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Analysis of Institutional Quality Impact on Foreign Direct Investment: A Case Study of Countries in America, Asia, and Europe

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ABSTRACT

Countries worldwide are making development efforts to improve the welfare of their people. Significant investment is needed to accelerate economic growth. This study examines the impact of institutional, macroeconomic, and social quality on foreign direct investment (FDI). The method used is the two-step Generalized Method of Moments (GMM). The study's subjects include 94 countries worldwide located in America (26 countries), Asia (33 countries), and Europe (35 countries) over the period 2002 – 2021. The secondary data collection used in this study is sourced from the World Development Indicators (WDI) and World Governance Indicators (WGI). The results of the study show that, simultaneously, all independent variables affect FDI in all models. Meanwhile, the results indicate that institutional quality is more effective in Europe than in America and Asia. Additionally, FDI in the previous period significantly impacts FDI in all models. This study also concludes that inflation and labor force have consistent significance in almost all models, indicating that these variables play an important role in FDI.

Keywords: Control of Corruption; Dynamic Panel Data Regression; Foreign Direct Investment (FDI); Generalized Method of Moments (GMM); Inflation; Institutional Quality; Political Stability

INTRODUCTION

Countries worldwide are working to improve their people's welfare by investing significantly to boost economic growth. Limited capital, however, can hinder productivity and reduce incomes. Investment is vital for economic development, with capital accumulation being crucial alongside factors like population growth and technological advancements. This investment enhances and expands physical and human resources (Anwar, 2016). Among the various factors contributing to economic growth, investment is the central pillar. Investment significantly impacts the economic growth of every country. Foreign direct investment (FDI) is a capital flow from abroad into the private sector through direct or indirect investments affecting portfolios. FDI is more beneficial than portfolio investments because it brings capital, technology, and knowledge transfer that a country can fully utilize (Tambunan et al., 2015).

The existing literature suggests that institutional quality, liberal trade policies, FDI inflows, and human capital all promote quality upgrading, though their impacts vary across sectors (Henn et al., 2020). Specifically, the quality of institutions in host countries has been shown to affect the location choice of Chinese outbound FDI, with institutions playing a more significant role in non-fuel natural resource-rich countries compared to fuel resource-rich countries (Ghauri & Yamin, 2009; Kamal et al., 2020). Moreover, studies have found that the private investment rate of countries with better institutional quality is higher, and the productivity of any given level of investment is more significant in countries with better institutions (Gwartney et al., 2006).

To examine the impact of institutional quality on FDI across different regions, this study will utilize data on various indicators of institutional quality, such as rule of law, control of corruption, and regulatory quality, as well as FDI inflows for countries in America, Asia, and Europe (Ghauri & Yamin, 2009; Gwartney et al., 2006; Henn et al., 2020; Kamal et al., 2020). The analysis will identify regional differences in the relationship between institutional quality and FDI. It will also explore the channels through which institutional quality may affect FDI, such as its impact on investment rates and productivity.

The government implements various policies to attract foreign capital, considering economic and non-economic factors. Strong, trustworthy institutions are crucial, promoting efficient law enforcement and reducing uncertainty. Inefficient institutions burden foreign investment, increasing uncertainty about risks and returns (Drajat, 2022). Compared to other types of financing, FDI is considered highly capable of bringing in foreign funds and supporting long-term development (Shara & Khoirudin, 2021). FDI occurs due to imperfections in the global market, leading companies to prefer managing their activities through more efficient internal markets rather than relying on external ones (Antonescu, 2015).

