Analyzing the Impact of Political Stability on FDI Inflows in SAARC Nations : A Panel ARDL Cointegration Approach

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Abstract

The present research work analyzed the influence of political stability on foreign direct investments (FDI) for the South Asian Association for Regional Cooperation (SAARC) nations. The study analyzed a panel of four countries, namely India, Bangladesh, Pakistan, and Sri Lanka. The time frame considered for analysis was from 2000 – 2017. The panel auto-regressive distributive lag (ARDL) cointegration methodology was applied to assess FDI inflows' impact on political stability of select SAARC nations. The results of panel ARDL exhibited significant and positive influence of political stability on FDI inflows in the long and short run. Long run causality and joint causality were also established amongst the political stability components and FDI inflows. The study advised SAARC nations to consider desired actions for improving the investment scenario and keep political situation stable in the region. The government, leaders, and policy makers are also advised to pay due consideration to the political stability to keep low investor scepticism and attract more FDIs in the economy.

Keywords : **political stability, FDI inflow, political risk ratings, ICRG, Panel ARDL**

JEL Classification: E6, F3, F4, F5

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Foreign direct investments (FDI) are long-term investments involving ownership and commitment by a domestic entity in the host economy. The positive impacts of FDI on the host nation are countless, which facilitates to enhance progress of an economy (Gupta & Jaiswal, 2017 ; The South African Institute of International Affairs (SAIIA), 2015). The foreign capital contributes in economic development and profitable investments in the country to promote economic growth. FDI has become a key source of income, an increasingly essential element for higher capital flows, helps in transfer of innovative technology, introduction of newer management practices, enhancement of business competition, create jobs, and enhance skills (Reddy, 2016 ; Xaypanya, Rangkakulnuwat, & Paweenawat, 2015). With rise in globalization across the globe over several decades, FDI flows have gained a significant rise. The FDI flows are dependent on interest rates, returns on investment, money supply, exchange rates, wholesale price index (WPI), and political environment of an economy (Chawla & Sharma, 2014). However, an increase in FDI is harmed by fragility in developing economies,

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immoderate political instability, and regional vulnerability (United Nations Conference on Trade and Development (UNCTAD), 2014).

A report published by Multilateral Investment Agency of World Bank in 2013 highlighted that macro-economic factors and political stability remain a primary concern for the global investors. Political stability risk is the investment risk that may arise from low institutional quality or instability in political background of an economy (Hayakawa, Kimura, & Lee, 2013). Political stability risk tends to pose negative effects on FDI inflow because it raises the economic environment fluctuations and reduces incentives of foreign investors (Khan & Akbar, 2013). Political instability of the host economy concerns investors as it is most likely to hamper the returns on investments.

The developed economies aim to find efficient labour, cheaper resources, stability in the government, and lower political risk levels (Asiedu & Lien, 2011 ; Du, Lu, & Tao, 2012). Australia, Germany, Switzerland, the United States, United Kingdom, Netherlands, South Africa, and South Korea have made investments through FDI in emerging nations, such as Bangladesh, India, Pakistan, Nepal, Ghana, Nigeria, Indonesia, Iran, and few African and Latin American economies (UNCTAD, 2017 ; World Bank, 2017). The developing economies are mostly deficit of savings and require external finance for funding internal investment projects (Meyer & Habanabakize, 2018). There are many determinants such as market size (Aziz & Mishra, 2016), cost competitiveness (Stankov, Damnjanović, & Roganović, 2018), and macro-economic factors (Khan & Akbar, 2013) that contribute to the FDI inflows. However, investors are increasingly becoming concerned towards current turbulent political environment and the host country's political stability (Baek & Qian, 2011).

Political stability is linked to various components like stability of the government, internal conflicts, external conflicts, investment profile, and many other components. Likewise, safeguarding law and order, curtailing levels of corruption, upholding government stability, ensuring no conflicts, and stabilizing investment profile are significant determinants to keep an economy politically stable. This stability ensures good governance and helps attract foreign capital flows. We, therefore, aim to empirically examine the connection between varied factors of stability in politics and FDI inflows in select SAARC nations.

