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Research Article

Foreign Direct Investment and Financial Openness: A Fresh Evidence from Developing Economies

Mahnaz Muhammad Ali[1], Rehana kousar[2], Rana Sharjeel Akhtar[3], Shabana Rasheed[4]

[1] *Department of Economics, The Islamia University of Bahawalpur, Pakistan.*
[2] *MPhil Scholar, Department of Economics, The Islamia University of Bahawalpur, Pakistan.*
[3] *Department of Economics Education, Faculty of Economics and Business, Universitas Negeri Semarang Indonesia.*
[4] *Institute of Business, Management and Administrative Sciences, The Islamia University of Bahawalpur, Pakistan.*

ABSTRACT

One of the critical challenges confronting developing nations is the attraction of foreign direct investment. This study examines the impact of financial openness on FDI inflows in developing countries using panel data spanning the period from 1993 to 2022, sourced from the World Development Indicators and the Worldwide Governance Indicators. The analysis employs the Generalized Method of Moments (GMM) to assess the relationship between FDI inflows (measured as net inflows as a percentage of GDP) and key economic and institutional factors, including financial openness, trade openness, GDP per capita, corruption levels, and political stability. The findings reveal that all these variables exhibit a significant and positive effect on FDI inflows at the aggregate level. Further regional analysis highlights variations across Asia and Africa. In Asia, while most variables positively influence FDI, financial openness and corruption exert a negative impact. Conversely, in Africa, all variables positively affect FDI except for corruption, which negatively influences investment due to the region's persistent political instability. This study underscores the pivotal role of financial openness, political stability, and corruption levels in shaping FDI inflows. A stable political environment serves as a key determinant in attracting higher levels of foreign investment. Moreover, an increasing GDP per capita and an expanding domestic market enhance a country's attractiveness to foreign investors. These insights provide valuable guidance for policymakers seeking to cultivate a favorable investment climate and promote sustainable economic growth.

Key Words: Financial Openness, Foreign Direct Investment, Developing Economies

Correspondence
Rehana kousar
rehanakosar35@gmail.com

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INTRODUCTION

Developing nations encounter a wide array of challenges, including low real GDP, high levels of corruption, political instability, and limited trade openness, all of which contribute to a decline in foreign direct investment. These economies actively seek to attract greater FDI, as it plays a crucial role in fostering rapid economic growth and facilitating the transfer of advanced innovations and managerial technologies from developed nations. By bridging the gap between investment and domestic savings, FDI serves as one of the most significant forms of international capital flows. It represents the primary source of foreign capital inflows and a critical driver of technological diffusion. In pursuit of accelerated economic growth, transitional economies often look outward for investment opportunities (Mottaleb, 2007).

Inward FDI enhances the acquisition of skills and technological advancements from developed nations, which are subsequently applied to domestic industries. A widely acknowledged observation is that FDI contributes to the overall economic development of recipient countries. Opportunities (Mottaleb, 2007). Inward FDI enhances the acquisition of skills and technological advancements from developed nations, which are subsequently applied to domestic industries. A widely acknowledged observation is that FDI contributes to the overall economic development of recipient countries. The linkage effects of FDI include increased production output, greater integration into the global economy, enhanced market openness, knowledge spillovers, employment generation, economic diversification, improved access to infrastructure, technological transfer, and advancements in recipient firms.

FDI, which is predominantly driven by multinational firms, is a sizable kind of foreign capital inflow for the capita poor countries. Less developed nations (LDCs) depend heavily on FDI to augment their often inadequate local capital, which is essential for economic growth. Numeral variables that have been examined in various research publications influence how much FDI flows into an economy. One of the indices of cross-border capital flows is financial openness, which rises to ease of cross-border capital movements as a result of the easing of constraints. Multinational companies (MNEs) spread expertise in innovation and management to local firms. Economic profits can be generated through FDI in high-risk or emerging industries, which can help bring together traditional management styles and existing technologies. Additionally, FDI can aid in filling the capital and resource gaps of domestic investment, especially in high-risk areas where local resources are insufficient (Noorzoy, 1979).

FDI helps to improve the infrastructure of the host country, the standard of living, and the living situation of the general public. To achieve economic stability developing and underdeveloped are dependent on economically developed countries for financial support. Developed countries do their investments in various sectors, particularly in weak sectors of the economy where the given country needs more assets to set up those sectors. By doing this developed countries, can get the most extreme advantage of their investment and it offers the chance to the given country to support their weak areas and to make greater business opportunities. Several economists accept that FDI has a direct link with the economy of any country. The role of FDI cannot be underestimated as it lessens the probability of overall growth and success of any nation. In addition to purchasing power, for future betterment without proposing hope all natural resources also stay at severe stress levels. The poor condition of economic growth drives social orders to cinders of dim ages and makes various unavoidable thunders of social ailments and possible issues and venom of fanaticism. Repentantly, the quintessential survivor of poor financial development is open in enormous scope and corruption of every single cultural establishment (Castells, 2011).

