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UNVEILING THE NEXUS: EXPLORING HOW POLITICAL STABILITY AND CORRUPTION MEDIATE THE RELATIONSHIP BETWEEN MACROECONOMIC FACTORS AND FOREIGN DIRECT INVESTMENT IN SOUTH ASIA

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Abstract

All global economies are sensitive to changes in the price of crude oil. Because their economies are more susceptible to external shocks, emerging nations feel the effects of fluctuations in crude oil prices more acutely. The relationship between macroeconomic factors and Foreign Direct Investment (FDI) in South Asian countries is investigated. This study will focus on the microeconomic factors and FDI in South Asian countries by investigating the variables such as interest rate, exchange rates, oil prices, inflation, and GDP levels. The primary goal is to desegregate the individual impacts of these factors in the selected South Asian economies and highlight the moderating role of governance and corruption on the linkage among these factors and foreign direct investment. The research covers the time span from 2000 to 2020 and includes such major economic crises as today's COVID 19 pandemics. Using purposive sampling technique, data were gathered from well-knowns sources, such as, central banks of Pakistan. The regression model which was applied in the analysis gives useful results. Culture of inflation and inflation has an indirect relationship with GDP in Bangladesh which in turn affects FDI. Conversely, corruption is perceived to act as the key intermediary in shaping the linkages among these factors. In India, the FDI dynamics are governed by a multi-pronged influence, and

as the inflation rates, exchange rates, oil prices, and GDP are the most important. Even though corruption is not widely regarded as a major barrier to attracting foreign capital, it proves to be a significant factor that predetermines political stability. On the other hand, Pakistan's inflation rates and exchange rates signify great impacts on FDI; however, with oil prices rapidly affecting and GDP doing so gradually. Although corruption has been inflicted as negligible, political equilibrium acquires a substantial role in the mediation process. This study highlights the pivotal use of governmental policy tools to stabilize key economic factors and restore investors' confidence. In addition to that, it showcases the role of having political stability to get FDI across varied sectors. Policymakers are therefore advised to start from the point of coordinating strategies that will stimulate economic stability as well as political cohesion in South Asian countries.

Keywords: *Interest rate; Inflation; exchange rate; GDP; oil prices; India; Pakistan; Bangladesh*

Introduction

Background

The problem of price stability is a challenge for developing countries. Instability in prices has several root causes. All global economies are sensitive to changes in the price of crude oil. Because their economies are more susceptible to external shocks, emerging nations feel the effects of fluctuations in crude oil prices more acutely. The rate of inflation and general price fluctuations are very sensitive to variations in the price of oil. The general economic performance is affected by price fluctuations because they might cause changes in the economic structure. One of the best ways to gauge the health of a country's economy is to look at its inflation rate. Therefore, maintaining low inflation and stable prices are the key goals of policymakers (Sek et al., 2015).

Because of its central role as a raw resource in manufacturing, oil price fluctuations have a direct impact on inflation rates. A rise in oil prices is associated with a rise in production costs and commodities prices. The costs of inputs like labor and materials as well as outputs like completed items are affected by these shifts (Hamilton, 1983). In other words, the price of energy-related items, such as petrol for homes and cars, as well as electricity, is directly tied to the price of crude

oil. A similar chain reaction occurs as oil prices rise productivity falls, real wages fall, employment falls, investment falls, profits fall, and stock market capitalization falls. According to Malik (2016), a combination of these factors and the actions taken by central banks explain how fluctuations in energy prices affect overall inflation.

Many people see foreign direct investment (FDI) as a powerful tool for economic development. Lack of investment and money worsens the economic condition in many developing nations. Foreign direct investment is a major focus for these nations' governments. Foreign direct investment (FDI) occurs when a foreign investor or speculator gains a stake in a company and exercises control over it. Employment isn't the only thing that foreign direct investment (FDI) will affect; it will also boost economic growth and development. Foreign direct investment (FDI) has been on the decline in developing nations over the last several years (Rahman et al., 2014).

The increase in capacity, administrative practices, exchange of knowledge, sharing of expertise among the different nations can be the most important factor of foreign direct investment. In fact, the flow of foreign direct investment is the significant factor which can be helpful in aiding the direction of improvement in the financial development but also can be helpful for the government in providing expertise for the strategies which the government is planning for their future. Therefore, it has been reported that foreign direct investment can be the significant factor which can be helpful to increase the capacity of financing and can be used for the exchange of technology and innovation among the different nations.

Developing economies are always interested in getting cheap raw materials; lower labor costs and attract new investors in their capital markets (Lo and Tan, 2019). But there is a lack of proper structure which can be helpful for the emerging economies to attract the investors to the market and the developing countries have no proper strategies and structure designed by experts for their both short- and long-term future. Overseas direct deals can be increased in the country through FDI or FPI. Pakistan, India, and Bangladesh are the developing countries, and its policy makers always try to attract the investments from all over the world. The management of interest rate in the country is the most significant factor for the investors, especially the external investors who always focus on the nation’s interest rate. The stability and suitability of the interest rate can be the important factors for the development of market. The manufacturing firms and other trading firms in the markets are always worried about the changes in the interest rate. In Pakistan the

foreign investors are now looking at the important economic project CPEC and trying to get market before operationalization of Gwadar and CPEC (Ahmed, 2017; Ali, 2020).

The conversation rate can be significantly designated as the value of one exchange in terms of other (foreign) currency. The study of Tiwari (2003) concluded that the instability of exchange rates or higher jumps in the currency of any country will create huge problems for financial stability and economic growth. Some of the studies argued that the exchange rate are the sources of increasing the country inflation rate as the higher the current exchange rate will mean that the value of present currency is decreasing for international currency and burden will be increasing on the lowering country.

