

FOREIGN DIRECT INVESTMENT AND INTERNATIONAL TRADE IN THE WESTERN BALKANS-6 COUNTRIES: AN EMPIRICAL ANALYSIS

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Abstract

The following research paper conducts a comprehensive analysis into the intricate dynamics governing the relationship between Foreign Direct Investment (FDI) and International Trade, with a specific focus on the Western Balkan Countries-6 (WB-6). This research spans the period from 2000 to 2020 and seeks to shed light on the interplay between FDI and International Trade within this region. To analyse and interpret these dynamics, various regression models, including Ordinary Least Squares (OLS), Fixed Effects, Random Effects, and the Hausman-Taylor model, are employed as analytical tools.

Moreover, the research takes into consideration the influence of specific institutional factors within each country, which play a pivotal role in shaping foreign investors' decisions to invest in a particular country. The study's results reveal that gravity factors, in conjunction with institutional determinants such as economic integration, control of corruption, political stability, and other indicators of governance quality, significantly impact the attractiveness of the WB-6 countries to foreign investors. The findings of this paper hold substantial relevance for the development of an analytical framework aimed at evaluating national policies and institutions geared towards enhancing the appeal of Western Balkan countries to foreign investors. Furthermore, the research underscores the importance of these host countries prioritizing efforts to bolster the effectiveness of governmental institutions, combat corruption, streamline bureaucratic processes, and improve overall economic conditions to attract and retain foreign investment.

Keywords: Foreign Direct Investments, International Trade, Western Balkans, Transition, Economic Development

JEL Classification: F21

1. INTRODUCTION

The role of Foreign Direct Investments (FDIs) has been a topic of considerable debate among economic policymakers, especially when assessing their

effects on economic indicators in Western Balkan countries. Some economists argue that these national economies do not always experience a positive impact from the influx of FDIs and that the effects on domestic company collaboration are relatively minor. Conversely, proponents of the positive effects of FDIs contend that they foster stronger connections with foreign companies, providing access to technology, know-how, and vast market opportunities. This, in turn, enables local companies to enhance productivity by transforming their production and service structures, leading to increased exports. Additionally, as part of the economic development process, FDIs contribute to improved balance of payments and higher employment rates.

Considering the economic challenges faced by the Western Balkan Countries (Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Serbia, and Montenegro), it becomes evident that the region requires more substantial investments, especially due to deindustrialization. It's noteworthy that researchers also suggest that larger FDI inflows lead to increased trade volumes and higher overall outputs. Both the NMS-11 and Western Balkan countries share a common historical past characterized by economic and political systems that led to issues like inflation, political instability, and financial sector collapses. The transition to a market economy in the Western Balkans was delayed due to events such as the disintegration of the Socialist Federal Republic of Yugoslavia in the late 90s. Surprisingly, there have been few studies examining the relationship between FDI inflows and export performance in these transitioning Western Balkan countries and newly integrated EU member states. Among various forms of international business, foreign direct investments are considered the most effective way by which transitioning economies become integrated in the global economy. In order to understand the interaction between FDI's and its impact on international trade, the basic research hypothesis emerged from the research goal is: the inflow of foreign direct investment has a statistically significant relationship on the growth of export of the host countries. The defined hypothesis will be tested in the countries of Western Balkans-6 in the form of correlation coefficients between the average share of FDI and GDP and the average GDP growth in the period of 2008-2020. Some of the research questions will be answered through a narrative and comparative approach, while others through a quantitative approach using sophisticated econometric methods. Specifically, through econometric models such as: the method of small squares, otherwise known as OSL, Fixed Effect, Random Effect, as well as Housman Taylor effects. During the drafting of this research paper comprehensive methodology, applying different research-scientific methods, which were mainly realized through reading the literature, observation, and critical thinking from where the information was selected according to their validity by different foreign and local authors. In order to examine these factors, the following research questions will be attempted to be answered:

Q1: What influences FDI inflow in WB-6 countries, considering GDP growth, market size, trade openness, institutional quality, and infrastructure development?

Q2: How do institutional factors, like the rule of law, governance quality, and regulatory frameworks, attract FDI in WB-6, and how do they interact with other FDI determinants such as market size, economic stability, and human capital?

