Can Foreign Direct Investment Enhance the Export Capabilities of Asean Countries?

Siphat Lim[1]

Abstract

The aim of this study is to analyze the impact of foreign direct investment on exports in ASEAN nations by employing both static and dynamic panel data models. This research incorporates panel data from ten ASEAN member states, namely Brunei, Cambodia, Indonesia, Lao, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam. The study period spans from 2000 to 2022. In this study, three distinct approaches for panel data models have been employed. These include the generalized least square (GLS) method without a lag dependent variable, the fixed effect model with a lag dependent variable, and the two-step generalized method of moment (GMM) dynamic panel data model. Each of these models incorporates two control variables, namely gross domestic product (GDP) and foreign exchange (FX) rate. The static panel data analysis reveals that both the net inflow of FDI and GDP have a positive and significant impact on exports. However, it is observed that FX does not have a significant influence on exports. On the other hand, when considering the dynamic panel data estimator methods, it is found that FDI and GDP have a positive and significant impact on exports, while exports are negatively influenced by FX and lag dependent variables. The empirical findings of this study highlight that the net inflow of FDI plays a crucial role in enhancing the export capabilities of ASEAN countries.

Keywords: *Exports, Foreign Direct Investment, ASEAN, Static Panel Data Model, Dynamic Panel Data Model*

Introduction

The economic development of a nation relies not only on domestic investment but also on foreign investment. Foreign direct investment (FDI) is a crucial factor in driving economic growth in every nation. It serves as a proactive investment magnet for governments worldwide, contributing significantly to the development of horst countries (ESCAP, 2023). FDI has been discovered to not only bring in financial investment, but also technology and productivity spillover across industries in the host country. Undoubtedly, this aids in promoting domestic outputs (Behera, 2023). Furthermore, apart from enhancing productivity by transferring knowledge from industrialized nations to developing countries, FDI inflow also contributes to job creation in the recipient nations. Notably, research conducted by Ahmed et al. (2023) revealed that FDI inflows also positively impact the export capabilities of these nations to the global market. In 66 developing countries, it has been discovered that FDI not only has a positive interaction with trade but also serves as a catalyst for domestic investment (Makki & Somwaru, 2004). China's policy of promoting export-oriented FDI has yielded impressive

[1] CamEd Business School, Phnom Penh, 120211 Cambodia. Email: lsiphat@cam-ed.com

results. Research has shown that FDI firms have played a crucial role in enhancing China's competitive advantage and facilitating the specialization of its exported products in the global market (Lemoine, 2000). According to the error correction model, FDI had a notable influence on exports in Pakistan in the long term. Additionally, the empirical results of this research provide further evidence in favor of the FDI-based endogenous growth theory (Farid et. al, 2023).

FDI plays a pivotal role in enhancing the productivity and efficiency of host countries, particularly in terms of the quality of goods produced, by facilitating the transfer of technology from developed to developing economies. Extensive research conducted across various countries and regions has consistently shown that FDI inflows stimulate exports from home countries to the global market, with a notable emphasis on developing countries exporting to developed nations like the EU (Carril-Caccia & Pavlova, 2018). This promotion aids in bolstering the level of development and enhancing the quality of life for individuals in their home countries by creating employment opportunities and facilitating the transfer of knowledge to enhance human capital.

Just like any other region in the world, the government of the Association of Southeast Asian Nations (ASEAN), comprising of ten member states including Brunei, Cambodia, Indonesia, Lao, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam, is also keen on attracting foreign direct investment (FDI) from developed economies. This initiative aims to provide opportunities for the people to acquire new skills and technology, ultimately enhancing their export capabilities and bolstering their competitiveness on a global scale.

The objective of this study is to carry out an empirical examination in order to evaluate the potential impact of net inflow of foreign direct investment on the exports of ASEAN countries to the global market. This particular research stands out from others as it utilizes a two-step generalized method of moment (GMM) approach in analyzing the dynamic panel data model, incorporating data from all ten ASEAN member states.

This study is divided into five sections, namely introduction, literature review, research methodology, empirical result, and conclusion. Section one presents the introduction, section two covers the literature review, and section three outlines the research methodology. The empirical result is described in section four, while section five provides an explanation of the conclusion.