Figure 1. Average FDI

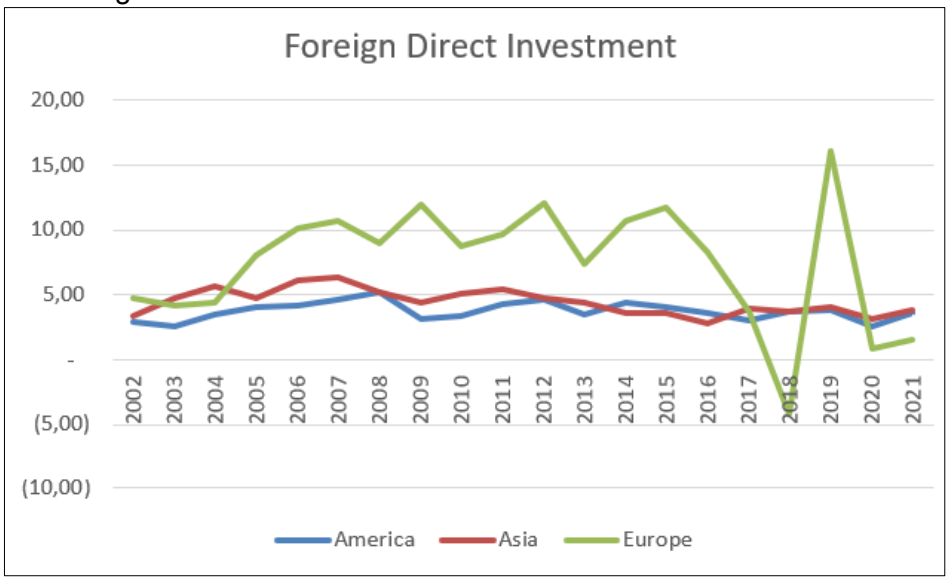

Figure 1 illustrates the fluctuation in average FDI across America, Asia, and Europe. The highest average value in America was in 2008, despite the global financial crisis, due to some countries' economic stability and favorable business environments. Asia peaked in 2007, driven by rapid economic growth, large markets in countries like China and India, and investment-friendly policies in Singapore, Thailand, and Malaysia. Europe's highest fluctuation was in 2019, with Germany, France, the Netherlands, and the United Kingdom attracting foreign investors due to economic stability, skilled labor, and favorable policies.

All companies investing abroad must adhere to good corporate governance (GCG) principles, ensuring they act ethically and fairly while benefiting all stakeholders, including those in the host countries (Lestari et al., 2024). The government implements various policies to attract foreign capital, considering economic and non-economic factors. Strong trustworthy institutions are crucial, promoting efficient law enforcement and reducing uncertainty. Inefficient institutions burden foreign investment, increasing uncertainty about risks and returns (Drajat, 2022).

Macroeconomics is a key approach to understanding the overall economy. Investors must consider macroeconomic indicators, like inflation, before investing, especially in FDI. Inflation, a common and sensitive monetary phenomenon, can negatively impact a country's trade balance. High inflation raises export prices, reducing the competitiveness of a country's commodities compared to other nations (Tambunan et al., 2015).

Social factors such as the labor force are also considered to have the ability to influence their interest in investing. Because the proportion of the population in the labor force indicates more opportunities for economic productivity, the labor force is considered a signal of a country's readiness to enhance its competitiveness (Bintoro, 2022).

The discussion above highlights ongoing debates about the impact of institutions, macroeconomics, and social factors on FDI. Previous studies often focus on limited variables, neglecting the combined influence of these factors. Additionally, a lack of cross-continental comparisons, particularly across America, Asia, and Europe, obscures regional understanding. Furthermore, analyses of institutional, macroeconomic, and social variables from 2002 to 2021 are scarce, leading to an incomplete understanding of how these factors interact and affect FDI inflows across continents.

FDI is a crucial driver of economic growth and development, and the quality of institutions in host countries is a significant determinant of FDI inflows (Naeem et al., 2021). This research paper examines institutional quality's impact on FDI in countries across America, Asia, and Europe. This research has significance, novelty, and important contribution to understanding the factors that affect FDI, especially the role of institutional quality. The significance of the study lies in its relevance to policymakers in developing countries in America, Asia, and Europe who want to attract more foreign investment.

By identifying factors such as inflation and labor as significant determinants of FDI, the study helps design more effective economic policies to drive economic growth. In addition, the use of the Generalized Method of Moments (GMM) method and dynamic panel data analysis provide consistent and valid results so that the findings of this study can be relied on for decision-making. Regarding novelty, the study offers a broad comparative perspective covering 94 countries from three continents (America, Asia, and Europe). The dynamic approach through a dynamic panel data regression model with two-step GMM can overcome the problems of autocorrelation and heteroscedasticity, providing a more accurate analysis. This research strengthens Path Dependence theory (Awadhi et al., 2022) and supports the literature on the importance of institutional quality in attracting FDI (Alguacil et al., 2020; Naeem et al., 2021). The study's findings empirically prove that institutional quality, inflation, and labor are key factors influencing FDI in various regions (Kurul & Yalta, 2017; Shear et al., 2023). Policy-wise, this study emphasizes the importance of institutional reform for countries in America and Asia while confirming the excellence of institutional quality in Europe (Kurul & Yalta, 2017; Sahu, 2021). In addition, the methodology used, such as the GMM, can be a reference for other researchers in different contexts (Roodman, 2020).