The literature shows the gap that some of the factors, i.e. corruption and political stability can play mediating role between the Macro-economic factors and FDI. The economic crisis of 2007-08 showed its financial and political effects on almost every country of the world. The economies have seen huge shocks, the stock markets faced record crashes and even some of the countries saw changes of the political governments. Due to these shocks, the FDI of both developed and developing countries decreased as the firms were trying to save their investments. This shows the global financial crises have shown its severe effects on the FDI around the world.

Corruption impedes economic growth because it redirects valuable resources and money to unproductive endeavors. Since foreign direct investment (FDI) is a direct source of capital acquisition, the unequal distribution of resources in developing nations limits economic growth prospects, which in turn causes capital to erode and makes it harder for various economic sectors to obtain the funds they need to function. Since foreign direct investment (FDI) is a key driver of economic growth, corruption has a direct impact on FDI inflows, which in turn limit economic growth. Corruption appears to be the primary element influencing the perceived progress of capital formation and commercial activities in nations' economies, and this study will focus on its effects on foreign direct investment (FDI) and economic outlook (Nizam and Liaqat, 2022).

Economists see political instability as a major illness that hinders economic growth. Several economists have taken an interest in the detrimental impacts of political instability on economic performance, which has occurred frequently in various nations throughout history. The propensity for a government to fall is what is known as political instability (Alesina et al., 1996). This can be

because of the intense rivalry or disagreements among the different political groups. The occurrence of a change in government would also raise the likelihood of further changes.

FDI is considered as the most important factor for achieving economic growth. The importance of FDI has increased manifold in the case of developing counties like Pakistan, India and Bangladesh. Different studies conducted on the different factors affecting FDI in these countries have argued that Interest Rate, Inflation Rate, Exchange Rate, Oil Prices and GDP are the most significant factors which can affect FDI directly. Irhsadet al., (2022) argued that interest rates are the factor which can affect the policy governing the capital inflow to the market. Fluctuation in the interest rate will lead to disturbance in the cash flow in the market and it is having a direct effect on the FDI. Mustapa (2020) and Tariq et al., (2020) reported that exchange rate is the factor which is having positive and significant effect on the economic growth and FDI is directly related to economic growth. The study of Abbasiet al., (2021) & Azam et al., (2021) argued that inflation rate is the factor, which is having negative impact on FDI, but this can be different, depending on the market structure. After evaluation of the literature, the gap has been identified that minimum work has been conducted by examining the selected macro factors in single study with corruption index and political stability index. Therefore, by taking the gap, the existing study will be conducted in finding out the effect of Interest Rate, Inflation Rate, Exchange Rate, Oil Prices, and GDP on FDI in Pakistan, India and Bangladesh along with the corruption index and political stability index as no study has examined them for the FDI. The literature shows that there is no study conducted who takes any factors in the mediating role, therefore, the presents study takes political stability and corruption as mediating variables and will examine its role between the selected factors and FDI.

This study examines different facets of foreign direct investment (FDI) in the South Asian countries. It intends to analyze the effect of interest rates, exchange rates, oil prices, inflation rate and GDP on FDI. The research examines the impact of interest rates on FDI; it also looks at whether exchange-rate adjustments or changes in oil prices have a negative effect on foreign direct investment and whether inflation plays any role, as well. Its scope includes South Asian nations including India, Nepal, Sri Lanka--all very different from Ho Chi Minh City. Furthermore, the study also goes one step further to explore whether political stability and corruption play a mediating role in interest rates-pressure-exchange rate relations: oil prices--oil surplus (deficit)--

inflation ratio relation. The research seeks to provide these insights by focusing on the conditions of FDI in this region.

A study, performed on the South Asian countries, examines interest rates; exchange rates; oil prices; inflation items and GDP in Foreign Direct Investment (FDI). It provides methodological guidance for new researchers working with macroeconomic data across different countries. Such findings have importance to policymakers, providing a connection between interest rates and FDI. Recommendations stress the need to stabilize interest rates in order to attract investment. The study also points to the importance of properly handling exchange rates, especially those involving the USD and guiding oil prices as well as inflation ratios. Their impact on FDI is apparent. Moreover, the exploration puts heavy stress on plays of interest rates, exchange rates and oil prices as well as GDP in attracting FDI to deepen our understanding about policymaking.

Literature Review

Capital Arbitrage Theory

The theory has been proposed by MacDougal (1960) who argued that the FDI can be considered as the most important factor for any country especially for those who have lower return of lower progress. The theory argued that the FDI always flows from the country where the rate of return is lower to the country where they can get a higher rate of return. The theory supports that there are multiple factors which can be found significant for the estimation of FDI. The investors always prefer to invest in the market where they can get higher returns. The Capital Arbitrage Theory related to the FDI inflow and usage in the most recommended manner. Tahir et al., (2020) concluded that fluctuations in exchange rates can lead to variability in investments and it has negative impact on the earnings. Therefore, it has been reported that the higher the current risk in the country will lead to affecting the market and this will make less attractive the market for the foreign investors and local investors.

This is since the fluctuation can show the unstable market and it will have negative impact on the financial performance (Deng, 2020). The lower FDI for the developing economies is worrisome which can lead them to the shortage of funds to finance their most necessary and profitable projects which results in decreasing their assets and capital flow (Osemene and Arotiba, 2018). The exchange rate and FDI can be considered as the most crucial and significant

determinants for prosperity and economic integration (Schmidt and Broll, 2009). Most of the studies have argued that the exchange rate can be used to attract new investments in the country. Previous studies i.e. Barrel and Pain (1998) have concluded that depreciation in the country currency can be a significant factor in attracting the FDI as this will increase the value of the foreign currency.

