

Article

Impacts of Political Risk and Macroeconomics Factors Towards Foreign Direct Investment in Developing Countries

Nur Izwan Faris Nur Mohamad ¹, Jaizah Othman ^{2,*}, Raudhah Mohd Tarmizi ¹ and Nurul Nadia Mohamad Hamidi ¹

¹ Department of Finance and Accounting, Faculty of Business Management and Professional Studies, Management and Science University, 40100, Selangor Malaysia; nurizwanfaris1999@gmail.com (N.I.F.N.M); raudhah@msu.edu.my (R.M.T); nurulnadia@msu.edu.my (N.N.M.H)

² Department of Economics, College of Business Administration, Princess Nourah Bint Abdulrahman University, 11671, Riyadh Saudi Arabia.

* Correspondence: JBOthman@pnu.edu.sa (J.O)

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Abstract: This study examines the relationship between macroeconomic factors and foreign direct investment (FDI) inflows in developing countries. The data from the World Bank covers 21 years, from 2000 to 2020 was analyzed using the panel regression approach with E-Views. Panel regression analysis, including model selections and diagnostics, is used for inferential analysis. The main contribution of this study is the influence of political factors on FDI inflows. Political stability and corruption control are technically the most important conditions for FDI inflows in developing countries and were introduced in this study. This study found a positive relationship between GDP growth rate, imports, inflation, and corruption index with FDI inflow, confirmed by previous studies. The study also implies that the exchange rate, exports, and political stability have a negative relationship with the level of FDI in developing countries. In addition, the study found that GDP growth rate, imports, and exports significantly impact FDI inflows in developing countries, while the other variables are not significant. In other words, this result shows that macroeconomic and political factors such as import, export, exchange rate, corruption control, and political stability impact FDI inflows. Moreover, this paper provides policy recommendations to support developing countries' economies by attracting FDI and increasing its inflow.

Keywords: foreign direct investment; political risk; macroeconomics factors; developing countries



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1. Introduction

Foreign direct investment (FDI) is one of the economic theories recognized as a factor in a nation's economic success in a market economy (Tocar, 2018). Eventually, several economic studies conclude that

the essential requirement for economic progress is the rapid and efficient transfer and adoption of best practices across borders. The study deals extensively with foreign direct investment as a driver of economic development and technological progress (Kok & Acikgoz Ersoy, 2009). Tocar (2018) argues that the considerable impact of FDI on a country's prosperity constantly examines the factors that promote or constrain the entry of FDI into a country's economy to explain where FDI flows globally. Accordingly, technological innovation contributes significantly to increasing economic output (Filiz, 2014). A counterexample is that most industrialized nations have high levels of manufacturing, which encourages innovation and the development of new technologies.

Foreign direct investment is often considered the most important element influencing a country's economy. At the same time, the Iraqi economy suffers from a shortage of domestic savings, which leads to FDI being seen as a means of closing the domestic savings gap by providing the necessary capital to increase the growth of real domestic products (Ali & Jameel, 2021). Thus, it was found that FDI flows have increased considerably in most countries in the region, suggesting that influencing variables can affect a country's choice for investment. It is important to know and understand the factors on the basis of which MNCs decide to invest abroad in developing countries, as the extent of growth depends on how well they are integrated into the global economy. Choong & Lam (2010) researched these lines to identify the key elements contributing to FDI activities in developing countries. The results show that FDI is often sensitive to several variables, including labor costs, tax rates, trade barriers, trade balance, and exchange rates, all of which positively or negatively impact FDI inflows.

A hypothesis refers to a suspected association between two or more variables that have obvious consequences for evaluating the stated relationship (Sundram et al., 2012). Scholars and managers would benefit tremendously from the study's methodology and results by better understanding the components that might influence FDI inflows to develop countries. The study is scientific and observational as it examines the relationship between FDI and developing countries' macroeconomic and economic climates. Therefore, this study attempts to complement the work by focusing on the macroeconomic factors and business climate that increase the country's attractiveness to FDI in emerging economies. This study should be useful for policymakers. It could serve as a model for developing countries that should encourage FDI inflows by building a stable political atmosphere, a corruption-free national environment, and a robust infrastructure.