Literature Review

The research conducted in ASEAN-5, Indonesia, and Vietnam revealed an empirical finding that foreign direct investment (FDI) had a noteworthy positive impact on exports. This impact was particularly significant in promoting economic growth in the host country (Purusa & Istiqomah, 2018; Nguyen, 2020; Millia et al., 2021). However, in the case of India, FDI did not have a significant influence on exports. Instead, it was found that exports had a significant effect on FDI Sultan (2013).

An investigation was conducted using monthly time series data from January 2005 to July 2018. The study employed an autoregressive distributed lag (ARDL) approach to co-integration in order to analyze the effects of FDI, industrial production index, domestic producer price index, real effective exchange rate, and domestic commercial credits interest rates on export. The findings revealed a positive correlation between FDI and export in Turkey, which aligns with

the consistent results obtained by Basilgan and Akman (2019). Similarly, Mukhtarof et al. (2019) found that FDI had a significant positive impact on export in Jordan. Furthermore, the Granger causality test indicated a short-term causal relationship between FDI and export, while in the long-run, FDI had a positive influence on export in India, as observed by Jena et al. (2020).

A study was conducted to examine the influence of foreign direct investment (FDI) on international trade in 31 developing Asian countries from 1991 to 2019. By employing a dynamic panel data model, the researchers found that FDI inflow had a noteworthy impact on trade openness in these developing Asian nations (Sinha & Tirtosuharto, 2023). The findings of this study align with the research carried out in the West African Economic and Monetary Union (WAEMU) (Illa, 2022). Furthermore, the correlation between international trade and foreign direct investment (FDI) in both the United States of America and Southeast Asia has been discovered (Chang & Gayle, 2009; Daniels & von der Ruhr, 2014; Bhasin & Paul, 2016).

The study conducted from 2002 to 2020 encompassed 110 countries, including 34 European countries, 28 Asian and Oceania countries, 21 African countries, 17 North American countries, and 10 South American countries. The aim was to examine the interrelation between Foreign Direct Investment (FDI) and net exports using the Granger causality test. The results of the test, based on the time series dataset of each country, revealed a significant relationship between FDI and net exports in most regions. Furthermore, it indicated that FDI had a causal effect on net exports in certain regions (Lakshani et al., 2023). A regression model was utilized to analyze the influence of foreign direct investment (FDI) on export and current account in the Visegrad Group countries, namely Czech Republic, Slovak Republic, Hungary, and Poland. The study focused on time series data and revealed a significant positive impact of FDI inflow on export in these countries. Additionally, the findings indicated that the connection between FDI and export can be established through the transition to a knowledge-based economy (Lomachynska, et al., 2020).

A panel vector error correction model (VECM) causality was utilized to evaluate the causal relationship between FDI, export, and economic growth in 16 developing countries, consisting of 8 European and 8 Asian countries. The empirical analysis revealed that in the short-run, there was a bidirectional causality between gross domestic product (GDP) and FDI leading to export in European countries. Conversely, in developing Asian countries, a bidirectional causality was observed between export and economic growth. In the long-run, both regions exhibited a causality running from export and FDI to economic growth (Mahmoodi & Mahmoodi, 2016). A significant dynamic relationship between foreign direct investment (FDI) and international trade has been discovered in both developed and developing countries, including Arab nations, Turkey, Africa, and Tunisia. Empirical evidence has proven that FDI not only facilitates the promotion of exports but also contributes to the overall economic growth of these countries (Hailu, 2010; Belloumi, 2014; Basilgan, 2019; Ismail, 2022). The empirical findings conducted in Vietnam, South Korea, and selected countries in South Asia have revealed either a negative significant or insignificant relation between foreign direct investment (FDI) and international trade in the host countries where trade barriers were imposed by their counterparties (Jeon, 1992; Dash & Sharma, 2010; Anwar & Nguyen, 2011). The results of these inquiries are in line with a research conducted by Voica et. al. (2021) that revealed no significant impact of FDI investment on trade flows in the European Union. However, it contradicts the findings of some studies conducted in Latin America and Mexico (Calega et. al., 2014; Cabral & Alvarado, 2021).

