### Political Instability Investment Behaviour in Pakistan

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#### Abstract

The study investigates the impact of political instability on Foreign Direct Investment (FDI) as well as private investment in Pakistan from 1990-2019. Control variables include trade openness, inflation, real GDP, interest rate, interest rate differential. We have employed Zivot Andrews stationarity test. The study makes use of the recently introduced dynamic ARDL simulation framework. The long-run results of our first object show the negative association between FDI political instability. Concerning the factors, we used as controls trade openness, real GDP, interest rate differential boosts the FDI inflows whereas inflation remains insignificant. the short-run result infers that the rate of adjustment is about 25%. As for as our second objective is concerned the dynamic ARDL model's long-term findings indicate that political instability deteriorates private investment. As for as control variables are concerned trade openness real GDP are positively associated with private investment whereas interest rates dampen it. Inflation remains insignificant in affecting private investment. Short-run results show that the speed of adjustment is 53% annually. It is suggested that the government has a responsibility to create an atmosphere that promotes both domestic foreign investments. Investor confidence will be boosted through greater governance, higher institutional quality, especially political stability.

Keywords: Political Instability, Error Correction, Institutional Quality, FDI, Private Investment.

Article History: Received: June 7, 2023, Revised: July 17, 2023, Accepted: May 1, 2023, Published: August 23, 2023

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# 1. INTRODUCTION

Political instability refers to the possibility of a government collapse owing to constitutional or unconstitutional reasons. Furthermore, government change enhances the likelihood of resulting modifications. On the one h, economic growth slows down due to an uncertain political environment.

Journal homepage: www.njssh.nust.edu.pk

Poor economic performance, on the other side, may lead to government collapse. Political stability from the perspective of growth, means a certain form of stability: the rule of law, strong institutions, an efficient bureaucracy, low corruption, an investment-friendly business climate. Because stability entails a stable political climate, the economy may fare well in terms of attracting foreign investment.

It is supposed truly that investment will be affected by uncertainty, both macroeconomic political. The country which is facing political instability economic uncertainty will face strong opposition from investors (Abdelkader, 2017). Uncertainty regarding the new policies of a possible new government makes the people hesitant to accept the risks they choose to invest elsewhere. Political instability is a serious problem for wealthy nations as well as emerging economies. Foreign buyers decrease when a country experiences political instability, which in turn results in weak financial growth. Political instability badly affects the economy. Law orders are guaranteed by political stability, a stable political system is necessary for the prosperity advancement of the country. If policies are distorted inconsistent, the government is thought to be inefficient. Political instability economic growth is related. First, political unrest raises uncertainty, reducing private investment. Second, political turmoil influences demand, which has a significant impact on economic growth. The literature claims that politically unstable countries are economically impoverished have insecure policies (Alesina Perotti, 1996).

FDI is a source of capital for developing nations for investment motives. It also contributes to the creation of job possibilities, which leads to higher economic growth. Pakistan regarded FDI as a critical source of funding to bridge the resource imbalance. FDI has been demonstrated to increase productivity create competitiveness among manufacturers in developing nations (Yousaf et al., 2008). Foreign investors are concerned with the stability of institutions in assessing the level of expected return on their investment. The high rate of expropriation (the act of a state or authority that appropriates property from its owner for public use or benefit) is due to less legal protection of assets greater political instability, which reduces the attractiveness of the investment. There can exist different forms of expropriation depending on the circumstances. The investment decision by foreign investors mainly focuses on the political situation of a country. The damage of property or confiscation, production interruptions, personnel facing threats which include a restriction on business operations that hinder the capacity of investors to take certain actions, disturbances, modifications in the macroeconomics management or regulatory environment. The unstable environment brings doubts in the minds of investors to risk their hard-earned capital. The foreign direct investment inflow rapidly reduced in many Asian countries due to corruption based on political motives (Nazeer, 2017).

Pakistan has been dealing with several issues, including foreign domestic challenges. Pakistan has encountered financial market challenges since the financial market structure has not been fully developed. Externally, Pakistan is dealing with an exchange rate a trade imbalance. Pakistan has been unable to establish political power due to a lack of a stable government, financial difficulties, a lack of social development (Hashmi et al., 2012). However, Pakistan is now facing various investment hurdles because of political uncertainty. Investors are cautious about investing in Pakistan (Attari et al., 2011).

## 1.1. Research Problem

FDI is crucial for the economic growth prosperity of Pakistan since the country has a savings investment disparity. Pakistan's economy is unable to create sufficient internal resources for sustained growth; hence, FDI supplements local investment to achieve economic objectives. FDI inflows facilitate technological spillover, employment output, managerial skills, human capital hence boost economic growth.

FDI inflows have increased dramatically almost everywhere in the world during the last two decades. In Pakistan, FDI inflows increased following financial market liberalization in the late 1980s. Since 2007, FDI inflows have been steadily declining. The investment-to-GDP ratio has declined, having a detrimental impact on employment levels. Multinational corporations invest in politically stable areas. As a result, international corporations consider the political stability of an economy when determining where to invest (Thompson Poon, 2000). Pakistan is consistently struggling with political instability, which discourages FDI. Akhtar (2000) has described that in Pakistan, an unstable political environment is a common occurrence, impacting every economic sector lowering investor confidence in Pakistan's investment climate. Due to Pakistan's volatile political climate, foreign as well as domestic enterprises are cautious to invest there. Because of the uncertain political situation, investors are hesitant to invest in Pakistan.

# 1.2. Contribution

Much research has been undertaken to assess the significant relationship between FDI economic growth in Pakistani other countries. The

bulk of these studies have indicated that FDI has a positive influence on economic growth. However, no research has been found that explored the links between FDI inflows political stability in Pakistan. Our empirical findings indicate a long-run relationship between political instability investment in Pakistan. As a result, our study aims to fill the gap in the literature would be extremely useful to policymakers' important economic decision-makers. Moreover, our study contributes by incorporating the most modern econometric technique, dynamic ARDL.

# 1.3. Objectives Significance of the Study

In light of the aforementioned, the study aims to investigate the dynamic relationship between political instability investment (both domestic foreign) in Pakistan from 1990 to 2019. The study will provide long-run as well as short-run estimates of political instability domestic foreign investment. We have also used novel dynamic ARDL simulation, the most modern econometric approach to examine the dynamic relationship between political instability investment. Based on the results of this investigation, Future researchers will be capable to do comparable research for different nations. Cross-country analysis has been the main methodology in earlier studies, which is sensitive to the sample countries. Recently, the focus has now switched to individual nation analysis thereby appropriate policy suggestions can be made considering the variations in size, location, features, etc. that exist between countries.