Q3: How do horizontal and vertical FDI impact WB-6 international trade, considering market size, income levels, and economic integration?

Thus, in order to investigate these research inquiries, we formulate the following research hypotheses:

Hypothesis I: A statistically positive relationship exists between Foreign Direct Investment (FDI) and International Trade for the Western Balkan Countries-6 which may be attributed to factors such as market structure, economic integration, and the nature of FDI inflows.

Hypothesis II: Political stability positively influences the relationship between Foreign Direct Investment and International Trade for both EU NMS-11 and WB-6 countries, by reducing uncertainty, fostering a favourable investment climate, and promoting economic cooperation within the region.

Hypothesis III: FDI inflows positively impacts the economic growth of recipient countries by promoting export-oriented activities, diversifying the economy, and improving international competitiveness.

Building upon the findings related to FDIs, the goal of this research is to determine the impact of foreign direct investments on export performance in the Western Balkan countries. The paper is structured to begin with the research goal and hypothesis, followed by a theoretical foundation exploring the impact of FDIs on economic growth. It then delves into a literature review elaborating on the implications of FDIs in international trade. The third section covers the research methodology, including data sources, and the fourth part presents the research results. Importantly, the research study offers a comparative analysis of the FDI-trade relationship in the Western Balkan Countries-6, highlighting both similarities and differences.

2. REVIEW OF LITERATURE

The process of transitioning to a market economy in the Western Balkans was significantly delayed due to a series of unfortunate events that began with the dissolution of the Socialist Federal Republic (SFR) of Yugoslavia in mid-1991. Following the breakup of the Yugoslav federation, the region endured a decade of armed conflicts, including those in Slovenia (1991), Croatia (1991-95), Bosnia and Herzegovina (1992-95), Kosovo (1998-99), and Macedonia (2001). Furthermore, some countries faced embargoes, such as the Federal Republic (FR) of Yugoslavia (comprising Serbia and Montenegro), which endured severe UN and EU sanctions in 1992-96 and again in 1998-99, as well as economic sanctions imposed on Macedonia by Greece. The prevailing political priorities and inward-focused nationalistic policies placed many of the economic reforms associated with the transition process on the backburner. The political developments in the Western

Balkans have had significant and enduring economic impacts (Uvalic, 2016). Following a turbulent decade marked by political and economic instability in the Western Balkans, the 2000s ushered in several positive developments. These included enhanced macroeconomic performance and the acceleration of economic reforms associated with the transition process. Prior to the global economic crisis that struck in late 2008, the Western Balkan nations enjoyed rapid economic growth and improved macroeconomic stability, a welcome change after experiencing episodes of hyperinflation during the 1990s. Trade liberalization, both with the EU and neighbouring countries, played a pivotal role in significantly boosting foreign trade volume. Nonetheless, trade potential in the region has not been fully realized, as observed by Sanfey and Zeh in 2012 and the World Bank in 2014.

The theoretical background in the existing literature provides a foundation for understanding the dynamics between FDI and international trade. These theories, including the Product Life Cycle Theory, Internalization Theory, and the Eclectic Paradigm, offer insights into how FDI and international trade can be intertwined, and their applicability can be examined in the context of WB-6 countries. The opening of the Western Balkans has allowed for a change in the political and economic landscape. The region has become a marketplace with potential for growth, and has attracted a lot of foreign direct investment (FDI). Much of this success can be credited to the determinations of local governments, international organizations, and other non-governmental institutions. These entities have provided foreign investors with information about their experiences, and what practices work best within the countries in which they have invested.

Research in the field of international economics has extensively analysed the patterns and determinants of Foreign Direct Investment (FDI) between countries. Various studies have explored the relationship between FDI, trade, and the characteristics of both home and host countries, providing valuable insights into the complex motivations driving multinational enterprises (MNEs) in the context of Western Balkan-6 (WB-6) countries, including Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Serbia, and Montenegro. Carr et al. (2001) and Markusen and Maskus (2002) conducted studies focusing on analysing the flow of FDI between two countries, investigating factors such as market size, distance, and institutional differences. Their findings shed light on how specific country characteristics influence investment decisions and the bilateral patterns of FDI.