LITERATURE REVIEW

Foreign Direct Investment (FDI)

FDI involves private multinational companies investing from one country to another. It is a strategic choice over other foreign financing forms due to its long-term nature and mitigates economic crises. Stephen Hymer's Market Imperfections theory suggests that FDI arises from imperfect markets, with companies seeking foreign capital to enhance competitiveness when market equilibrium is disrupted (Widianatasari & Purwanti, 2021). FDI, a component of international capital flows, involves companies expanding by establishing new entities abroad. This brings resources and technology, benefiting the recipient country's economy and market. FDI has a more significant impact on sustainable development than foreign loans or portfolio capital. Previous studies have examined factors influencing FDI in developed and developing countries (Zakiyyah et al., 2024). FDI involves private multinational companies investing from one country to another. It is a strategic choice over other foreign financing forms due to its long-term nature, which mitigates economic crises and creates jobs in the host country (Henn et al., 2020; Huang, 2020). FDI flows have increased significantly over the past few decades, driven by globalization and emerging market growth (Gwartney et al., 2006; Kamal et al., 2020; Naeem et al., 2021; Yu, 2022). The existing literature suggests that institutional quality, liberal trade policies, FDI inflows, and human capital all promote quality upgrading, though their impacts vary across sectors (Gwartney et al., 2006; Kamal et al., 2020; Lee et al., 2014; Lessmann, 2013; Naeem et al., 2021).

Numerous studies have identified the quality of institutions in host countries as a significant determinant of FDI inflows. Institutional quality includes factors such as the rule of law, control of corruption, regulatory quality, and political stability. Better institutions reduce uncertainty and risks for foreign investors, making a country more attractive for FDI.

One study found that institutional quality affects the location choice of Chinese outbound FDI, with institutions playing a more significant role in non-fuel natural resource-rich countries compared to fuel resource-rich countries. Similarly, another study on South Asian emerging markets showed a positive association between government effectiveness and FDI (Naeem et al., 2021). Furthermore, the research has shown that the private investment rate of countries with better institutional quality is higher, and the productivity of any given level of investment is more significant in countries with better institutions. This suggests that institutional quality, directly and indirectly, impacts FDI through its effects on investment rates and productivity. John Dunning's Eclectic Paradigm theory identifies factors influencing global investors' decisions. It suggests that initial investments in a country impact future decisions, driven by its comparative advantages, location attractiveness, and market internalization potential, collectively attracting more investment (Asiamah et al., 2019). The Eclectic Paradigm theory combines three conditions that influence multinational corporation's decisions to invest in other countries: ownership advantage, location advantage, and internalization advantage (Bouchoucha, 2022). Comparative advantage is the advantage that makes another country more attractive as an investment destination than political stability. Furthermore, location advantage also includes other factors, such as good infrastructure and market size, that can influence the location of FDI in the target country (Sabola, 2023)

Institutional Quality

Institutional quality refers to the effectiveness of a country's rules governing society and interactions. It includes societal compliance with regulations on social and economic activities and technical procedures for selecting, monitoring, and replacing governments. Institutional quality refers to the effectiveness of a country's rules governing society and interactions. It includes societal compliance with regulations on social and economic activities and technical procedures for selecting, monitoring, and replacing governments. Strong institutions, with the rule of law, control of corruption, and secure property rights, promote efficient economic activity, encourage investment and innovation, and lead to higher economic growth.

Empirical studies show that institutional quality is key to FDI location decisions. Multinational enterprises prefer to invest in countries with stable, transparent, and efficient institutions that minimize political and economic risks. Additionally, it encompasses the government's effectiveness in formulating and implementing policies (Widianatasari & Purwanti, 2021).