Many studies have been conducted on FDI and economic growth and also the different macroeconomic determinants of FDI in the different markets of the world. These have been concluded with different findings. Some of the studies have been conducted on the firm level while most of the literature has been reported from the macro level of factors. The current chapter of the study has included the relationship of all determinants with the FDI and discussed their findings based on their models. These studies are:

Exchange Rate & FDI

International direct investment (FDI) inflows (in millions of USD) and real gross domestic product (GDP) (USD at constant 2010 prices) in Indonesia were studied by Tanaya and Suyanto (2022) from 1970 to 2018. A natural logarithmic transformation was applied to the variables. According to the Dickey-Fuller and Phillips-Perron unit root tests, the real GDP logarithm is a non-stationary series I (1) whereas the foreign direct investment logarithm is a stationary series I(0). An ARDL (3, 2) model with a dependent variable logarithm of FDI, whose lag selection was examined using the Schwarz Bayesian information criteria, may be tested using the ARDL co-integration bound test since each series is expressed in logarithmic order. With an F-statistic of 477.26, which significantly surpasses the I (0) and I(1) bands, the authors inferred a long-term equilibrium link between the logarithm of real GDP and FDI at the 5% significance level. A highly significant and high-income elasticity of foreign direct investment (FDI) of 76.74 in the near term and a considerable income elasticity of FDI of 42.18 in the subsequent period are shown by the calculated ECM. When compared to its value from the prior period, FDI exhibits a very negative and inelastic behavior. By confirming the co-integration between the series with a negative coefficient of the error correction component, this model concludes.

Interest Rate & FDI

Foreign direct investment (FDI) is a wide-ranging index that includes the equities, debt, and securities markets as well as banks, mutual funds, pension funds, and insurance. Clearly, the other related studies also backed up the fact that economic growth is one of the rightful outcomes.(Tariq et al., 2020). Several studies have shown that balance of trade has a direct bearing, GDP (gross domestic product), of many developing countries in continuation to that of India and many more in Asia. (Prabhakar&Rentala, 2019). When an economy has a negative balance of trade (a trade surplus), it is characterized by the presence of more imports rather than exports. Conversely, the other case will be that the government gets more in its sum of exports than that of imports, which means that the surplus of that traded good by the government will happen. Does it imply that favourably changing the trade balance of a country exports more than it imports, will have a positive impact on its economic growth?With regards to both, foreign direct investment (FDI) and different factors, as elucidated by Ahmed and Mayowa (2010), several factors and variables have an impact. The research was conducted in a grocery store in Nigeria, a developing economy situated between 1970 and 2009. The VECM model and Granger causality test, a "time series" of variables, were used to study the link between the variables and respective time parameters. This was evident from the study as it showed that factors such as inflation, market openness strengthened by interest rates and currency values all play a major role to internationally attract FDIs.

Oil Prices & FDI

The research carried out by Maalel and Mahmood in (2018) aimed to study what influence the changing in oil prices had on the country's economic performance. In this study, results have been obtained by considering the GCC countries and considering the non-linear properties. The first part argued for oil price impact on economic growth growth and further illustrated that country could be worse of the effect caused by a dependence on oil. The empirical findings go a bit further and suggest that the economic growth of Bahrain and Kuwait have been affected negatively while it has been found that the relationship between this growth factor and oil price has been found positive and significant in the case Qatar and Oman. The study established the fact that the country under two categories of regimes in the Gulf according to the impact of the oil exports on the

economy: the oil exports appeared in negative way from the point of view of UAE and Saudi Arabia, yet in Bahrain's case the same impact was discovered to be positive. Another one is to look at the findings of Alkhateebet al. (2017), they concluded that the variation in oil prices might have a negative impact on the nation's economic position. The literature indicated that the shifts in oil prices not only presented negative characteristics towards FDI and GDP growth in some counties, but the effect depended on the market structure.

Inflation Rate & FDI

The relationship between GDP and FDI has been the primary focus of most contemporary research on macroeconomic indicators. Still, at first, there was some muddled connection between the two variables. However, over time, it became clear that FDI in the host nation began to produce local knowledge, productivity, and technology, leading to a rise in economic growth for the country (Thi&Nga, 2019, Hakizimana, 2015). Foreign direct investment (FDI) is often thought to have a beneficial impact on economic growth;however, this has been cast into doubt by several empirical research. According to Thi and Nga (2019), this might be the main reason why the home and host nations' technology and productivity levels are so different.

A study by Aggarwal (1997) has examined the impact of inflation rate on the FDI and concluded that there is a significant relationship between the FDI and inflation rate. The study has been conducted among the six Asian countries and examined the portfolio investments across the countries. The study of Kaur and Dhillon (2010) concluded that there is a positive association among the FDI and inflation in India. Another study conducted by Al-Smadi (2018) found a negative but significant relationship between the FDI and inflation rate.

GDP and FDI

Yearly GDP is another name for the GDP that is calculated annually. According to Ijirshar (2019), a country's GDP is the sum of all its final goods and services' market values for a specific year. Economists rely on several metrics, but one of the most important is the Gross Domestic Product (GDP), which is a measure of an economy's productivity and health. All final goods and services produced inside a nation during a certain time period are collectively referred to as its

Gross Domestic Product (GDP). Concerning the correlation between GDP exchange rates and inflation, several forms of study have been conducted. According to nearly all of them, inflation has a smaller effect on GDP than the exchange rate (Ang et al., 2006; Mohsin&Naseem, 2018).

There is a long-run link between GDP and FDI, according to previous research on the topic. Although several variables have been adversely linked to GDP, research has shown that foreign direct investment (FDI) is the most important element that might affect development. Foreign investors have a crucial role in the country's economic output. An uptick in foreign direct investment (FDI) may be good for the company. There are two angles from which the investors putting up FDI may make a big splash. To start with, a company's bottom line might get a substantial boost from overseas investment. Research on the factors that influence foreign direct investment has mostly focused on individual firms.