Brainard's (1997) employed a research methodology that focused on empirical analysis and used econometric methods to investigate the role of horizontal FDI between similar countries, revealing that higher transport costs and tariffs encourage multinational firms to establish local production facilities in foreign markets. This insight into horizontal FDI is particularly relevant when considering the impact of FDIs on WB-6 countries. What's more, Brainard (1997) demonstrated that US labor competes with labor abroad through multinational production, with activities in developing countries being outsourced to take advantage of wage differentials, providing valuable lessons for regions like the Western Balkans. The author further explored the activities of foreign manufacturing affiliates owned by

US multinationals, highlighting that affiliate activities in developing countries can be complementary to those in industrialized countries. This suggests that multinationals strategically use FDI in countries at various stages of development to optimize production.

Blonigen et al. (1997) conducted a comprehensive study using data on U.S. affiliate sales from 1986 to 1994, shedding light on the motivations driving vertical MNEs, this study was based on empirical research methodology. Their findings offered evidence supporting the horizontal model of FDI, which is particularly relevant for understanding FDI in the context of WB-6 countries. Ekholm et al. (2007) used data from the U.S. Department of Commerce to provide substantial evidence of the importance of FDI between countries concerning both size and relative endowments. Their results supported the Knowledge-Capital (KK) model, which suggests that FDI is driven by a combination of firm-specific advantages and location-specific factors.

Head and Ries (HR, 2003) conducted empirical research to study the production decisions of large Japanese firms in 1989, revealing that when a host country offers no cost advantage, investors abroad are more productive than exporters. This finding has implications for understanding how firms in the Western Balkans might attract FDI. HMY (2004) developed a model examining firms' decisions between exports and horizontal FDI, providing insights into the factors driving the internationalization strategies of firms, which can be relevant for understanding the FDI- trade nexus in WB-6 countries.

In summary, while numerous studies have explored factors influencing economic growth in both developed and developing nations, there is a notable scarcity of empirical growth models specifically tailored to the Western Balkans countries. To enhance our comprehension of the growth dynamics in this region, this research establishes an empirical growth model aimed at examining the factors that hinder economic growth in Western Balkans countries and how policies can be employed to address these limitations.

3. RESEARCH METHODOLOGY AND DATA

3.1 RESEARCH METHODOLOGY

To conduct this scientific study and validate the initial findings of our research project which is the relationship between foreign direct investment and international trade for the Western Balkan countries over the period of 2000-2020, we will utilize advanced scientific methodologies and models. To achieve this objective, we utilized a combination of statistical methods, including pooled ordinary least squares (OLS), fixed effects, random effects, and the Hausman-Taylor instrumental variables (IV). Additionally, we conducted the Hausman test to determine the most suitable model among fixed effects, random effects, and the Hausman-Taylor model.

Pooled OLS Model

By using OLS, we can estimate the impact of each independent variable on the dependent variable and assess the statistical significance of the coefficients

$$Y_i = \beta_0 + \beta_1 X_i + \varepsilon_i$$

The model relies on an assumption about the error term, where it is presumed that the error term follows a normal distribution with a constant variance (homoscedasticity), and there is no autocorrelation between error terms from different observations. However, in panel data models, the presence of heterogeneity among units within the same sample and over time can pose challenges, potentially leading to biased coefficients. Despite the potential biases, this paper chooses to begin with pooled OLS estimation, aligning with the approach adopted in previous empirical studies.

Fixed and random effects model

$$Y_{it} = \beta_0 + \beta_1 X_{it} + \alpha_i + \varepsilon_{it}$$

Here, y_{it} is the dependent variable, x_{it} represents the observable explanatory variable, c_i is the individual-specific effect or unobserved effect, and u_{it} is a random error or idiosyncratic error. The crucial assumption revolves around whether the first part of the decomposition, c_i , in equation (2) is correlated with the explanatory variables x_{it} . In the random effects model, the term c_i is assumed to be uncorrelated with the explanatory variables, while in the fixed effects model, the term c_i is considered to be correlated with the explanatory variables. Both models also account for unobservable individual-specific time-invariant effects of heterogeneity.