New Institutional Economics (NIE) emphasizes the critical role of institutions in attracting FDI. This theory posits that strong economic institutions, which protect property rights, uphold legal supremacy, and offer attractive investment incentives, can enhance resource allocation efficiency. A primary function of well-developed institutions is to reduce transaction costs and uncertainties foreign investors face, thereby promoting FDI inflows (Gökçeli, 2023). Conversely, countries with weak, dysfunctional institutions characterized by high bureaucratic red tape, corruption, and political instability tend to repel FDI. This, in turn, improves a country's economic growth prospects, making it more appealing to investors. Conversely, weak institutions marked by corruption and crime increase investment costs (Bouchoucha, 2022)

According to the World Bank's World Governance Indicators, governance quality is measured by six indicators on a scale from -2.5 to +2.5. A score closer to +2.5 indicates good governance quality, while a score near -2.5 indicates poor governance quality. Governance quality is assessed through six key indicators that collectively reflect the

effectiveness and stability of governmental systems. Control of corruption is a fundamental indicator, as the government's ability to prevent corruption directly impacts its performance and stability. High levels of corruption undermine government credibility and deter investor interest, emphasizing the need for effective corruption control (Lubis et al., 2024). Government effectiveness represents the quality of public services, the efficiency of civil services, and their independence from political pressures, serving as a benchmark for the functionality and reliability of governance systems (Zakiyyah et al., 2024). Political stability is another critical factor, as it measures the risk of governmental instability or unconstitutional overthrows, which can lead to conflicts and deter foreign and domestic investments (Zakiyyah et al., 2024).

Regulatory quality reflects the government's capability to design and enforce laws that promote economic growth and stability, making it a vital aspect of good governance for evaluating a nation's economic progress (Lubis et al., 2024). Rule of law pertains to the degree to which individuals respect and adhere to social norms and legal frameworks, ensuring a stable and predictable legal environment (Emako et al., 2022). Finally, voice and accountability capture how citizens can freely express their opinions and associate with and access independent media, fostering transparency and inclusivity in governance (Widianatasari & Purwanti, 2021). Together, these indicators provide a comprehensive framework for assessing governance quality and its impact on a nation’s development and attractiveness to investors.

Inflation

Inflation occurs when the overall prices of goods and services rise or the value of money declines. It is not just about individual items becoming more expensive but also about many items increasing in price simultaneously. For example, if rice, sugar, and oil prices rise simultaneously, that is inflation. High inflation adversely affects foreign investment in several ways: it erodes the purchasing power of consumers, making it harder for multinational firms to predict future sales and profits; it creates economic uncertainty that discourages long-term investment decisions; and it can lead to currency devaluation, diminishing the actual value of returns for foreign investors (Aghion et al., 2009; Hong & Ali, 2020). Conversely, low and stable inflation rates foster a favorable environment for attracting FDI, indicating a country's economic stability and health. This means our money's purchasing power has decreased, as we need more money to buy the same things as before (Marlissa & Mamengko, 2024).

In the context of macroeconomics, inflation results from the interaction between aggregate demand and aggregate supply. If inflation is not controlled, it can harm society. However, if the inflation rate can be kept within reasonable limits, it can benefit society (Rizkiyani et al., 2022). Inflation, as per the Quantity theory popularized by Irving Fisher, occurs when there is an increase in the money supply. It is a phenomenon characterized by a continuous rise in the prices of goods and services (Kurniawan & Prawoto, 2014).

In Neoclassical Investment theory, high inflation creates economic uncertainty, reducing a country's appeal as an investment destination. A sudden inflation increase signals economic instability and suggests the government's inability to control the economy. This can increase the risks foreign investors perceive and discourage them from investing (Tripathi et al., 2015). On the other hand, moderate and stable inflation signals economic health and competence, making the host country more attractive for FDI. Good institutional quality also helps maintain low and stable inflation, encouraging FDI inflows. Inflation can also inflate raw material prices, affecting production costs and pricing challenges for companies, leading investors to hesitate to invest in economically unstable countries (Fiona & Laulita, 2023).

Labor Force
The labor force includes individuals aged 15 to 64, whether employed or actively seeking employment, representing those participating in the labor market. Many studies show a positive relationship between human capital, as measured by labor force skill and quality, and FDI (Joshua et al., 2020). Foreign firms are often attracted to locations with large, educated, and skilled labor forces, which can provide them with the talent required for their operations. It is classified by rural-urban areas, education, and gender and measures the population involved in economic activities (Syafitri & Ariusni, 2019).

The Neo-Classical Growth Model posits that output is produced using labor and capital. Economic growth and labor are interlinked; technological advancements lead to an increase in labor supply. Over time, output per capita and labor productivity increase due to external technological progress. This can drive higher rates of FDI in countries with skilled labor (Titalessy & Situmeang, 2024).