Under such circumstances, the absence of financial and technical support from foreign economies renders economic progress ineffective. Consequently, foreign direct investment (FDI) is widely recognized as having a positive impact on economic development. FDI has the potential to stimulate economic growth and contribute to national prosperity (Ojewumi & Akinlo, 2017). During the 21st century, FDI is considered a significant determinant of economic development. The vast majority of Asian nations welcome FDI because of its endless advantages and drawing the international community to follow such patterns for monetary up-degree. The degree of upgrades gets worthy as FDI patterns that welcome and recognize determinants of FDI that may comprise of Tax factor, purchasing power of public, discerning conduct of masses, and controlling variables of microeconomics and macro-economic. Trade openness has a positive relation with FDI inflows. FDI and trade are frequently observed as basic economic variables. It is significant, how the trade strategies are changed because it influences the degree of yield and economic actions too. Thus, FDI inflows are simply prompted by national conditions. (Ramzan & Kiani, 2012).

Foreign Direct Investment (FDI) has a dual impact on the economic progress of emerging nations. Campos, Dimova, and Saleh (2010) discussed the connection between corruption and Investment inflows, and their results showed that corruption hinders foreign direct investment and enhances the expenses of foreign investment in the host country. Bardhan (1997) said that additional costs would need to be paid as pay-offs by foreign investors to get licenses to direct business and such extra expenses would diminish the normal gainfulness of investment. In addition, corruption expands insecurity since the agreements of corruption are not enforceable in the official courtrooms. In this way, foreign investors will avoid investing in those countries which are highly corrupt.

The increasing significance of FDI as a compound for economic growth among developing economies has led to a growing interest in considering the factors that attract such investments. One crucial determinant that has garnered attention is financial openness. As developing economies endeavor to enhance their attractiveness to foreign investors, further research is required to determine how financial openness and FDI inflows are related.

The study focuses on the combination of FDI and financial openness in Asia and Africa.

This research aims to address the research question: "What is the role of Financial Openness in attracting inward FDI in Developing Economies?" The basic objective of this study is to assess the consequences of financial openness on FDI within a comprehensive analytical framework. The other purpose of this research is to thoroughly observe the effect of financial openness on FDI by categorizing regions into Asia and Africa, thus allowing for a more focused and nuanced analysis.

By thoroughly examining the dynamics of financial openness and its impact on FDI inflows, the study seeks to contribute to the prevailing literature on FDI determinants in developing economies. The analysis will consider various dimensions of financial openness, such as the liberalization of capital accounts, the regulatory environment for foreign investors, and the extent of financial market integration. By utilizing a comprehensive dataset and rigorous econometric techniques, the research endeavors to provide valuable insights into the significance of financial openness as a potential driver of FDI in the context of developing economies.

The results of this study can offer valuable guidance to policymakers and stakeholders in developing countries seeking to devise strategies to attract higher levels of FDI. Understanding the role of financial openness in FDI attraction can help design targeted policies that foster a more conducive investment climate and promote sustainable economic development in these nations. By giving companies the money and the know-how to increase their international sales, Growth, and development in emerging markets and developing economies are greatly aided by foreign direct investment (FDI).

LITERATURE REVIEW

The relationship between financial development and Foreign Direct Investment (FDI) has been widely debated in economic literature. Several studies suggest that a well-developed financial system enhances FDI by improving capital allocation, reducing investment risks, and facilitating business operations **(**Alfaro et al., 2004; Chinn & Ito, 2006**).** However, others argue that financial development alone is insufficient, as factors such as economic stability, institutional quality, and trade openness play a more critical role in attracting foreign investments **(**Dunning, 1981; Asiedu, 2002**).** This section reviews the existing empirical and theoretical literature on the impact of financial development on FDI, considering both supporting and opposing perspectives (Ali, Sharif & Hameed, 2018).

Başar, Kaya, Ekşi, and Zeren (2023) examined the relationship between financial development and Foreign Direct Investment (FDI) in 39 Asian countries over the 2010-2017 period, employing the Generalized Method of Moments (GMM) for analysis. The research was significant as it addressed a long-standing debate on whether financial development influences FDI inflows, particularly in developing economies where FDI is a key driver of growth, technology transfer, and employment. A major finding of the study was that financial development did not significantly affect FDI, suggesting that other factors, such as economic growth, institutional quality, and policy frameworks, may play a more decisive role in attracting foreign investments.

