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OPENNESS TO TRADE AND ECONOMIC DEVELOPMENT OF TRANSITION ECONOMIES

ОТВОРЕНОСТ КА ТРГОВИНИ И ЕКОНОМСКИ РАЗВОЈ ТРАНЗИЦИОНИХ ПРИВРЕДА

Summary: *The purpose of this paper is to investigate the connection between countries' openness to international trade and economic development, i.e. the standard of living of umc citizens. Given that this is a frequently researched question among economists with still open conclusions, research on this topic always sheds some new light and contributes to new conclusions on that aspect. The methodology used in the paper is a correlation analysis, where we compared different measures of openness with economic development measured by GDP per capita expressed in purchasing power parity. The sample on which we performed the analysis is 16 countries, some of which have completed the transition process like the countries of so-called New Europe, and some are still stuck in transition, such as our countries of our region. Each of these countries continues to be subject of an analysis of transition progress in the EBRD's Transition Report. The results clearly show a strong and positive correlation between openness to international trade flows and economic development, with this relationship being stronger if we look at export flows than import flows. The conclusion is that openness has no alternative, and that the countries of the region must strengthen their export base and export performance in order to reduce the gap in relation to the countries of New Europe, for which we can easily say that have successfully completed the transition process.*

Keywords: *openness to trade, transition, import, export, correlation, economic development.*

JEL classification: *F14, F43, F63*

Резиме: *Сврха овог рада јесте да истражи везу између отворености земаља ка међународној трговини и економског развоја, односно животног стандарда грађана. Обзиром да је ово често истраживано питање међу економистима са још увијек отвореним закључцима, истраживања на ову тему увијек бацају неко ново свјетло и дају допринос новим закључцима по том аспекту. Методологија која је коришћена у раду је корелациона анализа, гдје смо у однос стављали различите мјере отворености са економским развојем мјереним БДП по глави становника изражен у паритету куповне моћи. Узорак на којем смо вршили анализу је 16 земаља од којих су неке завршиле процес транзиције, а неке су још увијек заглављене у транзицији као што су наше земље региона. Свака од ових земаља и даље је предмет анализе напретка у ЕБРД Транзиционом извјештају. Резултати недвосмислено показују јаку и позитивни корелациону везу између отворености ка токовима међународне трговине и економског развоја, с тим да је та веза снажнија ако погледамо извозне токове него увозне. Закључак је да отвореност нема алтернативу, те да земље региона морају да појачају своју извозну базу и извозне перформансе како би смањиле јаз у односу на земље Нове Европе, за које можемо рећи да су усјешно завршиле процес транзиције.*

Кључне ријечи: *отвореност ка трговини, транзиција, извоз, увоз, корелација, економски развој.*

JEL класификација: *F14, F43, F63*

1. INTRODUCTION

The link between openness and economic growth and development is a widely researched question among economists with still unclear conclusions. The vague relationship between these categories is often associated with an inconsistent approach to measuring the openness of countries.

There are basically two types of measures of openness: the measure of openness to foreign trade flows and the measure of openness of the foreign trade regime. The most basic measure of openness that takes into account foreign trade flows is the participation of the sum of exports and imports in the gross domestic product, while no generally accepted measure stands out as a measure of openness that takes into account the degree of liberalization or

restrictiveness of the foreign trade regime. The focus of this paper is the openness of countries measured by foreign trade flows, i.e. imports and exports.

The modern economic theory of international trade, based on the basic postulates of economic liberalism since the time of Smith and Ricardo, generally claims that countries benefit from international trade through specialization and exchange in that production in which the country has comparative advantages. Specialization enables better use of economies of scale, which is especially important for smaller countries. International trade also serves as a diffusion mechanism through which modern technologies and knowledge are transferred as an extremely important intangible resource in modern conditions.

Considering the largely failed import substitution strategies in developing countries and the progress recorded in most out-ward oriented economies, existing research indicates that there is a positive and strong relationship between growth and development and export growth (Balassa 1985; Ram 1985; Anwer and Samphat 1997; Ekanayake 1999; Haddad and Shepherd 2011). Researchers believe that such policies tend to accelerate the process of getting out of poverty in backward economies (Daitoh 2008), and that economies that force restrictive policies in terms of international trade liberalization fall behind and face low standards and slow recovery and growth (Sachs and Warner 1995; Krueger 1998; Dollar and Kraay 2001; Krugman and Obstfeld 2009; Kee et al. 2008).