There are five sections in the study. In section one, there is an introduction that includes the research problem, research gap, study's aim. The next section focuses on the review of prior literature the literature gap. Section three discusses the empirical model, variables, methodology. Section four analyses the results discussion; descriptive analysis, correlation matrix, the findings of the stationarity test, dynamic ARDL. The final section discusses the conclusion policy recommendations.

#### 2. LITERATURE REVIEW

A literature review is a comprehensive overview of previous research determines a theoretical base for the research. We have covered the earlier research on the subject in this section.

### 2.1. Political Instability and Foreign Direct Investment

Both theoretical empirical research on FDI motivation MNEs' formation has pointed to several factors which affected FDI inflows. The

neoclassical theory states that FDI enhances the host nation's economic development by raising its standard of living. FDI encourages capital formation in the host nation, which influences profit reinvestment additional capital inflows. The purpose of dependency theory is to close the technological gap.

Many East Asian Latin American countries adopted this theory throughout the 1970s, but eventually had to adapt to liberal policies, resulting in a shift from closed to open economies. Industrialization theory spillover effects consider foreign direct investment (FDI) to be a transfer of capital, management, new technology is defined as a manifestation of industrial organization theory.

As far as empirical literature is concerned Buthe (2008) observed that developing countries see the variation in foreign direct investment in different periods. It is difficult to comprehend how political factors affect these flows. He stated that foreign investment can be increased by assuring foreign investors of the treatment of their assets as outlined in international trade agreements like Preferential Trade Agreements GATT/WTO. The deviation from these international agreements becomes expensive for the countries so they are more reliable for the investors as compared to domestic policies. The developing countries see more FDI inflows after being part of WTO PTAs as they are providing greater protection to foreign investors.

Asiedu (2011) explained that non-resource resource-importing countries show similar associations in the case of FDI democracy as FDI is highly affected by democracy. The data for 1982 to 2007 from 112 developing countries is used to estimate the relation whether the host country's ownership of natural resources has any effect on this relationship or not. It is concluded that the value of oil the value of mineral's share in total export above a threshold level promote FDI in the presence of democracy. It is also noted due to the expansion of democracy, the FDI is reducing in 22 countries increasing in ninety countries.

The impact of political instability on Pakistan's economy was examined by Tabassam et al. (2016). The annual data is in four parts which cover the last twenty-two years. The GARCH ARCH models are used to investigate how political uncertainty affects economic growth. It is concluded that terrorism harms the dependent variable from all other variables like elections, strikes, regimes. The conclusion is that political instability retards economic growth therefore a greater role by the government is needed to bring political stability.

Cotte Martinez (2019) looked at political violence economic growth. To measure economic development political violence, different datasets were used from 2000 to 2014 using panel fixed effects the GMM. The model for political violence describes that political violence is negatively affected by health coverage, education, arrests, the aggregate-level production per capita while positively affected by illegal drugs, GINI displacing population, unemployment rate. The model for economic development is negatively affected by corruption, armed action, political violence while positively affected by political participation, saving, manufacturing, employment, production.

According to Bano et al. (2019), terrorism, political unrest, financial instability, energy shortages, all cause a decline in FDI inflows to Pakistan. The analysis is robust as they are based on events before after the financial crisis. ARDL is used to combine integrate different variables. According to the findings, terrorism has less impact on FDI inflows to Pakistan than economic instability, energy scarcity, political instability. Still, the primary reason for the decrease in FDI inflows to Pakistan is energy scarcity terrorism.

The relationships between Bangladesh's exchange rate foreign direct investment were examined by Qamruzzaman Karim (2019). The results of the study show that monetary policy, public policy, FDI, exchange rates have a long-term relationship. The FDI inflows are reduced when the exchange rate changes positively for the US dollar, while FDI inflows reduce to positive shocks.

Sujit et al. (2020) analysed how FDI in the US market is impacted by risk, governance, macroeconomic factors. A stronger Euro results in more FDI in the US. Investment in research development is a crucial factor contributing to the increasing activity of FDI. The more the FDI inflows, the higher will be the firm profitability. In markets like the United States, exports imports are important determinants in determining FDI. Inflation has a detrimental influence on FDI flow. FDI intensity is negatively associated with inflation. Firms' FDI activity tends to be lower when the country's corruption levels are high.

Yusuf et al. (2020) investigated how political upheaval, democracy, FDI, financial development influenced economic growth in West Africa. The study uses dynamic fixed effect methodology secondary data gathered from 1996 to 2016. The economic growth increased by 0.26% in the sub-region of West Africa due to increasing of 1% in FDI inflow. During the empirical study, no meaningful association is found in the short run. Political instability retards the growth of different countries significantly. The FDI is an important tool that results in both higher production growth.

Association among the FDI, trade, economic growth was observed in India by Kumari et al. (2021). The outcome demonstrates that none of the three factors mentioned above are related over the long run. FDI drives economic growth, economic growth drives FDI, according to VAR Granger, which shows bi-directional causality. Economic growth trade openness has no bidirectional relationship.

VO and HO (2021) examined the mitigating effects of free trade agreements on the connection between FDI inflows trade openness to ASEAN countries (FTAs). The research indicated a powerful positive influence of FTAs trade openness on FDI inflows.

# 2.2. Political Instability and Private Investment

In general, five basic approaches are considered when determining the drivers of investment. The basic accelerator model, the liquidity theory, the anticipated profits theory, Tobin's Q Theory, the neoclassical flexible accelerator theory is among the primary strs of investment behaviour. According to neoclassical investment theory, real GDP growth private investment is directly related (Greene Villanueva, 1991; Fielding, 1997). Similarly, to this, it has also been argued that income level influences private investment favourably because higher-income countries tend to invest more of their money in domestic savings. These savings are then utilized to finance investments (Greene Villanueva, 1991). Jorgenson (1971) colleagues developed the neoclassical approach, which is a modified form of the flexible accelerator model. According to this approach, the desired capital stock is proportional to output the user cost of capital.

As for as empirical literature is concerned Frimpong Marbuah (2010) investigated the determinants of private sector investment in Ghana. The findings demonstrate the long-term effects of foreign debt, exchange rate, real output, external debt, openness on private investment. Inflation, openness, constitutional rule are determinants of private investment in the short run.