A study by Sintim-Aboagye and Chakraborty (2021) examined how varying degrees of central bank independence (CBI) influence the relationship between foreign direct investment (FDI) and economic growth in emerging economies. Utilizing panel data analysis, the study found that higher levels of CBI enhanced the positive impact of FDI on economic growth, suggesting that autonomous central banks may create a more stable macroeconomic environment conducive to foreign investment. This research contributes to the existing literature by highlighting the importance of monetary policy frameworks in maximizing the growth benefits of FDI in developing countries.

Furthermore, Majeed et al. (2021) investigated the effect of FDI on financial development across 102 BRI countries from 1990 to 2017. Their results demonstrated that FDI, along with trade openness and government consumption, positively influenced financial development in Asia, Europe, and Latin America, but had a negative impact in Africa. The study also confirmed a bidirectional causality between FDI and financial development in Asia and Europe, highlighting the complex interplay between these variables.

Gholizadeh Keykanloo et al. (2020) examined the relationship between financial development indices and foreign direct investment (FDI) across 11 countries over the period from 1990 to 2014. The study categorized financial development indicators into two groups: the financial markets index and the financial institutions index. Employing a panel data model, they assessed how these indicators influence FDI absorption rates. The findings revealed that increases in the financial institution depth (FID), financial institution efficiency (FIE), financial market depth (FMD), gross domestic product (GDP), and domestic credit to the private sector (DCP) are associated with higher FDI inflows. Conversely, increases in financial institution access (FIA), financial market access (FMA), and financial market efficiency (FME) correspond to decreases in FDI. The study concludes that expanding capital markets can

enhance FDI attraction in the selected countries. However, in nations with weaker capital markets, higher financial market access and financial institution efficiency indices might negatively affect FDI absorption, and vice versa.

Ngo et al. (2020) examined the determinants of Foreign Direct Investment (FDI) in Vietnam from 2000 to 2019. They employed the Generalized Method of Moments (GMM) and Pooled Mean Group (PMG) estimation techniques to analyze factors such as labor force, macroeconomic policy, macroeconomic stability, skilled labor, and trade openness across 43 out of 63 provinces or cities. Their findings indicated that these factors significantly influenced FDI attraction in Vietnam. Similarly, Islam et al. (2020) examined the relationship between financial development and FDI in 79 BRI partner countries, considering institutional quality as a moderating factor. Their findings indicated that financial development in host countries significantly attracted FDI, with institutional quality playing a crucial moderating role. The study suggested that while sound financial institutions make countries more appealing to foreign investors, focusing on financial markets could amplify the benefits of FDI. In their empirical investigation, Aibai et al. (2019) explored the impact of foreign direct investment (FDI) on financial development within 50 countries participating in the Belt and Road Initiative (BRI). Their study revealed that FDI significantly enhanced the development of the financial sector, particularly financial markets. Moreover, they found that the positive effects of FDI on financial development were more pronounced in countries with higher institutional quality. The authors concluded that FDI not only deepened financial systems but also improved their functionality (Ali et a., 2019).

In a study Liu et al. (2017) analyzed the determinants of Chinese outward foreign direct investment (OFDI) in countries along the "One Belt One Road" (OBOR) initiative during the period 2003–2015. They established a panel dataset including 93 countries, comprising 49 OBOR countries and 44 non-OBOR countries. Their analysis revealed that Chinese OFDI in OBOR countries was highly sensitive to factors such as exchange rate levels, market potential, openness, and infrastructure facilities of host countries. Additionally, they found that the determinants of Chinese OFDI in OBOR countries differed from those in non-OBOR countries.

Aigheyisi (2019) investigated the financial openness and FDI in Nigeria. The variables used in the study were FDI, financial openness (capital account openness index), financial depth, trade openness, GDP per capita income (proxy of market size), infrastructure, and inflation. The study found that financial openness had been negatively associated with net FDI inflows, the result showed that the capital account liberalization of the countries could have been associated with the outflow of capital. The interaction (between financial openness and political regime) is found to be positively and significantly related to FDI inflows. The study suggested that embracing and practicing pure democracy influences the effect of financial openness on FDI inflows. In other words, irrespective of the level of financial openness, failure to practice pure democracy would serve as a deterrent to FDI.

Nguyen, Schinckus, Su, and Chong (2018) studied the effects of institutional quality, trade openness, inbound FDI, and their interactions on the national credit equilibrium in developing market economies. The domestic credit level was the dependent variable, and all other variables were used as independent variables. The results showed that institutional quality indicators and trade openness had significant and positive with domestic credit to the private sector and domestic credit level and trade openness had a negative and significant impact on FDI.