Political Stability and FDI

Peter and Filip (2017) conducted their study on political stability and FDI. The study has taken 11 developing countries and tried to include both FDI inflow and outflow from the country. The study argued that political stability is the most critical factor which can be significant in bringing FDI in the country and political risk can be the most negative factor which can give shock to the foreign investors. The study has used VAR, Granger causality and ARDL approach for the data analysis. The study has recommended based on findings that the political risk can be having both long run and short run relationship with the FDI of the country. The study has recommended that political risk can be considered as the major factor in developing countries which can have negative impact on FDI.

Corruption and FDI

Corruption is the major issue of both developed and developing countries and this is the factor which can bring economic instability to the country. The issues faced by developing countries brought huge economic shock for the poor countries. According to Lambsdorff (2017) corruption in the country is the major factor which removes the confidence of the international world and major industries shifted from the market to save their investment. The study has been conducted in the Jordan. The study has included data time from 1975 to 2015. The study has used

time series analysis and included corruption, law and order and GDP with FDI. The time series analysis included VAR and co-integration model for the analysis. The findings argued that corruption is having a significant association with FDI, but it has been recommended that the corruption needs to be controlled otherwise it will bring FDI down.

Tomic (2018) has conducted his study in the Greece and examined the relationship between corruption, interest rate and exchange rate in the FDI of the country. The study has taken data from 2000 to 2017 monthly. The time series analysis was recommended for the analysis. The ARDL and VAR model was used to examine the long and short run relationship between corruption and FDI. The findings recommended that the corruption was the only significant factor in Greece which showed negative impact on the FDI.

The most difficult part of fixing any economy is dealing with corruption. Global economists agree that fighting corruption is the greatest obstacle. Considering that corruption stands as the most significant obstacle to attaining economic progress and prosperity. According to Kaufmann and Kraay (2007), corruption permeates practically every facet of social and economic life. It is characterized as any behaviour that undermines the legal system and results in unethical business practices. Reducing investment and distorting corporate activity, which in turn causes economic inflation, has a direct impact on the country's economy. Corruption has an influence on foreign direct investment (FDI) flows, according to Quazi (2014), who studied the relationship between the two in South and East Asia. Some of the elements that are considered while looking at the impacts on foreign direct investment (FDI) are economic freedom, market size, political stability, human capital, corruption, and the rate of return.

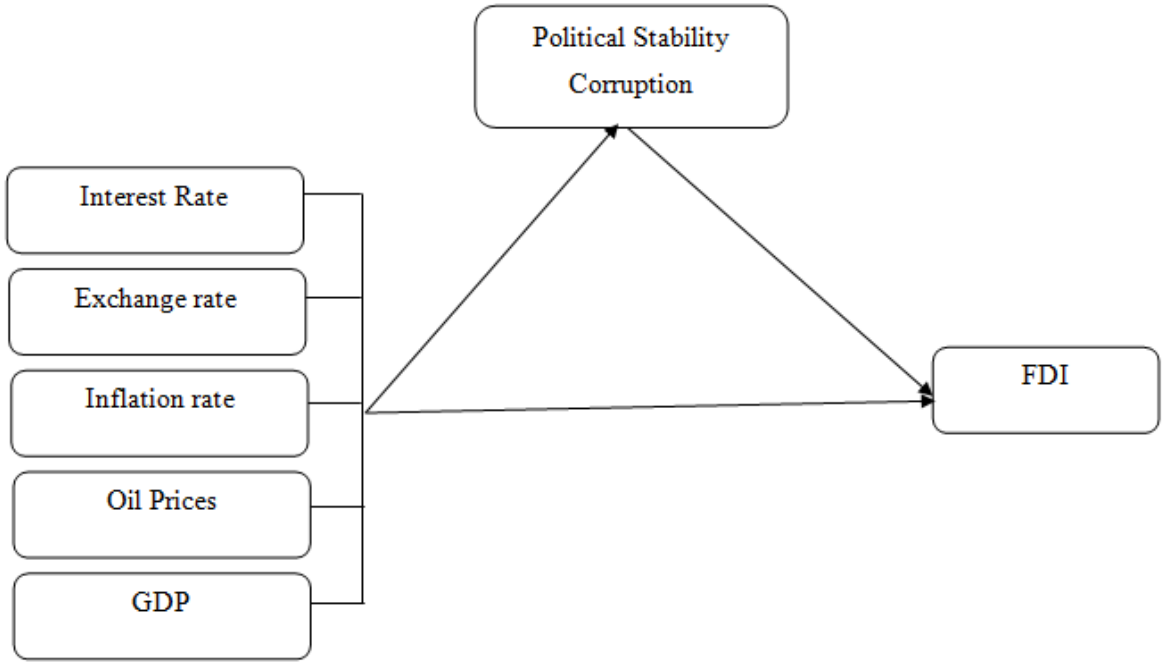

Figure.1 Conceptual Framework

Hypotheses

H_1: Independent Variables (Interest Proportion, Exchange Proportion, Oil Values, Inflation Proportion and GDP) have significant effect on FDI.

H_{1a}: Interest rates takes significant effect on FDI.

H_{1b}: Exchange rate has significant effect on FDI.

H_{1c}: Oil Prices have significant effect on FDI.

H_{1d}: Inflation rate has significant effect on FDI.

H_{1e}: GDP has significant effect on FDI.

H_2: Corruption and Political Stability has a significant mediating role between Macro-economic factors and FDI.

H_{2a}: Corruption has a significant mediating role between interest rate, exchange rate, oil prices, inflation rate GDP and FDI.