Failure to consider the issue of heterogeneity leads to two main limitations: 1) determining whether there is a correlation between c_i and the explanatory variables (in the case of random effects), and 2) if it's assumed that c_i is correlated with the explanatory variables, estimating time-invariant explanatory variables becomes challenging. Furthermore, given that some variables in our study are considered to be endogenous, they might introduce bias into the results. Consequently, neither random effects nor fixed effects estimation may be appropriate. Hence, we turn to a more sophisticated model, the Hausman-Taylor instrumental IV estimation. The fixed and random effects models are presented mainly for comparison purposes.

Hausman-Taylor model

$$Y_{it} = \beta_0 + \beta_1 X_{it} + \beta_2 Z_{it} + \mu_i + \varepsilon_{it}$$

The Housman Taylor Approach, or Housman-Taylor estimator, is a method used to address the endogeneity issue in panel data models. Endogeneity occurs when the independent variables are correlated with the error term, leading to biased and inconsistent coefficient estimates. In your theoretical model, the Housman Taylor Approach would be employed to address potential endogeneity concerns arising from omitted variables or measurement errors. This approach uses instrumental variables to address endogeneity by providing a source of exogenous variation that is correlated with the independent variables but not with the error term.

The Housman Taylor Approach improves the validity of the estimated coefficients and allows for more reliable inference in the presence of endogeneity issues. It is particularly useful when there are concerns about the causal interpretation of the coefficients in the presence of endogeneity.

Estimated model

The application of the Hausman-Taylor Instrumental IV model serves to address the critical issue of endogeneity, which holds significant importance in the field of econometrics. Furthermore, as some of the variables in our study are considered to be endogenous, they can introduce complications because these determinants may be influenced by economic growth itself, resulting in a system of simultaneous equations. This, in turn, can lead to biased regression coefficients associated with these variables. To mitigate the endogeneity problem, we adopt a one-equation approach using instrumental variables. Considering our understanding of the endogeneity issues and the results of the Hausman test, the Hausman-Taylor instrumental variables model is deemed the most appropriate choice when compared to the random and fixed effects models for the context of the Western Balkans countries over the time period from 2000 to 2020.

4. EMPIRICAL RESULTS

It is crucial to highlight that regression models serve as indispensable tools for researchers to explore the various channels through which economic growth is influenced by a wide range of explanatory variables. These models allow researchers to discern changes in economic growth and its development over time. In line with the economic literature and the arguments discussed previously, it is vital to underscore that countries facing a heightened level of institutional crisis, such as the transitioning Western Balkans-6 countries, can incur substantial economic and social costs.

Table 1: Testing the effect of FDI on international trade

Base	v2 (OLS Model)	v3 (Fixed Effects)	v4 (Random Effects)	v5 (Hausman Taylor)
	-1	-2	-3	-4
VARIABLES	lnexp_import	lnexp_import	lnexp_import	lnexp_import
lnexp_import				
lnfdinetoutflows	0.0099243*	0.0141702**	0.0099243*	0.0142095**
	0.0067234	0.0052787	0.0067234	0.0052853
lnfdinetinflows	0.0351653**	0.0864185***	0.0351653**	0.0874765***
	0.0158709	0.0149929	0.0158709	0.0149139
Corruption	-0.1204567*	0.0514651*	-0.1204567*	-0.2342811*
	0.0260293	0.0253041	0.0260293	0.0636097

Rule of law	0.5197528***	0.1559533**	0.5197528***	0.168734**
	0.065643	0.0681261	0.065643	0.0678142
regulatoryquality	0.1555301*	0.0576446*	0.1555301*	0.0627395**
	0.032862	0.0465396	0.032862	0.046181
voiceandaccountability	-0.288301*	-0.240476*	-0.288301*	-0.2463505**
	0.0569827	0.0647674	0.592762	0.0642565
control_corruption	0.3942904*	-0.2476993*	0.3942904*	0.0511441**
	0.0569827	0.0637996	0.0569827	0.0251057
Lngdp	0.9620497***	0.9808462**	0.9620497***	0.9605099**
	0.0141364	0.0463928	0.0141364	0.041868
_cons	0.6424685*	-1.90212*	0.6424685*	-1.463279**
	0.2266578	0.9464416	0.2266578	0.08622166
Observations	324	324	324	324
R-squared	0.9766	0.9515	0.9766	
Number of code				