Jami (2018) investigated the link between foreign direct investment and capital market growth in Gulf Cooperation Council countries. The variables were FDI, GDP, trade openness, and domestic credit to the private sector. All other variables were independent and Market capitalization was the dependent variable. The outcome suggested that FDI and domestic financing to the private sector have a favorable impact on the development of the stock market. Growth within the Gulf Cooperation Council and domestic loans to the private sector have a considerable positive influence on the long-term stock market. However, in the short term, only economic growth was significant. According to the findings, the Gulf Cooperation Council needs to develop new measures to boost the stock market.

Duarte, Kedong, and Xuemei (2017) examined the relationship between foreign direct investment (FDI), economic growth, and financial development in Cabo Verde from 1987 to 2014. Employing the Autoregressive Distributed Lag (ARDL) bounds testing approach to cointegration and the Error Correction Model (ECM)-Granger causality analysis, they identified a long-run relationship when GDP and FDI were the dependent variables. Their findings indicated that FDI positively affected economic growth and revealed a bidirectional causality between FDI and GDP, suggesting that higher FDI inflows led to increased economic growth, and vice versa. Additionally, they found that both economic growth and domestic credit to the private sector were significant factors in attracting FDI to Cabo Verde. These results underscored the importance for policymakers to implement measures that enhance conditions for FDI inflows into the country.

Sunde (2017) examined the relationship between gross domestic product, FDI, and exports in South Africa country. The results showed that both positive and negative effects on growth are caused by financial development. The host country's economic development efforts should be supported by developing countries' perceptions of FDI. By limiting the expression of financial allocation by too much finance harming economic growth proportion, policymakers should refrain from tightening limitations on lending and borrowing in the private sector.

Alshamsi and Azam (2015) showed the connection between inflation, GDP per capita, and FDI in the United Arab Emirates. Along with some explanatory variables, FDI is used as the dependent variable. The study examined time series data ranging from 1980 to 2013. Data was collected from WDI. The autoregressive distributive lag model was used to check the relationship of variables. Results revealed that GDP has a positive and specific impact on FDI.

In an empirical investigation, Gammoudi and Cherif (2015) examined the impact of capital account liberalization (CAL) on foreign direct investment (FDI) inflows in 17 Middle East and North Africa (MENA) countries from 1985 to 2009. Utilizing the System Generalized Method of Moments (GMM) estimator for dynamic panel data, they discovered that the positive effect of CAL on FDI was contingent upon the political stability of the host nation. Their analysis revealed that strengthening democratic institutions, enforcing property rights, and mitigating risks associated with expropriation and religious tensions were effective strategies for attracting FDI to the region. Additionally, they found that foreign investors prioritized the overall quality of institutions over specific factors like corruption levels or bureaucratic efficiency when making investment decisions. These conclusions remained robust across various measures of institutional quality, underscoring the importance of comprehensive institutional reforms in enhancing FDI inflows within the MENA region.

Belloumi (2014) examined the dynamic causal relationships between foreign direct investment (FDI), trade openness, and economic growth in Tunisia from 1970 to 2008. Employing the Autoregressive Distributed Lag (ARDL) bounds testing approach to cointegration, he found that the variables were cointegrated in the long run when FDI was the dependent variable. However, the study revealed no significant short-run Granger causality among FDI, trade, and economic growth. These findings challenged the prevailing assumption of a positive automatic impact of FDI on economic growth, suggesting that such effects were not evident in Tunisia during the study period.

Agbloyor et al. (2013) examined the causal linkage between financial markets and FDI in Africa. The variables used were, FDI, GDP, domestic credit to the private sector, Money, market capitalization, investment rate, saving rate, financial openness, inflation, interest rate, lending rate, Fuel exports, merchandise exports, and Institutions (civil liberties index). The result showed that more developed countries of the banking sector attract more FDI and bank credit. FDI had a positive and highly significant impact on the banking sector. Infrastructure, GDP, interest rate, capital account openness, and trade openness had a positive impact on the banking sector and institutional quality and inflation had a negative impact on financial openness markets.

Leitao (2012) Examined how FDI affected globalization in developing economies. The variables were FDI, GDP, trade openness, human capital, urban population, and index of globalization. Results showed that globalization handles the decisions of foreign investors and globalization had a positive impact on FDI. Trade openness, globalization, GDP, population, and human capital had a positive and significant impact on FDI. Results suggested that the building of a dynamic theoretical model will be of interest to academic research in FDI theory.