However, there is a growing number of researchers who doubt the consistency of the positive relationship between international trade and economic growth/development (Rodriguez and Rodrik 2001; Baldwin 2003; Rodrik et. al. 2002; Rodrik 2006; Rodriguez 2006a; 2006b), and this is mainly as a result of the lack of a conceptual definition of openness and its measurement (Baldwin 2003). Additionally, a high ratio of openness to trade, i.e. high integration into the world economy implies a growing sense of insecurity and sensitivity to external shocks (Montalbano et al. 2005).

While most empirical studies focused on the relationship between openness and growth, Frankel and Romer (1999) investigated the relationship between openness and income, ie. Standard of living of the population. In their analysis, the authors showed that the impact of trade on the standard of living is significant because an increase in the share of foreign trade in GDP by 1% contributes to an increase in the standard of living between 0.5 and 2% (Frankel and Romero 1999, 380).

Although most of the literature focuses on the relationship between trade and economic growth, empirical research has focused on the relationship between exports and growth (Levine and Renelt 1992). The basic assumption of the export strategy hypothesis (export-led growth hypothesis-ELGH) claims that the orientation towards export and its expansion is one of the main determinants of long-term growth. The countries of Southeast Asia are a good example – Hong Kong, Taiwan, South Korea and Singapore or the so-called "Four Tigers", achieved consistently high growth since the early 60s of the 20th century as a result of building a market economy and orientation towards foreign markets (Medina-Smith 2001; World Bank 1993).

In the context of the research problem, there is generally little research devoted to small economies. It is widely believed that small countries have a modest resource base, which is why they are dependent on foreign trade and external resources. Exports are often concentrated in a few sectors, and therefore such countries are more exposed to external shocks. However, there are some other advantages of small countries that they could profit from. In this paper, the sample countries consist of small countries, at a sufficiently similar level of development, which have undergone or are still undergoing the process of transition, i.e. countries with similar economic and social characteristics. As a measure of openness, the participation of foreign trade flows in the gross domestic product is used in the work, and by dividing foreign trade flows into import and export flows, we will give special emphasis when observing the openness to foreign trade flows of a country in the context of its level of development.

2. METHODOLOGY OF ANALYSIS – SAMPLE AND METHODS OF MEASUREMENT

The sample on which the hypothesis is tested includes 16 small economies, out of which some finished their process of transition such as Central European Countries and Baltics, and some are still in transition process. The sample is based on the countries that are included in the Transition Report of the European Bank for Transition and Development where their progress in finishing transition is measured by ATQ scores for six key qualities of a sustainable market economy (EBRD Transition Report 2023,103).

In our sample, we can make a clear distinction according to how close the countries are to membership in the European Union. Thus, we have the countries of the region (Albania, BiH, North Macedonia, Montenegro and Serbia) that are not members, the countries of the region that are members and the youngest ones (Bulgaria, Croatia and Romania), and those countries that are called New Europe, the countries of Central Europe and the Baltic States (Czech Republic, Estonia, Latvia, Hungary, Lithuania, Poland, Slovakia and Slovenia).

According to the definition of the International Monetary Fund and their database *World Economic Outlook*, some of these countries are developed countries of Europe (Czech Republic, Croatia, Estonia, Latvia, Lithuania, Slovenia, Slovakia), but most of them are classified as emerging and developing economies of Europe (Albania, Bulgaria, BiH, Hungary, North Macedonia, Montenegro, Poland, Romania, Serbia). Countries like Poland and Hungary, Countries of so called New Europe are classified as emerging market and developing economies together with Serbia, Romania, Bosnia and Herzegovina, etc. which is surprising because according to the level of GDP per capita in purchasing power parity, these two countries are far ahead of countries like Bosnia and Herzegovina, Albania, Serbia or North Macedonia, and they are almost "side by side" with the other member countries of the "New Europe", such as Slovenia, Slovakia, Czech Republic, etc. This only confirms our observation that the classifications of countries' development by international financial institutions such as the IMF and the World Bank still suffer from inconsistency and vagueness.