H_{2b}: Political stability has a significant mediating role between interest rate, exchange rate, oil prices, inflation rate GDP and FDI.

Research Methodology

Sample Size & Time Frame

This research work has been conducted to examine the macro-economic factors for the FDI with mediating role of political stability and corruption in South Asian counties. So, the variables were selected on the country level. Due to the limitation of availability of macroeconomic data for the desired variables, it was not easy to include the data set from the beginning of the economic period of the country. Therefore, the most recent time was selected to ensure the collection of updated data. The study adopted purposive sampling technique and included 2000-2020 as the sample time for the data collection. In this period the world economies have seen different crises including major economic crises and the recent COVID-19 Pandemic.

Data Sources

The data nature of the present study variables is macroeconomic in nature. It is therefore recommended that country level reports were used for the data collection. The statistics for the selected variables stayed collected from the authentic intelligences of Central Banks of Pakistan, India and Bangladesh, IMF, World Bank Indicators data portal. These sources are the most recommended and authentic for research purposes.

Study Variables

Foreign Direct Investment (FDI) (Dependent Variables)

The foreign direct Investment was occupied as the dependent variable. The foreign direct investment means the funds inflow from the international channels to Pakistani market was considered as FDI. FDI was measured by the percentage of investment made by foreign investors to the local production in a single year.

Interest Rate (Independent Variables)

Interest rate was taken as independent variable. The study has taken the bank lending rate as the interest rate. The bank lending rate is issued by the Central Bank of the country.

Rate of Exchange

The independent variable in this study was the exchange rate. The value of one currency relative to another was defined as the exchange rate. The value of PKR relative to USD was the unit of measurement for the exchange rate data. The Central Bank is responsible for issuing the currency rates.

Oil Prices

The Oil prices were taken as independent variable. The oil prices mean the price of Petrol and Diesel in the market. The historical oil prices were collected from the state oil companies and the volatility in these prices was calculated. Oil price is measured dollar price per liter in home currency.

Gross Domestic Product (GDP)

The GDP or economic growth was taken as independent variable. The GDP or economic growth were used interchangeably. The GDP data was taken from the economic survey of sampled countries.

Inflation Rate

The inflation rate is the independent variable. The Consumer Price Index (CPI) was taken as the proxy for inflation rate. Inflation means the percentage change in the consumer products in a specified period.

Corruption (Mediating Variables)

The study used corruption as the Mediating variable and the data issued by World Bank Indicator (P-rank data) was used to measure corruption.

Political Stability

The study used political stability as the Mediating variable and the data issued by World Bank Indicator (P-rank data) will be used to measure corruption.

Empirical Model (Regression)

$$FDI = \alpha + \beta(IR) + \beta(ER) + \beta(OIL) + \beta(GDP) + \beta(INF) + e \quad (1)$$

Mediating Model

$$PS = \alpha + \beta(IR) + \beta(ER) + \beta(OIL) + \beta(GDP) + \beta(INF) + \quad (2)$$

$$COR = \alpha + \beta(IR) + \beta(ER) + \beta(OIL) + \beta(GDP) + \beta(INF) + e \quad (3)$$

$$FDI = \alpha + \beta(IR) + \beta(ER) + \beta(OIL) + \beta(GDP) + \beta(INF) + \beta(COR) + \beta(PS) + e \quad (4)$$

Variables	
FDI	Foreign direct Investment
IR	Interest rate
ER	Exchange rate
OIL	Oil prices
GDP	Gross domestic product
INF	Inflation rate
COR	Corruption
PS	Political Stability
α	Intercept
β	Coefficient
e	Error term

Data Analysis

In this study the nature of the data is macroeconomic that's why we used country level reports to collect the data. The Unit Root Test was used to check the stationary and non-stationary nature of the data. The results showed that the data is unit root at levels as the p-values are insignificant while it is having significant test values and found no unit root at first difference.

Baron and Kenny (1986) method for mediation was used to invention out the influence of Macroeconomics variables on Foreign Through investment (FDI) with mediating role of Political stability and Corruption. We used Linear Regression model to sight out the through impact of DV (Foreign Direct Investment) on IDV (Macroeconomic variables). The ANNOVA test was used for model significance.

Results & Discussion

This section is the results and discussion section of the research study. This section included the details results of regression model which has been used in the existing study for checking the effect of IDV on the DV with mediating variables. The regression model has been used since the study has panel data (more countries and a greater number of years). The mediating results are also elaborated in this section based on mediating model using SPSS.

Unit Root Test

	At levels		At first difference	
Variables	**Test**	**P-value**	**Test**	**P-value**
Interest Rate	-1.113	0.513	-4.32	0.00
Exchange Rate	-1.514	0.416	-5.64	0.00
Inflation Rate	-1.641	0.445	-4.88	0.00
Oil Prices	-1.164	0.239	-5.51	0.00
GDP	-1.118	0.531	-5.67	0.00

The overhead table demonstrates the results of unit root test which was used to check the stationary and non-stationary nature. The results showed that the data has unit root at levels as the p-values are insignificant while it is having significant test values and found no unit root at first difference.

Regression

The results of regression analysis to evaluate the impact of independent factors on dependent variables are captured in this phase of the study. The study's first goal was to investigate the direct and indirect effects of organisational change (leadership, culture), as well as job crafting, on employee performance. The direct effects are analyzed using multiple and linear regression model in this section while the mediation effects are analyzed using Barron and Kenny Approach (1986) in later section.

Regression Result (Bangladesh)

Baron and Kenny (1986) approach were used to treasure out the bearing of Macroeconomics variables happening Foreign Direct investment (FDI) with mediating role of Political stability and Corruption.

a. Predicting the effect of Interest rate, GDP, Oil prices, Inflation rate and exchange rate on FDI.

