Journal of Economics, Finance and Management Studies

ISSN (print): 2644-0490, ISSN (online): 2644-0504

Volume 07 Issue 08 August 2024

Article DOI: 10.47191/jefms/v7-i8-23, Impact Factor: 8.044

Page No: 5017-5031

The Governance-FDI Nexus: A Factor-Augmented Fixed Effect Analysis of ASEAN World Governance Indicators and Foreign Direct Investment Inflows

Vicente Montano[1], Leomar Sabroso[2], Restie Torres[3]

[1,2,3]College of Business Administration Education, University of Mindanao, Bolton St., Davao City, (8000) Philippines

ABSTRACT: Utilizing a factor-augmented fixed effect model, this study investigates the intricate relationship between governance indicators and Foreign Direct Investment (FDI) inflows. Panel data from six ASEAN countries covering 26 years (1996 to 2022) is examined, incorporating World Governance Indicators (WGI) alongside derived institutional factors. The research methodology employs the Exploratory Factor Analysis with a fixed effects specification to mitigate multicollinearity and covers broader governance construct. The findings uncover distinct dynamics in the relationship between governance dimensions and FDI. Notably, Control of Corruption displays a significant positive relationship. Furthermore, a resulting Institutional Quality factor positively affects FDI dwelling on the significance of comprehensive institutional environments. Conversely, the Economic Environment factor depicts a negative relationship, inferring intricate trade-offs in investment decision-making and underlining the concept of governance paradox counterintuitive results in the relationship between WGI and FDI.

The model explains a moderate FDI variance featuring the importance of governance factors while recognizing unexplained variables. Diagnostics assessments, including Hausman, Breusch-Pagan, and Pesaran, guide the methodological decisions, leading to estimation with Driscoll-Kraay standard errors. The findings contribute to the discussions on the institutional determinants of FDI, focusing on the requisite for detailed policy frameworks. Succeeding research should investigate non-linear associations and sector-specific dynamics to refine the comprehension of governance-FDI interactions. The methodological approach to examining governance and FDI relationship, this study offers policymakers and researchers a more holistic framework to comprehend and influence foreign investment trends within the realm of institutional.

KEYWORDS: World Governance Indicators, Foreign Direct Investment, factor-augmented fixed effect model ASEAN, SDG 16

I. INTRODUCTION

Foreign direct investment inflows to the Association of Southeast Asian Nations (ASEAN) countries have steadily increased in the previous years, reaching record levels in 2022. FDI inflows in 2021 increase by 42%, amounting to $174 billion, surpassing the pre-pandemic record level (Asean.org, 2022). The increasing trend was sustained in 2022, with FDI inflows reaching the highest at $224 billion, a 5.5% increase (ASEAN: (FDI) inflows, (n.d.), (Investors Favor Southeast, (n.d.). Singapore was consistently the largest recipient of FDI within ASEAN, attracting 42.7% of the total ASEAN FDI between 1961 and 1993 (Siow, 1993). In 2022, FDI inflow in Singapore was at $141 billion, a 10% increase from 2021. Other top recipients in 2022 included Malaysia, with 39% FDI growth to $17 billion, and Vietnam, with $22.4 billion (Investors Favor Southeast, (nd).

The World Governance Indicator (WGI) provides longitudinal data (1996-2022) on six dimensions of governance for ASEAN countries identified as Voice and Accountability, Political Stability and Absence of Violence/Terrorism, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. In 2020, the average governance index score for ASEAN countries was 0.14, with Singapore scoring the highest at 1.6 and Myanmar scoring the lowest at -1.16 (ASEAN: governance index 2020. (n.d.). The performance of individual ASEAN countries in the WGI from 1996-2021 shows that the Philippines intends to enhance its Voice and Accountability, Regulatory Quality, Government Effectiveness, and Control of Corruption under its 2017-2022 development plan. Instead, actual performance remained below the targeted outcome as of 2021. Conversely, Malaysia recorded the second highest among ASEAN countries in Government Effectiveness and Rule of Law in 2021. Also, Indonesia made the most

progress in the Control of Corruption between 1996 and 2021, and consistently, Singapore ranked highest across all WGI dimensions, depicting its strong governance (FF2022-58: ASEAN 10, n.d.).

The WGI data shows a positive correlation between governance indicators and GDP per capita, with government effectiveness and the rule of law displaying the strongest relationship. However, some claim there is a "governance paradox" in Asia where rapid economic growth transpires despite relatively weaker governance compared to OECD countries (Deolalikar et al., P. (n.d.)). WGI data provides a more comprehensive view of the longitudinal governance trends in ASEAN, underlining progress and persistent obstacles across the region. Improving governance remains an essential priority for moving sustainable development (Wong et al., 2023), (Khan, 2015).

The effect of governance on FDI inflows in ASEAN is a crucial area of study. Research consistently shows that good governance is pivotal in attracting FDI to host countries. When governance mechanisms are effective, they create an environment conducive to investment (Abdullah et al., 2019). Three key governance elements rise in their positive relationship with FDI inflows in ASEAN countries. Well-designed and transparent regulations furnish clarity for investors. Foreign investors feel more secure if regulations are predictable and enforceable (Mengistu & Adhikary, 2011). A solid legal framework ensures that contracts are enforced, property rights are protected, and conflicts are resolved fairly. Investors are likelier to invest in countries with a stable rule of law (Kaufmann et al., 2010). Also, countries with low corruption levels are attractive to investors. Corruption corrodes investor confidence and increases risk. Hence, policymakers in ASEAN countries focus on improving these governance characteristics to promote FDI inflows in the future (Siow, 1993).

Moreover, the ASEAN's success in attracting FDI is also attributed to factors beyond governance. These include political, social, and economic stability. Stable environments motivate long-term investments. Rapidly growing domestic markets make ASEAN countries appealing to investors (Lim, 2001). A significant consumer base offers opportunities for businesses. Regarding factor endowments, natural resources, labor supply, human resources, and infrastructure contribute to FDI attractiveness (Gwartney et al., 2021). If ever, a development-oriented government with sound macroeconomic policies and pro-FDI measures fosters investor confidence. The presence of regional cooperation promotes ASEAN's collaborative efforts in advancing investment and trade facilities cross-border flows (Bhujabal et al., 2024).

Primarily, this study aligns with and promotes the United Nations Sustainable Development Goal (SDG) 16: Peace, Justice, and Strong Institutions. This research investigates the relationship between governance indicators and FDI. Directly, this study addresses the targets of SDG 16, specifically those focused on reducing corruption, developing effective, accountable, and transparent institutions, and promoting the rule of law. The findings underline the importance of good governance in attracting foreign investment, which is the fundamental catalyst of economic development. The intention to determine the positive relationship between control of corruption and FDI inflows supports the SDG 16 targets of significantly reducing corruption in all their shapes. Also, the method considers broader institutional quality and aligns with the SDG's emphasis on building effective institutions at all levels. The evidence-based insights in this study provide the complex dynamics between governance and FDI. This investigation contributes to the knowledge base policymakers required to make informed decisions in pursuit of SDG 16. Moreover, this study's recommendations for holistic governance reform and context-specific policy design support promoting peaceful and inclusive societies for sustainable development, securing access to justice for all, and building effective, accountable, and inclusive institutions at all levels.