2. Literature Review

This study comprehensively reviews previous research on various factors and difficulties associated with FDI flows and needs in specific countries. This review also explores the hypothesis associated with the various determinants of FDI in a non-industry country, explicitly towards developing countries. This discussion primarily aims to trace the influence and impact of significant macroeconomic and economic factors on FDI inflows to developing countries. It could be said that over the years, truly crucial elements for attracting FDI inflows into a country's economy have been studied as essential aspects for enhancing the economic development of the host country and also Malaysia (Lim, 2001). FDI is searching for low-cost inputs, i.e., it leads to splitting the vertical production chain and relocating part of it to a low-cost location, such as the assembly of electronic products in Asia.

In contrast, Lim (2001) added that complex components and final sales may occur in the United States. Moreover, the low input may be primary or raw materials in a particular location. Technically, vertical FDI is sometimes known as raw material-seeking FDI. In addition, Lim (2001) explores that other low-cost inputs that vertical FDI seeks may include labor, intermediate inputs, or even access to certain externalities. For example, if there is a concentration of FDI in a region. Typically, vertical FDI is export-oriented and concentrated in the MNE's home market, unaffected by the size of the host economy market. Vertical FDI is generally encouraged when different stages of the manufacturing process require different inputs and input prices vary across countries. International fluctuations in factor and commodity prices and technological advances are likely to promote vertical FDI (Lim, 2001).

2.1. Gross Domestic Product (GDP) Growth Rate

According to Khan et al. (2022), foreign direct investment is calculated as a gross domestic product (GDP) percentage. (Ciobanu et al. (2020) determined GDP growth first through FDI, then through a positive multiplier effect on the host economy, ultimately leading to an increase in national income larger than the FDI inflow. Accordingly, economic outcomes, such as GDP, are used to assess a country's

economic health. Consequently, the economy's growth rate is defined as the year-on-year change in GDP (Ausloos et al., 2019). Aziz (2022) studied the impact of foreign direct investment on growth, which led to numerous empirical studies in both developing and emerging economies. In addition, (Kurtović et al., 2020) found that a higher GDP growth rate attracts investors who want to take advantage of the opportunity to meet rising domestic demand and expand the economy. Moreover, Kok & Acikgoz Ersoy (2009) found that the GDP development rate critically affects FDI inflows, and their discoveries are reliable with this version of the discoveries.

Regarding the GDP growth rate, the China-Pakistan Economic Corridor (CPEC) offers many energy projects (Zubedi et al., 2022). Indeed, planting energy projects could help alleviate energy shortages if implemented properly. Therefore, the following hypothesis is proposed in this paper:

H₂: The exchange rate has a significant relationship with FDI inflow to developing countries.

2.2. Exchange Rate

A few studies have traced areas of correlation between the depreciation of the dollar and the expansion of foreign direct investment in the United States, including Caves (1989), Kogut & Chang (1996) and Blonigen (2019). Caves (1989) found a huge negative relationship between the level of the real swap scale and FDI inflows to the United States. Baek & Okawa (2001) found that FDI in trade-oriented enterprises such as composites and electrical equipment had a decisive effect on the decline of Asian currencies against the dollar. Japanese FDI in the electrical equipment industry was the most important, accounting for more than 70% of Japanese firms' absolute transactions in Asia during the long period between 1997 and 1998. (Choong & Lam, 2010) have shown that the scale of transformation and FDI move in lockstep after some time. According to Wafure & Nurudeen (2010), the depreciation of the exchange rate of money is one of Nigeria's most important indicators of FDI. Therefore, the following hypothesis is proposed in this paper:

H₁: The GDP growth rate has a significant relationship with FDI inflow to developing countries.

2.3. Imports

According to Onwuka & Zoral (2009), the import substitution method was popular among transition economists as a policy tool for economic growth. The importance of FDI cannot be overstated, as it is a low-cost source of foreign capital. According to Rodrik (1999), imports can help promote economic growth and development by bringing in ideas, investment, and intermediate goods. At the same time, MNEs are the vehicles of FDI, so MNCs that import inputs and intermediates can stimulate imports through FDI. The host country benefits from better remuneration and higher factor productivity (Onwuka & Zoral, 2009). In addition, technological innovation can come from outside in the form of FDI and imports or from within through indigenous innovation activities (Salman et al., 2022). Therefore, the following hypothesis is proposed in this paper:

H₃: Imports have a significant relationship with FDI inflow to developing countries.