FDI has been a subject of interest since globalization in many economies, including the SAARC nations. Before 1990s, FDI inflows in South Asia were very low because of the reluctance of member countries for embracing free trade and investment policies (Shah, 2011). The industries of SAARC countries had to enhance their productive capacity for competing with global players. This situation forced these countries to bring economic reforms. Removal of quantitative barriers opened SAARC economies to international market competition that progressed towards ambitious environment in industrial and service divisions (Behera & Parida, 2011). FDI exhibits significant part in the economic advancement of select SAARC nations (Shiekh & Mir, 2016). Post the reforms in 1990, a huge amount of FDI inflows were received by India (Ekanayake & Perera, 2015). These economic reforms also resulted in modifications in foreign policies and investment patterns in these countries (Shah, 2011). FDI gained significance in SAARC countries post liberalization and these investments brought growth in industries and economies (Pradhan, 2011). However, the FDI flow in the SAARC countries is quite low in comparison with South-East Asia and the rest of the world (Shah & Faiz, 2015). In 1990, amongst the developing economies, inflow of FDI in SAARC nations was 1.63%, which upgraded to 7.86% in 2013 (UNCTAD, 2013). In 2013, the FDI share of SAARC countries across Asia was 7.92%, and across the world, it was 2.89%. This share gradually increased to 3.5% ($54 billion) across the world till 2018 (UNCTAD, 2019).

The SAARC countries have a unique feature of similar cultural, social, economic, and geopolitical background (Iqbal, Hassan, Peng, & Khurshaid, 2019). In 2017, the gross domestic product of SAARC nations totalled US $2.6 trillion (Abbas, Kousar, Razzaq, Saeed, Alam, & Mahmood et al., 2018). Amongst the vast literature on determinants impacting FDI in different economies (Khan & Akbar, 2013), SAARC countries remain unexplored.

There exists research gap in literature that analyzes the influence of political instability on the FDI inflows in select SAARC nations. Though the South Asian countries have huge potential for attracting FDI, many political problems crop as hindrance (Kuznetsova & Kuznetsova, 2015 ; Vadlamannati, Tamazian, & Irala, 2009). There is a dearth of research exploring political risk and FDI flow for the SAARC region. Only few studies like Obino (2009) and Vadlamannati et al. (2009) have come up on similar lines, but analyzing the SAARC countries together in a panel framework is novel.

Our research attempts to bridge the identified gaps by analyzing determinants that affect SAARC nations for attracting FDI inflows (Obino, 2009 ; Shah & Faiz, 2015 ; Shah, 2018 ; Vadlamannati et al., 2009). The paper assesses the outcome of political stability on FDI inflow though panel ARDL cointegration approach. The panel ARDL cointegration technique is a perfect solution for determining long - and short run relationship amongst the determinants with mixed-order stationarity series.

The empirical results highlight that political stability significantly influences FDI inflows in select SAARC nations. The results highlight that political stability significantly impacts the FDI inflows both in long run and short run. The results show cointegration and long run causality amongst the selected variables. The established relationship implies that governments, leaders, and policy makers need to pay due consideration to the political risk components which shall further reduce investors' skepticism and highlight true FDI hosting potential of the economies. The present work will be of immense help for policy builders of select SAARC nations in planning FDI policies that shall enhance economic growth and economic development of these nations.

Literature Review

FDI has earned fame due to economic globalization across the globe. Numerous research studies have been carried on for analyzing FDI inflows and its determinants (Azam & Ahmed, 2015 ; Abdel-Latif & Ouattara, 2019 ; Nasir, 2016 ; Nelson, Sooreea, & Gokcek, 2016). Very few studies provide significance of political risk and its components on inflows of FDI (Goswami & Haider, 2014). Numerous determinants have been identified that impact FDI inflows in the host nation (Economou, Hassapis, Philippas, & Tsionas, 2017 ; Kariuki, 2015 ; Stankov et al., 2018). Among them, market size (Nasir, 2016), human capital (Azam & Ahmed, 2015 ; Salike, 2016), political situation (Abdel-Latif & Ouattara, 2019 ; Nelson et al., 2016), and exchange rate (Li, Liu, & Jiang, 2015) have been the foremost. Many studies have highlighted political stability as a crucial determinant for bringing FDI inflows into a country (Ginevičius & Šimelytė, 2011 ; Masron & Naseem, 2017 ; Mijiyawa, 2015). Ramcharran (1999) examined the relationship amongst FDI flows, political risk, and economic risks for 26 different nations. Their results indicated significant influence of both political risk and economic risk on FDI flows.