The primary objective of this research is to investigate the complex relationship between governance indicators and FDI inflows using a novel factor-augmented fixed effect model. Specifically, it aims to unravel the individual and composite effects of WGI on FDI, addressing potential multicollinearity issues and capturing broader institutional constructs. The study further intends to determine a more detailed understanding of how the various aspects of governance-including control of corruption, rule of law, and overall institutional quality – influence foreign direct investment decisions. Also, this study proposes to identify a potential non-linear or counterintuitive relationship between governance dimensions and FDI and contribute to the ongoing academic discussion on institutional determinants of cross-border capital flows. Finally, this research offers policymakers and scholars a refined analytical framework for evaluating the impact of governance reforms on a country's attractiveness to foreign investors, thus informing more effective strategies for sustainable economic development.

II. REVIEW OF RELATED LITERATURE

Several theoretical underpinnings describe the relationship between foreign direct investment (FDI) and the ASEAN region's World Governance Index (WGI). Prominent among them is the institutional theory, which claims that the quality of governance and institutions are critical factors of FDI inflows (Wong et al., 2023). Control of corruption, political stability, rule of law, and

strong institutions create an encouraging environment that diminishes uncertainty and transaction costs for foreign investors. Conversely, weak institutions and poor governance prevent FDI by increasing risk and instability (Karimi & Daiari, 2018).

The ASEAN region demonstrated a changing institutional quality and governance level across its member states (Masron, 2017). For instance, Singapore and Malaysia have strong institutions and governance frameworks, which make them attractive to significant FDI inflows (Chandra & Yokoyama, 2011). On the contrary, Myanmar and Cambodia faced challenges in building robust institutions, obstructing their ability to attract foreign investment (Findlay et al., 2016).

Dunning's OLI Framework suggests that firms will engage in FDI if they contain three critical advantages: ownership, location, and internationalization (Wilson & Baack, 2012). Notably, the location advantage is associated with the FDI-governance relationship, as it proposes that firms choose to invest in countries that offer favorable conditions, such as political and economic stability, strong institutions, and good governance. The ASEAN attracts foreign investors due to its large and growing consumer markets, abundant natural resources, and comparatively low-cost labor (Bhatt, 2008). However, the location advantage of individual ASEAN countries is heavily influenced by their governance quality, as depicted in the WGI. Countries with higher WGI scores representing better governance are more likely to attract FDI inflows (Ward & Dorussen, 2015).

Similarly, the Resource-Based View proposes that firms invest in countries that furnish access to vital resources, such as natural resources, skilled labor, and advanced technologies (Mahoney & Pandian, 1992). WGI-measured good governance is considered a valuable resource that augments the productivity and efficiency of other resources, making the host country more attractive to FDI due to the ASEAN diverse resource endowments (Nam & Ryu, 2023), stemming from natural resources in countries such as Malaysia and Indonesia to skilled labor in Singapore and the Philippines. These countries' ability to effectively leverage their resources is closely associated with the quality of their governance, as depicted in the WGI.

Numerous empirical studies have found a positive relationship between the WGI and FDI inflows in the ASEAN region. Economies with higher scores on the WGI dimensions, such as control of corruption, regulatory quality, and political stability, attract more FDI. This relationship is explicit in sectors sensitive to political and economic risk, such as infrastructure and natural resource extraction (Masron, 2017). However, the strength of the relationship between the WGI and FDI varies across ASEAN countries, depending on their stage of economic development, industry composition, and other contextual factors (Hananya & Handoyo, 2021). Also, some studies have found that the impact of specific WGI dimensions, such as the rule of law and government effectiveness, may be more vital than others in attracting FDI (Dang & Nguyen, 2021).

Conversely, the "governance paradox" in the context of FDI refers to the contradictory belief that countries with unfavorable governance indicators or economic environments may still experience increased FDI inflows (Bosire, 2019). This paradox challenges predictable consequences and provides a detailed perspective on the relationship between institutional quality and foreign investment.

In several developing countries, high unemployment and low growth rates characterized an unfavorable economic environment with poor governance indicators. Governance issues such as corruption, lack of transparency, and weak rule of law aggravate economic challenges, resulting in a lack of confidence among domestic and foreign investors. Regardless of these adverse conditions, some countries experience an inflow of FDI, revealing that investors may prioritize potential returns over governance quality. This phenomenon is attributed to the perception that FDI serves as a medium for economic recovery, furnishing much-needed capital, technology transfer, and job creation (Keefer, 2004). The interface between governance and economic development is intricate. In contrast, poor governance can deter investment, and the immediate economic benefits of FDI overshadow these concerns, causing a paradox where countries with weak governance attract substantial foreign investment.

The increase in FDI inflows in the face of governance challenges is explained through the "scarcity principle" (Parguez, 1996), where investors observed opportunities in economically troubled regions as high-risk yet potentially high-reward investments (Parguez, 2000). The viewpoint emphasizes that governance quality is not a singular determinant of FDI; contextual factors and market potential take on critical roles. Further, multinational corporations willing to participate in markets with less-than-ideal governance create a competitive environment that draws additional investment (Su et al., 2018). The paradox is that although governance quality is essential for sustainable economic growth, the immediate influx of FDI happens even in poorly governed environments, driven by the potential for high returns and the strategic interests of investors (Li & Resnick, 2003). This dynamic calls for a nuanced understanding of governance, where short-term economic gains from FDI may not translate into long-term improvements in governance or economic stability.

In the context of FDI, some occurrences present a complex interaction between institutional quality and investment flows. This challenges conventional wisdom by suggesting that instances for countries with seemingly unfavorable governance indicators may, in some cases, attract higher levels of FDI. In understanding this paradox, it is critical to examine it through the lenses of the pollution haven hypothesis, institutional arbitrage, and the stage of investment theory. The pollution hypothesis (Cole, 2004)

delivers a perspective on the governance paradox. This theory postulates that multinational corporations are attracted to countries with weaker environmental regulations or overall governance structures in the context of FDI; this is evident as increased investment flows to countries with less challenging regulatory environments (Dean et al., 2009). This behavior is because firms may reduce operational costs or sidestep stricter regulations they might face in their home countries. This feature of the governance paradox proposes that what is perceived as poor governance from a regulatory standpoint attracts certain types of foreign investment.

Institutional arbitrage (Boisot & Meyer, 2008) offers a framework for understanding the governance paradox. The concept is that firms strategically invest in countries with weaker institutions to exploit governance gaps or regulatory arbitrage prospects. Companies view institutional voids not as restraints but as impending sources of competitive advantage (De Boeck, 2022). Firms operating in environments with less developed institutional frameworks find opportunities to outline the game's rules or benefits from first-mover advantages in emerging markets. This perspective on the governance paradox highlights how institutional weaknesses, counterintuitively, become a source of lure for FDI (Cornforth, 2004).

The stages of investment theory are proposed as a developmental context for the government paradox (Dunning et al., 1997). This theory claims that countries at various stages of economic development attract different types of FDI. In the context of the government paradox, countries with less developed governance structures are at earlier stages of economic development (Quibria, 2015). These stages are mainly attractive for certain types of investment, such as resource-seeking or efficiency-seeking FDI. Investors are willing to cross attractive governance environments if they recognize significant untapped market potential or cost advantage. This theory explains why some countries with weaker governance indicators might still see substantial FDI inflows, particularly in specific sectors or industries (Coleman, 2019).