The Heckscher-Ohlin theory states that countries abundant in labor tend to export labor-intensive products, while those abundant in capital tend to export capital-intensive products (Saha et al., 2022). The Heckscher-Ohlin framework notes that FDI inflows reduce income inequality in the host country with more significant benefits for production and technology transfer factors that increase the gap between skilled and unskilled labor (Li et al., 2024).

Dunning's Eclectic Paradigm theory also explains that higher rates of return can determine the inflow of FDI. Therefore, the health of the population can be considered an important factor in determining the inflow of FDI because it can affect worker productivity, thus improving the profitability of companies and return on investment (Immurana et al., 2023).

RESEARCH METHOD

Types and Sources of Data
This research uses secondary data called panel data, which combines information over time and across different countries. The study includes 94 countries in America, Asia, and Europe, covering 2002 to 2021. The data is collected from the World Development Indicators (WDI) and World Governance Indicators (WGI).

Analysis Methods
This research employs a quantitative approach, utilizing the dynamic panel data regression method with the Generalized Method of Moments (GMM). The two-step estimation method is selected due to its efficiency and robustness against heteroskedasticity and autocorrelation. Furthermore, the two-step GMM estimation method is preferred to ensure reliable and consistent estimation results. Statistical instruments used in this study include Microsoft Excel and Stata. The following is the equation constructed in this research:

$$FDI_{i,t} = \beta_0 + \delta FDI_{i,t-1} + \beta_1 CC_{i,t} + \beta_2 GE_{i,t} + \beta_3 PS_{i,t} + \beta_4 RQ_{i,t} + \beta_5 RL_{i,t} + \beta_6 VA_{i,t} + \beta_7 INF_{i,t} + \beta_8 LABOR_{i,t} + \varepsilon_{it}$$

Where:
FDI = Foreign Direct Investment
δ = Coefficients of Endogenous Explanatory Variables
CC = Control of Corruption
GE = Government Effectiveness

PS = Political Stability
RQ = Regulatory Quality
RL = Rule of Law
VA = Voice and Accountability
INF = Inflation
LABOR = Labor Force
i = Number of Countries
t = Time Period
ε_{it} = Error Term
β_0 = Intercept
$\beta_1 \dots \beta_8$ = Slope

RESULTS

Model Specification Test

The specification of the dynamic panel regression model is tested using the Arellano-Bond test (conducted to examine the consistency of estimation results), the Sargan test (performed to identify overidentifying restriction), and the Bias test (conducted to evaluate bias criteria).

Table 1. Results of the Arellano-Bond Test

			Statistic	P-value
Americas	FD-GMM	m_1	-2.8679	0.0041
		m_2	-0.48808	0.6255
	SYS-GMM	m_1	-3.2873	0.0010
		m_2	-0.7978	0.8432
Asia	FD-GMM	m_1	-1.725	0.0845
		m_2	1.1395	0.2545
	SYS-GMM	m_1	-1.68	0.0930
		m_2	1.0105	0.3122
Europe	FD-GMM	m_1	-1.5359	0.1246
		m_2	0.39324	0.6941
	SYS-GMM	m_1	-1.5118	0.1306
		m_2	0.97943	0.3274

Source: Secondary Data Processed (2024)

Based on Table 1, the dynamic panel analysis using the two-step first-difference GMM and two-step system GMM approaches is statistically the best model, meeting the criteria with fulfilled consistency and validity of instrumental variables. Estimation using the Arellano-Bond method demonstrates consistency with statistically insignificant values. In all models, including those for America, Asia, and Europe, the p-values of the Arellano-Bond test at the second order exceed the specified alpha (5%). This indicates that the estimation is consistent, and the model has no autocorrelation. The findings reveal that institutional quality, as the WGI measures, is a significant positive determinant of FDI inflows across the regions examined in this study. The results show that FDI inflows are positively impacted by improved quality of institutions, including the rule of law, control of corruption, government effectiveness, political stability, and regulatory quality.