Table.4. 1 **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.766[a]	0.587	0.449	0.32859	0.587	18.113	5	15	0.00

a. Predictors: (Constant), GDP, oil prices, Interest rate, inflation rate, exchange rate

Mediation Effect Using Barron and Kenny Approach (1986)

a. Predicting mediating role of corruption between Macroeconomic Factors FDI by Barron and Kenny Approach (1986)

Barron & Kenny (1986) Criteria for Mediation:

Step-1: X must be correlated with Y.

Step-2: X must be correlated with M.

Step-3: M must be correlated with Y (Controlling for X on Y)

Step-4: When effect of M on Y in controlled:

- when X is no longer correlated with Y = Complete Mediation
- Correlation between X and Y is reduced = Partial Mediation

- H_2: Corruption and Political Stability has a significant mediating role between Macro-economic factors and FDI.

- H_{2a}: Corruption has a significant mediating role between interest rate, exchange rate, oil prices, inflation rate GDP and FDI.

- H_{2b}: Political stability has a significant mediating role between interest rate, exchange rate, oil prices, inflation rate GDP and FDI.

Step-1: Total Effect of Macroeconomics Factors over FDI

Table.4. 6 **Coefficient**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.569	1.136		1.381	0.09
Interest rate	0.643	0.131	0.513	4.908	0.00
Exchange rate	0.419	0.093	0.394	4.505	0.00
Inflation rate	-0.24	0.113	-0.193	-2.115	0.00
Oil prices	0.296	0.053	0.216	5.585	0.00
GDP	0.319	0.135	0.223	2.363	0.00

Dependent Variable: FDI

The table reveals that the value of beta β for IR = 0.643, EX = 0.419, INF = -0.239, OP = 0.296 and GDP = 0.184 (for path C) that represent total effect of Macroeconomics Factors over FDI.

i. Effect of Macroeconomic factors and Corruption and Political stability

Table.4. 7 Coefficient

	Corruption			Political Stability		
Variable	Beta	T-value	Sig	Beta	T-value	Sig
Interest rate	0.51	3.136	0	0.413	2.314	0.00
Exchange rate	0.04	2.331	0	0.117	1.986	0.06
Inflation rate	0.47	1.364	0.36	0.439	2.036	0.00
Oil prices	0.35	0.961	0.79	0.379	2.791	0.00
GDP	0.33	2.876	0	0.289	3.113	0.00

a. **Dependent Variable: PS, COR**

The table reveals that the value of beta β for IR = 0.513, EX = 0.036, INF = -0.469, OP = 0.349 and GDP = 0.331 (for path a) that represent total effect of Macroeconomics Factors over Corruption.

The table reveals that the value of beta β for IR = 0.413, EX = 0.117, INF = -0.439, OP = 0.379 and GDP = 0.289 (for path a) represent total effect of Macroeconomics Factors over Political Stability.

ii. Effect of Macroeconomic factors, Corruption and Political stability on FDI

Table.4. 8 **Coefficient**

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.669	1.119		1.49151	0.3
Interest rate	0.749	0.134	0.556	5.58955	0.00
Exchange rate	0.516	0.104	0.493	4.96154	0.00
Inflation rate	-0.34	0.127	-0.3	-2.66929	0.00
Oil prices	0.349	0.063	0.396	5.53968	0.00
GDP	0.561	0.079	0.559	7.10127	0.00
Corruption	0.769	0.139	0.631	5.53237	0.00
Political Stability	0.617	0.159	0.523	3.8805	0.00

a. Dependent Variable: FDI

The outcome reveals that the value of beta β for IR = 0.749, EX = 0.516, INF = -0.339, OP = 0.349 and GDP = 0.561 (for path c$^{/}$)) and β for COR= 0.769and PS= 0.617 (for path b) that represent the effect of Macroeconomic factors and PS, COR over FDI.

Analyze the Magnitude of Beta Value

According to Barron and Kenny Approach (1986), the data in the above tables were analyzed and compared the magnitude of beta β at path C and C$^{/}$ where total effect equals the sum of direct and indirect effects, C = C$^{/}$ + a*b. The magnitude of beta β for IR = 0.643, EX = 0.419, INF = -0.239, OP = 0.296 and GDP = 0.184 (for path C) has been increased to β IR = 0.749, EX = 0.516, INF = -0.339, OP = 0.349 and GDP= 0.561 (for path C$^{/}$**)** which means the total effect has been transmitted at indirect path. The outcome reveals that corruption and political stability have strong and significant mediates the relationship between macroeconomic factors and FDI. These interpretations support alternate Hypothesis.

Regression Results (India)

a. Predicting the effect of Interest rate, GDP, Oil prices, Inflation rate and exchange rate on FDI.

Table.4. 9 **Model Summary**

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.535[a]	0.286	0.53	0.68571	0.53	21.221	5	15	0.00

b. Predicting mediating role of Political Stability and Corruption between Macroeconomic Factors FDI by Barron and Kenny Approach (1986)

c. H_{2a}: Corruption has a significant mediating role between interest rate, exchange rate, oil prices, inflation rate GDP and FDI.

d. H_{2b}: Political stability has a significant mediating role between interest rate, exchange rate, oil prices, inflation rate GDP and FDI.