$$\begin{aligned} \text{Trade}_{ijt} = & \alpha_0 + \alpha_1 * \text{FDI}_{ijt} + \alpha_2 * \text{GDP}_i * \text{GDP}_j + \alpha_3 * \text{GDPpc}_{it} + \alpha_4 * \\ & \text{GDPpc}_{jt} + \alpha_5 * \text{Corruption}_{it} + \alpha_6 * \text{Corruption}_{jt} + \alpha_7 * \text{WTO}_{it} * \text{WTO}_{jt} + \\ & \alpha_8 * \text{Voice}_{\text{Accountability}_{it}} + \alpha_9 * \text{Voice}_{\text{Accountability}_{jt}} + \alpha_{10} * \\ & \text{Gov}_{\text{Effectiveness}_{it}} + \alpha_{11} * \text{Gov}_{\text{Effectiveness}_{jt}} + \alpha_{12} * \text{Regulatory}_{\text{Quality}_{it}} + \\ & \alpha_{13} * \text{Regulatory}_{\text{Quality}_{jt}} + \alpha_{14} * \text{Rule}_{\text{of}_{\text{Law}_{it}}} + \alpha_{15} * \text{Rule}_{\text{of}_{\text{Law}_{jt}}} + \alpha_{16} * \\ & \text{Political}_{\text{Stability}_{it}} + \alpha_{17} * \text{Political}_{\text{Stability}_{jt}} + \alpha_{18} * \text{Distance}_{ij} + \alpha_{19} * \\ & \text{Language}_{ij} + \alpha_{20} * \text{Border}_{ij} + \eta_{ijt} \end{aligned}$$

Trade_{ijt} represents the dependent variable, which captures the international trade between country i and country j at time t. These factors, represented by various independent variables, interconnect to shape the dynamics of international trade. At the forefront of this study is Foreign Direct Investment (FDI_{ijt}), which embodies the cross-border flows of direct investment between country i and country j at a specific point in time denoted as t. FDI_{ijt} acts as a catalyst, facilitating economic integration and exerting its influence on Trade_{ijt}. The coefficient α₁ serves as a quantitative measure of the impact of FDI_{ijt} on trade patterns and volumes. Moving beyond the microeconomic scope, the Gross Domestic Product (GDP) assumes prominence. The product of GDP_i and GDP_j captures the aggregate economic output of country i and country j, respectively. This multiplication yields valuable insights into the complex relationship between economic activity and trade.

The coefficient α₂ provides a quantitative assessment of the extent to which the combined GDP of both countries influences Trade_{ijt}. In an endeavor to elucidate the intricate nuances of trade, the GDP per capita of country i (GDPpc_{it}) and country j (GDPpc_{jt}) are taken into consideration. These variables offer a finer

lens through which to examine the economic well-being of individuals within each nation at time t . The coefficients α_3 and α_4 shed light on the impact of GDP per capita on Trade_{ijt}, thereby illuminating the role of individual prosperity in shaping trade dynamics.

Considering the socio-political dimension, corruption emerges as a salient factor. The level of corruption within country i (Corruption_{it}) and country j (Corruption_{jt}) serves as a pivotal variable. By virtue of the coefficients α_5 and α_6 , the influence of corruption on Trade_{ijt} is quantified, offering insights into the potential impediments or incentives that corruption poses to trade relationships. The World Trade Organization (WTO) assumes a crucial role in shaping the landscape of international trade. To assess its impact on Trade_{ijt}, the interaction term between WTO membership status of country i (WTO_{it}) and country j (WTO_{jt}) is considered. The coefficient α_7 captures the influence of WTO membership on trade patterns, shedding light on the benefits or disadvantages conferred by membership in this international trade body. Beyond economic factors, governance and accountability come to the fore. Variables such as Voice and Accountability (Voice_Accountability_{it} and Voice_Accountability_{jt}), Government Effectiveness (Gov_Effectiveness_{it} and Gov_Effectiveness_{jt}), Regulatory Quality (Regulatory_Quality_{it} and Regulatory_Quality_{jt}), Rule of Law (Rule_of_Law_{it} and Rule_of_Law_{jt}), and Political Stability (Political_Stability_{it} and Political_Stability_{jt}) are integral to understanding Trade_{ijt}.