Morrissey Udomkerdmongkol (2012) investigate the dynamics of FDI domestic private investment under different components of governance. For forty-six developing countries annual aggregate data was used covering the period 1996–2009. It is evident from the results that countries with better governance have a large amount of total investment (FDI private). Political instability corruption has a substantial influence on investment. Governance has a direct influence on private investment FDI.

Ali et al. (2013) investigated political instability its effects on private investment from 1972 to 2009 in Pakistan. To study the investment dynamics in the short, long run respectively, ARDL was used. Private investment political instability is negatively associated over the long, short terms. FDI public sector investment both stimulate private investment in Pakistan. For a stable

flourishing economy, a stable political environment is required which attracts domestic foreign investors for investment without any hesitation.

Hira (2017) examined how the behaviour of corporate investors is affected by political uncertainty which is resulting from the change in stock prices in Pakistan. The data for the period 1998 to 2012 is obtained from the yahoo finance index for the stock market. Political instability stock market index is analysed concerning one another using ARDL. Political unrest stock prices are demonstrated to be negatively related. An unstable political system frequently causes stock prices to decline. The stock prices have positive relations with exports industrial production a negative relationship with inflation.

Baker et al. (2019) concluded that the stability of the political environment in a nation affects the efficiency of its economic institutions. It is determined how political stability affects public-private partnerships. The monopoly is over by a stable political environment by building useful institutions. The Regression analysis of data from 1999 to 2014 for twelve countries showed that GDP per capita is affected by private infrastructure in the presence of a stable political environment.

Abedin et al. (2020) reinvestigated the association between domestic investment remittances in Bangladesh. When a currency depreciates per capita GDP rises, remittances rise, domestic investment rises as well. The supremacy of the investment motivation of remittances is claimed by the considerable positive influence of per capita GDP foreign exchange rate on remittances, over the long run domestic investment is positively impacted by remittances. This study argues that to increase remittances, for the interests of the economy, it is crucial to keep the domestic currency depreciation at a controllable level. Apart from that, a double-digit interest rate deters domestic investment.

Maradze Nyoni (2020) investigated how in Zimbabwe, private investment is affected by the influence of interest rates. To increase private investment in Zimbabwe, it is needed to explore the strategies that reduce interest rates the crowding-out impact. In addition, it is important to promote positive international relationships.

Rasmane et al. (2020) explored the influence of public investment in sub–Saharan Africa from 1980 to 2015. It is shown that private investment is impacted by public investment differently in three different groups of countries. The high risk of repatriation of profit, conflict, terrorism does not exist in the group where public-private partnership takes place.

Tung Thang (2020) examined seventeen countries in Asia 32 countries in Africa, in a total of 49 developing nations, to assess how FDI will affect private investment. FDI complements private investment. Past behaviour of private investment also significantly determines it. In the full-panel sample trade openness, per-capita GDP, electricity enhances the private investment. The level of private investment in Asia is influenced significantly by variable electricity.

Nigerian interest rates investment was analysed by Alobari et al. (2021). Multiple regressions demonstrated that high-interest rates have a detrimental influence on investment. Government should establish policies that encourage saving lower prime lending rates for legitimate investors. It also argues that, because income savings are intertwined, relevant authorities should adopt economic measures that raise people's income levels to mobilize investment.

Anwar et al. (2021) studied how investment is impacted by the real interest rate in Pakistan for the period 1964 to 2012. The long-term relationship is examined using the Johansen Cointegration test among investment, interest rate, level of income. The primary hypothesis of this study is that real interest rates investment has an adverse relationship in Pakistan.

Awad et al. (2021) examined that in Palestine, private investment is impacted by political instability interest rates. The main findings support the neoclassical notion that interest rates deter private investment. There is no longterm association, according to the various empirical investigations. The loan rates domestic investment is also not correlated.

## 2.3. Research Gap

Several studies have been executed to determine the substantial association between FDI economic growth in Pakistani other countries. Most of this research has found that FDI boosts economic growth. However, no research has been found that has explored the links between FDI inflows political stability in Pakistan. As a result, our study seeks to fill the gap in the literature would be extremely useful to policy makers important economic decision-makers. Moreover, our study contributes by incorporating a recently developed econometric technique, dynamic ARDL.

### 3. DATA METHODOLOGY

This section includes a summary of the statistical procedures as well as descriptions of the variables the relevant data sources.

### 3.1. Empirical Model

The causes contributing elements for FDI inflow fluctuate over time, while the priorities for growth development remain constant. The neoclassical

theory states that FDI enhances the host nation's economic development by raising its standard of living. FDI encourages capital formation in the host nation, which influences profit reinvestment additional capital inflows. Our approach for modelling FDI inflows builds on past research that made use of a multidimensional model. The chosen determinants are expected to affect FDI inflows due to their frequent inclusion as location-specific components in the OLI paradigm (Dunning, 1991 1998). These are political instability, trade openness, interest rate (IR), interest rate differential (IRD), inflation rate, real GDP. The host nation's political, social, economic characteristics affect the OLI parameters. It is important to look at how different features of the host nation's economy affect FDI inflows. Following Madr Kouba (2015), Musibah (2017), Zouhaier Kefi (2012), Oladipo et al. (2007), Bhatti et al. (2008) we, therefore, postulate the following model.

FDI = f (political instability, trade openness, real GDP, interest rate differential, inflation)

$$FDI_{t} = \beta_{0} + \beta_{1}P.Inst_{t} + \beta_{2}TO_{t} + \beta_{3}RGDP_{t} + \beta_{4}IRD_{t} + \beta_{5}INF_{t} + \mu_{t}$$
(1)

The dependent variable is FDI some important standard determinants of FDI, like trade openness, interest rate differential (IRD), inflation rate, real GDP.

When modelling the variables that impact investment, different approaches are taken into consideration. The model that appears to be applied in research the most common is the flexible accelerator model. According to neoclassical investment theory, real GDP growth private investment is related (Greene Villanueva, 1991; Fielding, 1997). Similarly, to this, it has also been argued that income level influences private investment favourably because higher-income countries tend to invest more of their money in domestic savings. These savings are then utilized to finance investments (Greene Villanueva, 1991). Jorgenson (1971) colleagues developed the neoclassical approach, which is a variant of the flexible accelerator model. This method holds that desired capital stock is proportional to output the user cost of capital.

Considering the discussions above, it is believed that our model for the private investment equation will resemble the following: PI = f (political instability, trade openness, real GDP, interest rate, inflation)

$$PI_{t} = \alpha_{0} + \alpha_{1}P.Inst_{t} + \alpha_{2}TO_{t} + \alpha_{3}RGDP_{t} + \alpha_{4}IR_{t} + \alpha_{5}INF_{t} + \varepsilon_{t} \qquad \dots (2)$$

The dependent variable is a private investment some important standard factors of private investment, such as trade openness, interest rate (IR), inflation rate, real GDP.