2.4. Exports

Foreign direct investment has been extensively studied in the literature, with most studies focusing on how FDI affects economic growth and exports in the host country (Ford et al., 2007). Generally, firms of all sizes, including foreign and domestic firms, gain access to the foreign market through FDI and exports (Chen et al., 2022). Firms might opt for FDI if trade proves excessively costly (Rob & Vettas, 2003). Moreover, Chen et al. (2022) found that firms might choose to conduct part of their production in distant countries to take advantage of the cost benefits in those countries and then transport the middle parts back to their country of origin to market them, thus helping domestic products. This hypothesis shows that FDI and trade are beneficial together (Helpman, 1984). Innovation spurts, market rivalry, and the creation of exchange opportunities all accompany FDI inflows (Chen et al., 2022). Likewise, it develops commodities and promotes a country's financial development when it enjoys a relative advantage in a particular industry (Hu, 2000). Therefore, the following hypothesis is proposed in this paper:

H₄: Exports have a significant relationship with FDI inflow to developing countries.

2.5. Inflation

The relationship between FDI inflows and expansion rates in recipient countries has long been a hotly debated topic in global finance (Agudze & Ibhagui, 2021). According to Schneider & Frey (1985), low inflation in a country favors FDI. For example, if the government balances its budget and the central bank's monetary policy is sound, this could tip the balance in favor of FDI. Technically, low inflation indicates that a country's policies are working well (Mahmood, 2018). According to Udoh & Egwaikhide (2010), inflation drives FDI inflows to underdeveloped countries. Therefore, the following hypothesis is proposed in this paper:

H₅: Inflation has a significant relationship with FDI inflow to developing countries.

2.6. Corruption Index

Corruption affects the business environment and impacts FDI inflows in both created and non-created countries (Kirti & Prasad, 2016; Pla Gutierrez, 2015; Serfraz, 2018). With the affirmation of the need for comprehensive monetary development in the face of persistent impoverishment and high unemployment, the link between FDI and impurities in agricultural countries has become more important than ever (Kasasbeh et al., 2018). Yadav et al. (2019) examined the relationship between corruption and FDI in developed and developing countries. They concluded that while corruption affects FDI inflows in developing countries, it has a negative impact on developing countries. Egger & Winner (2005) found that corruption is closely related to the volume of FDI inflows to the host country. According to Hossain (2016), governments should also strengthen anti-corruption agencies. Therefore, the following hypothesis is proposed in this paper:

H₆: Corruption Index has a significant relationship with FDI inflow to developing countries.

2.7. Political Stability

Investors avoid countries whose institutions favor corruption, cronyism, and bureaucracy because these characteristics increase business costs (Mengistu & Adhikary, 2011). According to Harms & Ursprung (2002), foreign investors prefer countries with strong democratic frameworks, while authoritarian regimes usually face policy reversals and attract less FDI. In addition, some research has found that institutional quality has a favorable and significant impact on FDI inflows in Asia and Latin America (Gani, 2007). According to Bandyopadhyay et al. (2014), aid could reduce threats to recipient countries' political stability, including terrorism, while increasing FDI by reducing the risk of political instability. Garriga & Phillips (2014) state that aid is more attractive to FDI in recipient countries with low-information environments. Therefore, the following hypothesis is proposed in this paper:

H₇: Political stability has a significant relationship with FDI inflow to developing countries.

Notwithstanding, there are seven independent variables, namely GDP growth rate, exchange rate, imports, exports, inflation, corruption index and political stability, while the dependent variable is FDI inflow. In order to achieve the proposed research objectives, seven hypotheses are investigated. This study assumes a positive relationship between GDP growth rate, imports, inflation, corruption index and FDI inflow to developing countries and a negative relationship between exchange rate, exports, political stability and FDI inflow to developing countries.