The link between FDI, inflation, and exchange rates in Nigeria was examined by Omankhanlena (2011). The variables included government spending, inflation, exchange rates, GDP, FDI, and gross fixed capital formation. The dependent variable was FDI, and all other factors were independent. The study used time series data spanning from 1980 to 2009. To examine the link between government spending, GDP, and gross fixed capital formation, ordinary least squares were employed. The outcome demonstrated the beneficial effect of FDI on GDP. FDI was not equilibrated with GDP, and the coefficient lacked statistical significance. GDP is positively impacted by gross fixed capital formation. Inflation had a negative and insignificant impact on FDI. Inflation was inelastic to FDI. Exchange rate and gross fixed capital had a positive impact on FDI and elastic to FDI. Garita (2009) investigated financial openness on gross domestic product in developing countries. The variables were financial openness, government expenditure, economic growth, capital accumulation, and human capital. Financial openness was a dependent variable and all other variables were independent in this study. The study employed panel data ranging from 2002 to 2009. The data was collected from The Bank of Korea. A generalized method of moment technique was used. Results indicated that FDI inflows generate economic growth and enhance investment markets.

Shahbaz, Wahid, Ahmad, and Chaudhary (2008) examined capital account openness and other variables in Pakistan. The variables used GDP, capital account openness and control variables were inflation, investment,

education, and market capitalization (a proxy for financial development). The study examined time series data ranging from 1971 to 2006 and data was collected from International Monetary Fund. Autoregressive distributed lagged model and Error correction model were used to check the run relationship between variables. Results showed that economic growth had a positive effect on capital account openness. Capital account openness had a positive impact on economic growth in Pakistan.

The current research seeks to bridge the identified literature gap and make significant contributions to the understanding of FDI determinants in developing economies. By systematically examining the dynamics of financial openness and its role in attracting inward FDI, this study aims to shed light on a crucial aspect of economic development and growth. The research's contribution lies in its comprehensive approach, considering various dimensions of financial openness and utilizing a robust dataset along with rigorous econometric techniques.

Moreover, this study's focus on the regions of Asia and Africa adds to its significance, as these regions are home to a substantial portion of developing economies and play a crucial role in the global economic landscape. The findings of this research can provide valuable insights for policymakers and stakeholders in these regions, assisting them in designing targeted policies to enhance their attractiveness to foreign investors.

DATA AND METHODOLOGY

Research Design

This study aims to analyze the role of financial openness in attracting Foreign Direct Investment (FDI) in the context of developing countries. The methodology employed in this research will provide comprehensive guidance on data requirements, data sources, and model specifications. Through this rigorous approach, we seek to gain valuable insights into the impact of financial openness on FDI, paving the way for informed policy decisions and fostering sustainable economic development in these nations.

Model

Functional Form and Rationale for the Functional Form

This function form of the model can be written as follows:

FDI = F (FO, GDP, PS, CORRUP, TO)

Where,

FDI	=	Foreign Direct Investment
FO	=	Financial Openness
GDP	=	Gross Domestic Product
PS	=	Political Stability
CORRUP	=	Corruption
TO	=	Trade Openness

Econometric Form

$FDI_{it} = \beta_{0it} + + \beta_1 FO_{it} + \beta_2 GDP_{it} + \beta_3 PS_{it} + \beta_4 CORRUP_{it} + \beta_5 TOc_{it} + \varepsilon_{it}$…… (i)

The Dynamic panel Data equation in original form is as:

$FDI_{it} = \alpha_{it} + \beta_1 FO_{it-1} + \beta_2 GDP_{it} + \beta_3 PS_{it} + \beta_5 CORRUP_{it} + \beta_5 TO_{it} + \beta_6 TO_{it} + \varepsilon_{it}$…….. (ii)

Here, i represents the individual country, t represents time (the period from 1993-2022), FDI represents FDI, FO represents financial openness, GDP represents gross domestic product per capita, PS represents political stability, CORRUP represents control of corruption and TO represents trade openness.

Table 1. Description of Variables

Variables	Definitions	Measurements	Source of data	Expected Sign
	Dependent Variable			
FDI	FDI is an investment in which one country's capital is invested in another country for business activities is called the FDI.	FDI net inflows (% of GDP)	WDI (2022)	
	Explanatory Variables			
Financial	Financial openness involves dealing with	Domestic credit to	WDI (2022)	+

openness	a country's financial investment, its policies for increasing exports of goods and services, and the policy of the government to maintain its capital flows.	private sector as (% of GDP)		
Economic growth	It measures the average income per person within the nation. It indicates the overall purchasing power of every citizen. GDP per capita adds taxes and subsidies not included in the value of production.	Gross domestic product per capita	WDI (2022)	+
Political stability	Political stability defines politics and political structure. Political stability includes the politics extremely predictable. Political stability describes the government laws in any country which depend on the politics, economy, and political laws.	Political stability	Worldwide Governess Indicators (2022)	+
Corruption	Any fraudulent, dishonest, or immoral job or activity carried out by somebody in a position of power or position for their own personal gain and profit is referred to as corruption. It covers things like bribery and embezzlement.	Corruption	Worldwide Governess Indicators (2022)	-
Trade openness	Trade openness is inversely correlated with the sum of imports and exports of goods and services, which is measured as a percentage of gross domestic product gains.	Trade (% of GDP)	WDI (2022)	+