Goswami and Haider (2014) conducted a research on 146 countries and found that government failure, partner country's attitude towards host country, and cultural conflicts were also accountable for deterring inflows of FDI. Arbatli (2011) listed various pull-factors for FDI inflows like domestic economy's size, educational levels, its locality, level of its political stability, economic growth, export development, inflation, exchange rate, tax rates, tariffs, and capital account restrictions. Hayakawa et al. (2013) analyzed the impact of financial risk and political risk components on FDI flows by applying Generalized Method of Moments (GMM) methodology on a panel of 90 developing nations. The analysis showed political risk determinants namely, levels of corruption, religious strains, stability of government, and ethnic tensions were negatively correlated to FDI inflows. Amongst all factors covered under financial risk category, only exchange rate stability was observed to be a significant and positively cointegrated factor for attracting FDIs.

Hayakawa et al. (2013) extended the work and highlighted negative effect of political risk on the FDI inflows. The authors found level of corruption, internal conflicts, quality of bureaucracy, and military in politics were

inversely linked with FDI inflows. The study also specified that lower financial risk did not add in FDI inflows in the developing countries. Rafat and Farahani (2019) examined the relationship between the FDI inflows and political risk levels defined by The International Country Risk Guide (ICRG). The analysis showed that external conflict, socioeconomic conditions, ethnic tensions, profile of investment, and religious tensions were very important determinants of inflows of FDI in Iran.

Asif and Majid (2015) found that government stability, investment profile, and gross domestic product per capita attracted FDI in Pakistan. The authors also found that depreciation in real exchange rate led to adverse FDI inflows. Ren, Karim, and Zaidi (2012) examined the role of institutional variables on inflows of FDIs in the select Middle East and North Africa (MENA) countries. The empirical findings revealed that profile of investment, internal conflict, and bureaucracy positively and significantly influenced the inflows of FDI. This study implied that for attracting investments from the foreigners, the policy builders in MENA nations need to adopt FDI-amiable policies as well as maintain and develop the quality of domestic institutions. Asif, Majid, Yasir, and Ali (2018) specified that higher stability in the government and lower external conflicts enhanced inflows in FDI in the longer run and investment profile encouraged FDI in the shorter run. The study also specified that poor law and order situations and higher internal conflicts discouraged FDI flows in the long run. The authors also suggested government and its related institutions to focus in minimization of political risk for higher FDI flows into Pakistan from developed nations.

Meyer and Habanabakize (2018) examined and found significant influence of gross domestic product (GDP) and political risks on FDI inflows in South Africa. The study highlighted that lower the political risk level, bigger the FDI inflows. Based on the findings, the authors suggested that the South African government should aim at lower levels of political risk for economic growth and welfare. Nazeer and Masih (2017) revealed that a long run and short run connection existed in Malaysia amongst instability in politics, FDI influx, and economic growth. The growth of the economy was found as a substantial driver for instability in politics and the FDI flows. The authors provided policy implications that the government should take to push growth in the economy to upgrade political stability and improve FDI.

All these studies targeted varied set of nations for assessing the effect of various components of political risk on FDI flows. Srinivasan (2011) is amongst the very few studies that examined SAARC countries and found significant positive influence of political stability on inflows in FDI. Similarly, Shah and Afridi (2015) also assessed South Asian countries and found that stability in politics significantly and positively impacted the FDI inflows. Thus, the present study advances to assess the impact of different components of political risk on the inflows in FDI in select SAARC nations for a long- and short run period. The study also aims to find cointegration and causality amongst the political risk rating components and FDI inflows.