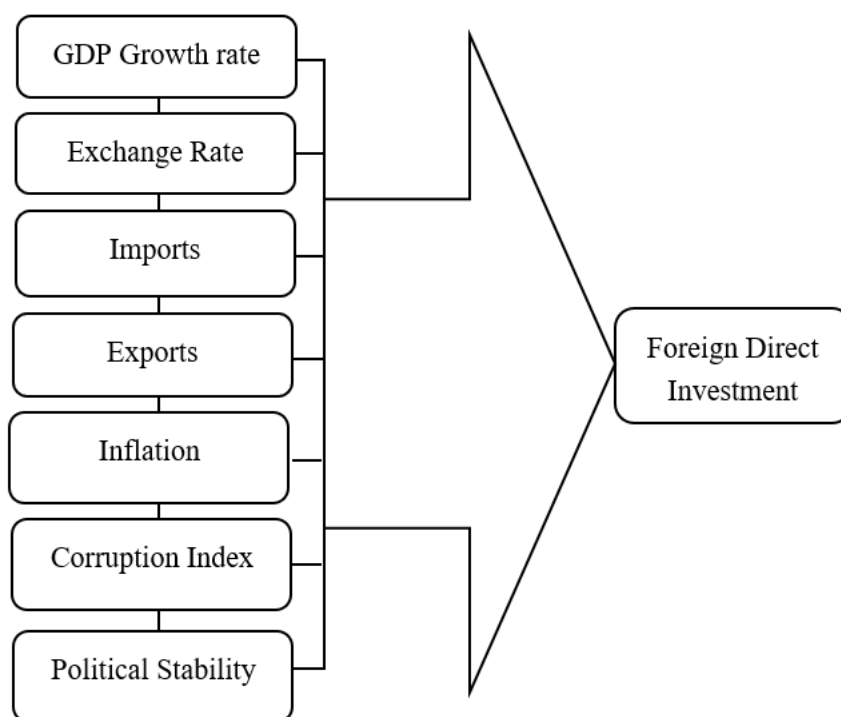


Figure 1. Conceptual Framework

3. Materials and Methods

This study uses a review strategy. It refers to procedures or an arrangement of approaches utilized in an investigation or exercise. Consequently, its utilization as a method and guiding idea for a specific activity is significant. This section used significant research results to evaluate the relationship between FDI inflow and GDP growth rate, exchange rate, imports, exports, inflation, corruption index, and political stability. Zikmund et al. (2009) state the research configuration is a comprehensive strategy that describes the methodology and techniques as well as the selection of information. Regardless, it is a system or plan for the activities of the review project. The research plan fully presents the idea of the investigation, the time period, the selection of the information, the time period, and the techniques for investigating the information. Accordingly, this study uses a quantitative plan to represent what is broadly associated with the quality or ability to lead this review (Sileyew, 2019). Therefore, this study used a quantitative research methodology and panel data design for analysis.

3.1. Sample Selection

In this study, a total of 137 developing countries were selected to examine the relationship between macroeconomic factors and the business environment and foreign direct investment. One of the most important elements of this study is the sample size, which is used to make interpretations based on the sample. Therefore, a total of 77 developing countries with a period from 2000 to 2020 are used as the observation base in this study.

3.2. Data Collection

This study uses quantitative data to identify FDI inflows to developing countries as dependent variable. The GDP growth rate, import, export, inflation, political stability and corruption index are independent variables in this exploratory study's model. The information is obtained from the World Bank's Open Data source for the extended period from 2000 to 2020. The E-Views program generates each result, which is then broken down to test each speculation.

Table 1. Variable Code and Measurement

Variable(s)	Code	Measurement
FDI Inflow	FDI	Net inflows (% of GDP)
GDP Growth Rate	GDPGR	Annualized average growth rate per capita
Exchange Rate	XR	Real effective exchange rate
Imports	IMP	Imports of goods and services (% of GDP)
Exports	EXP	Exports of goods and services (% of GDP)
Inflation	INF	Inflation (Annual %)
Corruption Index	C	Control of corruption: percentile rank, upper bound of 90% confidence interval
Political Stability Index	P	Political stability and absence of violence/terrorism: percentile rank

Source: World Bank (2022)

4. Results

In this study, seven hypotheses are formulated to obtain answers to the research questions, and these hypotheses are then evaluated using a regression model as described.