# **3.2. Description of Variables**

The annual inflows as a percentage of GDP (FDI) private investment in the form of gross capital formation as a percentage of GDP are dependent variables. The independent variables are chosen following empirical literature.

**Political stability** measures the likelihood that the government will remain in power be able to carry out any programs that have been outlined by that government. International country risk guide provides data on government stability. It provides monthly political, economic, financial, composite risk evaluations projections for 141 countries. The data on government stability is based on numerous indicators from different sources. Popular support, government unity, legislative strength are three sub-components of government stability, index ranges between (0 to 12). A minimum score of 0 indicates low political stability, while a maximum score of 12 indicates high political stability. There are high risks of investment concerns of investors in countries where political stability is low. This means that the relationships which are found (positive/negative) will be the inverse of the relationship we are concerned with.

Other measures of political instability have also been employed in the empirical literature. The World Governance Indicators (WGI) describe a lack of violence political stability. This indicator is graded on a scale of -2.5 to 2.5, with 2.5 indicating the most political stability. The Polity Scale is also used to measure democracy, ranging from extremely authoritarian (- 10) to strongly democratic (+ 10) regimes (10). Political instability was quantified in Mankiw's (1995) study by the frequency of coups, wars, revolutions. Political instability was defined by Persson Tabellini (1999) as more frequent bloodshed regime changes or political turmoil. Political instability was quantified by Barro Lee (1993) in their analysis of the number of successful coups, revolutions, political assassinations per million people. Strikes, free press nonviolent demonstrations, internal regional conflicts, other initiatives, according to Campos Nugent (2000). Tabassam et al. (2016) used a variety of political instability measures, including strike dummies as a proxy for political instability. A proxy is employed through a dummy election to quantify political instability.

### 3.2.1. Control Variables

*Trade openness* is defined as a percentage share in GDP by the combined value of exports imports. Domestic investment FDI are positively impacted by trade openness as FDI flow is more towards open countries, as discussed in empirical studies (Asiedu (2002, 2006); Bende-Nabende (2002); Fedderke Romm (2006)).

*Gross domestic product* is the representation of income, purchasing power, market size. Domestic investment FDI are positively impacted by higher aggregate demands, the demands are positively impacted by high average income, so consumers' purchasing power is captured by GDP per capita (Brada et al., 2006). According to Chakrabarti (2001), because economies of scale successful resource usage both require a sizable market, the potential for FDI inflow is higher the larger the market in the host nation.

*Inflation* is the annual percentage change in the average price. It is also a measure of macroeconomic instability consequently, it is predicted to hurt both domestic foreign investment (Anyanwu Yameogo, 2015).

The cost of borrowing the yield on savings are both expressed as the interest rate. In addition to investing in larger returns or higher interest rates, investors will search for low-cost funding sources or lower rates. It implies that money will flow from a low-rate to a high-rate nation. Gross Trevino (1996) explain that FDI inflows will increase in an environment of relatively high interest. It is predicted that differences in interest rates will positively affect FDI influx. The interest rate effect negatively to domestic investment.

### 3.3. Date Sources

We investigate how domestic private investment foreign investment are impacted by political instability; we will perform a time series analysis for Pakistan from 1990 to 2019. `The data source for the GDP is the state bank of Pakistan while the data source for the interest rate is international financial statistics (IFS). Data on trade openness, FDI, inflation, private investment are derived from WDI. International Country Risk Guide (ICRG) is the data source for political instability.

Name	Representation	Explanation	Scale	Source
Foreign Direct Investment	FDI	Denotes the percentage of annual inflows.	% of GDP	WDI
Private Investment	PI	Gross fixed capital formation measures private investment.	% of GDP	WDI

Table 1. Summary of Variables

	I ouncai Instabili	y invesiment behaviour in i akisu	in	15
Trade Openness	ТО	The combined value of exports imports as the percentage of GDP	% of GDP	WDI
Inflation	INF	The annual change in the weighted average price of consumer goods (CPI inflation).	Annual %	WDI
Real GDP	RGDP	It is the market worth of the products that a nation has created over the specified period.	Million Rupees	SBP
Interest Rate	IR	It is the amount paid by the borrower on the borrowing of money. It is given by the money market rate.	Annual %	IFS
Political Instability	P.Inst	It is defined as the ability to conduct the declared programs.	0-12 Low to high political stability	ICRG
Interest rate differential	IRD	Interest rate disparity between the home country the US (money market rate)	-	IFS

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### 3.4. Methodology

## 3.4.1. Zivot and Andrews Unit Root Test

Conventional unit root tests have the drawback of not accounting for the structural break. Perron demonstrated that when the stationary alternative is true a structural break is disregarded, it becomes harder to reject a unit root. He accomplished this by presuming that the break's timing is an external component. In their version of Perron's original test, Zivot Andrews assume that they are unaware of the exact time the breakpoint occurs. Zivot Andrews test for a unit root using three models by considering structural break: Equ. 1, which permits a single adjustment to the series' level; Equ. 2, which enables a one-time change to the trend function's slope; as well as Equ. 3, which incorporates both one-time variations in the level slope of the trend function. Therefore, Zivot Andrews test for a unit root in contrast to the alternative of a single structural break using the subsequent regression equations.

$$\Delta Z_t = c_0 + \lambda Z_{t-1} + \delta t + \gamma D U_t + \sum_{k=1}^j d_k \Delta Z_{t-k} + \eta_t \qquad \dots (3)$$

$$\Delta Z_t = c_0 + \lambda Z_{t-1} + \delta t + \phi DT_t + \sum_{k=1}^J d_k \Delta Z_{t-k} + \eta_t \qquad \dots (4)$$

$$\Delta Z_t = c_0 + \lambda Z_{t-1} + \delta t + \phi DT_t + \gamma DU_t + \sum_{k=1}^J d_k \Delta Z_{t-k} + \eta_t \dots (5)$$

Where  $DT_t$  is the relevant trend shift variable DUt is an indicator dummy variable for a mean shift occurring at each potential break-date (TB).