Between the years 1974 and 2014, the Vector Autoregressive (VAR) model, which was a well-known system of equation models, was employed to analyze the relation between Foreign Direct Investment (FDI) and international trade, specifically export and import, in Turkey. The empirical findings derived from the VAR model, as well as the Johansen co-integration and Granger causality tests, revealed that there is a causal relationship from FDI to export and from FDI to import, but not the other way around. Interestingly, it was also discovered that FDI has a positive influence on trade in Turkey (Karimov, 2019). Instead of employing a system of equations to examine the impact of FDI on exports in Ethiopia, a singular regression model known as the Autoregressive Distributed Lag Model (ARDL) was applied over a time series spanning from 1922 to 2018. Nevertheless, this model yielded an insignificant relationship between the two variables being investigated (Gebremariam & Ying, 2022).

A similar model was employed in Nigeria to analyze the lasting consequences of foreign direct investment (FDI) in the primary and manufacturing sectors on both total exports and oil exports. The study revealed a noteworthy influence of FDI in these sectors, not only on total exports but also on oil exports. Nevertheless, the influence of FDI on exports within the services sector was deemed inconsequential, as indicated by Okechukwu et. al. (2018). This finding aligns with similar research conducted in Bangladesh, but contradicts the results of an empirical study carried out in India (Majumder et. al., 2022; Mohanty & Sethi, 2021).

The impact of foreign direct investment on export has been extensively studied through empirical investigations in various countries and regions. In the past, ASEAN countries, specifically Indonesia, Malaysia, Philippines, Thailand, and Vietnam, were included in these studies using static panel data models such as pooled OLS, fixed effect, and random effect models. However, to further explore the impact of FDI on export, the current study aims to include all ten member states of ASEAN. In addition to the static panel data models, this research will also incorporate a dynamic panel data model for a more comprehensive analysis.

Methodology

This study utilizes a dynamic panel data model to evaluate the influence of foreign direct investment on exports in the ASEAN region. The model's specification is constructed as follows.

$$EXPORT_{it} = \beta_0 + \beta_1 EXPORT_{it-1} + \beta_2 FDI_{it} + \beta_3 GDP_{it} + \beta_4 FX_{it} + u_{it}$$

Where EXPORT is the total export of domestic country to the rest of the world, FDI represents net inflow of foreign direct investment, GDP indicates real gross domestic product, and FX is foreign exchange. All of the variables are measured in million of US dollars, except for FX, which is measured in domestic currency per US dollar. Foreign direct investment is the primary independent variable examined in this study. However, the model also incorporates two control variables, namely GDP and FX. The data for EXPORT, GDP, and FX are collected from the Asian Development Bank (ADB), while the FDI dataset is collected from the World Development Indicator of the World Bank (WB). The parameters to be estimated in this research are β_j, where $j = 0,1,2,3,4$. u_{it} be the error term of a panel data regression model, with $1 \le i \le n$, and $1 \le t \le T$. It is worth mentioning that $u_{it} = \mu_i + \varepsilon_{it}$ and $\varepsilon_{it} \sim \mathcal{N}(0, \sigma_\varepsilon^2)$. Three different estimation methods are applied in this study: generalized least square (GLS) which accounted for panels: homoscedastic and no autocorrelation for least square of model without the dynamic term, fixed effect (FE) model with dynamic term, and two-step generalized method of moments (GMM) Arellano-Bond dynamic panel data. The

total sample size consists of 230 observations, which includes ten member states of ASEAN, $i = 1,2,3, \cdots ,10$, over a period of 23 years, $t = 2000,2001,2002, \cdots ,2022$.

Empirical Results

This section is divided into two parts. The first part presents the summary statistics and correlation coefficient for the independent variables of the study, namely net inflow of foreign direct investment, gross domestic product, and foreign exchange. The second part focuses on the empirical results that describe the impact of foreign direct investment on exports.

Table 1: Summary Statistics.