In this paper, foreign trade flows of countries include export and import of goods, which are still the dominant item in world trade. According to the latest data from the World Trade Organization, the share of world trade in goods is about 79% of total world trade, 20% is services and 1% is intellectual property trade.

In order to test the connection between openness and economic development, two key variables of our analysis, we applied the method of statistical correlation and analysis based on correlation coefficients. First, we tested the relationship between openness to total foreign trade (the sum of imports and exports) and economic development, and then we analyzed the relationship between openness broken down on the import side and on the export side and economic development measured by gross domestic product per capita according to purchasing power parity. It was also examined what kind of connection the export of manufactured or industrial goods has with economic development.

Data on export and import flows were used from the comprehensive statistical database of the World Trade Organization - *Statistics Database*, while data on the level of GDP and GDP per capita in purchasing power parity were taken from the IMF's statistical database *World Economic Outlook*. All data values are expressed in current dollars, except for GDP per capita, which is expressed in current international dollars.

GDP per capita is still the generally accepted and most commonly used measure of economic development despite its shortcomings.

For each of the variables, the eight-year average 2015-2022 was analyzed, in order to avoid the effect of shocks and crises that can obscure the actual results. Only the seven-year average was analyzed for the variable export of manufactured goods because the data for 2022 is not yet available.

The following 4 relations were therefore tested:

1. Correlation between openness and economic development, where "trade intensity" is used as the most basic measure of openness, that is, share of imports and exports in the gross domestic product;
2. Correlation between the share of exports in the gross domestic product and economic development;
3. Correlation between the share of imports in the gross domestic product and economic development;
4. Correlation between share of export of industrial goods in the gross domestic product and economic development.

A summary table with all variables by country is shown below.

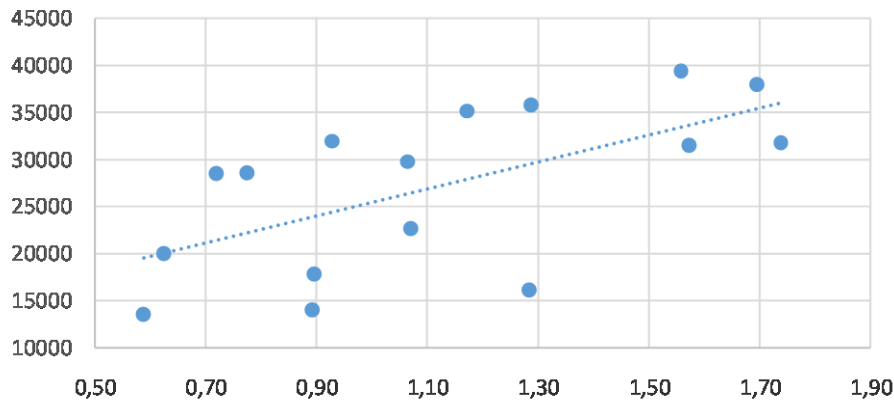
Table 1: Variables - export of goods, import of goods, export of manufactured goods, average GDP, share of trade in GDP, share of export of goods in GDP, share of imports in GDP, GDP per capita at PPP

Reporting Economy	Average Exports (2015-2022)	Average Imports (2015-2022)	Average Manufactured /Industrial Exports (2015-2021)	Average GDP (2015-2022)	Share of Trade in GDP	Share of Exports in GDP	Share of Imports in GDP	Share of Manufactured Exports in GDP	GDP per capita at PPP, average (2015-2022)
Albania	2766000000	5961875000	1742142857	14855000000	0,59	0,19	0,40	0,12	13542
Bosnia and Herzegovina	6878875000	11213000000	4437428571	20271750000	0,89	0,34	0,55	0,22	13991
Bulgaria	34270875000	38409250000	18457285714	67872750000	1,07	0,50	0,57	0,27	22650
Croatia	17719250000	28666250000	10817000000	59903000000	0,77	0,30	0,48	0,18	28535
Czech Republic	195472625000	178813000000	169892571429	240330750000	1,56	0,81	0,74	0,71	39347
Estonia	16738000000	18755375000	10737142857	30286250000	1,17	0,55	0,62	0,35	35184
Hungary	122067125000	119597625000	100590142857	153595500000	1,57	0,79	0,78	0,65	31477
Latvia	16454000000	19647375000	9307428571	33894875000	1,07	0,49	0,58	0,27	29807
Lithuania	33336125000	36604250000	20084571429	54320500000	1,29	0,61	0,67	0,37	35738
Montenegro	468375000	2740250000	118857143	5135500000	0,62	0,09	0,53	0,02	19995
North Macedonia	6580625000	9035625000	5216285714	12160375000	1,28	0,54	0,74	0,43	16071
Poland	267810000000	268620375000	202939428571	577909125000	0,93	0,46	0,46	0,35	31981
Romania	75779125000	95622375000	58951142857	238423000000	0,72	0,32	0,40	0,25	28464
Serbia	19777375000	26607250000	12653142857	51753750000	0,90	0,38	0,51	0,24	17806
Slovak Republic	89640250000	89134625000	78164142857	102889625000	1,74	0,87	0,87	0,76	31733
Slovenia	45530000000	44023125000	35223000000	52824875000	1,70	0,86	0,83	0,67	37911

