

## THE EFFECTS OF CHANGING INTERNATIONAL POLITICAL ECONOMY TO MACEDONIAN FOREIGN TRADE

DOI: <http://dx.doi.org/10.18509/GBP.2015.51>  
UDC: 339.56:911]:303.725.3(497.7/4)

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### ABSTRACT

Changing international political environment especially after the II World War and 1989 had affected both political and economic geography of Eastern Europe. The collapse of Socialist Republics concluded with new independent states and liberal economies. As a result, international political economic geography of Eastern Europe and Balkans completely changed and ex-Socialist states began to develop more close economic and political relations with the West integrating European Union (EU) or Central European Free Trade Agreement (CEFTA).

Macedonia is located in the heart of Balkans and surrounded by Albania, Bulgaria, Greece and Serbia, also close to important markets of Europe which like Italy, Germany, France and Turkey. Thus, this paper aims to evaluate the affects Macedonia's geographic location to her foreign trade. For this purpose firstly the effects of changing international political economy to (Yugoslavian) Macedonian economic geography and relations are assessed. Secondly Macedonian economic geography which is integrating with the world is evaluated with her potential domain and thirdly panel gravity model employed to assess the relationship between geographical distance and economic activity. Our data consist from 33 countries which are important partners of Macedonia (EU-27 countries, CEFTA members and Turkey) with 2004-2013 periods. We estimate this relationship with panel corrected standard errors (PCSE) approach. Our test results show Macedonia's geographic location (distance and common border variables) is an important determinant of her foreign trade. Also as an important variable economic size (sum GDP variable) rise is highly effective on Macedonia's foreign trade. However we couldn't find any relationship between regional membership variable (CEFTA) and foreign trade.

**KEYWORDS:** International Political Economy, Economic Geography, Macedonia, Foreign Trade, Gravity Model.

### INTRODUCTION

The main objectives of this paper are: (i) to evaluate geo-economic potential of Macedonia, (ii) to analyze the effect of geographic position, contiguity and economic potential Macedonia to her foreign trade within a gravity model approach. In that manner Macedonia's (Yugoslavia) past trade relations and integration attempts to world economy are briefly summarized and evaluated in the process of international political economy. Because Macedonia a landlocked state one the most influenced states by the changing political and economic geography. Macedonia's geographical location has mostly determined the international status, economic structure and trading relations of her both in the geopolitical and geoeconomic era.

## **INTERNATIONAL AND REGIONAL POLITICAL ECONOMY**

After 1870s the rising protectionism between industrializing states, commercial and economic rivalry, world wars, newly independent national states emergence on the European geography, revolutions and 1929 world economic depression prevented to the progression of global economic and commercial relations and let to the autarchic states and planned economies.

The international political economic geography of world after the II World War was mainly determined by the USA and the USSR. That term witnessed not only the competition of the rival states but also the rival economic systems and ideologies. Both USA and USSR aimed to expand their influence on the world geography and protect themselves and their allies by various means such as political, militarily and mostly economic. In the first half of the 20th century the rivalry among capitalist states with its imperialistic character and wars superseded to a bipolar rivalry between ideologically and politically differentiated systems in the second half of the century. And the most central character of that era was the domination of political/ideological approaches to the world geography. So world economic geography is mostly determined by the two superpowers and with their actions. A limited number of states that Yugoslavia was one of them could have applied independent economic policies on national and international level being not directly under the influence of big powers. Yugoslavia which was not occupied by Soviet troops unlike many Eastern European states, established "brotherhood" relations with the Socialist East as a planned (socialist) economy and established close relation with the Liberal West but distant as a result of geographic position and neutrality policy. Yugoslavia's location was the most determinant factor on the formation of its economic, commercial and political structure and relations with the world.