These governance variables encapsulate the institutional frameworks, transparency, and stability within country i and country j . The corresponding coefficients (α_8 to α_{17}) quantify the impact of governance factors on trade dynamics, highlighting the influence of participatory governance, effective governmental institutions, regulatory frameworks, the rule of law, and political stability on Trade_{ijt}. Incorporating geographical considerations, the variable Distance_{ij} captures the physical separation between country i and country j . This geographic distance contributes to the logistical challenges and costs associated with trade. The coefficient α_{18} elucidates the influence of distance on trade patterns, revealing the barriers or facilitators that geographic separation presents. Additionally, Language_{ij} and Border_{ij}, represented as dummy variables, assume relevance in shaping trade dynamics. Language_{ij} indicates whether country i and country j share a common language, while Border_{ij} signifies the presence of a shared border. The coefficients α_{19} and α_{20} respectively capture the influence of language and border-sharing on Trade.

To gain a deeper understanding of the intricate relationship between FDI and international trade in these transitioning European countries, this research will delve into various dimensions of their economic and institutional frameworks. Addressing the data limitations in the Western Balkans-6 countries is of paramount importance, as it can significantly enhance our comprehension of the economic dynamics in this region and the impact of FDI and international trade on their development. Moreover, the research findings have the potential to provide valuable insights for policymakers and stakeholders in these transitioning countries. These insights can

aid in the formulation and implementation of strategies to foster economic growth, attract FDI, and promote international trade. Identifying the specific factors that either drive or hinder the relationship between FDI and trade in these nations can serve as a roadmap for future development initiatives and policy reforms, ultimately contributing to the overall prosperity and stability of the region.

5. EMPIRICAL RESULTS

5.1 OLS (ORDINARY LEAST SQUARE)

The statistical model employed in this study demonstrates a remarkable overall significance, as evident from the F-statistic; $F(8, 315) = 1641.86$, $\text{Prob} > F = 0.0000$). This statistic indicates that at least one of the independent variables in the model significantly contributes to explaining the variations observed in "international trade". Moreover, the model is highly effective in explaining the variability in "international trade," with an R-squared value of 0.9766. This means that an overwhelming 97.66% of the fluctuations in "international trade" can be accounted for by the independent variables in our model, signifying strong statistical results.

Initially, the variable "FDI net outflows" did not display statistical significance ($t = 1.48$, $p = 0.141$), suggesting that it may not have a substantial impact on „international trade." In simpler terms, changes in „FDI net outflows" do not seem to strongly influence the dependent variable within the scope of this study. In contrast, "FDI net inflows" showed statistical significance ($t = 2.22$, $p = 0.027$) with a positive coefficient. This suggests a potential positive influence on „international trade," indicating that higher values of „FDI net inflows" may contribute positively to the "international trade" variable, possibly through increased foreign direct investment inflows. The variable "corruption" exhibited a significant and positive relationship ($t = 6.92$, $p < 0.001$) with „international trade." This implies that higher levels of corruption are associated with increased „international trade." This result may seem counterintuitive but highlights a specific dynamic where corruption may coincide with higher levels of international trade activity. Similarly, "rule of law" demonstrated a significant positive relationship ($t = 7.92$, $p < 0.001$) with "international trade." This suggests that a stronger rule of law corresponds to higher levels of „international trade," emphasizing the role of a robust legal framework in fostering international trade. The variable "regulatory quality" exhibited a significant positive impact ($t = 4.73$, $p < 0.001$) on „international trade," implying that better regulatory quality is linked to higher levels of „international trade." This finding underscores the importance of regulatory efficiency and effectiveness in promoting international trade within this research context. Conversely, "voice and accountability" had a significant negative effect ($t = -4.86$, $p < 0.001$) on "international trade," indicating that higher levels of voice and accountability are associated with lower "international trade." This result suggests that increased scrutiny and accountability may potentially hinder international trade activities within this specific context. Correspondingly, "control of corruption" demonstrated a significant negative impact ($t = -4.63$, $p < 0.001$) on "international trade," implying

that stronger control of corruption is linked to lower "international trade." This underscores the complex relationship between governance measures and international trade in this particular research setting. Finally, "GDP" exhibited a highly significant positive relationship ($t = 68.05$, $p < 0.001$) with "international trade," implying that higher GDP levels are strongly associated with greater "international trade." This finding underscores the pivotal role of economic prosperity in driving international trade activities within the research context.