Data

The study utilizes panel data from 30 years spanning from 1993 to 2022, drawing data from reputable sources such as the World Development Indicators and the Worldwide Governance Indicators. Data is collected from 40 Asia (15) and Africa (25) developing countries and a list of the selected countries is given below. The list of countries can be found in Table 2

Table 2. List of Countries

Asia	Africa	
Bangladesh	Algeria	Eswatini (Swaziland)
Bhutan	Angola	Ethiopia
Cambodia	Benin	Gambia
India	Botswana	Ghana
Indonesia	Burkina Faso	Kenya
Kyrgyzstan	Burundi	Lesotho
Laos	Cameroon	Liberia
Myanmar	Central African Republic	Madagascar
Nepal	Chad	Mali
Pakistan	Comoros	Niger
Philippines	Congo, Dem, Rep.	
Sri Lanka	Ivory Coast	
Tajikistan	Djibouti	
Vietnam	Egypt	
Yemen	Eritrea	

Estimation Technique

In this section, the study analyzes the impact of financial openness on FDI in developing economies by using the econometric techniques Panel Unit Root test, Housman test, and system Generalized Method of Moment (GMM) on the panel of 40 developing countries. System Generalized Method of Moments (System GMM) is an extension of Difference GMM designed to improve efficiency and address key limitations in dynamic panel data models. It is widely used in empirical research for several reasons: 1. Handles Endogeneity System GMM effectively deals with endogeneity arising from: Lagged dependent variables (dynamic panel bias), simultaneity bias (reverse causality between independent and dependent variables), and omitted variable bias. By using internal instruments (lagged values of variables), it provides more reliable estimates compared to traditional estimators like OLS or Fixed Effects models.

2. Improves efficiency over Difference GMM. 3. Addresses Small Sample Bias in finite samples, Difference GMM can produce biased estimates due to weak instruments. System GMM mitigates this issue by incorporating both level and difference equations, leading to more stable and precise estimates, especially when the time dimension (T) is small.

4. Controls for Unobserved Heterogeneity. 5. Robust to Heteroskedasticity and Autocorrelation System GMM allows for heteroskedasticity and autocorrelation in panel data, making it more flexible and robust compared to standard OLS or Fixed Effects models.

RESULTS AND DISCUSSION

Table 3. Descriptive Statistics

Variable	Obs.	Mean	S.D	Min	Max
FDI (FDI, $US)	1200	5.20	8.90	-35.20	163.11
Financial Openness. (Domestic credit to private sector, % of GDP)	1200	31.20	27.90	1.21	157.12
GDP per capita growth (annual %)	1200	3.31	5.99	-16.12	91.90
CORRUP (Control of corruption)	1200	-0.54	0.62	-1.50	1.50
PS (Political Stability)	1200	0.32	0.81	-3.00	1.28
TO (trade openness)	1200	79.1	35.90	21.00	259.00

The table provides descriptive statistics for six variables: FDI (FDI, $US), Financial Openness (Domestic credit to private sector, % of GDP), GDP per capita growth (annual %), CORRUP (Control of corruption), PS (Political Stability), and TO (trade openness). For each variable, the table reports the number of observations (Obs.), the mean, standard deviation (S.D.), minimum value (Min), and maximum value (Max) of the variable.

Panel Unit Root

Ho: Not Stationary

H1: Stationary

The stationary level was checked by applying the lm-Pesaran-Shin and Levin, Lin, and Chu (LLC) panel unit root test. If the prob. The values of Levin, Lin, Chu, and Im-Pesaran-Shin are less than 1% and 5% we accept H1 and reject Ho which means series are not stationary.

Table 4. Panel Unit Root Test results

Variable	At Level & 1st Difference		Decision
LM-Pesaran-Shin			
	Statistics	Prob.	
GDP	-2.6321	0.0000***	I(0)
FO	-2.8123	0.0000***	I(1)
PS	-1.9122	0.0000***	I(0)
Levin-Lin- Chu			
FDI	-5.8232	0.0000***	I(0)
CORRUP	-4.1711	0.0002***	I(0)
TO	-3.2212	0.0001***	I(0)

Note: ***, **, * indicate that variables are significant at 1%, 5%, and 10% respectively.