$$FDI_{i,t} = \alpha + \beta_1 GDPGR_{i,t} + \beta_2 XR_{i,t} + \beta_3 IMP_{i,t} + \beta_4 EXP_{i,t} + \beta_5 INF_{i,t} + \beta_6 C_{i,t} + \beta_7 P_{i,t} + \varepsilon_{i,t}$$

Where;

FDI : Foreign Direct Investment Inflow

A : Constant

GDPGR : Gross Domestic Product Growth Rate

XR : Exchange Rate

IMP : Imports

EXP : Exports

INF : Inflations

C : Corruption Index

P : Political Stability

ε : Random error term

According to Nerlove (2002), panel data offer many advantages over data sets with only a temporal or longitudinal component. First, more observations are often available than traditional time series data, although cross-sectional data sets are sometimes very large. Second, panel data are less aggregated than traditional time series and, at best, can represent the same individual units across time and more complex dynamic and behavioral hypotheses. Consequently, it can be better evaluated than those tested with one-dimensional data.

Panel data allow for the inclusion of multiple explanatory factors and more complex dynamics, as well as the ability to describe underlying disorders more explicitly as components common to all individuals at a given time and as persistent over time. Thus, panel data approaches are particularly important for research in developing countries, where there may also be no historical practice of statistical data collection. Thus, the panel data must be based on original survey data to address many critical questions. The comparisons of the panel data regression models must first be conducted using three levels of testing: The Chow test in the first level, the Hausman test in the second level, and the Lagrange multiplier test in the third level. It is important to find a reliable regression model for panel data that can be used according to the conditions of the data used. In the following, each of these tests and each model provides criteria for identifying the appropriate model.

4.1. Descriptive Statistics Analysis

The statistics in the table below provide a descriptive analysis of FDI inflows as the dependent variable from 2000 to 2020, with GDP growth rate, exchange rate, imports, exports, inflation, corruption index, and political stability as independent factors. A total of 1617 observations were collected from the selected developing countries. Table 2 shows that the mean values for FDI inflows (4.373), GDP growth rate (3.660), exchange rate (738.759), imports (41.924), exports (36.473), inflation (5.728), corruption index (40.722) and political stability (40.395) were based on the results. Among the independent variables, the exchange rate reached the highest standard deviation value of 2573.631 and thus the highest volatility, followed by political stability, corruption index, export, import, inflation, FDI inflows, and GDP growth rate with 26.401, 24.587, 19.761, 19.154, 8.6503, 6.489 and 4.390. It indicates that the exchange rate impacts the volatility of FDI inflows in developing countries.

Table 2. Descriptive Analysis (N=1617)

Test Statistics	FDI	GDPG	XR	IMP	EXP	INF	C	P
Mean	4.37	3.66	738.76	41.92	36.47	5.73	40.72	40.40
Median	3.06	4.06	31.69	37.48	32.00	3.96	38.94	38.16
Maximum	108.42	34.50	23208.37	117.15	119.80	168.62	91.88	99.03
Minimum	-40.08	-36.39	0.09	0.35	0.44	-8.97	0.00	0.00
Std. Dev.	6.49	4.39	2573.63	19.15	19.76	8.65	24.59	26.40
Skewness	5.38	-0.78	5.83	0.87	1.09	9.16	0.22	0.29
Kurtosis	64.72	13.13	40.88	3.52	4.20	140.66	2.03	1.97

Note: FDI = FDI Inflow, GDPG = GDP Growth Rate, EXC = Exchange Rate, IMP = Imports, EXP = Exports, INF = Inflation, COR = Corruption Index, PS = Political Stability

4.2. Model Selections

4.2.1. Chow Test

The Chow test is a statistical and economical method for determining whether the coefficients in a linear regression on multiple data sets are equal (Chow, 1960). Anam & Saputra (2021) elaborated that the standard value of the chi-squared random cross-section is 0.000, which is less than the significance value of 5 percent, indicating that the fixed effect model (FEM) is more appropriate for this study than the traditional effect model.

