixed effects") or random disturbances characterizing that country ("random effects"). In the first case, since the fixed country effects are time-invariant, they would be perfectly correlated with other time-invariant explanatory variables. As a result, we would not be able to estimate directly the impact of these effects on trade. The random effects specification, on the other hand, would allow us to estimate the impact of these variables and actually provide more efficient estimates if the country-specific term ui is not correlated with the other explanatory variables. To distinguish between the two hypotheses regarding the country-specific term, we can test for the orthogonality of ui to the other regressors with a Hausman test. This test is based on the idea that under the null hypothesis of no correlation, the random effects model is more appropriate and more powerful. If a correlation exists, then the random effect is inconsistent and the fixed effect model is used.

Another possible estimation technique is differencing the data since it increases estimation efficiency. The reason for this is if we assume that the error terms are serially correlated over time, fixed effects estimation becomes inefficient as T gets large. Another problem that might arise is that GDP and trade flows are likely unit root processes. This may cause a spurious regression problem and in that case, first differencing would be preferable.

The general gravity model was used to quantify trade variation between the CEFTA countries in terms of economic mass, distance and a dummy variable either facilitating or impeding further growth in trade. We used two separate equations in order to assess the effects of the selected variables on imports and exports. The reason for this is that exports and imports display different behavioural patterns. Furthermore, the structure of trade between CEFTA countries differs. It is logical to assume that these react differently to important factors like trade liberalisation and changes in the real exchange rate. For example, Croatia is exporting goods with high value added and imports agricultural products. The opposite case might be applied for Albania, which mainly exports two groups of commodities, textiles and garments and unprocessed raw materials. The set of variables used in this empirical analysis corresponds to the basic gravity model of international trade augmented for a dummy variable indicating the signing of the Stabilisation and Accession Agreement.

The product of country i and j gross domestic product in time t is used as a direct measure of economic mass. This variable is meant to represent the economic mass in the interactive way and it is expected to be positively and significantly related to dependent variables. Nominal GDP was used since the assumption is that trade occurs at international prices; therefore, GDP in constant prices or PPP has no bearing on trade levels, at least in the short term, as is the case in this paper.

Distance is the variable that tries to capture transportation costs, as this is one of the most significant impeding factors to international trade. This variable has been criticized as being "too simple" as it captures only distance between the countries but leaves out other similar factors. Brun, Carrere & de Melo (2002) set out to correct this problem and include proxies for the state of infrastructure (per capita phone lines, length of paved roads and railroads) in order to take care of the omitted-variable bias. They show that the inclusion of the new variable causes the distance coefficient to remain about stationary in case of trade among developed countries. In other cases, however, the negative trend prevails. The contradictory behaviour of the distance coefficient has become a focal point of several studies like those in Frankel (1997), Buch et al. (2004) and Anderson van Wincoop (2004). Despite the critics, this variable offers one of the most robust effects on explaining bilateral trade.

As was mentioned before, panel estimation was used with pooled, random and fixed effects. Random effects which assume that the average individual effect is embodied in the constant term and that the error term includes the unobserved individual effect is chosen as the efficient estimation method since the Hausman test didn't reject the null hypothesis.[7]

Consistent with other empirical work on explaining international trade variation, GDP results are positively and significantly related to exports and import volume.

Looking just at the export equation, a 1% increase in the export country's GDP increases export volume by 1.485%. The size of the coefficient for the import country's GDP is smaller in magnitude, implying that a 1% increase in the import country's GDP increases export volume by 0.755%.

Variable distance has the right sign and is highly significant in both equations. This is also confirmed by actual data that show that neighbouring countries trade more.

The similarity among GDP coefficients in both equations suggests that CEFTA countries, which are mainly located in the Balkan region, still show divergences in their trade structure. In other words, demand and supply differ since the supply efficiency of the home country does not match

[7] The Hausman test is a test of H_0: that random effects would be consistent and efficient, versus H_1: that random effects would be inconsistent. The result of the test is a vector of dimension k (dim (β)) which will be distributed chi-square(k). So if the Hausman test statistic is large, one must use FE. If the statistic is small, one may use RE.

Table 3. *The gravity model for CEFTA countries*

	Export equation	Import equation
Specification	RE	RE
Log GDP (export country)	1.485* (3.320)	1.147* (6.067)
Log GDP (import country)	0.755* (4.463)	1.390* (2.822)
Log distance	-2.930* (-8.263)	-2.140* (-3.564)
Dummy	0.401 (0.693)	0.358 (0.772)
Hausman test	2.89	6.87
R2	0.85	0.78
No. of obs.	79	77

* shows significance at 1% level

Source: author's calculations.

Table 4. *Relations between potential and actual exports among CEFTA countries*

	Albania	BiH	Croatia	Macedonia	Moldova	Serbia and Monetenegro
Albania	-	7.64	59.25	0.11	0.11	44.19
BiH	0.27	-	0.10	0.10	0.60	0.20
Croatia	0.55	0.12	-	0.20	1.01	0.96
Macedonia	...	0.02	0.20	-	...	0.001
Moldova	4.18	1.17	...	1.40	-	0.01
Serbia and Montenegro	2.56	0.02	1.63	0.05	...	-

Source: author‘s calculations.