The most important economic institutions of the post-war period to re-unify world geography and increase relations between states in terms of economic development, financial interactions and commercial cooperation on the global level, IMF, WB and GATT established under the leadership of USA. However USSR's reservations politically prevented the success of these institutions on the global level. Besides USSR's reservations, divergences between developed and developing economies and systemic differences between planned and liberal economies limited the performance of Bretton Woods Institutions. As a result, these institutions played an important role during the post-cold war period on the formation of international political economy. The Western states led by USA mainly used these institutions to connect the economies of gradually narrowing "*Free World*" and to stabilize USA's hegemonic power. After the failure of International Trade Organization (ITO), General Agreement on Tariffs and Trade (GATT) took effect in 1948 with the principles of "reciprocity, non-discrimination and transparency". Except USSR, Eastern Bloc Planned Economies after long negotiations participated to GATT in order to benefit from tariff concessions and international trade. Yugoslavia fully acceded to GATT in 1966. "Accession of Yugoslavia to full GATT membership took several stages. In 1950 Yugoslavia was granted observer status. On 1 July 1960 Yugoslavia introduced a provisional customs tariff, limited to 127 items. In 1961 a permanent tariff schedule covering all items of trade was adopted, and Yugoslavia applied for regular membership in GATT. On 13 November 1962 Yugoslavia was provisionally admitted to GATT, and on 5 April 1966 admitted to regular membership. Yugoslavia on acceding to GATT devalued her currency from 759 dinars/dollar to 1250 dinars, in order to avoid subsidizing her exports to both the GATT and (The Council for Mutual Economic Assistance) the CMEA/Comecon markets." [1]Yugoslavia's

membership to the Bretton Woods twins, IMF and IBRD was earlier than GATT membership which effective in 1945 as a original member like Czechoslovakia. After the Yugoslavia's expulsion from the Cominform in 1948, between 1949 and 1992, 91 projects funded by IBRD/IDA which were used for mainly infrastructural investments worth of 5.782,60 million US dollars [2] and between 1952 and 1984 Yugoslavia took 3.262,10 million SDR IMF loans [3]. However the integration attempts of Yugoslavia to world trading system could not attained the desired level and success. Because planned economic model was in contradiction with the liberal trade model and international trade were seen as an instrument in order to support nation's industrialization process. Yugoslavia's balance of payments continued to be worse and foreign debt increased like many non-socialist import-substitution states.

Yugoslavia's dilemma between West and the East evolved a new phase in 1960s due to changes in the international political economy. In 1960s political polarization and conflict between East and West began to replace with the rising North and South divergence which stressed on socioeconomic differences and inequalities on international level. Neither the First World's nor the Second World's international political economic system have satisfied the underdeveloped and developing states' demands, Third World emerged as a challenge to both of them and their institutions. The establishment of Non-Aligned Movement in Belgrade in 1961 gained importance to Yugoslavia and enable it to balance East and West which was geographically locked between two blocks. However either the development level or the geographically distributed structure and distance of the South states to Yugoslavia effected the level of achievement negatively. Yugoslavia as an industrialized country according to the South realized only 13% of its exports to Asian, African and Latin American countries in 1958[4] and that position remained in the later years.

With the end of USA-USSR alliance after the II World War, Europe became the conflicting arena of two powers. Besides the international institutions on the global level, regional initiatives and cooperation gained importance. Political and militarily polarization in Europe led to emerge regional economic blocs under the leadership of two powers. The "European Recovery Program" or "Marshall Aids" promoted the commercial and economic cooperation and with the establishment of Organization of European Economic Cooperation (OEEC) in 1948 to coordinate the Marshall Aids between European states was the most important step of regionalization process in European geography. Against OEEC, in 1949 USSR established Council for Mutual Economic Assistance (COMECON) to promote economic and commercial relations between the planned economies of the East Europe. The establishment of regional economic blocs strengthened the political partition of European geography. Yugoslavia's national independency policy against both the West and the East prevented Yugoslavia to integrate OEEC/OECD and European Economic Community (EEC) and COMECON. Yugoslavia had an observer status in OECD (1961) and had associate member status in COMECON in 1964. On one hand the geographical proximity of Yugoslavia to the developed states of Europe like Italy and West Germany, historic commercial relations with the West and Yugoslavia's requirements to the West's imports raised the importance of EEC and EEC signed its first agreement with Yugoslavia in 1970 which was a non-preferential agreement, and a second non-preferential agreement was signed in 1973[5], on the other hand Yugoslavia as a planned and a socialist country with also geographical proximity and bordering with Hungary, Romania and Bulgaria and USSR's importance for Yugoslavia's exports provided continuance to relate with COMECON.