Source: World Trade Organization for foreign trade data, International Monetary Fund for GDP and GDP per capita at purchasing power parity data and author's calculation

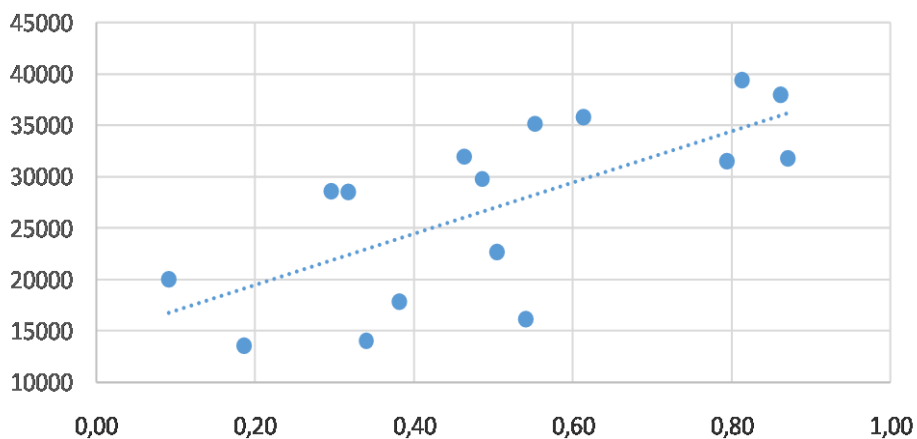
3. RESULTS

Graph 1 shows the relationship between openness measured by the share of imports and exports in gross domestic product (x axis) and economic development measured by GDP per capita at purchasing power parity (y axis). The correlation coefficient is 0.62, which means that there is a strong correlation between these two variables with a positive sign. We can say that these two variables move together or that there is a positive interdependence of these variables.

Graph 1: Correlation between openness to trade and economic development

Source: Author's calculation based on the previous table

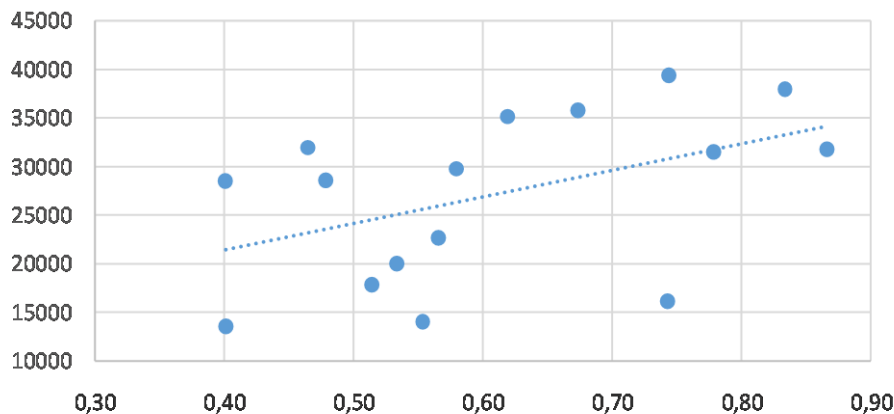
Graph 2 shows the relationship between openness measured by the share exports in gross domestic product (x axis) and economic development measured by GDP per capita at purchasing power parity (y axis). The correlation coefficient is 0.69, which means that there is a strong correlation between these two variables with a positive sign, even stronger than previous measure of openness. We can say that these two variables move together or that there is a positive interdependence of these variables. When we exclude two countries in which the export of tourist services dominates, Croatia and Montenegro, then the correlation coefficient between the share of exports in GDP and economic development rises to high level of 0.72.