Variable	Observation	Mean	Standard Deviation	Minimum	Maximum
EXPORT	230	154,768	256,123	301	1,551,619
FDI	230	10,158	20,406	-4,947	140,844
GDP	230	124,296	122,825	1,758	378,651
FX	230	4,413	6,440	1.25	23,271

Table 1 displays the summarized data for all variables examined in this study. Across all ASEAN member countries, the mean values for export, FDI, GDP, and FX are US$154,768; US$10,158; US$124,296; and 4,413 (domestic currency per US dollar), respectively. The correlation coefficient between FDI and GDP, between FDI and FX, and between FX and GDP, are 0.512, -0.082, and -0.251, respectively. Given that the correlation among independent variables is below 0.9, it can be inferred that there is no presence of perfect or highly multicollinearity issues among the independent variables.

The initial estimation method begins with the use of generalized least squares in the panel model, excluding the lag of independent variable, known as the dynamic term. This method assumes that the variance of the residual term remains constant (homoscedastic) and that there is no autocorrelation. The empirical results obtained through the GLS method reveal that FDI has a significant positive impact on exports at a 1% level of significance. Additionally, exports are positively influenced by GDP, as indicated by the positive and highly statistically significant estimated slope at a 1% level of significance. The GLS results also demonstrate that the influence of FX on exports is insignificant. Notably, the Wald chi-square test suggests that all variables in the model, except for the constant term, jointly explain exports. This is supported by the test's probability, which is less than 1% and therefore significant at the 1% level.

The export is found to have a highly negative and statistically significant relationship with its lag, as indicated by the estimated parameters under the fixed effect model with a dynamic term at the 1% level. The estimated coefficients for FDI and GDP are 2.0495 and 0.7359, respectively, and they both have statistically significant effects on explaining export at the 5% and 1% levels. On the other hand, the impact of FX on export is highly negative and significant, with an estimated slope of -8.2071 and a probability of zero. The constant term in the model also has a significant influence on export. Furthermore, the calculated F-statistic of 33.29 suggests that all variables in the model jointly explain export, as the probability of the test is zero or less than 1%.

Although this approach considers the specific effects of each country, it fails to address the issue of endogeneity bias, $E(\varepsilon_{it}|Export_{it-1} \neq 0)$, which represents the correlation between the lag dependent variable and the residual term. Consequently, the standard panel data estimators become inconsistent. To overcome this problem, Arellano and Bond (1991) propose the

utilization of a GMM approach that incorporates all available conditions. The GMM method was initially introduced by Hansen (1982).

It is imperative to verify whether the estimated outcomes obtained from the two-step Arellano-Bond dynamic panel-data method satisfy its two fundamental assumptions. According to the z-test, there is evidence of first order autocorrelation in the first-differenced errors, as indicated by the probability value (Prob>z=0.0000). However, there is no presence of second order autocorrelation in the first-differenced errors, as the probability value (Prob>z=0.1085) suggests. Furthermore, the Sargan test of overidentifying restrictions indicates that the null hypothesis of overidentifying restrictions is valid and cannot be rejected, given that the probability value (Prob>chi2=0.9412) is greater than the 1% significance level. Taking into account the autocorrelation in first-differenced errors and the results of the Sargan tests, it can be concluded that the two-step Arellano-Bond dynamic panel-data method fulfills its two key assumptions.

Table 2: Static and Dynamic Panel Data Models, Empirical Results.

Independent Variables	GLS	FE	Two-Step GMM
EXPORT (-1)		-0.4163***	-0.3122***
		(0.0699)	(0.0026)
FDI	3.3311***	2.0495**	2.7801***
	(0.7681)	(0.8164)	(0.0205)
GDP	0.8797***	0.7359***	0.9685***
	(0.1319)	(0.1629)	(0.0034)
FX	-0.5120	-8.2071***	-5.2937***
	(2.1599)	(2.7079)	(0.0651)
CONSTANT	13613	151295***	
	(23251)	(38042)	
Joint test	Wald chi2(3) = 132.44	F(4,176) = 33.29	Wald chi2(4) = 997132.47
	Prob > chi2 = 0.0000	Prof > F = 0.0000	Prob > chi2 = 0.0000
Arellano-Bond test for AR(1) in first differences			z = -4.5245 Prob > z = 0.0000
Arellano-Bond test for AR(2) in first differences			z = -1.6051 Prob > z = 0.1085
Sargan test			chi2(35) = 22.9649
			Prob > chi2 = 0.9412

Note: ***, **, * Significant at 1%, 5%, 10%, Respectively. Standard Error in Parenthesis.