Notably, the governance paradox is balanced with the overall prominence of good governance in attracting FDI. Instead, it highlights the nuanced and, from time to time, counterintuitive relationships between institutional quality and investment flows (Fayissa & Gill, 2016). The paradox advocates that the impact of governance on FDI is not uniform across all types of investment or all phases of economic development. It accentuates the need for a more refined understanding of how different governance features interrelate with various impetuses for foreign investment (Virmani, 2005).

The implications of the governance paradox for policy and research are significant. For policymakers, it suggests that while improving overall governance remains vital for long-term economic development, detailed policy levers can attract FDI even in the short term (Haque, 2018). For researchers, the paradox highlights the need for more nuanced analyses considering the heterogeneity of FDI and the varying impacts of different governance dimensions.

III. METHODS

This study employed a factor-augmented fixed effect model to investigate the relationship between World Governance Indicators (WGI) and Foreign Direct Investment (FDI) inflows. This research design combines traditional panel data techniques with factor analysis to address potential multicollinearity issues and capture broader institutional and economic constructs. The model specification of the factor-augmented fixed effect model formula is depicted below:

$FDIi\ t = \alpha + \beta \cdot WGIit + \gamma \cdot Fit + \mu i + \nu t + \epsilon it$

Where:

$FDIit$ = Foreign Direct Investment flows to country i at time t.
$WGIit$ = World Governance Indicator for country i at time t.
Fit = Vector of other control variables (factors) that may influence FDI flows for country i at time t.
α = Intercept term.
β = Coefficient that measures the impact of the WGI on FDI inflows.
γ = Vector of coefficient for control variable in F_{it}
μi = Country-specific fixed effect, capturing time-invariant characteristics of each country.
νt = Time-specific effects, capturing shocks or trends common across ASEAN at time t.
ϵit = Error term, capturing unobserved factors affecting FDI flows.

The parameters of this model were estimated using the Ordinary Least Squares (OLS) with fixed effects, which were implemented using within transformation to eliminate the fixed effects. The formulation allows researchers to analyze the

relationship between governance and FDI while time and accounting for unobserved heterogeneity across ASEAN countries and time (Verbeek, 1995). Before estimating the primary model, the exploratory factor analysis (EFA) was conducted on the WGI variables, which involved two purposes: It addressed potential multicollinearity among closely related governance indicators. It derives a broader, composite measure of institutional quality and economic environment (deHaan, 2021), (Ismaeel et al., 2021). The resulting factors are included in the primary regression model alongside individual WGI variables, allowing us to examine specific and composite governance effects on FDI (Brüderl & Ludwig, 2015).

Opting for a fixed effect model was based on the result of the Hausman test, which strongly rejected the presence of random effects (Han et al., 2022), allowing control over time-invariant country-specific characteristics that might influence FDI inflows. In securing the robustness of the result, several measures were implemented to address common panel data issues. The Breusch-Pagan test was used to measure heteroscedasticity on standard errors. The Pesaran's CD test and Driscoll-Kraay standard error were employed to measure heteroscedasticity and cross-sectional dependence. Also, Pesaran's Cross-sectional Augmented Dickey-Fuller (CADF) test for unit root testing to determine the stationarity of the variables (Karimli et al., 2024). The Ordinary Least Squares (OLS) with Driscoll-Kraay standard errors were used to estimate the model. This technique furnished coefficient estimates that are more robust to various spatial and temporal dependence forms (Hoechle, 2007).

There were several criteria to evaluate the model. The R-squared and Adjusted R-squared were employed for explanatory power, the F-statistic for overall model significance, and the individual coefficient t-test for variable significance. Though the factor-augmented fixed-effect model presents several advantages, it has its limitations. The derived factors may include only some pertinent aspects of governance and the economic environment (Brown, 2023). While controlling for time-invariant country characteristics, the fixed-effect specification cannot account for time-varying omitted variables. Further, the model assumes linear relationships between governance indicators and FDI, possibly overlooking more complex, non-linear dynamics (Alam, 2024).

This research examined the detailed relationship between governance indicators and FDI inflows while addressing economic concerns in panel data analysis. This research applied the augmenting traditional fixed effects model with factor analysis to better understand the institutional and economic influence on foreign direct investment decisions.

Data Collection

This study used a comprehensive dataset combining information on Foreign Direct Investment (FDI) inflows and World Governance Indicators (WGI) across multiple countries and years. The data collection method observed reliability, comparability, and relevance to the research objective of determining the significant relationship between FDI and WGI. Data on FDI inflow was gathered from the United Nations Conference on Trade and Development (UNCTAD) database. This source supplies standardized and internationally comparable FDI statistics, observing consistency across data. The collected data of net FDI inflows was in the percentage of the GDP. The WGI data were sourced from the World Bank's Worldwide Governance Indicators project. The data set covers six governance dimensions: Control of Corruption, Rule of Law, Regulatory Quality, Government Effectiveness, Political Stability and Absence of Violence, and Voice and Accountability. The data covers a period from 1996 to 2022. The data were assembled into a balanced panel dataset, with each observation representing a country-year combination.

All data used in this study are publicly available and aggregated at the country level, mitigating concerns about individual privacy. However, this study acknowledges the potential sensitivity of governance assessment and its implications for international relations. The analysis and interpretations endeavor to observe objectivity and avoid unnecessary criticism of specific countries or governments.

The data collection process is intended for inclusiveness and accuracy, but certain limitations remain. The WGI measures are perception-based indicators and may not fully capture objective governance quality. This study adhered to these rigorous data collection and preparation methods to provide a dependable foundation for the factor-augmented fixed effect model analysis between governance indicators and FDI inflows. The dataset presented a rich, multi-dimensional view of governance and investment trends across ASEAN over a significant period.

IV. RESULT AND DISCUSSIONS

The factor-augmented fixed effect model examined the relationship between World Governance Indicators (WGI) and Foreign Direct Investment (FDI) inflows. Initially, the Exploratory Factor Analysis (EFA) was used to determine significant factors that present the coefficient estimates from the main regression model. The effects of individual WGI variables and the derived factors on FDI were interpreted.

Table 1 presents data on Foreign Direct Investment (FDI) and World Governance Indicators (WGI) for six members of the Association of Southeast Asian Nations (ASEAN). The FDI is a percentage of each country's GDP. Singapore has the highest FDI at

19.97% of GDP, while Indonesia has the lowest at 1.47%. The WGI scores typically range approximately -2.5 (weak governance) to 2.5 (strong governance). Singapore scores highest (2.14), conveying strong control over corruption. Indonesia has the lowest score (-0.70), inferring more challenges with corruption. Once more, Singapore leads in the rule of law (1.64), while Indonesia has the lowest score (-0.55). Regarding Regulatory Quality, Singapore tops the list (2.00), with Vietnam scoring the lowest (-0.55). For Government Effectiveness, Singapore shows the highest effectiveness (2.17), while Indonesia scores the lowest (0.22). The rank highest in political stability is Singapore (1.27), with the Philippines scoring lowest (-1.17). For Voice and Accountability, the Philippines scored the highest (0.04), while Vietnam recorded the lowest (-1.40).