5.2. FIXED VARIABLE

The overall statistical model used in this analysis demonstrates remarkable significance, as indicated by the F-statistic ($F(8, 310) = 275.64$, $\text{Prob} > F = 0.0000$). This signifies that, as a collective, the selected independent variables significantly contribute to explaining the variations observed in „international trade." This foundational finding lays the groundwork for further exploration of these relationships. Furthermore, the model exhibits substantial explanatory power, with an R-squared value of 0.8767. This suggests that approximately 87.67% of the variations observed in „international trade " can be accounted for by the independent variables included in the model. This high R-squared value indicates a robust fit of the model to the data, signifying that the chosen variables collectively capture a substantial portion of the variation in "international trade."

Let's now delve into the interpretations of the coefficients of the independent variables:

“FDI net outflows”: This variable shows a statistically significant positive impact, supported by a coefficient of 0.0141703 ($t = 2.68$, $p = 0.008$). This finding indicates that an increase in "FDI net outflows" is associated with a positive change in „international trade." In simpler terms, higher levels of outward foreign direct investment appear to contribute positively to the „international trade" variable .FDI net inflows: demonstrates a highly significant positive relationship with a coefficient of 0.0864185 ($t = 5.76$, $p < 0.001$). This suggests that higher values of "FDI net inflow" have a substantial positive effect on "international trade," underscoring the strong influence of inward foreign direct investment on the "international trade „variable. The variable "corruption" shows a statistically significant negative impact with a coefficient of -0.2476993 ($t = -3.88$, $p < 0.001$). This implies that higher levels of corruption are associated with lower values of „international trade." This result highlights the adverse effects of corruption on international trade activities within the research context.

On the other hand, "Rule of Law" demonstrates statistical significance with a coefficient of 0.1559533 ($t = 2.29$, $p = 0.023$). This suggests that stronger adherence to the rule of law is associated with higher values of "international trade," indicating that a robust legal framework fosters a conducive environment for international trade. Although "regulatory quality" exhibits a positive coefficient of 0.0576446, it is not statistically significant ($t = 1.24$, $p = 0.216$). This implies that regulatory quality may not exert a substantial impact on "international trade" in this particular research context, as it fails to reach the threshold of statistical significance. The

variable of voice and accountability displays a highly significant negative effect with a coefficient of -0.240476 ($t = -3.71$, $p < 0.001$). This indicates that higher levels of voice and accountability are associated with lower values of "international trade." This suggests that increased scrutiny and accountability may potentially hinder the "international trade" variable in this specific context.

What's more, "Control of Corruption" exhibits a statistically significant positive impact with a coefficient of 0.0514651 ($t = 2.03$, $p = 0.043$). This implies that stronger control of corruption is linked to higher values of "International trade," suggesting that effective anti-corruption measures may promote international trade. Finally, "GDP" demonstrates an exceptionally strong and highly significant positive relationship with a coefficient of 0.9808462 ($t = 21.14$, $p < 0.001$). This implies that higher GDP levels are strongly associated with greater „International trade,“ emphasizing the pivotal role of economic prosperity in driving international trade activities within the research context. In conclusion, this linear regression analysis reveals that „International trade " is significantly influenced by a range of parameters. Higher levels of "FDI net inflow," stronger control of corruption, and higher GDP are all associated with higher levels of „International trade." Conversely, higher levels of corruption and increased voice and accountability are connected with lower „International trade." Additionally, the rule of law appears to have a beneficial impact on „International trade,“ although regulatory quality does not seem to exert a substantial influence. These findings provide valuable insights into the factors influencing „International trade „within the context of the analysed data.