Graph 2: Correlation between share of exports in GDP and economic development

Source: Author's calculation based on the previous table

Graph 3 shows the relationship between openness measured by the share imports in gross domestic product (x axis) and economic development measured by GDP per capita at purchasing power parity (y axis). The correlation coefficient is 0.47, which means that there is a correlation between these two variables with a positive sign, but much lower than for the exports which was expected. When analyzing the share of imports in GDP and economic development, we can quite intuitively assume that the correlation coefficient cannot be high, but it is important to note that this relationship has a positive sign, of course, with a significantly lower value of 0.47. We can interpret this as the country's import capacity, which ultimately results from its export potential.

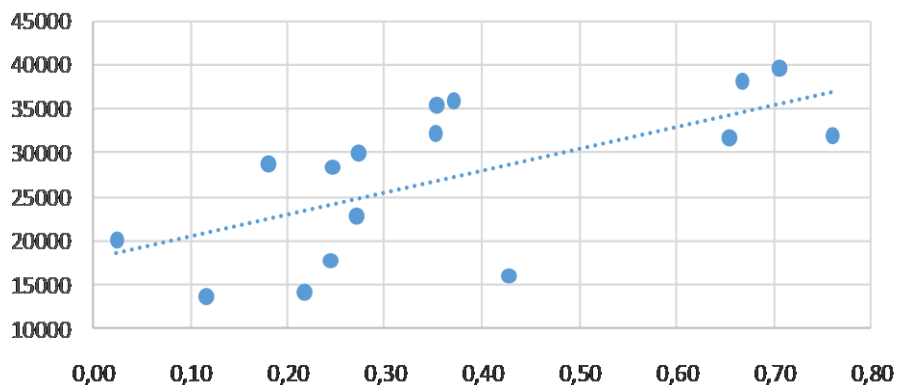
Graph 3: Correlation between share of imports in GDP and economic development



Source: Author's calculation based on the previous table

Graph 4 shows the relationship between openness measured by the share exports of industrial goods in gross domestic product (x axis) and economic development measured by GDP per capita at purchasing power parity (y axis). The correlation coefficient is **0.62** which is unexpectedly lower than correlation coefficient of all exports and economic development. If we go into a little deeper analysis, the countries that do not have high coefficients of the share of export of industrial goods in GDP, and have a relatively high standard of living compared to other countries in the sample, are the Baltic countries - Lithuania, Latvia and Estonia, which due to their specific development, rely on financial services, information technologies and technologies of the modern era, and practically do not base their economic development exclusively on industry, such results for the correlation coefficient are logical.

Graph 4: Correlation between share of exports of industrial goods in GDP and economic development



Source: Author's calculation based on the previous table

4. CONCLUSIONS

The relationship between the country's openness to foreign trade and economic development, although a widely researched issue in economics, remains extremely demanding, methodologically undefined, but interesting for further research. Our analysis of the problem showed that there is a significant positive correlation between the openness of countries and economic development, but also that the relationship between openness on the export side is far stronger than the relationship between openness on the import side and standard of living. This conclusion suggests that when analyzing openness, one should distinguish between export and import flows, which is often not done in research.

The nature of the relationship between imports and economic development is of positive sign, but the correlation coefficient is far lower than when we look at the link between exports and economic development. This suggests that for small open economies it is extremely important that they actually build their import capacity on strengthening their export performance which is extremely connected with the issue of competitiveness. Somewhat weaker connection between the export of industrial products and economic development was shown, which can be explained by the deindustrialization that is present in the modern world, where many countries base their development on new technologies, the ICT sector, which is in our sample vivid on the example of the Baltic countries.

What is worrying is that the countries of the region - Albania, Bosnia and Herzegovina, North Macedonia, Montenegro and Serbia lag significantly behind even the youngest members of the EU in terms of living standards, and that the gap in relation to the countries of the New Europe is even wider compared to some of our earlier studies (Trivic, 2018). In the context of the analysis performed in this paper, we can conclude that only by strengthening the export performance of the countries of the region, this gap can be overcome.

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