#### 3.4.2. Novel Dynamic ARDL Simulation

ARDL, developed by Pesaran et al. (2001), other cointegration frameworks that can only estimate analyse the short- long-run correlations between variables have been widely employed in previous research. Jordan Philips (2018) recently created a novel dynamic ARDL simulation model to overcome the issues with the traditional ARDL technique. This recently developed framework can simulate, produce graphs of variable fluctuations over time evaluate interactions in the short long term. The capacity to anticipate, simulate visualize the anticipated adjustment on a dependent variable by altering one regressor ceteris paribus is a significant benefit of this approach (Khan et al., 2022). The novel dynamic ARDL Simulations are useful for testing cointegration, long short-run equilibrium relationships in both levels' differences. It is an enhanced effective time series approach for policy formulation. It examines the dynamic relationship between variables. It also provides a causal analysis. It can be used to determine if variations in investment levels are the cause or the result of political instability. It is also used for policy evaluation analysis. We can evaluate the likely effects of policy changes by simulating various policy scenarios. It can help decision-makers develop sensible policies make wise choices to encourage investment. Such scenario testing helps to educate investment strategies by illuminating the possible dangers possibilities associated with political instability. The following illustrates how the novel dynamic ARDL simulation model works, following Udeagha Ngepah (2021).

Dynamic ARDL representation of equation 1 is given blwo.

$$\Delta FDI_{t} = \upsilon_{0} + \omega_{0}FDI_{(t-1)} + \gamma_{1}P.Inst_{(t-1)} + \gamma_{2}TO_{(t-1)} + \gamma_{3}RGDP_{(t-1)} + \gamma_{4}IRD_{(t-1)} + \gamma_{5}INF_{(t-1)} + \phi_{1}\Delta P.Inst_{t} + \phi_{2}\Delta TO_{t} + \phi_{3}\Delta RGDP_{t} + \phi_{4}\Delta IRD_{t} + \phi_{5}\Delta INF_{t} + \upsilon_{1t} \qquad \dots (6)$$

In the equation above,  $\omega_0$  refers to the error correction term,  $\gamma_1$  through  $\gamma_6$  are long-run estimations, while  $\phi_1$  through  $\phi_6$  are short-run regressors, respectively. Equation (v), which is an ARDL dynamic equation, is analogous.

$$\Delta PI_{t} = \tau_{0} + \pi_{0}PI_{(t-1)} + \theta_{1}P.Inst_{(t-1)} + \theta_{2}TO_{(t-1)} + \theta_{3}RGDP_{(t-1)} + \theta_{4}IR_{(t-1)} + \theta_{5}INF_{(t-1)} + \chi_{1}\Delta P.Inst_{t} + \chi_{2}\Delta TO_{t} + \chi_{3}\Delta RGDP_{t} + \chi_{4}\Delta IR_{t} + \chi_{5}\Delta INF_{t} + \omega_{1t} \dots (7)$$

Similar to the previous equation, this one also uses the symbols  $\pi_0$  to represent the error correction term,  $\theta_1 - \theta_6$  to designate long-run estimations,  $\chi_1 - \chi_6$  to denote short-run regressors.

First, the above equation is estimated by choosing the appropriate lag length after that bounds test is performed. The alternative is used to investigate if there is a long-term link, which is the null hypothesis. In this investigation, the Krippganz Schneider (2019) critical values are utilized. If the upper bound of the F statistics critical value is exceeded, the null hypothesis is rejected. Next, we move on to the estimates for the long- short-term.

#### 4. **RESULTS AND DISCUSSIONS**

This section contains a discussion of the empirical findings. To check that the data are normal, we first present the descriptive analysis findings. The results of the correlation matrix are discussed to avoid multicollinearity. The stationarity of data is discussed based on the results of the Zivot rews unit root test. The impact on foreign domestic investment by political instability is discussed using dynamic ARDL findings.

### 4.1. Descriptive Analysis

The first important step in conducting statistical analyses is descriptive analysis. The typos outliers in the data are detected, data distribution is visualized using descriptive analysis. To conduct further statistical analysis, it is crucial to identify the descriptive analysis.

The average of foreign direct investment is 1.564365 with a standard deviation of 0.768754, the average of private investment is 10.0933 the average of political instability is 7.004167 with a standard deviation of 2.277328. 32.7926 is the average value of trade openness its standard deviation is 3.8495. The mean values of RGDP, interest rate, inflation rate is 119661.4, 8.778667, 8.3827 with standard deviations of 54169.59, 2.716096, 4.0905, respectively. Data symmetry is measured by skewness. The results of the variables' skewness (lack of symmetry) indicate that all variables are positively skewed but political instability, interest rate, trade openness are negatively skewed. For normal univariate asymmetry, its value must lie between -2 to +2 (George amp; Mallery, 2010; Trochim Donnelly, 2006). The kurtosis is used to assess if the data are flat or peaks when compared to the star's distribution. Skewness kurtoses are used collectively to check that rom variables follow a normal distribution. Jarque-Bera (Prob) also indicates that the distribution of data is normal.

Table 2.	Summary	Statistics
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Variables	FDI	PI	P.Inst	RGDP	ТО	IR	IRD	INF
Mean	1.564365	10.09333	7.004167	119661.4	32.79267	8.778667	5.87533	8.382760
Median	1.493256	9.850000	6.750000	113409.2	32.90500	8.850000	5.37500	8.360542
Std. Dev.	0.768756	1.567324	2.277828	54169.59	3.849560	2.716096	3.38175	4.090564
Skewness	0.406908	0.397193	-0.11395	0.205880	-0.261138	-0.621933	0.26239	0.637313
Kurtosis	2.393104	2.885597	2.065715	1.659730	2.202276	2.922404	2.36007	3.524945
Jarque-Bera (Prob)	0.525116	0.668590	0.561007	0.292682	0.566538	0.378793	0.65176	0.304937

# Table 3. Zivot Andrews Unit Root Tests with Structural Breaks

		Level			First Diff.		Decision
Variables	Const.	Const. Trend	Break	Const.	Const. Trend	Break	
FDI	-3.68	-3.97	1998	-5.93*	-6.15*	2017	I(1)
PI	-3.79	-3.84	2007	-7.38*	-8.36*	2002	I(1)
P.Inst	-3.45	-4.41	1993	-7.59*	-8.47*	2010	I(1)
ТО	-4.53	-4.62	2000	-8.65*	-8.24*	2005	I(1)
RGDP	-4.70*	-4.89*	2008	-7.83*	-7.92*	2008	I(0)
IR	-3.97	-3.99	2002	-7.53*	-8.01*	2005	I(1)
IRD	-4.49	-5.04	2008	-5.42*	-6.12*	2012	I(1)
INF	-5.30*	-5.56*	2015	-7.94*	-8.32*	2012	I(0)

Note: \* shows Zivot-Andrew's test statistic at 5 % critical level.