Data and Research Methodology

Data and Variables

The present work is a quantitative research study. For examining the influence of political stability on inflows in FDI, a data set in its panel form is constructed. Yearly dataset, ranging from 2000 – 2017 were collected. This particular time frame is selected because it had the maximum observations with no missing data for these years. There are eight SAARC countries in total. Four out of eight countries are selected for the assessment, including India, Bangladesh, Pakistan, and Sri Lanka. Four selected nations have been opted for analysis due to their data availability and the other nations had to be dropped due to data unavailability. For analyzing political stability, various components of political risk ratings have been taken into consideration. There are two main datasets

involved in the analysis: Political Risk Ratings (PRR) data and inflows in FDI. Both are extracted from two different sources. The ratings were obtained from The International Country Risk Guide (ICRG) which is constructed by Political Risk Services (PRS) Group. [1]

This research study considers the following five PRR components, namely investment profile, government stability, internal conflict, external conflict, and military in politics. The component of stability in government assesses the capacity of the government to accomplish its programs and remain in position. The PRR component of profile of investment assesses factors impacting investment related risks. Internal conflict assesses level of violence in politics in the nation and its probable effect on governance. Highest order rating is assigned to a nation with zero civil opposition towards the government and in a country with no government involvement in arbitrary violence. Lowest order rating is assigned to a country with an on-going domestic war. External conflict assesses risk to the government from actions like restrictions in trade activities, disputes related to territories, pending sanctions, or fierce external pressures like conflicts across the borders till total war scenario. These collisions can influence foreign businesses adversely like operational restrictions in trading, constraints in investment approvals, distortions in allocating economic resources, or modifications in arrangement of society. Lastly, the involvement of military in politics is regarded as democratic accountability's diminution. Low ratings intend a higher participation of military in politics and higher political risk.

The data of net inflows from foreign direct investments (dependent variable) were obtained through the World Bank online data source. The FDI implies direct investments in the equity flows of an economy. Direct investment means cross-border investments linked to a resident in a nation, imposing influence and management control of business which is resident in another economy. On the basis of political risk ratings, the study is expected to show a significant and positive relation amongst PRR and FDI inflows.

Research Methodology

This research work plans to analyze the impact of political stability on the influx in FDI in select SAARC nations. The Panel Autoregressive Distributed Lag (ARDL) approach is chosen to analyze the same. It is best suited for such panel datasets because this model encompasses advantages for variables to be stationary at $I(0)$ or $I(1)$. The panel ARDL also works with mixed ordered stationarity, which infers variables can be a combination of $I(0)$ and $I(1)$ stationarity. However, this technique does not work with the variables with $I(2)$ stationarity. Thus, before the application of Panel ARDL approach to co-integration, we need to conduct panel unit root test. The unit root test for the panel format was developed by Levin, Lin, and Chu (2002). The results of Levin-Lin and Chu were taken into consideration and all $I(2)$ variables, if any, were dropped.

Next, the panel ARDL technique is applied, derived from the famous cointegration technique model of ARDL, also known as bounds test for cointegration. The ARDL technique is applied on time series data. Nkoro and Uko (2016) highlighted that in econometrics, research studies conducted by Engle and Granger (1987) ; Granger (1981) ; Johansen and Juselius (1990) ; Pesaran and Shin (1999) ; and Pesaran, Shin, and Smith (2001) have gained laurels for giving various cointegration techniques. Pesaran and Shin (1999) is highlighted for its contribution of Autoregressive Distributed Lag (ARDL) technique. These cointegration models have achieved popularity as a

[1] PRS Group, 2005: It provides information on political, financial, and economic risk ratings. Lower points intend a higher level of risk, and higher points infer lower level of risk. The PRR comprises of 12 components of risk that pertain to political risk and political institutions. The aim of PRR is assessment of stability in politics of the nations assessed by ICRG. This is achieved through assigning the risk points to a group of factors called the political risk determinants. These 12 PRR components are : Government stability, socioeconomic conditions, investment profile, internal conflict, external conflict, corruption, military in politics, religious tensions, law and order, ethnic tensions, democratic accountability, and bureaucracy quality.

solution for the determination of long run relation amongst the non-stationary variables. Pesaran et al. (2001) earned laurels for their panel ARDL approach. The panel ARDL approach is favourable even for the smaller samples. Panel ARDL methodology also facilitates estimation of long and short run relationships. In this methodology, the long-run relation amongst variables is found through the *f*-statistic, popularly called as the Wald test. A long-run relationship is established if the value of *f*-statistic exceeds critical value. These techniques reparametrize them into the error correction model (ECM). The ECM results provide a short-run relation between the underlying factors.