Table 2. Results of the Sargan Test

		Statistic	P-value
Americas	FD-GMM	19.80403	1.000
	SYS-GMM	18.81647	1.000
Asia	FD-GMM	25.44994	1.000
	SYS-GMM	23.60144	1.000
Europe	FD-GMM	28.96542	1.000
	SYS-GMM	25.12269	1.000

Source: Secondary Data Processed (2024)

Table 2 shows that the Sargan test results for the two-step first-difference GMM and two-step system GMM in all models indicate the validity of the instrumental variables used. This is evidenced by the probability values of all models, which are greater than the specified alpha (5%). This implies that the overidentifying restriction condition in the model is valid. The results highlight the importance of institutional quality as a key determinant of FDI, particularly for developing economies seeking to attract more excellent foreign investment. Strengthening the rule of law, enhancing government effectiveness, reducing corruption, and maintaining political stability are crucial policy priorities that can significantly improve a country's attractiveness to foreign investors. By improving institutional quality, countries can create a more conducive environment for FDI, increasing capital inflows, technology transfer, and economic growth. The findings of this study provide valuable insights for policymakers in America, Asia, and Europe as they strive to design and implement strategies to attract and retain FDI (Lloyd, 1996; Sahu, 2021).

Table 3. Results of the Bias Test

Model	FD-GMM	SYS-GMM	PLS	FEM
Americas	0.37624218	0.54230298	0.76091179	0.54176246
Asia	0.48879207	0.57967187	0.7630251	0.57405403
Europe	0.01861304	0.16402514	0.38044023	0.16146995

Source: Secondary Data Processed (2024)

Table 3 reveals that in all models, the Bias test results indicate that the coefficients of lag dependence FD-GMM do not fall between the coefficients of PLS and FEM. However, in SYS-GMM, it is observed that the coefficients of lag dependence SYS-GMM are situated between the coefficients of PLS and FEM. Hence, the model that adheres to the bias standard in all models (Americas, Asia, and Europe) is the system GMM model.

Parameter Significance Test

A parameter significance test is used to assess whether the relationship between variables in the model is significant. In this study, the significance test is conducted both overall (simultaneous significance test using the Wald test) and individually (partial significance test using the Z test).

Table 4. Results of the Two-Step System GMM Test for America

Variable	Coef.	Z	P-value
$FDI_{i,t-1}$	0.542303	6.91	0.000
$CC_{i,t}$	0.0072329	0.01	0.996
$GE_{i,t}$	-0.8969493	-0.53	0.593
$PS_{i,t}$	0.9509849	0.55	0.585
$RQ_{i,t}$	-1.158954	-0.76	0.450
$RL_{i,t}$	3.688322	2.90	0.004
$VA_{i,t}$	1.091869	0.44	0.663
$INF_{i,t}$	-0.221991	-4.34	0.000

$LABOR_{i,t}$	-0.1520818	-4.06	0.000
Wald chi2	675.25		
Prob.	0.0000		

Source: Secondary Data Processed (2024)

Table 5. Results of the Two-Step System GMM Test for the Asia

Variable	Coef.	Z	P-value
$FDI_{i,t-1}$	0.5796719	67.32	0.000
$CC_{i,t}$	3.224662	4.73	0.000
$GE_{i,t}$	0.5136741	0.36	0.716
$PS_{i,t}$	-0.316965	-1.40	0.161
$RQ_{i,t}$	1.129963	0.70	0.486
$RL_{i,t}$	-5.734073	-2.58	0.010
$VA_{i,t}$	6.54528	14.95	0.000
$INF_{i,t}$	0.019321	3.63	0.000
$LABOR_{i,t}$	0.1952164	5.65	0.000
Wald chi2	85353.49		
Prob.	0.0000		

Source: Secondary Data Processed (2024)

Table 6. Results of the Two-Step System GMM Test for the Europe

Variable	Coef.	Z	P-value
$FDI_{i,t-1}$	0.1640252	58.13	0.000
$CC_{i,t}$	18.57859	4.58	0.000
$GE_{i,t}$	34.76208	6.64	0.000
$PS_{i,t}$	-16.9597	-8.48	0.000
$RQ_{i,t}$	-14.89883	-2.97	0.003
$RL_{i,t}$	30.52373	7.44	0.000
$VA_{i,t}$	-46.64842	-8.85	0.000
$INF_{i,t}$	0.0882054	2.68	0.007
$LABOR_{i,t}$	-0.8264988	-4.71	0.000
Wald chi2	129404.90		
Prob.	0.0000		

Source: Secondary Data Processed (2024)

Referring to the results of the Wald test analysis on the two-step system GMM for America (Table 4), Asia (Table 5), and Europe (Table 6), the Wald statistics reveal significant impacts. In America, the Wald statistic value is 675.25, with a P-value of 0.0000. For Asia, the Wald statistic value is 85353.49, with a P-value of 0.0000. Meanwhile, the Wald statistic value in Europe is 129404.90, with a P-value of 0.0000. With an alpha of 5%, the Wald P-value is more minor than alpha in all cases. This indicates that all independent variables collectively influence FDI in America, Asia, and Europe.