**Table 1: Yugoslav Trade with EEC and COMECON in 1970(%)**

EEC Countries	Yugoslav Imports	Yugoslav Exports	COMECON Countries	Yugoslav Imports	Yugoslav Exports
West Germany	19.7	11.8	USSR	6.7	14.4
Italy	13.2	15.2	Czechoslovakia	5.3	5.3
France	3.8	3.8	German Democratic Republic	2.6	3.0
Holland	1.7	1.6	Poland	1.8	3.4
Belgium	1.4	0.6	Hungary	1.7	2.8
			Romania	1.2	1.8
			Bulgaria	1.1	1.3

**Source:** Jovanovich[6].

The changing structure of international political economy in the 1970s with Oil Crisis, collapse of Bretton Woods system, emergence of EEC and Japan as important economic powers, *Détente* between USA and USSR led to the decline of USA hegemony in some measure and transition from bipolarity to multi-polarity system. Debt Crisis of the 1980s, rise of neo-liberalism, transition process of Socialist economies, *Perestroika* and *Glasnost* in USSR and finally the collapse of USSR directly affected Yugoslavia like many countries. Yugoslavia which was a neutral state and preserved political and economic independence during the Cold War and an important actor of Non-Aligned Movement enforcing international peace during the bipolar world dramatically affected by the rapid political and socio-economic change in the Eastern Europe.

In the 1990s with the declaration of "*The End of History*" and "*The End of the Nation State*" priorities of either individual or states changed and economics regained importance against ideologies and politics. So geoeconomics superseded geopolitics and every state began to rearrange economic and commercial relations depended on their geography. In these years regionalization process has gained acceleration on worldwide. Establishment of EU(1993) as the most important economic and political integration on the European geography and enlargement process to the East with the Maastricht and Copenhagen criteria opened a new phase for ex-Socialist states. The absence of a power center except EU, and limitation of Commonwealth of Independent States (CIS) with ex-Soviet states (except Baltic States) catalyzed the integration of East European states.

Republic of Macedonia as a landlocked state gained independence in 1991 peacefully and as a sovereign state has become a party of international and regional organizations. "In the past years the integration of Macedonia in the world economy has been conducted through three mutually compatible processes: integration in the multilateral trading system, integration in the EU, and regional trade integration. The Republic of Macedonia, on 4 April 2003, became the 146<sup>th</sup> Member of the World Trade Organization (WTO) Macedonia has been a candidate country for EU membership since 2005, in October 2009, and the European Commission has recommended start of accession negotiations for full-fledged membership. The Stabilization and Association Agreement (SAA), concluded on 9 April 2001 provides a framework for political dialogue and strengthens the regional cooperation, promotes expansion of markets and economic relations among the EU and Macedonia and establishes the grounds for technical and financial support. And also Macedonia applied Free Trade Agreements (FTAs) with Turkey(2000), Ukraine (2001), EFTA (2002) and CEFTA (2006)."[7]

## THE GRAVITY MODEL

The gravity model approach which is an adaptation of Isaac Newton's law of gravity has been widely used in economic studies. This model links foreign trade with "economic mass" of countries (GDP and/or population) and distances of capital cities or economic centers and some dummy variables such as common border, language, membership of same economic integrations [8]. Gravity approach mainly used to estimate international trade/factor flows such as foreign trade, foreign direct investment, and labor [9].