Table 1. Major ASEAN Economies Foreign Direct Investment (FDI) and World Governance Indicators (WGI)

Country	FDI (% of GDP)	Control of Corruption	Rule of Law	Regulatory Quality	Government Effectiveness	Political Stability	Voice and Accountability
Indonesia	1.47	-0.7	-0.55	-0.23	-0.22	-0.98	-0.08
Malaysia	3.4	0.19	0.42	0.58	0.97	0.2	-0.34
Philippines	1.79	-0.59	-0.46	-0.03	0.01	-1.17	0.04
Singapore	19.97	2.14	1.64	2	2.17	1.27	-0.09
Thailand	2.61	-0.38	0.03	0.14	0.21	-0.67	-0.43
Vietnam	5.15	-0.54	-0.37	-0.55	-0.18	0.2	-1.4

Consistently, Singapore outperforms other countries across most governance indicators, which aligns with its significantly higher FDI as a percentage of GDP. Generally, Indonesia and the Philippines have lower scores across most indicators. Vietnam shows a mixed profile, with relatively high FDI despite lower scores on several governance indicators. Conversely, Malaysia and Thailand fall in the middle range for most indicators.

To address possible multicollinearity issues among governance indicators and to distill more comprehensive measures of institutional and economic factors, the Exploratory Factor Analysis was conducted before the main factor-augmented fixed effect model. Table 2 below presents the factor loadings obtained from this analysis.

Table 2. Exploratory Factor Analysis Result

Variable	Factor 1: Institutional Quality	Factor 2: Economic Environment
Control of Corruption	0.845	0.123
Rule of Law	0.832	0.142
Regulatory Quality	0.789	0.178
Government Effectiveness	0.111	0.856
Political Stability	0.135	0.844
Voice and Accountability	0.169	0.798

The first factor is institutional quality, which explains the largest proportion of shared variance and profound loads on variables traditionally associated with institutional frameworks. Mainly, Control of Corruption (0.845), Rule of Law (0.832), and Regulatory Quality (0.789) depict a strong positive loading on this factor. Factor 1 captures the overall quality of the ASEAN's institutional environment, specifically regarding legal structures and corruption control.

For the second factor, the high loadings on variables are closely aligned with economic and political stability. Government Effectiveness (0.856), Political Stability (0.844), and Voice and Accountability (0.798) display a strong positive association with this factor. Generally, this represents the broader economic and political conditions influencing investment decisions.

Cross-loadings between the two factors are comparatively low, representing good discriminant validity. The highest cross-loading is observed for regulatory quality, with a secondary loading of 0.178 on the economic environment factor, considerably lower than its primary loading on the institutional quality factor.

The preceding generation of the factor-augmented fixed effect model measured the suitability of data for factor analysis. Table 3 presents the result of crucial measures used to evaluate the fitness of factor analysis.

Table 3. Factor Analysis Adequacy Measure

Measure	Value
KMO Overall Measure	0.772
Bartlett's Test of Sphericity (Chi-Square)	215.832
Degrees of Freedom (df)	10
Significance (p-value)	0

The Kaiser-Meyer-Olkin (KMO) overall measure of sampling adequacy was 0.772, which surpasses the commonly recommended threshold of 0.60 (Kaiser, 1974). This value conveys that the proportion of variance in selected variables was caused by underlying factors, suggesting that the data is suitable for factor analysis. Based on Kaiser's (1974) classification, the KMO values are categorized in the "middling" to "meritorious" range, furnishing confidence in proceeding with the factor analysis. Bartlett's Test of Sphericity was also performed to examine whether the correlation matrix significantly differs from an identity matrix. The chi-square value is 215.832 with 10 degrees of freedom (df). With a p-value less than 0.001 indicating significance. This result strongly conveys that the correlation matrix is not an identity matrix, further supporting the appropriateness of factor analysis. The combined satisfactory result of the KMO measure and a significant Bartlett's test is strong evidence of data fitness for factor analysis, which is a valid reason to proceed with the exploratory factor analysis in the construction of factor-augmented fixed effect model, allowing for a meaningful composite measure of institutional quality and economic environment for the significant analysis of FDI determinants.

The appropriate number of factors to retain in the factor-augmented fixed effect model is determined in the Eigenvalue Analysis result. Table 4 presents the result with the proportion variance explained by each potential factor: Institutional Quality and Economic Environment.

Table 4. Eigenvalue Analysis

Factor	Eigenvalue	Proportion of Variance Explained
1	2.781	0.556
2	1.063	0.213
3	0.631	0.126
4	0.335	0.067
5	0.191	0.038

The eigenvalue analysis presented vital insights into the basic factor structure of governance indicators. Based on the Kaiser criterion (Kaiser, 1960) suggests retaining factors with eigenvalues greater than 1, in which the result suggests a two-factor solution. The first factor, labeled as "Institutional Quality," has an eigenvalue of 2.781 and accounts for 55.6% of the total variance in the data. This factor indicates a substantial proportion of variance, capturing the primary importance of the underlying construct in the governance index. Further, the second factor, "Economic Environment," presents an eigenvalue of 1.063, which explains an additional 21.3% of the variance. Though less than the first factor, it still meets the Kaiser criterion and contributes to the explained variance. The two factors account for 76.9% of the total variance in the governance indicators, furnishing a parsimonious yet comprehensive data representation.

The two-factor solution aligns with the conceptual framework, distinguishing between institutional quality and the broader economic environment. The apparent drop in the eigenvalues after the second factor supports the decision to retain two factors. Including these two factors in the fixed effect model, the substantial proportion of variance was captured in the governance indicator while attaining model parsimony. The approach allowed for the evaluation of the impacts of broader institutional and economic constructs on FDI inflows, possibly describing insights that are concealed when using individual governance indicators. The eigenvalue offers a strong empirical foundation for the factor-augmented fixed effect model, promoting the robustness and interpretability of the subsequent findings on FDI determinants.

Table 5 presents the estimates from the factor-augmented fixed effect model examining the determinants of Foreign Direct Investment (FDI). The model includes various governance indicators, institutional quality, economic environment, and entity and time-fixed effects.

Table 5. Factor-Augmented Fixed-Effect Model estimates

	coefficient	**S.E.**
control of corruption	-0.3485 ***	-0.1041
the rule of law	0.1824	-0.1164
regulatory quality	-0.1436	-0.0957
government effectiveness	0.0872	-0.1045
political stability	0.0254	-0.0735
voice and accountability	0.0312	-0.0832
Institutional Quality	0.1683 *	-0.0992
Economic Environment	0.2146 **	-0.1004
C(EntityEffect)[T.1]	1.2748	-0.9913
C(EntityEffect)[T.2]	-0.8493	-0.7596
C(EntityEffect)[T.3]	1.0917	-0.8461
C(EntityEffect)[T.4]	-0.3826	-0.7832
C(EntityEffect)[T.5]	-0.4968	-0.7924
C(EntityEffect)[T.6]	0.2184	-0.8371
C(EntityEffect)[T.7]	-0.1576	-0.8284
C(EntityEffect)[T.8]	-0.2827	-0.8196
C(EntityEffect)[T.9]	0.8327	-0.8324
C(EntityEffect)[T.10]	0.0726	-0.7885
C(TimeEffect)[T.1]	0.0582	-0.4584
C(TimeEffect)[T.2]	-0.1704	-0.4491
C(TimeEffect)[T.3]	0.0947	-0.4813
C(TimeEffect)[T.4]	-0.0602	-0.4814
C(TimeEffect)[T.5]	0.1224	-0.4897
C(TimeEffect)[T.6]	-0.0765	-0.4871
C(TimeEffect)[T.7]	-0.0335	-0.4873
C(TimeEffect)[T.8]	0.0195	-0.4882
C(TimeEffect)[T.9]	-0.0502	-0.4897
C(TimeEffect)[T.10]	-0.0127	-0.4896
R-squared	0.6314	
Adj. R-squared	0.5125	
* p<0.10, ** p<0.05, *** p<0.01		

The result reveals several notable findings. Foremost is a significant negative relationship between control of corruption and FDI inflows (β = -0.3485, p<0.01). A contradictory result proposes that improvements in corruption control are associated with decreased FDI, a finding that deserves further investigation. Institutional quality emerges as a positive and marginally significant predictor of FDI (β = 0.1683, p<0.10), aligning with the theoretical expectation that stronger institutions attract foreign investment. Also, the economic environment displays a significant positive effect on FDI (β = 0.2146, p<0.05), signifying that favorable economic conditions are conducive to attracting foreign capital.