Step-1: Total Effect of Macroeconomics Factors over FDI

Table.4. 14 **Coefficients**

Unstandardized Coefficients			Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	1.02	1.136		0.90053	0.69
Interest rate	0.56	0.106	0.46	5.29245	0.00
Exchange rate	0.48	0.136	0.4	3.52206	0.00
Inflation rate	0.6	0.193	0.49	3.09326	0.00
Oil prices	0.45	0.146	0.39	3.07534	0.00
GDP	0.4	0.34	0.32	1.16765	0.31

The table reveals that the value of beta β for IR = 0.561, EX = 0.479, INF = -0.597, OP = 0.449 and GDP = 0.397 (for path C) that represent total effect of Macroeconomics Factors over FDI.

i. Effect of Macroeconomic factors and Corruption and Political stability

Table.4. 15 **Coefficients**

	Corruption			**Political Stability**		
Variable	Beta	T-value	Sig	Beta	T-value	Sig
Interest rate	0.54	2.364	0	0.71	3.137	0.00
Exchange rate	0.32	3.449	0	0.26	1.171	0.2
Inflation rate	0.5	1.364	0.12	0.47	4.931	0.00
Oil prices	0.37	2.791	0	0.51	3.778	0.00
GDP	0.59	5.643	0	0.35	2.691	0.00

a. Dependent Variable: PS, COR

The table reveals that the value of beta β for IR = 0.541, EX = 0.316, INF = -0.497, OP = 0.367 and GDP = 0.593 (for path a) that represent total effect of Macroeconomics Factors over Corruption.

The table reveals that the value of beta β for IR = 0.710, EX = 0.259, INF = -0.472, OP = 0.510 and GDP = 0.348 (for path a) that represent total effect of Macroeconomics Factors over Political Stability.

ii. Effect of Macroeconomic Factors, Corruption and Political Stability On FDI

Table.4. 16 Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	1.53	1.311		1.16781	0.23
Interest rate	0.69	0.119	0.56	5.80672	0.00
Exchange rate	0.56	0.164	0.5	3.39634	0.00
Inflation rate	0.63	0.162	0.58	3.89506	0.00
Oil prices	0.67	0.157	0.59	4.24841	0.00
GDP	0.59	0.257	0.34	2.30739	0.00

a. Dependent Variable: FDI

The outcome reveals that the value of beta β for IR = 0.691, EX = 0.557, INF = -0.631, OP = 0.667 and GDP = 0.593 (for path c/)) and β for COR= 0.581and PS= 0.639 (for path b) that represent the effect of Macroeconomic factors and PS, COR over FDI.

IV. Analyze the Magnitude of Beta Value

According to Barron and Kenny Approach (1986), the data in the above tables were analyzed and compared the magnitude of beta β at path C and C/ where total effect equals the sum of direct and indirect effects, C = C/ + a*b. The magnitude of beta β for IR = 0.561, EX = 0.479, INF = -0.597, OP = 0.449 and GDP= 0.397 (for path C) has been increased to β IR = 0.691, EX = 0.557, INF = -0.631, OP = 0.667 and GDP = 0.593 (for path**)** which means the total effect has been transmitted at indirect path. The outcome reveals that corruption and political stability have strong and significant mediates the relationship between macroeconomic factors and FDI. These interpretations support alternate Hypothesis.

Regression Results (Pakistan)

a. **Predicting the Consequence of Interest Rate, Gdp, Oil Amounts, Inflation Rate and Exchange Rate on Fdi.**

Table.4. 17 Model Summary

	Unstandardized Coefficients		Standardized Coefficients		
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	0.45	1.362		0.33	0.75
Interest rate	0.01	0.065	0.02	3.08	0.01
Exchange rate	0.51	0.208	0.48	2.45	0.00
Inflation rate	0.64	0.253	0.62	2.51	0.00
Oil prices	0.57	0.194	0.55	2.94	0.00
GDP	0.72	0.229	0.64	3.15	0.00

R: .745, R-square: .555, F-value: 17.781

a. **Predicting Mediating Role of Corruption Between Macroeconomic Factors FDI By Barron And Kenny Approach (1986)**

b. H_1: Independent Variables (Interest Percentage, Exchange Proportion, Oil Values, Inflation Proportion and GDP) have significant effect on FDI.

c. H_{1a}: Interest rateshavea significant effect on FDI.

d. H_{1b}: Exchange rate has significant effect on FDI.

e. H_{1c}: Oil Prices have significant effect on FDI.

f. H_{1d}: Inflation rate has significant effect on FDI.

g. H_{1e}: GDP has a significant effect on FDI.

h. Total effect of Macroeconomic factors and FDI

Table.4. 20 **Coefficients**

Unstandardized Coefficients			Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	0.968	1.136		0.852113	0.99
Interest rate	0.679	0.107	0.601	6.345794	0.00
Exchange rate	0.549	0.316	0.456	1.737342	0.01
Inflation rate	-0.38	0.142	-0.31	-2.66901	0.00
Oil prices	0.648	0.163	0.576	3.97546	0.00
GDP	0.583	0.19	0.501	3.068421	0.00

The table reveals that the value of beta β for IR = 0.679, EX = 0.549, INF = -0.379, OP = 0.648 and GDP = 0.583 (for path C) that represent total effect of Macroeconomics Factors over FDI.

i. Effect of Macroeconomic Factors and Corruption and Political Stability

Table.4. 21 **Coefficients**

	Corruption			Political Stability		
Variable	Beta	T-value	Sig	Beta	T-value	Sig
Interest rate	0.489	2.367	0.00	-0.63	-4.593	0.00
exchange rate	-0.28	0.349	0.56	-0.32	-2.341	0.00
inflation rate	0.159	1.311	0.15	0.264	2.091	0.00
oil prices	0.349	3.694	0.00	0.297	1.978	0.02
GDP	0.572	4.449	0.00	0.193	1.279	0.02

a. Dependent Variable: PS, COR

The table reveals that the value of beta β for IR = 0.489, EX = -0.279, INF = 0.159, OP = 0.349 and GDP = 0.572 (for path a) that represent total effect of Macroeconomics Factors over Corruption.