## 4.2. Unit Root Test Results

We used the Zivot Andrews unit root test to examine the variables' order of integration. Table 3 shows the results of the unit root test suggests that all the variables are stationary at the first difference except RGDP inflation which are stationary at the level in the presence of a structural break.

# 4.3. Correlation Matrix

The linear dependence between independent variables is investigated using bivariate correlation of variables. All the variables in Table 4 have a correlation coefficient of less than 0.8. As a rule, the correlation matrix results show that our model does not have a multicollinearity issue.

Table 4. Bivariate Correlation						
Variables	P.Inst	ТО	RGDP	IR	INF	IRD
P.Inst	1.000000					
ТО	-0.302434	1.000000				
RGDP	0.141939	-0.437575	1.000000			
IR	-0.339130	0.333140	-0.039076	1.000000		
INF	-0.269822	0.566926	-0.183325	0.646130	1.000000	
IRD	-0.259473	-0.097655	0.488822	0.719442	0.480665	1.000000

Table 4. Bivariate Correlation

### 4.4. Co-integration Analysis

### 4.4.1. Lag Length Selection

In the first step of the DARDL, we determine the lag length for the first difference variables. Table 5 displays the findings of numerous tests conducted to determine the optimal lag. This study uses the Schwarz criterion (SC) for lag selection because SC yields the lowest value at lag one in comparison to other techniques, lag 1 is appropriate for our model.

			<u> </u>			
Logo		Equation I			Equation II	
Lags	AIC	SC	HQ	AIC	SC	HQ
0	-10.3491	-9.26901	-10.5829	-9.2763	-8.3629	-11.2903
1	-18.2762	-17.4821*	-19.3972*	-16.4382	-15.2681*	-16.4726*
2	-18.3581	-13.6803	-18.4716	-16.4731	-15.1742	-16.2961
3	-19.6903	-13.2491	-18.39825	-15.2869*	-14.5803	-15.3703
4	-19.0538*	-12.7206	-18.02627	15.0572	-14.8347	-15.0261

Table 5. Lag Length Selection

Note: The lag order chosen by the criterion is indicated by an Asterisk.

#### 4.4.2. ARDL Bounds Testing

To determine the long-run association between variables we perform the bound test. The null hypothesis of no cointegration is contrasted with the alternative. The outcome of the cointegration test using the Kripfganz Schneider (2018) recommended surface-response regression method is shown in Table 6. The F- t-statistics exceed the upper-bound critical values at various levels of significance, which leads us to reject the null hypothesis that there is no level of association. Our empirical findings thus indicate cointegration between the variables under consideration.

	1 a	0.10	ANDL	Dound	Table 0. ARDL bounds Test Analysis							
Test	Value	10	%	5	%	1	%	Prob.	Values			
Statistics		crit	ical	crit	ical	crit	ical					
		val	lue	va	lue	va	lue					
Equation I		I(0)	I(1)	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)			
F Statistics	12.6921	3.45	4.93	4.21	5.60	6.25	7.18	0.014**	0.000***			
T Statistics	-5.2083	2.67	3.05	3.58	4.16	5.22	6.39	0.021**	0.000***			
Equation II		I(0)	I(1)	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)			
F Statistics	13.8442	3.97	5.06	4.83	5.79	6.11	7.03	0.043**	0.001***			
T Statistics	-7.8715	2.71	3.45	3.62	4.35	4.99	5.17	0.036**	0.000***			

# Table 6. ARDL Bounds Test Analysis

Note: Probability values from Kripfganz Schneider (2018). \*\*\* indicate significance at 1% however \*\* at 5% level.

We have also used the Maki cointegration test to evaluate the robustness. Table 7 supports the preceding surface-response regression findings. The findings of the Maki cointegration test, which take structural breaks into account, demonstrate that the variables are cointegrated.

	Ec	Juation I	Equation II		
Model	Test Stats.	Structural Break	Test Stats.	Structural Break	
Level Shifts with Trend	-8.371*	1992-2003-2014	-9.428	1993-2004-2016	
<b>Regime Shifts</b>	-13.503***	1993-2001-2011	-15.729	1994-2004-2017	
Regime Shifts with Trend	-10.582***	1996-2007-2015	-14.072	1992-2005-2014	

Table 7. Maki Cointegration (With Structural Breaks)

Note: 1% 10% significance levels are indicated, respectively, by \*\*\* \*.

### 4.4.3. Outcomes of Dynamic ARDL

We conducted a bounds test to ascertain the long-term link between the variables after examining the order of integration selecting the proper lag length for each model. Long-run short-run results are acquired in the following step are shown in Table 8 below.

Deper	ndent Variab	le: FDI	De	Dependent Variable: PI		
Variable	Coefficient	t-Statistic	Variable	Coefficient	t-Statistic	
P.Inst	-0.182294	-2.839251**	P.Inst	-0.376972	-3.017032***	
ТО	0.145297	2.523636**	ТО	0.317001	2.467238**	
INF	0.033672	0.550090	INF	0.026111	0.244350	
RGDP	0.491185	1.894841*	RGDP	1.065791	1.733342*	
IRD	0.161977	2.367108**	IR	-0.313222	-3.055608***	
С	-3.549086	-1.168051	С	-6.521983	-0.925048	
D(P.Inst)	0.223668	2.060243**	D(P.Inst)	0.362718	1.983762	
D(INF)	-0.029079	-0.749918	D(INF)	0.124619	2.946053**	
D(TO)	0.030798	0.616230	D(TO)	0.101633	2.042579**	
D(RGDP)	0.082380	1.774622*	D(RGDP)	0.531845	2.719962**	
D(IRD)	0.020549	1.038622	D(IR)	-0.298470	-4.643613***	
ECT (-1)	-0.257734	-6.979075***	ECT (-1)	-0.532730	-7.642391***	
$\mathbb{R}^2$	0.797145		$\mathbb{R}^2$	0.880735		
Adj. R <sup>2</sup>	0.722410		Adj. R <sup>2</sup>	0.817595		
Simulations	1000		Simulations	1000		
ROOT MSE	0.638		ROOT MSE	0.162		

Table 8. Dynamic ARDL Simulations Analysis

Note: \*\*\*, \*\*, \* indicates the significance at the 1%, 5%, 10% levels of significance, respectively.