Panel ARDL's simplified representation can be highlighted as follows :

FDI = f (Political Risk Ratings)

The following model specification is framed to examine the long-run impact of political risk rating components of FDI inflows in the select countries :

FDI = f (Stability of Government, Profile of Investment, Internal and External Conflicts, and Military in Politics)

Pesaran et al. (2001) dispensed two different critical values for cointegration test. The critical value for lower bound presumes cointegration of variable at the level *I*(0), and the upper bound presumes cointegration of variable at the level *I*(1). If computed *f* - statistic value obtained is over and above the upper bound, we do not accept the null hypothesis (H_0). This result implies cointegration amongst variables. If this value of *f*-statistic falls below the lower bound value, in that scenario, we accept the null hypothesis, which implies presence of no cointegration amongst the variables. The value of *f*-statistic may fall between lower and upper bound, and in that case, we conclude the results to be inconclusive (Dube & Zhou, 2013). The Akaike Information Criteria (AIC) and/or Schwartz – Bayesian criteria are considered for optimal lag length selection for each variable.

Equation 1 below describes the panel ARDL cointegration approach in equation format. The equation has two parts. First part brings out the long run influence of stability in politics on inflows in FDI inflows and other half of the equation gives the short run results for the analysis. If betas are equal to zero, then the null hypothesis implies no co-integration.

$$\Delta lnFDI_{it} = \alpha + \sum_{i=0}^{p} \varphi_i \Delta GOVSTB_{i,t-1} + \sum_{i=0}^{p} \delta_i \Delta INVPRO_{i,t-1} + \sum_{i=0}^{p} \gamma_i \Delta EXTCON_{i,t-1} + \sum_{i=0}^{p} \omega_i \Delta INTCON_{i,t-1} \quad (1)$$
$$+ \sum_{i=0}^{p} \rho_i \Delta MILPOL_{i,t-1} + \sum_{i=0}^{p} \beta_1 lnGOVSTB_{i,t-1} + \sum_{i=0}^{p} \beta_2 lnINVPRO_{i,t-1} + \sum_{i=0}^{p} \beta_3 lnEXTCON_{i,t-1}$$
$$+ \sum_{i=0}^{p} \beta_4 lnINTCON_{i,t-1} + \sum_{i=0}^{p} \beta_5 lnMILPOL_{i,t-1} + \mu_{it}$$

In the equation 1, the dependent variable is foreign direct investment represented by short name FDI. The different independent variables belong to one single factor PRR, which includes components defined by ICRG : government stability (GOVSTB), investment profile (INVPRO), external conflict (EXTCON), internal conflict (INTCON), and military in politics (MILPOL). The φ, δ, γ, ω, ρ represent the short run parameters and β_1, β_2, β_3, β_4, β_5 represent the long-run parameters.

Empirical Analysis and Results

The variables and their variation are described in Table 1. This table has a comprehensive description of FDI and select PRR components for a panel of four countries, their observations, mean, median, and respective standard deviation. The table also represents the skewness and kurtosis of the data observed.

Table 1. ***Descriptive Statistics***

VARIABLES	*FDI*	*EXTCON*	*GOVSTB*	*INTCON*	*INVPRO*	*MILPOL*
Mean	1.27	9.30	7.81	6.83	7.19	2.36
Median	1.12	9.00	8.00	7.00	7.50	2.25
Maximum	3.67	12.00	11.00	9.50	9.50	4.00
Minimum	0.10	6.00	5.00	0.00	3.00	0.00
Std. Dev.	0.72	1.21	1.42	1.39	1.25	1.15
Skewness	1.39	0.06	0.04	–1.57	–1.06	–0.13
Kurtosis	5.30	3.36	2.27	9.97	4.21	2.44
Jarque – Bera	39.04	0.44	1.60	175.52	17.93	1.14
Probability	0.00	0.80	0.45	0.00	0.00	0.56
Sum	91.76	669.50	562.00	491.50	517.50	170.00
Sum Sq. Dev.	37.23	103.33	143.78	137.58	111.22	93.61
Observations	72	72	72	72	72	72