H₀: Choose CE (p-value > 0.05)

H₁: Choose FE (p-value < 0.05)

Table 3. Chow Test

Effect Test	Statistics	P-Value
Cross-section Chi-square	441.803	0.000

Note: P-Value signifies at the significance level of 5 percent.

4.2.2. Hausman Test

According to Dirvi Surya Abbas & Arry Eksandy (2021), the Hausman test is a data test that compares fixed-effects models (FEM) with random-effects models (REM) to determine the superior model. According to Bollen & Brand (2010), the researcher must combine these goodness-of-fit statistics with previous studies and knowledge of the area in question, and perhaps with a more focused empirical examination of the data, to determine which model best represents the social structure. Assuming H₀ is acceptable and REM is favored over FEM by the occurrence of the random cross-sectional value greater than or equal to 0.05. Accordingly, H₁ is confirmed, which means that REM is suitable if the value of the random cross-section is less than 0.05. The fact that the random cross-section value of 60.741 is greater than the value (0.05) used in this analysis and that the chi-squared likelihood cross-section value of 0.000 is less than the value (0.05) used in this analysis indicates that the fixed-effect model is more suitable for this study than the random-effect model.

H₀: Random Effect Model

H₁: Fixed Effect Model

Table 4. Hausman Test

Test Summary	Statistics	P-Value
Cross-section random	60.741	0.000

Note: P-Value signifies at the significance level of 5 percent.

The test is valid as it is weaker than the 5 percent.

4.2.3. Lagrange Multiplier Test

Breusch & Pagan (1980) have shown that the Lagrange multiplier test (LM) can be applied to various model specifications in econometrics. Technically, the Lagrange multiplier test (LM) is a data test that can be used to produce a better model by comparing models. (Moulton & Randolph, 1989) have shown that the LM test can be easily extended to the one-sided error component model to the scenario of incomplete panel data. The result of the Lagrange multiplier test is H₁, suggesting that REM is the best estimation approach. A contrary explanation is that the optimal estimation approach is the CEM, which reaches H₀ when the p-value is greater than 0.05. Basically, the Lagrange multiplier test is significant in distinguishing the ideal estimation model for evaluating the level of FDI in developing countries with other illustrative elements. Consequently, the best approach in this study is the Random Effect Model (REM).

H₀: Choose CE (p-value > 0.05)

H₁: Choose RE (p-value < 0.05)

Table 5. Breusch Pagan (Lagrange Multiplier Test)

	Cross-sections	Test Hypothesis Time	Both
Breusch-Pagan	379.889 (0.000)	3.511 (0.060)	383.400 (0.000)

Note: Breusch-Pagan signifies at the significance level of 5 percent.

The value inside parentheses is given as the probability value of each test hypothesis.

4.3. Panel EGLS (Cross-section random effects)

The R-squared for the weighted and unweighted measures, as reported in Table 6, are 0.117151 and 0.123586, respectively. These findings indicate that the seven independent variables significantly impact the magnitude of change in the size of FDI inflows across countries.

Table 6. Weighted Statistics and Unweighted Statistics (Inferential Analysis)

Weighted Statistics	
R-squared	0.117
Adjusted R-squared	0.113
F-statistic	30.501
Unweighted Statistics	
R-squared	0.123

Table 6 shows the R-squared values for weighted and unweighted. These autonomous factors are responsible for 11.72 percent and 12.36 percent of FDI inflows in emerging economies over the extended period from 2000 to 2020. The adjusted R-squared value in Table 6 provides information on the extent to which FDI inflows to emerging markets were meaningful after calculating the opportunities (d.f.). Accordingly, the adjusted R-squared for the weighted measure is 0.11331, indicating that these factors account for 11.33 percent of the variation in FDI inflows. The P-value for emerging markets included in the result is 30.50116, indicating that the current model is appropriate for determining the magnitude of FDI inflows to emerging markets.