There are extensive amount papers which are evaluating international trade potential of different countries. However we can only find a few numbers of recent papers which applied gravity model to Macedonian data: Mojsoska-Blazevski and Petrevski [10] examine the determinants of Macedonia's foreign trade between 1990-2009 time span with 39 trade partners. And Zulfiu [11], analyze FDI determinants of Macedonia with a gravity model approach. The sample of study comprises 29 countries between 1997-2003 periods.

## DATA, METHODOLOGY & ANALYSIS

The main aim of this paper is to analyze the affect of Macedonia's geographic position to her bilateral foreign trade. Therefore our study focuses on, to set a relationship, between geographic position (distance and common border), economic potential (size), regional integration (CEFTA) and foreign trade. In this context we use panel gravity model. Our panel-gravity model takes following form:

$$\ln trade_{it} = \ln sum gdp_{it} + \ln distance_{it} + border_{it} + cefta_{it} + \varepsilon_{it} \quad (E.1)$$

Where,  $\ln trade_{it}$ : foreign trade between Macedonia and partner country, in 2004-2013 period. The data collected from Macedonia National Statistics Agency web site [12]. Both import and export variables have taken in US Dollar form.  $\ln sum gdp_{it}$ : Sum of GDP of Macedonia and partner (target) country between 2004-2013 periods.<sup>1</sup> We took this data proxy for economic size. The data has taken from WDI online [14] by US Dollars (constant, 2005).  $\ln distance_{it}$ : Distances between capital of Macedonia (Skopje) and target country's capital (or economic centers)<sup>2</sup>. Distance variable, added to our analysis as a proxy for geographic location and transaction costs. We use two dummy variables,  $cefta_{it}$ : the membership of CEFTA between 2004-2013 period and  $border_{it}$ : a dummy variable signify countries which have common border with Macedonia or not. We took CEFTA variable to imply regional integration and common border variable for another proxy of geographic location.

Thus the data covers 33 target countries (Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Moldova, Netherlands, Poland, Portugal, Romania, Serbia and Montenegro<sup>3</sup>, Slovakia, Slovenia, Spain, Sweden, Turkey and United Kingdom) which are including

<sup>1</sup>We adopted same strategy with Antonucci&Manzocchi [13]; Bjelic&Mitrovic [8] and we sum Macedonia's GDP with partner countries GDP for given time.

<sup>2</sup> For Turkey, Istanbul has taken for economic center. Like many other studies [13; 11; 9]; we collect distance variable from [indo.com/distance](http://indo.com/distance) [15] web site.

<sup>3</sup> Due to data availability Serbia and Montenegro has taken as a same country and the distance computed between Skopje and Belgrade.

important trade partners of Macedonia such as EU-27 countries, CEFTA partners (except Kosovo) and Turkey for a decade (2004-2013).

To test our model with gravity approach we used panel data estimators. As Hsiao (2003) stated, panel data serves important advantages: gives large data points, amplify freedom degree, decrease multicollinearity and thus increase efficiency and stability of estimators [16]. In general, panel data models suffer from heteroskedasticity, autocorrelation and cross sectional dependence. Along with existence of these problems panel estimates will be inefficient [17]. Before testing our model we applied some specification tests<sup>4</sup> to our models and all tests shows that our data suffers from same problems.

Within this scope, we use Beck and Katz's [21], panel corrected standard errors (PCSE) estimators which gives prosperous results for cross-sectional dependence, heteroskedasticity and autocorrelation [17;22; 23].

Table 2 shows the results of Prais-Winsten PCSE estimation<sup>5</sup>. Except one (*cefta<sub>it</sub>*) all variables have statistical significance and both are in expected values. The distance variable taken to model as a proxy for transaction costs (to emphasise Macedonia's geographic position) is statistically significant and shows a negative relationship as expected. Border variable which implies the effect common border is significant and positive as expected. This result may interpretable as common border with Albania, Bulgaria, Greece and Serbia make important effect on Macedonia's foreign trade. Hereby we can say that, Macedonia's geographic position is an important determinant of her foreign trade. GDP variable, reflecting the economic potential (size) of Macedonia and partner country. This variable is significant and positive as expected. This result implies that Macedonia tend to trade with large economies. CEFTA variable is the only variable which is insignificant in our analysis. We think it is because the membership of CEFTA so active and after membership of Macedonia in 2006 important trade partners Bulgaria and Romania left the CEFTA in 2007 and Croatia in 2013.