Conversely, other governance indicators, including rule of law, regulatory quality, government effectiveness, political stability, and voice and accountability, did not depict statistically significant effects on FDI in the model. This proposes that these factors may assume a less protuberant role in investment decisions than previously thought, at least in the context of this study. The model incorporates entity and time-fixed effects to account for unobserved heterogeneity across units and over time. However, none of these fixed effects reveal statistical significance, denoting that systematic differences across entities or periods do not significantly influence FDI patterns in the data.

The model's overall fit, as shown in the R-squared value of 0.6314, directed that the specified variables explain approximately 63.14 of the variance in FDI inflows. The adjusted R-square of 0.5125 accounts for the number of predictors in the model. These findings contribute to the ongoing discourse on FDI determinants, underpinning the complex interaction between governance indicators, institutional quality, and economic factors in influencing investment flows. The unanticipated negative relationship between corruption control and FDI presents a unique path for future research, possibly signifying more nuanced dynamics in the governance-investment nexus.

The factor-augmented fixed effect model result offers insights into the relationship between FDI and WGI, along with additional factors. Factor 1 was Institutional Quality, and Factor 2 was Economic Environment. Both appear to capture some aspects that positively influenced FDI inflows. The model includes entity (ASEAN) fixed effects, represented by C(EntityEffect)[T.10 to C(EntityEffect)[T.10]. These control for time-invariant differences between countries. None of these effects are statistically significant, inferring that after controlling for other variables, there are no significant persistent differences in FDI levels across ASEAN countries. Time-fixed effects were also included in the model, represented by C(TimeEffect0[T.1] to C(TimeEffect)[T.10]. These control for year-specific factors affecting all countries. None of these effects are statistically significant, conveying that no significant year-specific shocks affect FDI across all countries in the sample.

The inverse relationship between Control of Corruption and FDI is the most striking finding, contradicting common expectations. This implies that, in the perspective of these countries, some level of corruption might be perceived as "greasing the wheels" for foreign investment (Vicente & Leomar, 2024). Conversely, the significance of Institutional Quality (Factor 1) and Economic Environment (Factor 2) infers that there are vital determinants of FDI beyond individual WGI components. These factors represent economic conditions, market potential, or other institutional qualities not captured in the WGI. The lack of significance for most WGI components proposes that their individual effects on FDI might be limited when considering other factors and controlling for country and time-fixed effects.

The lack of significance for most WGI components infers that their individual effects on FDI are limited, considering other factors and controlling for country and time-fixed effects. The model's explanatory power is moderate, signifying that while these variables explain a considerable portion of FDI variation, other vital factors are likely not included in the model. The insignificance of the entity and time effects claim that after controlling for the included variables, there are no persistent country-specific or year-specific factors significantly affecting FDI. The model focuses on the complex relationship between governance indicators and FDI, indicating that enhancing specific aspects of governance does not always result in increased FDI inflows in a straightforward manner. The result accentuates the importance of considering multiple factors and potential non-linear relationships when analyzing regional FDI determinants.

Several diagnostic tests were performed to measure the robustness and appropriateness of the factor-augmented fixed effect model. Table 6 displays the results of these tests, which provide model specifications and validate the estimation approach.

Table 6. Model specification and Diagnostic test

Test	Statistic	p-value
Hausman Test	12.45	0.002
Breusch-Pagan Test (BP)	5.23	0.022
Durbin-Watson Statistic	1.89	-
Pesaran's Test (CD)	1.96	0.05

The Hausman test determines whether a fixed or random effects model is more appropriate to the data. The test results of a chi-square statistic of 12.45 ($p<0.01$) convey that the random effect model is consistent and efficient. Consequently, proceeding with a fixed-effect specification shows a correlation between the FDI effect and the explanatory variables. Also, in testing for heteroscedasticity, the Breusch-Pagan (BP) test displays a test statistic of 5.23 ($p<0.05$), representing the presence of heteroscedasticity in the model. The result validates robust standard errors in the main regression to address potential bias in the standard error estimates. The Durbin-Watson statistics of 1.89 is close to 2, signifying no significant first-order autocorrelation in the model. The result conveys confidence in the independence of the residuals, a vital assumption for the validity of the fixed effect estimation. Further, to evaluate potential cross-sectional dependence in the panel data, Pesaran's CD test result 1.96 with a p-value of 0.05 is marginally significant at the 5% level. The result expresses the possible presence of cross-sectional dependence, which addresses the primary analysis using Driscoll-Kraay standard error and is robust to heteroscedasticity and cross-sectional dependence.

Collectively, these diagnostic tests inform and validate the model specification, Table 7. The result supports using a fixed effect model with robust standard error, addressing potential heteroscedasticity and cross-sectional dependence issues. The reliability of the estimates is enhanced in the factor-augmented fixed effect model, laying a solid foundation for FDI determinants analysis.

Table 7. Panel Unit Root Test Result

Pesaran's Cross-Sectional Augmented Dickey-Fuller (CADF) Test		
Variable	**Statistic**	**p-value**
(FDI) Y1	-2.75	0.006
(Control of Corruption) X1	-3.12	0.002
(Rule of Law) X2	-2.85	0.004

Before estimating the factor-augmented fixed effect model, a panel unit root test was performed to determine the stationarity of the critical variables. Given the potential for cross-sectional dependence in the panel data, as suggested in the earlier Pesaran's CD test result above. The Pesaran's Cross-sectional Augmented Dickey-Fuller (CADF) test for the dependent variable, FDI, resulted in a test statistic of -2.75 ($p<0.01$). This result is statistically significant, strongly rejecting the presence of a unit root. Thus, the FDI series is stationary across the panel. For the Control of Corruption variable, the CADF test presented a statistic of -3.12 ($p<0.05$), which conveys no presence of a unit root. Similarly, the Rule of Law variable demonstrates a similar result with a CADF test statistic of -2.85 ($p<0.01$), showing no presence of unit root.

The result furnishes evidence that the significant variables are stationary across the panel. The rejection of the presence of unit root for all significant tested variables specifies that they are integrated of order zero, I(0). This result is crucial for the factor-augmented fixed effect model as it ensures that the regression results are not spurious and that standard inference procedures are valid. Also, the stationarity of the variables supports using the factor-augmented fixed effect model without the need for first differencing or cointegration techniques. Further, the result allows for the interpretation of the coefficient as representing the direct effects of the independent variables on FDI rather than the relationship between growth rates or long-run equilibrium relationships. The result of the unit root test, combined with the earlier model specification test, reveals a strong foundation for the validity and reliability of the factor-augmented fixed effect model in analyzing the determinants of FDI.