Table 7. Panel EGLS (Cross-section random effects) Findings

Variable(s)	Coefficient(s)	Prob.
GDPG	0.136 [4.184]	0.000
XR	-8.69E-05 [-0.763]	0.446
IMP	0.220222 [12.833]	0.000
EXP	-0.090 [-5.236]	0.000
INF	0.0178 [1.0161]	0.310
C	0.0124 [0.9381]	0.348
P	-0.0036 [-0.305]	0.760

Table 7 shows that REM is the preferred model for estimating the concentration of FDI inflows, using Hausman and Lagrange multiplier tests in this study. Therefore, the following REM is constructed and estimated using E-VIEWS, which allows us to identify the relationship between GDP growth rate, exchange rate, imports, exports, inflation, corruption index and political stability about the share of FDI inflows in developing countries. This analysis shows a positive relationship between GDP growth rate, imports, inflation, corruption index and FDI inflow with a value of 0.136, 0.220, 0.0178 and 0.0124, respectively. Meanwhile, there is a negative relationship between exchange rate, exports, political stability and FDI inflow with a negative value of 0.000, 0.089 and 0.003, respectively.

4.4. Model Diagnostic

4.4.1. Multicollinearity

In addition, multicollinearity refers to the linear correlations between the independent variables in multiple regression analysis. Collinearity describes the relationship between two variables that are nearly perfect linear combinations of each other (Shrestha, 2020). Technically, a regression model includes numerous variables that are significantly related to the dependent variables at the same time. Multicollinearity then occurs because the components in a multivariate regression model have numerous intercorrelations (Young, 2018).

Table 8. Partial Correlation for the Variables (Multicollinearity)

Variable(s)	GDPG	XR	IMP	EXP	INF	C	P
GDPG	1.000						
XR	0.089	1.000					
IMP	0.052	0.127	1.000				
EXP	0.050	0.171	0.765	1.000			
INF	-0.010	-0.004	-0.029	-0.058	1.000		
C	0.059	0.214	0.002	0.015	0.064	1.000	
P	-0.072	-0.237	-0.021	0.015	-0.029	0.756	1.000

According to Young (2018), multicollinearity can lead to wider confidence intervals and less reliable likelihood estimates, which ultimately shows that the correlation coefficient and variance inflation factor (VIF) approaches are applicable to this study. The VIF value for each independent variable has a value of 10, which means that there is no multicollinearity among the variables of the regression model, based on the results of the multicollinearity test. From the VIF result, it was concluded that there is no multicollinearity in the panel regression model used in this study.

H₀: There is no multicollinearity

H₁: There is multicollinearity

Table 9. Variance Inflation Factors (Multicollinearity)

Variable(s)	Centered VIF
GDPG	1.012
XR	1.103
IMP	2.418
EXP	2.462
INF	1.009
C	2.349
P	2.376

4.4.2. Autocorrelation

Autocorrelation in economic data is important for many reasons (Ul-Islam, 2011). The use of the term, the traditional regression model assumes that the error terms for modeling or projecting macroeconomic data are not autocorrelated. In fact, according to Ul-Islam, (2011), the autocorrelation approach is essential in econometric and panel analysis. In short, Breusch-Godfrey test is used to determine the autocorrelation of the LM test. The P-value has the same characteristics in both approaches. The model is no longer autocorrelated if the P-value does not exactly reach the 1% significance level.

H₀: There is no serial correlation

H₁: There is a serial correlation.

Table 10. Weighted Statistics (Autocorrelation)

Weighted Statistics	Result
Test Statistics	1.114

Note: Reject H₀, the Durbin-Watson Test of 1.114 is lower than the dL (1.53)

Table 11. Unweighted Statistics (Autocorrelation)

Unweighted Statistics	Result
Test Statistics	0.878

Note: Reject H₀. The Durbin-Watson Test of 0.878 is lower than the dL (1.53)

4.4.3. Normality Test

The effectiveness of normality tests varies according to the type of non-normality based on unique features of the normal distribution (Seier, 2002). According to Ul-Islam (2011), the purpose of normality error terms is to evaluate the performance of normality tests by emphasizing the test purpose. The residual normality test is used to determine whether the residual of the regression is normally distributed. The normality test in this study aims to determine if the error term in the model created is normally distributed. Thus, the model's data is not normally distributed, as shown using E-Views software. The P-value is below the 5% significance level.

H₀: The data is normally distributed.

H₁: The data is not normally distributed

Table 12. Normality Test

Test Statistics	Value & Result
Jarque-Bera	296922.2
P-value	0.000

Note: Reject H₀. The P-value is 0.000, less than the significance level of 5 per-

cent.