### 4.5. Long-run Results and Discussion

The findings show that both domestic foreign investment decreases when political instability increases. FDI inflows are discouraged by political instability because it is a long-term investment. The performance of foreign investment is negatively affected by a volatile environment change in policies; this may happen more frequently due to political instability. The countries which do not reverse their policy are more attractive to foreign investors. Previous research backs up the findings of the study. Schneider Frey (1985) proposed a politico-economic model that considers both economic political causes shows that political instability affects foreign direct investment inflows considerably. Our findings are likewise Asiedu (2006) for Africa, Akhtar (2000), Aqeel et al. (2004), Hakro Ghumro (2011), Shah et al. (2016), Yousaf et al. (2008) Bano et al. (2019) for Pakistan, Asiedu (2002) for developing countries, Bende-Nabende (2002) for Sub Saharan Africa, Busse Hefeker (2007) for 83 developing countries, Brada et al. (2006) for Central Europe the Balkans, Madr Kouba (2015) for emerging countries, Musibah (2017) for Middle East North Africa, Nazeer Masih (2017) for Malaysia Thompson Poon (2000) for ASEAN.

As for as domestic investment is concerned firms always analyse future expectations about the capital market economy before taking investment decisions. The level of investment falls when the risk of loss of capital rise owing to political instability. Due to uncertainty, foreign domestic investors do not attract investment in an unstable country. Our findings are comparable to Anwar (2021), Bhutto et al. (2019), Ali et al. (2013) for Pakistan, Alesina Perotti (1996) for 71 countries, Baker et al. (2019) for 14 emerging nations, Busari Amaghionyeodiwe, (2007) for Nigeria, Feng (2001) for developing countries Zouhaier KEFI (2012) for Middle East North Africa.

Trade openness FDI are positively related. As the openness ratio rises, the country will attract more investors, with the assumption that the investments will be concentrated in the tradable industries. The FDI flow decreases due to the strict bureaucratic structure, which is a typical scenario of a closed trade regime. The regime with the concept of open trade attracts more firms to relocate to their countries. More foreign direct investment is made in nations with fewer export restrictions. International firms must use FDI to enter local markets when trade barriers are high, but for export-oriented firms, more openness the accessibility of less expensive local resources might attract more FDI (Jordan, 2004). Different literature findings are supported, such as Lane Melesi-Ferretti's (2001) finding that in emerging nations, FDI is influenced positively by openness. Ponce (2006) has found that trade, in other words, free trade agreements affecting openness positively contribute to FDI. Private investment is positively impacted by trade openness which is shown by the positive coefficient of trade openness. The investment production in the country can be increased by encouraging producers by simplifying the procedures of exports imports. Boachie et al. (2020) found that trade openness provides significant long- short-term advantages in the private sector. Trade openness has long been seen as a critical component in economic growth with an increase in either public or private investment. Our findings are in line with economic literature [Akhtar (2000); Ageel et al. (2004); Asiedu (2002); Busse Hefeker (2007); Madr Kouba (2015); Thompson Poon (2000); Baker et al. (2019); Feng (2001); Alesina and Perotti (1996); Khan (2008); King Levine (1993)].

Higher real GDP attracts more foreign as well as domestic investment. An approximate indicator of a nation's economic health is its income per capita. Investors perceive understand growth in real GDP as an indication that a country's economy is performing well. This is essential for investors because it might be viewed as a sign of these residents' purchasing power, which will drive them to favour one country over another. Previous research, such as Asiedu (2006) Schneider Frey (1985) assertion that large markets boost FDI. According to Jordaan (2004), FDI will go to larger growing economies, higher purchasing power, opportunities for businesses to earn a higher return on their investments. When real GDP increases, it attracts private investors eventually leads to large private investments, the findings are in line with (Feng, 2001), (Tun Wai Wong, 1982), (Blejer Khan, 1984).

The coefficient of interest rate differential foreign direct investment has a positive relationship. Investment shifts from low-interest rate to high-interest rate countries by the investors as it provides an incentive to foreign investors seeking higher returns, hence a high-interest rate differential can lead to increase FDI. The difference in interest rates has frequently been seen as a key factor influencing capital flows to emerging market economies. The advanced nations' loose monetary policies the quest for yield have encouraged significant capital inflows to emerging economies have been a significant push factor. Chakrabarti (2001) identified a strong connection between the interest rate differential FDI in India. According to Hannan (2017), interest rate differentials usually have a positive influence on net capital inflows. According to Mody, Taylor, Kim (2001), capital flows to the majority of emerging economies were significantly impacted by fluctuations in US interest rates. It has been discovered that normal capital flows respond to changes in the interest rate differential by Fedderke, J.W., W. Liu (2002). FDI interest rate differential was found to be positively related by Jaffri Ahmad (2010) Chakrabarti (2001). Contrary to these results Taylor Sarno (1997) found that Latin American country's interest rates are a more significant determinant of portfolio flows, in comparison to Asian countries. According to Verma Prakash (2011), the majority of FDI inflows are long-term in nature not very sensitive to interest rates.

Private investment is negatively impacted by interest rates, as indicated by the interest rate's negative coefficient. The private investment decreases due to high-interest rates which increases the capital's cost. Kennedy (2021) Green Villanueva (1991) concluded that private investment is negatively impacted by interest rates although there is very less flexibility.

### 4.6. Short Run Results

Foreign direct investment is the dependent variable in the first equation, the error correction term is negative (-0.2577), representing that because of a shock disequilibrium in the previous period is corrected by 25% per annum in the present period. In the short run, the FDI is positively impacted by political instability due to rent-seeking activities. In contrast to the long term, the difference in interest rates becomes negligible. The R<sup>2</sup> shows the explained variations by the model out of the total variations. The adjusted R<sup>2</sup> value of 0.722410 demonstrates that around 72 % of variations are explainable by the model after considering the degree of freedom. Private investment is the dependent variable in the second equation, the feedback coefficient is -0.53, implying that around 0.53 percent of the previous year's disequilibrium is corrected in the current year. Short-term trade openness, inflation, real GDP all are positively related to private investment, but the interest rate is inversely related. The R-square shows the explained variations by the model out of the total variations. The value of adjusted  $R^2 0.880735$  shows that a good fit is indicated when the independent variable explains around 88 % of variations by taking care of the degree of freedom.