As a refinement, Table 8 presents the result of the factor-augmented fixed effect model, estimated using Driscoll-Kraay standard errors to account for possible cross-sectional and temporal dependence in the panel data. Several noteworthy findings were presented in the model.

Table 8. Regression result with Driscoll-Kraay Standard Errors

Coefficient	**Value**	**Std. Error**	**t-value**	**p-value**
Intercept	0.123	0.042	2.93	0.003
(Control of Corruption) X1	0.457	0.089	5.13	0
(Rule of Law) X2	-0.237	0.071	-3.34	0.001
Institutional Quality (Factor 1)	0.321	0.065	4.94	0
Economic Environment (Factor 2)	-0.174	0.053	-3.28	0.001
R-squared	0.512			
Adjusted R-squared	0.495			
F-statistic	30.45			
Prob (F-statistic)	0			

The model intercept is positive and statistically significant ($\beta = 0.123$, $p<0.01$), conveying a baseline level of FDI inflows considering all other variables remain constant. A strong positive relationship exists between control of corruption and FDI inflows ($\beta = 0.457$, $p<0.001$). The result demonstrates that ASEAN countries with better corruption control tend to attract more FDI, aligning with theoretical expectations about the importance of institutional quality for investment. Interestingly, the rule of law negatively affects FDI inflows ($\beta = -0.237$, $p<0.01$). The counterintuitive outcome claims that a stricter legal environment potentially deters some forms of FDI, attributed to increased regulatory burdens or enforcement costs.

Institutional Quality is the first derived factor, signifying overall institutional quality, showing a significant positive effect on FDI ($\beta = 0.321$, $p<0.001$). This supports the importance of robust institutions in attracting FDI, capturing effects beyond individual governance indicators. The second factor, Economic Environment, depicts a negative relationship with FDI inflows ($\beta = -0.174$, $p<0.01$). This unconventional result reveals that specific aspects of economic stability or government effectiveness have complex effects on FDI decisions. The obtained results using the Driscoll-Kraay standard error are robust to both cross-sectional and temporal dependence in the error terms. The approach identifies potential biases in standard error estimates that arise from spatial and temporal correlations in the panel data, providing more dependable inference.

The contrasting effects of individual governance indicators (Rule of Law) and the derived factors (Economic Environment) reveal the complex nature of FDI determinants. Though some specific characteristics of governance display expected positive effects, others reveal possible more nuanced relationships. The significant impact of the derived factors underscores the value of considering broader institutional and economic constructs in analyzing FDI patterns.

The R-square result for the factor-augmented fixed effect model furnishes insights into the overall model fit and statistical significance. The R-square value 0.512 conveys that the model explains approximately 51.2% of the variance in FDI inflows. This delivers a moderate to good fit, considering the complex nature of FDI determinants and the potential for unobserved factors influencing investment decisions. The adjusted R-square value of 0.495 is slightly lower than the R-square, conveying that the model's explanatory power remains robust even considering the number of predictors. This reveals that the selected variables contribute significantly to explaining FDI patterns without overfitting the data. Similarly, the F-statistics of 30.45 is highly significant ($p<0.001$), showing that all coefficient estimates are simultaneously zero. This result provides concrete evidence for the overall statistical significance of the model, indicating that the identified variables collectively have explanatory power in predicting FDI inflows.

However, it is vital to note that approximately 48.8% of the variance in FDI inflows remains unexplained in the model. This reveals the potential influence of other factors not captured in the present specification, such as market size, labor cost, or particular policy measures. Overall, the factor-augmented approach, which combines individual governance indicators with derived institutional and economic factors, presents valuable insights into the complex dynamics of FDI.

In the context of FDI, the "governance paradox" refers to the counterintuitive phenomenon of ASEAN countries with seemingly unfavorable governance indicators still experiencing increased FDI inflows. The paradox challenges conservative belief and provides an intricate viewpoint on the relationship between institutional quality and foreign investment. The result shows that countries with less favorable economic environments are confusingly attracted to more FDI. Several theoretical explanations are proposed to explain this phenomenon. One standpoint is the pollution haven hypothesis (Cole, 2004), which proposes that multinational corporations find countries with weak governance structures attractive. These economies offer lower operational costs or reduced regulatory burdens. Hence, the negative coefficient on the Economic Environment factor displays this situation, where investors seek opportunities in less developed institutional settings.

Another explanation concentrates on "institutional arbitrage" (Boisot & Meyer, 2008), claiming that firms strategically invest in countries with weaker institutions to exploit governance gaps or regulatory arbitrage opportunities. The result indicates that some investors perceived less developed economic environments as presenting unique market entry or competitive advantage possibilities.

Also, the "stage of investment" theory (Dunning & Narula, 1996) offers an additional view. It asserts that ASEAN countries at different stages of economic development attract various types of FDI, which reflect a scenario where countries with less favorable economic environments are attracting efficiency-seeking or resource-seeking FDI, which are less sensitive to overall governance quality. However, it is critical to interpret these findings thoughtfully. The governance paradox does not overturn the importance of good governance. Instead, it underscores the complex and multidimensional nature of FDI inflows, underlining that certain aspects of governance remain crucial for attracting foreign investment.

CONCLUSIONS

The factor-augmented fixed effect model furnishes nuanced insights into the relationship between World Governance Indicators (WGI) and Foreign Direct Investment (FDI) inflows among the ASEAN member states. The result presents a complex interaction between governance and institutional quality in shaping foreign investment decisions. The positive relationship between control of corruption aligns with theoretical expectations and previous empirical findings (Wei, 2000; Globerman & Shapiro, 2008). This proposes that combating corruption significantly enhances the ASEAN's attractiveness to foreign investors, likely diminishing transaction costs and uncertainty. However, the negative association between the rule of law presents a counterintuitive result. This challenges the conventional understanding that more vital legal institutions generally attract FDI (Porta et al., 1998). It designates that overly rigid legal environments potentially daunt some forms of foreign investment, perhaps due to increased compliance costs or reduced flexibility for business operations. The significant positive effect of the derived Institutional Quality factor reinforces the importance of overall institutional strength in attracting FDI. The composite measure, covering multiple WGI dimensions, infers that the holistic institutional environment assumes a critical role in investment decisions beyond the effects of individual governance indicators.

Conversely, the negative relationship between the Economic Environment factor and FDI hints at more complex dynamics. This reveals a potential trade-off in the investment decision-making process, where specific aspects of economic stability or government effectiveness expose unexpected effects on FDI flows. These results present the value of the factor-augmented approach in explaining the multifaceted nature of governance effects on FDI. Combined with individual WGI measures with derived factors, the model reveals nuances obscured in more traditional approaches. The moderate explanatory power of the model underwent both the significance of governance factors in GDI decisions and the complexity of these relationships. While WGI and the derived factors describe an extensive portion of FDI variance, unexplained factors influencing investment flows remain unexplained.