**Table 2: Test results of Panel Corrected Standard Errors Estimation**

Dependent variable $\text{Intrade}_{it}$	
Independent variables	
$\text{Insumgdp}_{it}$	1.221577 (.0793129)***
$\text{Indistance}_{it}$	-2.172094 (.1359396)***
$\text{border}_{it}$	.5647738 (.1162527)***
$\text{cefta}_{it}$	.1983187 (.1535009)
CONS	1.071314 (1.823762)
Number of Observations	329
$R^2$	0.9408
Wald( $X^2$ )	411.10***

Notes: PCSE are reported in brackets. \*\*\*, \*\* and \* are significance at 1%, 5% and 10%.

Briefly, the result of panel gravity model approach is successful to explain Macedonia's foreign trade and shows that her trade highly dependent on geographic position (can be

<sup>4</sup> For autocorrelation we run Wooldridge test for OLS model and Bhargava et. al. Durbin–Watson statistic and Baltagi–Wu locally best invariant (LBI) test for fixed and random effects. For heteroskedasticity we run Breusch-Pagan/Cook–Wiesberg test for OLS and Breusch Pagan LM test for random effect models [18; 19]. And for testing cross-section independence we use Pesaran's [20] test for fixed and random effect estimators [18]. Specification test results given in Appendix Table A1.

<sup>5</sup> All tests (specification and PCSE tests) performed by STATA 11.1

observed both from distance and common border explanatory variables). Also sum of GDPs' (sum of economic size of Macedonia and trade partner) is an important determinant while regional integration dummy (CEFTA membership) is not.

## CONCLUSION

Geography plays an important role on the formation of states either domestic or foreign economic structure. And also especially during the *Cold War* international political economy directly affected whole world's economic geography however Yugoslavia was one of the mostly affected country. After the collapse of bipolar world and the disintegration of Yugoslavia the new Republics has begun to find their ways due to their geography. In this paper we focused on to evaluate the affect of Macedonia's geographic position, economic potential (size) and integration level (membership to CEFTA) to her foreign trade with 33 countries, for 2004-2013 time span.

We use panel gravity approach with which it is possible to estimate foreign trade determinants. PCSE estimation results shows us distance (or contrary geographic proximity), economic size (sumGDP) and common border are important determinants of Macedonia's foreign trade. Only we couldn't find any significant relationship between CEFTA membership and foreign trade.

## REFERENCES

- [1] Grzybowski, K. Socialist Countries in GATT, The American Journal of Comparative Law, USA, Vol.28 pp539-554, 1980.
- [2] The World Bank <http://web.worldbank.org/external/projects/main?pagePK=217672&piPK=95916&theSitePK=40941&menuPK=221954&category=regcountries&regioncode=5&countrycode=YU>
- [3] Mikel, T. IMF Conditionalities and Debt Conversion in the Former Yugoslavia, Canada, 2003. <http://hdl.handle.net/10393/25164>
- [4] Stanovnik, J. Yugoslav Trade with Asia, The Economic Weekly, Dec.19, 1959.
- [5] European Community Information Service. Background Note, USA, No: 54/1976, pp.1-3, 1976.
- [6] Jovanovich, M. Yugoslav Trade with EEC and COMECON Countries, Law and Contemporary Problems, USA, vol. 37, pp. 586-591, 1972.
- [7] WTO. Trade Policy Review, The Former Yugoslav Republic of Macedonia, pp. 1-15, 2013.
- [8] Bjelić, P.& R. D.Mitrović. The effects of competing trade regimes on bilateral trade flows: case of Serbia, ZbornikradovaEkonomskogfakulteta u Rijeci, časopiszaekonomskuteorijuipraksu-Proceedings of Rijeka Faculty of Economics, Journal of Economics and Business, vol. 35, pp. 267-294, 2012
- [9] Martínez-Zarzoso, I., Nowak-Lehmann D. Felicitas& N. Horsewood. Are regional trading agreements beneficial? Static and dynamic panel gravity models, vol. 20, pp. 46-65, 2009.
- [10] Mojsoska-Blazevski, N.& M.Petreski. Western Balkan's Trade With The EU And Cefta-2006: Evidence From Macedonia, Актуальніпроблемиекономіки, Vol. 8, pp. 339-350, 2013.
- [11] Zulfiu, M. Determinants of Foreign Direct Investment in Transition Economies: With particular Reference to Macedonia's Performance, FIW WorkingPaper N°19, 2008.
- [12] Makstat (Republic of Macedonia State Statistical Office). Commodity exchange trade by countries, <http://makstat.stat.gov.mk/pxweb2007bazi/Database/Statistics>