According to the results presented in Table 2, the Arellano-Bond dynamic panel-data estimation method revealed interesting empirical findings. The slope coefficient of the lag dependent variable is -0.3122, indicating a negative relationship. Importantly, this coefficient is statistically significant at the 1% level, suggesting that it has a significant impact on explaining exports. Furthermore, the estimated slope coefficients of FDI and GDP are 2.7801 and 0.9685, respectively. Both coefficients are positive and statistically significant at the 1% level, indicating that an increase in net inflow of FDI or GDP would lead to an increase in exports. On the other hand, the estimated slope coefficient of FX, representing exchange depreciation, is -5.2937. This coefficient is negative and statistically significant at the 1% level, suggesting that

exchange depreciation has a detrimental effect on exports. It is worth noting that the constant term is automatically omitted from the model, possibly due to its correlation with other variables in the model. Interestingly, the calculated Wald Chi-square is 997132.47, and its probability is less than 1%. This implies that all variables jointly have a significant influence on exports.

Conclusion

The primary aim of this study is to empirically investigate the impact of foreign direct investment on exports in the Association of Southeast Asian Nations (ASEAN), which comprises ten member states. To achieve this objective, panel data models are utilized, incorporating two control variables: gross domestic product and foreign exchange. Three panel data estimator methods are applied in this research, namely GLS, fixed effect, and two-step GMM methods. The lag dependent variable is included only in the fixed effect and two-step GMM models. The empirical findings, particularly the two-step GMM estimation method proposed by Arellano and Bond, demonstrate that the net inflow of foreign direct investment has a statistically significant influence on exports. Additionally, the expansion of the economy in the ASEAN states would also contribute to the promotion of exports. Conversely, exports would decrease when the exchange rate depreciates.

Naturally, the practical findings of this research demonstrate that the arrival of foreign direct investment (FDI) not only contributes to the capital stock development in the home countries, but also facilitates the transfer of technology. This technology transfer aids in enhancing the capacity and capability of the home country, resulting in increased domestic outputs and improved quality of products that meet international standards. Undoubtedly, these achievements play a significant role in boosting the exports of host countries to global markets. Hence, it is crucial for the governments of ASEAN member states to carefully contemplate the implementation of effective strategies to attract more foreign investors to invest in their respective countries.

The findings of this research rely on both static and dynamic panel data models, which enable the evaluation of the influence of foreign direct investment and other control variables on exports. However, these models do not allow for the examination of the interrelationship among all variables in the system. Therefore, it is strongly advised for future researchers to bridge this research gap by extending their empirical studies using a system of equations called the panel vector autoregressive (Panel VAR) model.

Acknowledgement

References

Ahmed, S. F., Mohsin, A. K. M., & Hossain, S. F. A. (2023). Relationship between FDI Inflows and Export Performance: An Empirical Investigation by Considering Structural Breaks. *Economies*, *11*(3), 73. https://doi.org/10.3390/economies11030073

Anwar, S., & Nguyen, L. P. (2011). Foreign direct investment and trade: The case of Vietnam. *Research in International Business and Finance*, *25*(1), 39–52. https://doi.org/10.1016/j.ribaf.2010.05.004

Arellano, M., & Bond, S. (1991). Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations. *The Review of Economic Studies*, *58*(2), 277–297. https://doi.org/10.2307/2297968

Basilgan, M., & Akman A.S, A. S. (2019). An empirical analysis on the impact of the foreign direct investments on export performance: Turkey case. *International Journal of Economics and Finance Studies*, *11*(2), 89–105

Belloumi, M. (2014). The relationship between trade, FDI and economic growth in Tunisia: An application of the autoregressive distributed lag model. *Economic Systems*, *38*(2), 269–287. https://doi.org/10.1016/j.ecosys.2013.09.002