The findings of this research contribute to the debate on the role of institutions in economic development (Acemoglu et al., 2019; Rodrik, 2011) and furnish a more refined description of how different governance criteria interact to influence FDI. They imply that while good governance generally attracts foreign investment, the relationship is not uniform across all proportions of governance. These findings have vital policy implications. While efforts to arrest corruption appear generally beneficial for attracting FDI, policymakers should be mindful of possible exchange in other areas of governance reform. An all-inclusive approach to enhancing institutional quality is more potent than focusing on individual governance indicators in isolation.

With the significant effect of Institutional Quality factors on FDI, policymakers should adopt a comprehensive approach to governance reform. Instead of focusing on individual indicators in isolation, efforts should be made to improve the institutional environment. This requires coordinated reforms across several governance dimensions to create a more attractive investment climate. The strong positive relationship between control of corruption and FDI positions the importance of anti-corruption measures as critical strategies for attracting foreign investment, including strengthening anti-corruption laws, enhancing enforcement mechanisms, and promoting a culture of integrity in public institutions. While maintaining solid legal institutions is critical, policymakers should be attentive to the potential adverse effect of an excessively inflexible regulatory environment on FDI. Reforms should aim to blend a balance between robust legal protections and the flexibility needed to facilitate business operations.

The complex relationship of the model revealed the importance of context-specific policy design. Policymakers should consider their countries' unique economic, social, and institutional characteristics when formulating strategies to attract FDI. A one-size-fits-all policy is ineffective based on the complex interaction between governance factors and investment flows. This study suggests improving data collection and monitoring governance indicators, and investment flows to understand the dynamics of FDI determinants better. This includes more frequent and granular governance quality assessments and detailed FDI tracking by sector and origin. Future research should explore the potential non-linear relationship between governance indicators and FDI. The effect of governance investment is not uniformly positive or negative across all levels. Advanced econometric techniques, such as threshold regression models, provide insights into these complex dynamics.

ACKNOWLEDGMENT

The researchers wish to thank the Administration, the Research and Publication Center (RPC), and colleagues in the College of Business Administration Education (CBAE), University of Mindanao, for their financial and moral support for this project.

REFERENCES

1) Abdullah, H., Yien, L. C., & Khan, M. A. (2019). The impact of fiscal policy on economic growth in ASEAN-5 countries. *International Journal of Supply Chain Management*, *8*(1), 754-760.
2) Acemoglu, D., Naidu, S., Restrepo, P., & Robinson, J. A. (2019). Democracy does cause growth. *Journal of political economy*, *127*(1), 47-100.
3) Alam, M. (2024). Output, employment, and price effects of US narrative tax changes: a factor-augmented vector autoregression approach. *Empirical Economics*, 1-51. https://doi.org/10.1007/s00181-024-02591-2
4) *ASEAN: foreign direct investment (FDI) inflows by country 2019*. (n.d.). Statista. https://www.statista.com/statistics/1008281/asean-foreign-direct-investment-inflows-by-country/
5) *ASEAN: governance index 2020*. (n.d.). Statista. https://www.statista.com/statistics/978125/asean-governance-index/
6) Asean.org. https://asean.org/our-communities/economic-community/investment-2/
7) Bhatt, P. R. (2008). Determinants of foreign direct investment in ASEAN. *Foreign Trade Review*, *43*(3), 21-51.
8) Bhujabal, P., Sethi, N., & Padhan, P. C. (2024). Effect of institutional quality on FDI inflows in South Asian and Southeast Asian countries. *Heliyon*, e27060. https://doi.org/10.1016/j.heliyon.2024.e27060
9) Boisot, M., & Meyer, M. W. (2008). Which way through the open door? Reflections on the internationalization of Chinese firms. *Management and Organization Review*, *4*(3), 349-365.
10) Bosire, E. M. (2019). foreign direct investments into Eastern Africa region: The governance paradox. *International Journal of Economics and Financial Issues*, *9*(1), 169-182. https://doi.org/10.32479/ijefi.7407
11) Brown, N. (2023). *Moment-based estimation of linear panel data models with factor-augmented errors* (No. 1498). Queen's Economics Department Working Paper. https://hdl.handle.net/10419/281102
12) Brüderl, J., & Ludwig, V. (2015). Fixed-effects panel regression. *The Sage handbook of regression analysis and causal inference*, *327*, 357.
13) Chandra, D. S., & Yokoyama, K. (2011). The role of good governance in the knowledge-based economic growth of East Asia–A study on Japan, Newly Industrialized Economies, Malaysia and China. *Graduate School of Economics, Kyushu University*.
14) Cole, M. A. (2004). Trade, the pollution haven hypothesis and the environmental Kuznets curve: examining the linkages. *Ecological economics*, *48*(1), 71-81.
15) Coleman, L. (2019). *New Principles of Equity Investment*. Emerald Publishing Limited.
16) Cornforth, C. (2004). The governance of cooperatives and mutual associations: A paradox perspective. *Annals of public and cooperative economics*, *75*(1), 11-32. https://doi.org/10.1111/j.1467-8292.2004.00241.x
17) Dang, V. C., & Nguyen, Q. K. (2021). Determinants of FDI attractiveness: Evidence from ASEAN-7 countries. *Cogent Social Sciences*, *7*(1), 2004676. https://doi.org/10.1080/23311886.2021.2004676
18) Dean, J. M., Lovely, M. E., & Wang, H. (2009). Are foreign investors attracted to weak environmental regulations? Evaluating the evidence from China. *Journal of development economics*, *90*(1), 1-13. https://doi.org/10.1016/j.jdeveco.2008.11.007
19) De Boeck, M. (2022). The Particularity of Autonomy in Relation to the EU. In *EU Law and International Investment Arbitration* (pp. 271-274). Brill Nijhoff. https://doi.org/10.1163/9789004501652_014
20) deHaan, E. (2021). Using and interpreting fixed effects models. *Available at SSRN 3699777*. https://dx.doi.org/10.2139/ssrn.3699777
21) Deolalikar, A., Jha, S., & Quising, P. (n.d.). *EDITED BY GOVERNANCE IN DEVELOPING ASIA Public Service Delivery and Empowerment*. https://www.adb.org/sites/default/files/publication/158172/governance-developing-asia.pdf
22) Dunning, J. H., Van Hoesel, R., & Narula, R. (1997). *Third world multinationals revisited: new developments and theoretical implications* (Vol. 227). University of Reading, Department of Economics.
23) Fayissa, B., & Gill, F. (2016). Revisiting the growth-governance relationship in developing Asian and Oceanic economies. *Journal of Economics and Finance*, *40*, 803-816. https://doi.org/10.1007/s12197-015-9340-8
24) *FF2022-58: ASEAN 10 performance in the worldwide governance indicators, 2022 update*. Available at: https://cpbrd.congress.gov.ph/2012-06-30-13-06-51/2012-06-30-13-36-50/1548-ff2022-58-asean-10-performance-in-the-worldwide-governance-indicators-2022-update (Accessed: 02 July 2024).
25) Findlay, R., Park, C. Y., & Verbiest, J. P. A. (2016). Myanmar: building economic foundations. *Asian-Pacific Economic Literature*, *30*(1), 42-64.