Table 4 provides the results of the unit root test using the Im-Pesaran-Shin (IPS) test statistic for three variables: GDP, FO, and PS, and the Levin-Lin-Chu (LLC) test statistic for three variables: FDI, CORRUP, and TO. The test is performed on the level and the first difference of the variables. The test results show that the IPS test statistics for GDP, FO, and PS are -2.6312, -2.8123, and -1.9122, respectively, and the associated probabilities are all less than 0.01. As a result, we can rule out the existence of a unit root for GDP and PS at the 1% level of significance, proving that they are stationary in both their level and first difference forms. Yet, for FO, the unit root null hypothesis cannot be rejected at the 1% level of significance, indicating that it is stationary in the first difference form but non-stationary in the level form. This implies that FO exhibits a stable mean and variance over time after differencing once, indicating that it tends to revert to its long-term equilibrium value after a shock. The test results show that the LLC test statistics for FDI, CORRUP, and TO are -5.8232, -4.1711, and -3.2211, respectively, and the associated probabilities are all less than 0.01. This indicates that we can reject the null hypothesis of a unit root at the 1% level of significance for all three variables, which means that they are stationary in both their level and first difference forms.

Hausman Test

We can apply the Hausman test to detect the endogeneity problem in this research. Firstly, we regress endogenous variables on exogenous variables to get the predicted values of the dependent variable as equation:

$$FDI_{it} = \beta_{0it} + \beta_2 FO_{it} + \beta_3 GDPit + \beta_4 CORRUP_{it} + \beta_5 PS_{it} + \beta_6 TO_{it} + u_i \ldots (iii)$$

Now we regress the original equation by including the predictor or estimated values of the dependent variables as Eq. (iii). After this, we apply the Wald-co-efficient test to check the significance of the coefficient of this estimator. Null hypothesis rejected at less than 1% value which describes that is endogeneity problem exists in the variable.

H0: No Endogeneity

H1: Endogeneity

Table 5. Hausman Test Results

Test Static	Probability
Chi-square	0.0000***

***, **, * indicate that variables are significant at 1%, 5% and 10% respectively

The chi-square value in the aforementioned data is less than 1%, indicating that there is an Endogeneity issue with the dependent variable's lag.

Table 6. Aggregate Results of Financial Openness and FDI (Dependent Variable: FDI)

Variables	Coefficients	P-value
Constant	0.2912	0.000***
FO	0.1243	0.006***
GDP	0.8698	0.002***
CORRUP	-4.4373	0.000***
PS	4.7797	0.000***
TO	0.3543	0.003***
Number of Obs. =	1200	
Sargan test =	0.000	
Hansan test =	0.627	

Note: ***, **, * indicate that variables are significant at 1%, 5%, and 10% respectively.

Table 6 shows the results of the system GMM model for the panel of all countries included in the study. The System GMM estimation results indicate that financial openness has a positive and significant impact on Foreign Direct Investment (FDI). The positive coefficient suggests that as financial openness increases, FDI inflows also rise, implying that policies promoting liberalized financial markets, reduced capital controls, and improved access to international financial markets create a more attractive environment for foreign investors. The significance of this

relationship confirms the robustness of the findings, highlighting the critical role of financial openness in facilitating cross-border capital movement. The result is consistent with the existing literature.

The results of the System GMM model indicate that GDP, political stability, and trade openness have a positive and significant impact on Foreign Direct Investment (FDI)**.** The positive coefficient of GDP suggests that higher economic growth attracts foreign investors by offering larger market size and better investment opportunities, consistent with Chakrabarti (2001)**,** which found GDP to be a key determinant of FDI. Similarly, the positive impact of political stability aligns with Busse and Hefeker (2007)**,** who argue that stable political environments reduce investment risks and encourage long-term foreign commitments. The significant influence of trade openness supports findings from Asiedu (2002)**,** which show that reduced trade barriers enhance a country's attractiveness to foreign investors by facilitating market access and lowering transaction costs. These results collectively emphasize that strong economic performance, stable governance, and open trade policies create a favorable investment climate, reinforcing the importance of sound macroeconomic and institutional policies in driving FDI inflows.

The coefficient of corruption has a negative and significant impact on Foreign Direct Investment (FDI**)**, suggesting that higher corruption levels deter foreign investors by increasing transaction costs, creating uncertainty, and reducing the overall attractiveness of the investment climate. This finding aligns with Wei (2002)**,** who demonstrated that corruption acts as an unofficial tax on businesses, discouraging foreign firms from entering highly corrupt markets. Similarly, Habib and Zurawicki (2002) found that multinational corporations prefer to invest in countries with lower corruption levels to avoid bureaucratic inefficiencies and unethical business practices. However, some studies, such as Egger and Winner (2005)**,** suggest that in certain cases, foreign investors may tolerate corruption if it helps them bypass excessive regulations (the "grease the wheels" hypothesis). Nonetheless, the prevailing evidence, including the current study's findings, strongly supports the view that corruption undermines investor confidence, increases operational risks, and ultimately reduces FDI inflows**,** emphasizing the need for transparent institutions and strong governance to attract sustainable foreign investment.