In the Z test analysis of Americas (Table 4), the variables Control of Corruption, Government Effectiveness, Political Stability, Regulatory Quality, and Voice and Accountability have P-values of 0.996, 0.593, 0.585, 0.450, and 0.663, respectively. These P-values are all greater than the 5% significance level, suggesting that these variables do not significantly impact FDI in America. Conversely, variables such as FDI in the previous year, Rule of Law, Inflation, and Labor Force have P-values below the 5% significance level, indicating that these variables have a significant influence on the model.

In Asia (Table 5), the variables Government Effectiveness, Political Stability, and Regulatory Quality have P-values of 0.716, 0.161, and 0.486, respectively, which exceed the 5% significance level. This indicates that these three variables have an insignificant impact on Asian FDI. Conversely, other variables such as FDI in the previous year, Control of Corruption, Rule of Law, Voice and Accountability, Inflation, and Labor Force have P-values below the significance level of 5%. This suggests that these variables significantly influence the model.

In the Z test for Europe (Table 6), it is found that the variables FDI in the previous year, Control of Corruption, Government Effectiveness, Political Stability, Regulatory Quality, Rule of Law, Voice and Accountability, Inflation, and Labor Force have P-values less than the α level set at 5%, indicates that these variables have a significant influence in the model.

DISCUSSION

Institutional quality, as measured by the WGI, is found to be a significant positive determinant of FDI inflows across the regions analyzed in this study. Specifically, FDI inflows are positively influenced by improvements in institutional quality, including the rule of law, control of corruption, government effectiveness, political stability, and regulatory quality. These findings are consistent with the theoretical perspectives and empirical evidence highlighted in the literature review (Baltabaev, 2014; Kumari & Sharma, 2017; Naeem et al., 2021; Wang & Wong, 2009), which underscore the importance of strong institutions in promoting FDI. Additionally, the analysis shows that economic growth, trade openness, and labor force quality are significant factors driving FDI, aligning with previous research (Kumari & Sharma, 2017; Naeem et al., 2021).

Tables 2 and 3 present the results of the Bias test and diagnostic checks, respectively, for the model. The results of the Hansen test of overidentifying restrictions and the Arellano-Bond test for second-order autocorrelation indicate that the models are well-specified and the instruments used are valid. The Bias test results show that the bias of the two-step first-difference GMM and two-step system GMM estimators is within acceptable levels, further validating the reliability of the findings (Daude & Stein, 2007; Naeem et al., 2021; Wernick et al., 2009). This aligns with the Path Dependence theory, which posits that decisions regarding foreign investment in one period can create a trajectory for the future (Awadhi et al., 2022).

The results of this study show that institutional quality is more effective in Europe than in America and Asia. This indicates that better-quality institutions will attract greater interest in FDI. Countries in America and Asia often face challenges in building strong institutions, including combating corruption, weak legal infrastructure, and political uncertainty. Meanwhile, European countries often have more institutional quality with policies supporting innovation and foreign investment (Kurul & Yalta, 2017).

Countries in America and Asia frequently contend with challenges such as corruption, weak governance, socioeconomic disparities, and inadequate institutional effectiveness. As a result, they prioritize institutional reforms aimed at enhancing governance and fostering conditions conducive to attracting FDI. In contrast, European countries typically benefit from more potent, transparent, and efficient institutional frameworks. To maximize the benefits of FDI, developing economies in America and Asia must prioritize institutional development and governance reforms to improve their attractiveness to foreign investors. This study contributes to the existing literature by providing a comprehensive and empirically grounded analysis of the impact of institutional quality on

FDI inflows across the diverse regions of America, Asia, and Europe. The findings offer valuable insights for policymakers in these regions as they work to design and implement strategies to attract and retain FDI.

The results indicate that countries with stronger institutional frameworks characterized by robust rule of law, effective governance, and political stability tend to attract higher levels of FDI. Conversely, countries with weak institutions, characterized by corruption, regulatory burdens, and policy instability, often struggle to attract and retain FDI (Bénassy-Quéré et al., 2007; Daude & Stein, 2007). All models consistently highlight the critical importance of the labor force and inflation in influencing FDI. The relatively stable coefficients observed across different models indicate that both variables consistently and significantly impact FDI (Shear et al., 2023).