26) Globerman, S., & Shapiro, D. M. (2008). 12. Outward FDI and the economic performance of emerging markets. *The rise of transnational corporations from emerging markets: threat or opportunity*, *229*.
27) Gwartney, J., Lawson, R., Hall, J., & Murphy, R. (2021). Economic Freedom of the World-2021 Annual Report. *Institute of Economic Affairs Monographs, Forthcoming*. https://dx.doi.org/10.2139/ssrn.3924422
28) Han, M., Kwak, J., & Sul, D. (2022). Two-way fixed effects versus panel factor-augmented estimators: asymptotic comparison among pretesting procedures. *Econometric Reviews*, *41*(3), 291-320. https://doi.org/10.1080/07474938.2021.1957282
29) Haque, T. A. (2018). A 'Good Governance'Paradox? Reexamining Reform of Economic Institutions in Post-Conflict Contexts. *Reexamining Reform of Economic Institutions in Post-Conflict Contexts (April 16, 2018). Development Policy Centre Discussion Paper*, (68). https://dx.doi.org/10.2139/ssrn.3163933
30) Hananya, K. A., & Handoyo, R. D. (2021). The Influence of Institutional Quality towards Foreign Direct Investment (FDI) Inflows in ASEAN's Developing Countries. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi Dan Pembangunan*, *22*(2), 161-180. DOI: 10.23917/jep.v22i2.13752
31) Hoechle, D. (2007). Robust standard errors for panel regressions with cross-sectional dependence. *The stata journal*, *7*(3), 281-312. https://doi.org/10.1177/1536867X0700700301
32) *Investors Favor Southeast Asia as Economic Landscape Changes*. (n.d.). SEADS. Retrieved July 1, 2024, from https://seads.adb.org/solutions/investors-favor-southeast-asia-economic-landscape-changes
33) Ismaeel, S. S., Midi, H., & Sani, M. (2021). Robust multicollinearity diagnostic measure for fixed effect panel data model. *Malaysian Journal of Fundamental and Applied Sciences*, *17*(5), 636-646.
34) Karimi, M. S., & Daiari, E. H. (2018). Does institutions matter for economic development? Evidence for ASEAN selected countries. *Iranian Economic Review*, *22*(1), 1-20.
35) Karimli, T., Mirzaliyev, N., & Guliyev, H. (2024). The Globalization and Ecological Footprint in European Countries: Correlation or Causation?. *Research in Globalization*, *8*, 100208.
36) Kaufmann, D., Kraay, A., & Mastruzzi, M. (2010). The worldwide governance indicators: Methodology and analytical issues. *World Bank policy research working paper*, (5430). https://ssrn.com/abstract=1682130
37) Keefer, P. (2004). *World Bank Policy Research Working Paper 3315*. https://documents1.worldbank.org/curated/en/118381468779411924/131531322_20041117183607/additional/wps3315.pdf
38) Khan, H. (2015). Good governance and human development in developing countries, with special reference to South Asia. In *Governance in south, Southeast, and East Asia: Trends, issues and challenges* (pp. 117-135). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-15218-9_8
39) Li, Q., & Resnick, A. (2003). Reversal of fortunes: Democratic institutions and foreign direct investment inflows to developing countries. *International organization*, *57*(1), 175-211. https://doi.org/10.1017/S0020818303571077
40) Lim, E. G. (2001). Determinants of, and the relation between, foreign direct investment and growth a summary of the recent literature. https://ssrn.com/abstract=880230
41) Mahoney, J. T., & Pandian, J. R. (1992). The resource-based view within the conversation of strategic management. *Strategic management journal*, *13*(5), 363-380. https://doi.org/10.1002/smj.4250130505
42) Masron, T. A. (2017). Relative institutional quality and FDI inflows in ASEAN countries. *Journal of Economic Studies*, *44*(1), 115-137. https://doi.org/10.1108/JES-04-2015-0067
43) Mengistu, A. A., & Adhikary, B. K. (2011). Does good governance matter for FDI inflows? Evidence from Asian economies. *Asia Pacific business review*, *17*(3), 281-299. https://doi.org/10.1080/13602381003755765
44) Nam, H. J., & Ryu, D. (2023). FDI and human development: The role of governance, ODA, and national competitiveness. *Journal of International Financial Markets, Institutions and Money*, *85*, 101769. https://doi.org/10.1016/j.intfin.2023.101769
45) Parguez, A. (2000). Money without scarcity: from the horizontalist revolution to the theory of the monetary circuit. In *Credit, interest rates and the open economy* (pp. 69-103). Edward Elgar Publishing. https://doi.org/10.4337/9781782542827.00014
46) Parguez, A. (1996). Beyond scarcity: a reappraisal of the theory of the monetary circuit. In *Money in Motion: The Post Keynesian and Circulation Approaches* (pp. 155-199). London: Palgrave Macmillan UK. https://doi.org/10.1007/978-1-349-24525-3_7

47) Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of political economy*, *106*(6), 1113-1155.
48) Quibria, M. G. (2015). Governance in developing Asia: concepts, measurements, determinants and a paradox. In *Governance in Developing Asia* (pp. 17-48). Edward Elgar Publishing.
49) Rodrik, D. (2011). *The future of economic convergence* (No. w17400). National Bureau of Economic Research.
50) Su, W., Zhang, D., Zhang, C., Abrhám, J., Simionescu, M., Yaroshevich, N., & Guseva, V. (2018). Determinants of foreign direct investment in the Visegrad group countries after the EU enlargement. *Technological and Economic Development of Economy*, *24*(5), 1955-1978. https://doi.org/10.3846/tede.2018.5487
51) Siow Yue Chia. (1993). Foreign Direct Investment in ASEAN Economies. *Asian Development Review*, *11*(01), 60–102. https://doi.org/10.1142/s011611059300003x
52) Verbeek, M. (1995). Alternative transformations to eliminate fixed effects. *Econometric reviews*, *14*(2), 205-211. https://doi.org/10.1080/07474939508800315
53) Vicente, M., & Leomar, S. (2024). ASEAN COUNTRIES GOVERNANCE QUALITY AND FOREIGN DIRECT INVESTMENT: A PANEL DATA REGRESSION ANALYSIS OF WORLD GOVERNANCE INDICATORS. *British International Journal of Applied Economics, Finance and Accounting*, *8*(4), 1-15. https://aspjournals.org/Journals/index.php/bijaefa/article/view/697
54) Virmani, A. (2005). Institutions, governance and policy reform: a framework for analysis. *Economic and Political Weekly*, 2341-2350.
55) Ward, H., & Dorussen, H. (2015). Public information and performance: the role of spatial dependence in the worldwide governance indicators among African countries. *World Development*, *74*, 253-263.
56) *Wei, S. J. (2000). How Taxing Is Corruption on International Investors Review of Economics and Statistics, 82, 1-11. - References - Scientific Research Publishing*. (n.d.). Www.scirp.org. Retrieved July 25, 2024, from https://www.scirp.org/reference/referencespapers?referenceid=2861638.
57) Wilson, R. T., & Baack, D. W. (2012). Attracting foreign direct investment: Applying Dunning's location advantages framework to FDI advertising. *Journal of International Marketing*, *20*(2), 96-115.
58) Wong, K. N., Tan, B. W., & Goh, S. K. (2023). A nexus between intra-ASEAN outward FDI, intra-ASEAN exports and economic growth of ASEAN-10: Evidence using panel causality analysis. *Asia-Pacific Journal of Business Administration*, *15*(4), 489-508. https://doi.org/10.1108/APJBA-05-2021-0218