Table 5. *Relations between potential and actual imports among CEFTA countries*

	Albania	BiH	Croatia	Macedonia	Moldova	Serbia and Monetenegro
Albania	-	1.89	0.96	0.58	...	1.63
BiH	7.71	-	0.17	0.28	0.78	0.72
Croatia	19.75	0.53	-	0.25	1.45	6.68
Macedonia	...	0.67	0.31	-	...	0.29
Moldova	...	1.36	2.75	4.77	-	2.51
Serbia and Montenegro	5.32	1.38	3.21	0.66	...	-

Source: author‘s calculations.

demand preferences in that country. For instance, looking at the export equation and assuming bilateral trade between Croatia and Bosnia and Herzegovina, a 1% increase in Croatian GDP will increase export volume to BiH by 1.485% holding everything else constant. On the other hand, looking at the import equation, a 1% increase in BiH GDP will increase exports to Croatia by 1.147%.

According to the model, potential exports within CEFTA countries are estimated.

The projection indicates various results: Albania has taken advantage of export potentials to export to Macedonia and Moldova and therefore has more opportunities to multiply its exports to Bosnia and Herzegovina, Croatia and Serbia and Montenegro. Bosnia and Herzegovina and Macedonia have made full use of export potentials in order to export to all CEFTA partners. Croatia exports more than anticipated by the model of export to Albania, Bosnia and Herzegovina, Macedonia and Serbia and Montenegro, but it might increase its exports to Moldova. Serbia and Montenegro might increase exports to Albania and Croatia. Based on everything mentioned herein, it may be pointed out that the countries of former Yugoslavia made the best use of their export potentials in order to export into CEFTA member countries (the region of the countries of Southeast Europe), and Albania and Moldova have done the least. Although there is enough area to increase mutual trade with these two countries, it is very hard to estimate the rationality of the trade increase since the more developed a country is, the more inclined it is towards trade with countries of similar characteristics. For example, Croatia's primary aim is to increase exports to developed countries and not to countries with weak purchasing power, and the second reason lies in countries' orientations towards the EU.

The results on the import side also show a different situation: Albania could increase its imports from Bosnia and Herzegovina and Serbia and Montenegro; and Croatia could increase imports from Albania, Moldova and Serbia and Montenegro. There is unexploited import potential for Moldova from all CEFTA countries. Serbia and Montenegro utilise import potential from Macedonia, while there is a large area to increase imports from Albania, Croatia and Bosnia and Herzergovina. Generally there is potential to increase mutual imports among CEFTA partners in the majority of cases. It is difficult to predict further import increases among those partners because they usually don't produce a variety of products that consumers want to buy (cars, audio and TV equipment, mobile phones, electronics, etc.), so countries should purchase these things on the world markets.

Conclusion

The historical overview of CEFTA's establishment and development points to the complexity of the issue of reconnecting CEE and SEE countries. The main obstacles appear to be the following: recalling the past (CMEA) as well as individual orientation towards EU membership. That is why CEFTA has remained the free trade area, and in the member countries' perception it is the EU's "waiting room" and serves as proof of the ability to cooperate with countries of the region. The existing CEFTA is characterised by a new contract and new member countries, which, because of the problems in the region of former Yugoslavia, establish stronger cooperation and encourage mutual trade flows through this zone.

The mutual trade of CEFTA member countries is small (in absolute values) in the majority of cases, but with an upward trend. For the development of these countries, it is better to orient their exports to the markets of Western European countries because it is the proof of successful market restructuring and the ability to fulfil demanding customers. On the other hand, increasing the importance of the SEE region in total trade of some countries is probably the result of limited or declining competitiveness. Nevertheless, it is important to be part of the international market and to compete with products and services, which gives the CEFTA market more importance.

While estimating the potential extent of mutual trade, two gravity models were created explaining the impact of the GDP of export and import countries and their mutual distance with respect to export and import values. Pursuant to expectations, a highly positive influence of the export country's GDP, a slightly lower positive influence of the import country's GDP, and a negative influence of distance on mutual trade were observed. The similarity among GDP coefficients in both equations (for exports and imports) suggests that CEFTA countries, which are mainly located in the Balkan region, still show divergences in their trade structure. In other words, demand and supply differ since supply efficiency of the home country does not match demand preferences in that country. Potential exports and imports of CEFTA member countries were calculated based on the obtained model and compared with achieved values. Results show that most of the countries achieve greater exports to the rest of CEFTA member countries from the values obtained by the model. This means that they fully used their export potential. Only Albania and Moldova have unused export potential on the CEFTA market. On the other hand, most of the countries have a large potential to increase imports from CEFTA countries, which emphasizes the greater importance of CEFTA markets for exports of member states than for imports. This is closely connected with the structure of production and exports of these countries, and also with consumers' needs (change in behaviour). It is especially necessary to highlight the case of Moldova, which is geographically the most remote country but at the same time it is most likely that the projected values will not be met due to the developed trade cooperation with the Baltic countries and the EU.

The "CEFTA 2006" has existed for just two years and it is too early to make conclusions about its effects. Since CEFTA may be regarded as a part of South-South integration, it is impossible to expect significant effects of trade creation. In the situation of insufficient competitiveness of export products and the impossibility of their placement in the markets of developed European countries, it is useful to take advantage of the trade growth potential provided by regional CEFTA membership. Trade cooperation may create preconditions for business restructuring, specialisation and better usage of comparative and competitive advantages.

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