Bhasin, N., & Paul, J. (2016). Exports and outward FDI: are they complements or substitutes? Evidence from Asia. *Multinational Business Review*, *24*(1), 62–78. https://doi.org/10.1108/mbr-05-2015-0016

Cabral, R., & Alvarado, J. A. (2020). The Role of FDI on Exports Performance: Evidence from the Mexican States. *International Regional Science Review*, *44*(6), 016001762097964. https://doi.org/10.1177/0160017620979641

Calega, rio C., Bruhn, N., & Pereira, M. (2014). Foreign Direct Investment and Trade: A Study on Selected Brazilian Industries. *Latin American Business Review*, *15*(1), 65–92

Carril-Caccia, F., & Pavlova, E. (2018). Foreign direct investment and its drivers: a global and EU perspective. *Economic Bulletin Articles*, *4*

Chang, Y.-M., & Gayle, P. G. (2009). Exports versus FDI: do firms use FDI as a mechanism to smooth demand volatility? *Review of World Economics*, *145*(3), 447–467. https://doi.org/10.1007/s10290-009-0023-4

Daniels, J. P., & von der Ruhr, M. (2013). Transportation Costs and US Manufacturing FDI. *Review of International Economics*, *22*(2), 299–309. https://doi.org/10.1111/roie.12110

Dash, R. K., & Sharma, C. (2010). Does causality between FDI and trade exist: evidence from South Asia? *International Journal of Trade and Global Markets*, *3*(4), 390. https://doi.org/10.1504/ijtgm.2010.035757

De Mello, L. R., & Fukasaku, K. (2000). Trade and foreign direct investment in Latin America and Southeast Asia: temporal causality analysis. *Journal of International Development*, *12*(7), 903–924. https://doi.org/10.1002/1099-1328(200010)12:7%3C903::aid-jid695%3E3.0.co;2-8

ESCAP, U. N. (2023). *Foreign direct investment trends and outlook in Asia and the Pacific 2023/2024*. ESCAP. https://www.unescap.org/kp/2023/foreign-direct-investment-trends-and-outlook-asia-and-pacific-20232024

Farid, K., Mahmood, T., Mumtaz, M., & Ansari, S. H. (2023). Impact of foreign direct investment on the exports of five major sectors of Pakistan's economy: A governance perspective. *Chinese Journal of Population, Resources and Environment*, *21*(3), 181–188

Gebremariam, T. K., & Ying, S. (2021). The foreign direct investment-Export performance nexus: An ARDL based empirical evidence from Ethiopia. *Cogent Economics & Finance*, *10*(1). https://doi.org/10.1080/23322039.2021.2009089

HAILU, Z. A. (2010). Impact of Foreign Direct Investment on Trade of African Countries. *International Journal of Economics and Finance*, *2*(3). https://doi.org/10.5539/ijef.v2n3p122

Hansen, L. P. (1982). Large Sample Properties of Generalized Method of Moments Estimators. *Econometrica*, *50*(4), 1029. https://doi.org/10.2307/1912775

Illa, E. I. (2022). Impact of Foreign Direct Investment on International Trade in West African Economic and Monetary Union Countries Using Dynamic Panel. *Modern Economy*, *13*(06), 833–851. https://doi.org/10.4236/me.2022.136045

Ismail, H. H. (2022). The impact of FDI on foreign trade in Arab countries. *International Journal of Advanced and Applied Sciences*, *9*(4), 97–105

Jana, S. S., Sahu, T. N., & Pandey, K. D. (2020). How far is FDI relevant to India's foreign trade growth? An empirical investigation. *Journal of Economic Structures*, *9*(1). https://doi.org/10.1186/s40008-020-00212-6

Jeon, Y.-D. (1992). The determinants of Korean foreign direct investment in manufacturing industries. *Weltwirtschaftliches Archiv*, *128*(3), 527–542. https://doi.org/10.1007/bf02707366

Karimov, M. (2019). The Impact of Foreign Direct Investment on Trade (Export and Import) in Turkey. *European Journal of Interdisciplinary Studies*, *5*(1), 1–17. https://doi.org/10.26417/ejis.v5i1.p6-17