- [%20by%20subject/Foreign%20Trade/Commodity%20exchange%20trade%20by%20countries/Commodity%20exchange%20trade%20by%20countries.asp](#), 09.02.2015.
- [13] Antonucci, D.& S.Manzocchi. Does Turkey have a special trade relation with the EU? A gravity model approach, *Economic Systems*, Vol. 30, pp. 157–169, 2006.
- [14] WDI Online (World Development Indicators, Online Database). The World Bank, <http://data.worldbank.org/data-catalog/world-development-indicators>, 2015, 20.01.2015
- [15] <http://www.indo.com/distance/>
- [16] Hsiao, C. *Analysis of panel data*. Cambridge University Press, 2003.
- [17] Kabir, M.& R. Salim. Can Gravity Model Explain BIMSTEC's Trade? *Journal of Economic Integration*, Vol. 25, pp. 144-166, 2010.
- [18] Baltagi, B. *Econometric Analysis of Panel Data*, West Sussex: John Wiley & Sons, England, Ltd. 2008
- [19] Yerdelen Tatoğlu, F. *Panel Veri Ekonometrisi (Stata Uygulamalı)*. İstanbul, Türkiye: Beta Basım A.Ş. 2012. (*Panel data econometrics (Stata Applied)*). In Turkish.
- [20] Pesaran, M. H. “General Diagnostic Tests For Cross Section Dependence in Panels”, Center for Economic Studies & Ifo Institute for Economic Research, Institute for the Study of Labor IZA, IZA Discussion Paper No. 1240, 2004.
- [21] Beck, N. & Katz., J. N. (1995), “What to Do (and Not to Do) with Time-Series Cross-Section Data”, *American Political Science Review*, 89, 634-647.
- [22] Al-Mawali, N & R. Salim. What is the Trade Response of the Regional Grouping in the GCC Countries?. The SIBR Conference on Interdisciplinary Business & Economic Research, 16-18 of June, Bangkok, Thailand, 2011. [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2027774](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2027774)
- [23] Ardizzi, G., Petraglia, C., Piacenza, M., Schneider, F., & Turati, G. Estimating Money Laundering through a “Cash Deposit Demand” Approach. In XXIV Conferenza Società italiana di economia pubblica: Economia informale, evasione fiscale e corruzione. 24-25 September, Pavia, Italy, 2012.

## APPENDIX A

**Table A1: Specification Test Results**

	OLS (Pooled)	Random Effects
Wooldridge test	10.152***	-
Bhargava et al. Durbin Watson test	-	1.0174818***
Baltagi-Wu LBI test	-	1.194927***
Breusch-Pagan/Cook Wiesberg test ( $\chi^2$ )	13.27***	-
Breusch Pagan test	-	745.59***
Pesaran (2004) test	-	23.939***

Note: Due to existence of time-invariant variables in our model we only apply specification tests to OLS (pooled) and random effect estimators.