The table reveals that the value of beta β for IR = -0.631, EX = -0.319, INF = 0.264, OP = 0.297 and GDP = 0.193 (for path a) that represent total effect of Macroeconomics Factors over Political Stability.

j. Effect of Macroeconomic Factors, Corruption and Political Stability On FDI

Table.4. 22 Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	1.249	1.089		1.146924	0.33
Interest rate	0.789	0.136	0.693	5.801471	0.00
Exchange rate	0.691	0.243	0.716	2.843621	0.00
Inflation rate	-0.5	0.154	-0.56	-3.24026	0.00
Oil prices	0.773	0.449	0.559	1.721604	0.03
GDP	0.657	0.234	0.697	2.807692	0.00
Corruption	-0.42	0.161	-0.36	-2.60248	0.00
Political Stability	0.837	0.241	0.771	3.473029	0.00

a. Dependent Variable: FDI

The outcome reveals that the value of beta β for IR = 0.789, EX = 0.691, INF = -0.499, OP = 0.773 and GDP = 0.657 (for path $c^{/}$) and β for COR= -0.419and PS= 0.837 (for path b) that represent the effect of Macroeconomic factors and PS, COR over FDI.

Analyze the Magnitude of Beta Value.

According to Barron and Kenny Approach (1986), the data in the above tables were analyzed and compared the magnitude of beta β at path C and $C^{/}$ where total effect equals the sum of direct and indirect effects, $C = C^{/} + a*b$. The magnitude of beta β for IR = 0.679, EX = 0.549, INF = -0.379, OP = 0.648 and = 0.583 (for path C) has been increased to β IR = 0.789, EX = 0.691, INF = -0.499, OP = 0.773 and = 0.657 (for path$^{/}$**)** which means the total effect has been transmitted at indirect path. The outcome reveals that corruption and political stability have strong and significant

mediates the relationship between macroeconomic factors and FDI. These interpretations support alternate Hypothesis.

Conclusion

The Indian regression results demonstrated that several variables significantly impact foreign direct investment (FDI), including the currency rate, inflation rate, oil prices, and GDP. Research was bolstered by the findings. i.e. The price of crude oil in US dollars has a significant impact on the supply and demand for foreign currency due to the importance of crude oil in different nations. Since merchants who do not deal in dollars must acquire dollars in order to purchase oil, this is critically significant from an importer's point of view. Consequently, the cost of importing them is directly related to fluctuations in the value of their currency relative to the dollar. Currency changes will also have an impact on oil exporters. With the goal of linking oil prices to the pricing system that affects the real exchange rate (Bénassy-Quéré et al., 2007), Amano and Norden (1998 a, b) established the terms of trade. The correlation between currency exchange rates and oil prices has been the subject of a great deal of research.

Foreign direct investment (FDI) in Pakistan is significantly affected by interest rates, currency rates, inflation rates, oil prices, and GDP, according to regression results. According to the findings, the FDI follow-up is impacted by the currency rate. Increases in the value of the dollar relative to the local currency have a favourable effect on foreign direct investment.

Regression results for Bangladesh demonstrated that oil prices, GDP, interest rates, inflation rates, and currency rates all significantly impact foreign direct investment (FDI) in the country. Foreign direct investment (FDI) contributes positively to Bangladesh's gross domestic product (GDP) and exchange rate, according to the study's findings. Additionally, the study found a substantial correlation between Bangladesh's inflation rate and FDI. The frequent and consistent fluctuations in Bangladesh's inflation rate could be to blame. The research shows that foreign direct investment (FDI) boosts GDP and the value of the Bangladeshi Taka (BDT) relative to the US dollar. A country's industrialization, GDP growth, and general economic progress may be best gauged by looking at macroeconomic metrics. The research shows that foreign direct investment (FDI) impacts Bangladesh's GDP, inflation rate, and exchange rate, three crucial macroeconomic

factors. Therefore, this research is crucial for the economic growth of Bangladesh and other south Asian nations.

Foreign direct investment (FDI) in Pakistan is significantly affected by interest rates, currency rates, inflation rates, oil prices, and GDP, according to regression results. According to the findings, the FDI follow-up is impacted by the currency rate. An increase in the value of the dollar relative to the local currency has a favorable influence on foreign direct investment.

The results demonstrate that in Bangladesh, Pakistan, and India, corruption plays a major mediating effect between macroeconomic variables and FDI. Largely, corruption acts as a negative mediator between FDI and other factors. Attracting foreign direct investment (FDI) necessitates that the government eliminates corruption. Countries with stable governments and low corruption rates are the ones that multinational corporations choose to invest in. Since corruption is a factor that can affect interest rates, inflation rates, currency rates, oil prices, and GDP, which in turn can cause negative movements.

According to the findings, political stability has a crucial mediating function between macroeconomic variables and FDI. According to the results, foreign direct investment (FDI) increases when a country's government is stable. greater foreign direct investment (FDI) equals greater reserves, which means more power to manage inflation and interest rates. Because domestic output will rise, they won't have to raise oil prices, and their GDP will rise as a result.

Recommendations

First, the government should actively maintain and balance the major macroeconomic factors such as interest rates, exchange rate levels, oil prices so that investors can have a stable expectation of investment returns at an increased level. Second, Political stability is very important role in the attraction of FDI to the different sectors; the government should try to maintain political stability. Third, the implementation of rule of law should be ensured and the corrupt people should be properly encountered in court of law and then ensure the implementation of punishment. Fourth, The interest rate should be maintained at the standard level so that the investors might get confidence to invest in the market and receive higher rate of return. Fourth, The oil prices should be controlled by giving subsidies to the respective sector so that the public might not suffer, and the local industries also get support by the controlled prices.

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