Lakshani, S., Sandaruwan, C., Fernando, C., Vidyapathirana, G., Jayathilaka, R., & Munasinghe, S. (2023). From short to long term: Dynamic analysis of FDI and net export in global regions. *Plos one*, *18*(9), e0291301. https://doi.org/10.1371/journal.pone.0291301

Lemoine, F.. (2000). Main determinants and impacts of foreign direct investment on China's economy. *OECD Publishing*

Lomachynska, I., Babenko, V., Yemets, O., Yakubovskiy, S., & Hryhorian, R. (2021). Impact Of The Foreign Direct Investment Inflow On The Export Growth Of The Visegrad Group Countries. *Studies of Applied Economics*, *38*(4). https://doi.org/10.25115/eea.v38i4.4007

Majumder, S. C., Rahman, M. H., & Martial, A. A. A. (2022). The effects of foreign direct investment on export processing zones in Bangladesh using Generalized Method of Moments Approach. *Social Sciences & Humanities Open*, *6*(1), 100277. https://doi.org/10.1016/j.ssaho.2022.100277

Makki, S. S., & Somwaru, A. (2004). Impact of Foreign Direct Investment and Trade on Economic Growth: Evidence from Developing Countries. *American Journal of Agricultural Economics*, *86*(3), 795–801. https://doi.org/10.1111/j.0002-9092.2004.00627.x

Millia, H., Ernawati, E., & Heriberta, H. (2023). Do foreign direct investment, trade and their interactions affect economic growth in Indonesia? *Jurnal Perspektif Pembiayaan Dan Pembangunan Daerah*, *11*(1), 1–16. https://doi.org/10.22437/ppd.v11i1.22698

Mohanty, S., & Sethi, N. (2019). Does Inward FDI Lead to Export Performance in India? An Empirical Investigation. *Global Business Review*, *22*(5), 097215091983277. https://doi.org/10.1177/0972150919832770

Mukhtarov, S., Alalawneh, M. M., Ibadov, E., & Huseynli, A. (2019). The impact of foreign direct investment on exports in Jordan: An empirical analysis. *Journal of International Studies*, *12*(3), 38–47. https://doi.org/10.14254/2071-8330.2019/12-3/4

Nguyen, C. H. (2020). The Impact of Foreign Direct Investment, Aid and Exports on Economic Growth in Vietnam. *The Journal of Asian Finance, Economics and Business*, *7*(10), 581–589. https://doi.org/10.13106/jafeb.2020.vol7.no10.581

Okechukwu, O. G., De Vita, G., & Luo, Y. (2018). The impact of FDI on Nigeria's Export Performance: A sectoral analysis. *Journal of Economic Studies*, *45*(5), 1088–1103. https://doi.org/10.1108/JES-11-2017-0317

Pereira, N., & Calegario, C. (2013). Foreign Direct Investment Strategies Effects on the Brazil's Trade Balance: A Causality Analysis. *Journal Globalization, Competitiveness and Governability*, *7*(1), 73–87

Purusa, N. A., & Istiqomah, N. (2018). Impact of FDI, COP, and Inflation to Export in Five ASEAN Countries. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi Dan Pembangunan*, *19*(1), 94–101. https://doi.org/10.23917/jep.v19i1.5832

Sinha, M., & Tirtosuharto, D. (2023). The Role of Foreign Direct Investment and Trade in Urbanization in Developing Asia: Structural Changes after the Global Financial Crisis. *Asian Development Review*, *40*(2), 343–362

Sultan, Z. A. (2013). A Causal Relationship between FDI Inflows and Export: The Case of India. *Journal of Economics and Sustainable Development*, *4*(2), 1–9. https://www.iiste.org/Journals/index.php/JEDS/article/view/4118

Voica, M. C., Panait, M., Hysa, E., Cela, A., & Manta, O. (2021). Foreign Direct Investment and Trade—Between Complementarity and Substitution. Evidence from European Union Countries. *Journal of Risk and Financial Management*, *14*(11), 559. https://doi.org/10.3390/jrfm14110559