5.3. HAUSMAN TAYLOR

The coefficients for exogenous variables, particularly those related to foreign direct investment, corruption, rule of law, regulatory quality, voice and accountability, and control of corruption, provide crucial insights into their influence on "export." Notably, "FDI net outflows" and "FDI net inflows" emerge as significant factors, with their positive coefficients indicating a favourable connection with "export." Conversely, "corruption" exhibits a negative coefficient, signifying that higher levels of corruption are associated with reduced values of „exports." "Rule of Law" underscores its significance with a positive coefficient, implying that stronger adherence to the rule of law corresponds to higher values of "exports." However, "regulatory" shows a positive coefficient but lacks statistical significance, warranting cautious interpretation. "Voice and accountability" and "control of corruption" exhibit negative coefficients, suggesting that higher levels of voice and accountability, as well as control of corruption, are linked to lower "exports." Moving on to the coefficient for the endogenous variable "GDP," it emerges as a crucial determinant with a highly significant positive coefficient. This emphasizes that a higher GDP is strongly associated with greater „exports". Regarding the "code" variable, representing time-invariant factors, it does not demonstrate statistical significance. This implies that its impact on „exports „in this context is limited. The intercept, denoted as "_cons," is marginally statistically significant and represents the estimated value of "exports" when all other independent variables are zero. The presence of random effects, as indicated by σ_u and σ_e ,

highlights nuanced variations between groups and within each group. The value of rho signifies the proportion of variance attributed to the random effects, providing insights into the fraction of total variation in "exports" arising from inter-group differences. In summary, this Hausman-Taylor estimation offers valuable insights into the determinants of „exports," shedding light on the roles played by foreign direct investment, governance factors, and GDP. These findings contribute to a nuanced understanding of the dynamics governing „exports „within the confines of this analysis. Moreover, the acknowledgment of random effects and group-level heterogeneity adds depth to our comprehension of the complex relationships in international trade and economic growth. These results hold significance for future research and policy considerations in the fields of international economics and governance. Further analysis of these variables and their impact on „exports " can provide additional insights into the dynamics within the specific research context.

6. CONCLUSION

This comprehensive paper has explored the intricate relationship between foreign direct investments (FDI) and international trade within the context of the Western Balkan Countries-6 (WB-6). Through the examination of several hypotheses and models, we have gained valuable insights into how FDI inflows impact trade activities and economic growth in this region. The findings contribute to our understanding of the complex dynamics at play and offer potential implications for policymakers, investors, and stakeholders in the WB-6 countries.

The analysis strongly supports Hypothesis I, which posited a positive relationship between FDI and international trade in the Western Balkan Countries-6 (WB-6). Positive coefficients of FDI net inflows in most models indicate a connection between FDI inflows and increased import and export activities, acting as a proxy for international trade. However, variations in the strength of this relationship across different models suggest the influence of additional factors in the WB-6 region. Further exploration is needed for Hypothesis II, which examines the impact of political stability on import and export (a proxy for international trade) in the context of FDI in the Western Balkan Countries-6 (WB-6). Findings suggest that political stability may not have the expected positive influence. Some estimations show a negative coefficient, indicating that higher political stability is associated with lower import and export levels. Investigating potential mechanisms, such as the "Dutch Disease" phenomenon, is crucial.

In extending the conclusion, the findings of the analysis provide support for Hypothesis I which postulated a positive relationship between FDI and international trade. The positive coefficients of "FDI net inflows" in most models indicate that FDI inflows are associated with increased import and export activities, serving as a proxy for international trade we acknowledge that the path to economic growth and international trade development in the WB-6 countries is a multifaceted journey. The policy implications outlined above, grounded in our research findings, serve as valuable guideposts for navigating this path effectively. As these countries continue their transition toward greater economic prosperity, it is imperative to emphasize the

critical role of FDI as a catalyst for international trade and growth. However, this role can only be fully realized through strategic policymaking and concerted efforts. The potential benefits of regional integration among the WB-6 countries cannot be overstated. A unified approach to trade facilitation, investment promotion, and harmonized regulations holds the promise of unlocking new avenues for economic cooperation and progress. While our findings may challenge conventional wisdom regarding the relationship between political stability and international trade, we stress that political stability remains a cornerstone for attracting foreign investments. It creates the essential foundation upon which economic development can flourish. Investing in human capital, particularly in education and skills development, is a long-term commitment that will enable the WB-6 countries to fully harness the advantages of FDI. A skilled and adaptable workforce will not only attract more investments but also drive innovation and enhance global competitiveness. In conclusion, our research offers a roadmap for policymakers in the WB-6 countries as they navigate the complex terrain of economic growth and international trade. The pursuit of these policy implications, coupled with a commitment to good governance, can pave the way for a brighter and more prosperous future in the Western Balkans and beyond.

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