### 4.7. Diagnostic Tests

To test the reliability of the model the study employs several diagnostic tests, the results of which are displayed in Table 7. Our model may be well-fitted, given that it passed all diagnostic tests. The null hypothesis is contrasted with the alternative, which claims that serial correlation, heteroscedasticity, functional form misspecification does not exist. We are unable to disprove the null hypothesis in each case. There are no issues with serial correlation in the model. according to the Breusch Godfrey LM test. The Breusch-Pagan-Godfrey test results show that there is no heteroscedasticity. The results of the Ramsey RESET test show that the model is not incorrectly specified.

Table 7. Diagnostic Statistics							
Diagnostic tests	$\chi^2 P$ values	$\chi^2 P$ values	Results				
statistics	equation I	equation II					
Breusch Godfrey test	0.4150	0.6123	Serial correlation does not exist.				
B-P-Godfrey test	0.3122	0.1728	No heteroscedasticity exists.				
Ramsey RESET test	0.4924	0.1529	The model is specified correctly				

Table 7. Diagnostic Statistics

## 4.8. Impulse Response Plots

The DARDL model shows predicts the subsequent value of a regressed variable in response to a regressor ceteris paribus using impulse response functions. In this study, we project how local foreign investments will alter in response to a 10% decline in political stability an increase in political stability. Confidence intervals of 75%, 90%, 95% are depicted by the deep blue to light blue lines, respectively, while the dots reflect the expected value. Each figure is described below.



Figure 1. The FDI Political Stability Impulse Response Plot



Figure 2. The Domestic Investment Stability Impulse Response Plot

The connection between FDI political stability is seen in Fig. 1. The FDI rises for every 10% improvement in political stability whereas every ten percent decline in political stability reduces the FDI. The association between political stability domestic investment is seen in Fig. 2. Impulse response plot shows that each ten-percent upsurge in political stability increases the domestic investment of the private sector whereas every ten-percent decline in political stability provides the reverse finding.

## 5. CONCLUSION AND POLICY RECOMMENDATIONS

A recap of the previous part is given in this section specifies the objectives of the study, data, methodology, description of the variables results, discussion. Finally, we also offer some significant policy recommendations supported by empirical research limitations future research directions.

In Pakistan, the investment climate, both foreign as well as domestic, despite tremendous resources is badly damaged because of political instability. The country's political leadership lacks competency efficiency this is manifested in bad management of the economy country political instability. The current study was carried out in Pakistan between 1990 2019. The two objectives of this study are, first to analyse how foreign direct investment is affected by political instability second to examine how political unrest affects domestic private investment. The study's key contribution is to analyse the dynamic link between political instability investment (domestic as well as foreign) in Pakistan using a novel dynamic ARDL simulation framework. FDI private investment are used as independent variables. Interest rate, interest rate differential, real GDP, trade openness, inflation is all considered control variables. Private investment is represented by the gross capital formation in the private sector FDI is represented by annual percentage inflows. We have measured political instability using ICRG political stability measure. This means that the relationships which have been found (positive) are the inverse of the relationship with which we are concerned. The share in GDP, of the combined value of exports imports, shows trade openness. The country's real GDP measures the size of its market its level of development. The weighted average price change of a basket of products services that people buy demonstrates inflation. The change in the consumer price index has been used as a measure of inflation. Interest rate is indicated by the money market rate at home as well in foreign (US).

To see that there is no normality issue exists in the data, as the first step descriptive statistics is described as part of empirical analysis. For further analysis, we assess the linear dependency between independent variables using the correlation matrix. The findings demonstrate the absence of a linear dependency. The variables integration is ascertained using the structural break unit root test. Additionally, we used a recently developed novel dynamic ARDL simulation analysis. The null hypothesis of no co-integration against the alternatives in both equations is rejected using the bound test. Later, the short long-term outcomes for both equations are shown.

Regarding our first objective first, we describe the long-run results of the dynamic ARDL model. We see the effect of political instability on FDI while income, trade openness, inflation, interest rate differential are our control variables. The findings indicate that FDI political instability are not positively related. When compared to a country with an unstable political climate, a politically stable country attracts greater investment. The case of high political instability forces multinational corporations (MNCs) to move to less risky countries avoid FDI. Trade openness, income, the difference in interest rates among our control variables all favourably impact FDI inflows while inflation remains insignificant in attracting foreign direct investment. The economic activity level of output is positively impacted by higher openness which also creates attraction for foreign investors. A higher real GDP indicates the wellbeing or development level of a country ultimately encourages investors to select that nation over others. A higher interest rate differential provides higher returns to foreign investors, therefore, leading to higher FDI. Political instability boosts the FDI inflows in the short run. Interest rate differential contains its sign over the short term as well. Over the short period, many variables become insignificant. Short-run results show that the adjustment speed is around 25%, which shows that in case of shifting away from the equilibrium, every year, about 25% of FDI has adjusted as the variable advances toward re-establishing equilibrium. According to adjusted  $R^2$ , the model explains 72% of the variations in the FDI after considering the degree of freedom, which is showing a good fit. The non-existence of first-order autocorrelation is shown by the Durbin-Watson statistic.

As for as our second objective is concerned long-run results of the dynamic ARDL demonstrate that political instability negatively affects private investment. A higher political instability lowers the level of investment undertaken because of uncertainty the risk of expropriation. Trade openness income, which serve as our control variables, show a positive association with private investment. The interest rate is inversely related to private investment. Inflation remains insignificant in affecting private investment. In larger markets, investors are encouraged to invest more through trade. A higher Real GDP attracts private investment raise the real cost of capital. Over the short-term trade openness, inflation, real GDP positively contribute to private investment. Interest rate contains its sign over the short period.

### 5.1. Policy Recommendations

We conclude based on our empirical findings that political instability harms foreign as well as domestic private investment. The government must create a climate that is favourable to both domestic foreign investments. Investor trust will be increased via stronger governance, higher institutional standards, especially political stability. In Pakistan, the irregularity the instability of the political system is most detrimental to economic progress. Long-term economic policies are required for increased economic growth. The government should reduce political uncertainty promote foreign as well as domestic investment for Pakistan's economic prosperity. The government of Pakistan should apply democratic principles strengthen political institutions to promote political stability. GDP is an important predictor of FDI since growing GDP indicates greater market possibilities for offshore investors seeking higher returns. As a result, efforts should be undertaken to boost GDP growth rates to attract international investment. Finally, higher incentives should be offered to foreign investors to encourage FDI inflows into Pakistan. Furthermore, the government should assure effective service delivery greater productivity of public investment.

The present study concentrates on the time series analysis merely. For improved outcomes, in the future, we can include a panel of developing developed nations for better results a comparison between both. Moreover, we can also use some other measures of political instability used in the empirical literature.

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