CONCLUSION

Referring to the research analysis results using dynamic panel data with the two-step GMM approach on 26 countries in America, 33 countries in Asia, and 35 countries in Europe from 2002-2021, several conclusions were drawn. Overall, the model in this research meets all statistical criteria for being the best model, demonstrating consistency, validity of instrument variables, and unbiasedness in the system GMM model. The FDI variable in the previous period had a significant positive impact on FDI. Additionally, institutional quality is more effective on the European than Asian and American continents. Inflation shows consistent significance in almost all models, indicating its important role in FDI. Similarly, the labor force has consistent significance in almost all models, highlighting its crucial role in FDI.

Theoretical Implications

This research supports the Eclectic Paradigm theory, which asserts that initial investment, location advantages, and sustainable investment appeal drive FDI. Summarized in the OLI (Ownership, Location, Internalization) framework, the theory underscores how companies invest abroad based on ownership advantages (e.g., superior technology or brands), favorable locations (e.g., low labor costs or access to large markets), and the desire to internalize operations for direct control. It also considers factors like technology, comparative advantage, and government policies influencing FDI (Dunning, 1988).

New Institutional Economics theory emphasizes that a country's institutional quality strongly influences foreign investment decisions. Institutions, encompassing laws and governance, establish a stable environment that attracts foreign investors by minimizing uncertainty and risks. High-quality institutions ensure legal certainty and efficient administration, enhancing confidence and reducing investment risks. In contrast, poor-quality institutions characterized by corruption and legal ambiguities can deter foreign investment. Institutional quality can enhance a country's attractiveness to foreign investors, whereas a decline may diminish their interest (North, 1991).

In Neoclassical Investment theory, high inflation can create economic uncertainty, reducing a country's attractiveness for FDI. Price and cost uncertainties from high inflation can lower foreign investors' profit expectations. Moderate inflation might not significantly affect investment, but exceeding a certain threshold can notably reduce it. Companies become hesitant to invest in long-term projects due to heightened economic uncertainty from high inflation. Therefore, maintaining stable and well-managed inflation through monetary policy can promote a more favorable investment environment (Bruno & Easterly, 1998).

In neoclassical economics, skilled labor availability is crucial. Countries with skilled workforces can attract more foreign investment due to lower labor costs and higher productivity. This aligns with the Heckscher-Ohlin theory, which emphasizes education and skills. Highly educated nations can attract FDI, especially in skill-intensive industries (Edeji, 2024).

Policy Implications

Policymakers play a vital role in creating an environment conducive to attracting FDI by implementing strategic reforms and addressing critical economic factors. Enhancing governance through effective reforms is essential to building investor confidence and fostering a stable environment for FDI inflows. Maintaining a stable level of inflation is equally important, as it provides predictability and reduces economic uncertainty, which are key considerations for foreign investors. Additionally, prioritizing education, skills training, labor migration, and labor protection can significantly enhance the quality of the workforce, making a country more appealing to international investors seeking skilled and adaptable labor markets.

In America and Asia, policymakers should prioritize governance reforms to create a transparent and efficient regulatory environment that attracts FDI. Meanwhile, improving institutional quality in Europe is crucial to adapting to technological advancements and evolving global dynamics. By focusing on institutional improvements, European policymakers can ensure their economies remain competitive and attractive to foreign investors in an increasingly interconnected world. These targeted measures underscore the importance of tailored strategies to stimulate FDI across different regions, fostering economic growth and global integration.

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DECLARATION OF CONFLICTING INTERESTS

The authors declare that there is no conflict of interest regarding the publication of this paper. No financial, personal, or professional relationships with other individuals or organizations have influenced this manuscript's research, analysis, or findings. All authors have contributed equally to this study's conceptualization, methodology, data analysis, and writing. The views and opinions expressed in this article are solely those of the authors and do not necessarily reflect the official policies or positions of their affiliated institutions, including Universitas Ahmad Dahlan, PT Bursa Efek Indonesia (BEI) Yogyakarta, or Gadjah Mada University. Any funding sources associated with this research have not influenced the study's design, data collection, analysis, interpretation, or manuscript preparation.

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