4.5. Summary of the findings

Table 13. Summary of Random Effect Model (REM)

Variable(s)	Actual Relationship	Hypothesis Testing
GDPG	Positive	Significant
XR	Negative	Insignificant
IMP	Positive	Significant
EXP	Negative	Significant
INF	Positive	Insignificant
C	Positive	Insignificant
P	Negative	Insignificant

Table 13 shows that various factors clearly correlated to FDI inflows in developing countries. On the other hand, all the results are consistent with previous studies conducted by researchers in specific developing countries and under different regression models and settings. The results recorded the effects of seven independent factors on FDI inflows in developing countries. This study found a positive relationship between GDP growth rate and FDI inflows, which is confirmed by previous research by Khan et al. (2022). Second, this study implies that the exchange rate has a negative relationship with inflation and the level of FDI in developing countries. Caves (1989), Kogut & Chang (1996), and Blonigen (2019) claimed that the inflation rate has a negative effect. Third, the share of FDI in developing countries is positively related to imports.

This research is confirmed by Rodrik (1999), who claims that previous results explain that imports have a positive effect. Imports can also affect economic growth and development by bringing innovation, investment, and intermediate goods. Moreover, exports and the level of FDI are negatively related in developing countries. Conversely, the impact of exports is a negative relationship. Like this study, discovered a negative relationship between FDI and exports in the case of investment. According to this study, there is a positive relationship between inflation and the level of FDI in developing countries. It supports the study of Agudze & Ibhagui (2021) that inflation has a favorable impact on investment returns (ROI) over time. Then, this study shows a positive relationship between the corruption index and the share of FDI in developing countries. Kirti & Prasad (2016) supported this study's findings that the corruption index creates a positive relationship. Corruption impacts the business environment and FDI inflow in both developed and developing countries.

Finally, in this study, there is a negative relationship between political stability and the level of FDI in developing countries. The influence of political stability is also a negative relationship, as shown in the study of Janačković & Janačković (2019), which supports this study. The correlation has shown that corruption is the most common intermediate.

5. Conclusions

This study examines the relationship between macroeconomic and business environment variables on FDI inflows in developing countries between 2000 and 2020. The study contributes to the existing literature on FDI inflows in developing countries. Nevertheless, the results of this study show that all independent variables except exchange rate, exports, and political stability positively impact FDI inflows. Ultimately, this study focused on the influence of macroeconomic factors and the business environment on FDI inflows in developing countries. Finally, given the current situation of developing countries, maintaining long-lasting political stability is the main attraction to attract investment. In addition, the magnitude of FDI inflows can be partly attributed to increased borrowing by MNCs in the current economic environment, which is characterized by global investment concerns. In this way, these circumstances can increase the strength of FDI through financial variables with the effect of a hard strategy system in emerging economies by creating a more reliable monetary standpoint and a good speculative climate.

Policy makers in developing countries and governments should design comprehensive minimum programs that incorporate monetary and fiscal policy considerations. Subsequently, proactive policies are

certainly needed to facilitate FDI inflows to developing countries. Therefore, a major initiative could be taken to encourage more local and international investment in foreign exchange-based development. The government and policymakers should seek out and recruit investors from developed countries such as China, Japan, South Korea, and France to boost foreign investment. In addition, the government should identify new investment industries, such as mining and quarrying, electricity and energy, construction and construction infrastructure, technology development, and tourism. First, this study is useful because it can help policymakers understand the issues related to FDI inflows in developing countries. The results of this study will help boost the country's economic performance by promoting investment in developing countries. Second, this study highlights the need for political stability in line with the new economic development theory. The results suggest that political stability could be used to improve and enhance business and economic status.

Third, this study sheds light on the importance of corruption and exchange rates in attracting FDI inflows to developing countries. At the same time, corruption discourages global and domestic investors from investing in the industry. Future research should add several variables not included in this study, such as environmental, social, and governance (ESG) factors. Thus, the effect of these factors on FDI and investors could not capture intentions to engage in developing countries. Nonetheless, the study lacks a component that could stimulate a deeper and more comprehensive examination of the issues of FDI and the future economic development of developing countries.

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