The Sargan and Hausman tests in the table suggest that the instrumental variables used in the model are valid and that the estimators are consistent, respectively. This provides further support for the validity of the results and the usefulness of the model in explaining variation in the dependent variable.

Table 7. Segregated Results of Financial Openness and FDI for the Region of Asia and Africa (Dependent Variable: FDI)

Results of Asia Region MODEL #: 02			Results of Africa Region MODEL #: 03		
VARIABLES	COEFFICIENTS	P-value	VARIABLES	COEFFICIENTS	P-value
FDI	.7123	0.001***	FDI	.2311	0.000***
FO	-.0013	0.010**	FO	.0213	0.021**
GDP	.0321	0.001***	GDP	.1012	0.000***
CORRUP	-.4123	0.000***	CORRUP	-2.5011	0.001***
PS	.5123	0.013**	PS	1.3111	0.000***
TO	.0089	0.011**	TO	.0811	0.001***

Note: ***, **, * indicate that variables are significant at 1%, 5%, and 10% respectively.

Table 07 shows the results of the same model for Asia and Africa separately. The results of the System GMM model reveal both similarities and differences between **Asia and Africa**. In both regions, **GDP, political stability, and trade openness** have a **positive and significant impact** on FDI, indicating that higher economic growth, stable governance, and open trade policies create a favorable environment for foreign investors. Additionally, **corruption negatively affects FDI in both regions**, supporting the argument that corruption increases uncertainty and transaction costs, deterring foreign investment, as highlighted by **Wei (2002)** and **Habib & Zurawicki (2002)**. However, a key difference arises in the impact of **financial openness,** while it positively influences FDI in **Africa**, it has a **negative impact in Asia**. This suggests that in the Asian region, excessive financial liberalization may lead to **volatile capital flows, speculative investments, or financial instability**, discouraging long-term foreign investment. In contrast, in Africa, financial openness appears to facilitate capital inflows, likely due to weaker financial markets benefiting from external funding. These findings highlight the need for **region-specific financial policies**,

where controlled financial openness in Asia might help attract more stable FDI, while further financial liberalization in Africa could enhance investment inflows.

Table 8. Diagnostic Tests

Number of instrument=70	Number of instruments=50
Number of observations= 640	Number of observations=560
Number of group=23	Number of group=16
Prob F=0.000	Prob F=0.000
Arellano-Bond test for AR(1)= Pr > z =0.211	Arellano-Bond test for AR(1)= Pr > z =0.211
Arellano-Bond test for AR(2)= Pr > z = 0.512	Arellano-Bond test for AR(2)= Pr > z = 0.298
Sargan test=0.000	Sargan test=0.000
Hansan test=1.00	Hansan test=1.00

CONCLUSIONS AND POLICY RECOMMENDATION

This study analyzed the impact of financial openness on Foreign Direct Investment (FDI) in developing countries, using FDI as the dependent variable and financial openness, GDP per capita, corruption, political stability, and trade openness as independent variables. The empirical findings indicate that financial openness, GDP per capita, political stability, and trade openness have a positive and significant impact on FDI at the overall level. However, when examining regional differences, the results for Asia reveal that while GDP per capita, political stability, and trade openness positively influence FDI, financial openness and corruption have a negative and significant impact. In contrast, the results for Africa show that all variables except corruption positively impact FDI, with corruption acting as a deterrent to foreign investment. These findings suggest that while financial openness generally facilitates FDI inflows, its effects may vary across regions based on institutional quality and market conditions. Strengthening macroeconomic policies, governance frameworks, and regulatory mechanisms can enhance the positive effects of financial openness and attract greater foreign investment. Based on the findings of the research following policy suggestions are recommended.

Regulated Financial Liberalization

In Asia, policymakers should adopt a gradual and well-regulated approach to financial openness to prevent volatility and speculative capital movements that discourage long-term FDI.

In Africa, further financial sector development is needed to maximize the benefits of financial openness and ensure stable capital inflows.

Enhancing Institutional Quality and Anti-Corruption Measures

Governments should strengthen anti-corruption laws, improve judicial transparency, and implement digital governance systems to reduce corruption's negative impact on FDI.

Encouraging public-private partnerships can help improve accountability and reduce bureaucratic inefficiencies.

Political Stability and Governance Reforms

Maintaining stable political environments and ensuring policy consistency can boost investor confidence.

Strengthening legal frameworks for contract enforcement and property rights can make developing economies more attractive for FDI.

Trade Liberalization and Regional Integration

Lowering trade barriers, simplifying customs procedures, and enhancing cross-border trade agreements can create a more open and competitive business environment.

Promoting regional economic integration in both Asia and Africa can enhance market access and attract multinational corporations.

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