Panel Unit Test Results

Before performing the cointegration assessment, stationarity of the variables is checked. Asteriou and Hall (2007), in their study, highlighted that a non-stationary variable in econometrics may drive towards spurious regression results. For the purpose of finding stationarity of variables, panel unit root test is applied. Table 2 represents the results of stationarity of the data. It shows that four out of five political risk components namely GOVSTB, INVPRO, EXTCON, and INTCON are stationary at level *I*(0) by specification of constant and trend. MILPOL and FDI net inflows are stationary at first level *I*(1). Since the order of integration is mixed, the apt methodology for estimation is Panel ARDL model for co-integration.

Table 2 presents the output achieved of the Augmented Dickey – Fuller (ADF) unit root test for the panel. The null hypothesis is accepted if test statistic < critical value.

Table 2. ***Panel Unit Root Test***

Variables	*I*(0)	*I*(1)	Stationarity Level
FDI	0.22	0.00***	*I*(1)
GOVSTB	0.07*	0.00***	*I*(0)
EXTCON	0.00***	0.00***	*I*(0)
INTCON	0.00***	0.00***	*I*(0)
INVPRO	0.05*	0.00***	*I*(0)
MILPOL	0.14	0.00***	*I*(1)

Note. *, **, *** infer significance level at 10%, 5%, and 1% levels, respectively.

Table 3. ***Panel ARDL Long Run Results***

Variable	Coefficient	Std. Error	*t*-Statistic	Probability
EXTCON	1.07**	0.46	2.31	0.02
GOVSTB	–0.35**	0.19	–1.85	0.07
INTCON	0.35***	0.11	3.16	0.00
INVPRO	–1.59***	0.45	–3.50	0.00
MILPOL	–2.06***	0.62	–3.29	0.00

Note. *, **, *** signifies 10%, 5%, and 1% significance levels, respectively.

Table 4. ***Panel ARDL Short Run Results***

Variable	Coefficient	Std. Error	*t*-Statistic	Probability
ECT (CointEq01)	–0.28**	0.14	–1.99	0.05
D (EXTCON)	0.01**	0.06	0.18	0.06
D (GOVSTB)	0.00**	0.10	–0.03	0.08
D (INTCON)	–0.17	0.18	–0.94	0.36
D (ONVPRO)	0.27***	0.06	4.31	0.00
D (MILPOL)	0.24***	0.11	2.17	0.04
C	2.21***	1.01	2.20	0.03

Note. *, **, *** signifies 10%, 5%, and 1% significance levels, respectively.

Political instability affects FDI inflow in a delay of some specific time frame. Therefore, for applying panel ARDL, lagged values need to be assessed. We perform lag selection based on Akaike information criteria (AIC). The analysis shows (1,1,1,1,1,1) as the best model as per AIC for the select set of variables. After the lags and model is selected, the panel ARDL analysis is carried out. The output of analysis for long run is provided in Table 3 and the analysis for short run output is described in Table 4.

The findings are in sync with past literature that highlight significant impact of political stability on FDI inflows (Cai, Gan, & Kim, 2018 ; Goswami & Haider, 2014 ; Kim & Wu, 2008). Higher political risk ratings infer higher political stability which further leads to higher levels of FDI inflows. Lower political risk ratings infer political instability, which further leads to lower levels of FDI inflows. The long run panel ARDL result (Table 3) shows that political stability significantly affects inflows in FDI in the longer run. Each of the components of the rating contribute to the decision. The GOVSTB, INVPRO, EXTCON, INTCON, and MILPOL all significantly impact the FDI inflows of select SAARC nations.

The significant value of error correction term (Cointeq01) shows that cointegration exists amongst variables in the panel at the 5% level. Any deviations from equilibrium in the long run analysis is corrected at 28% speed of adjustment (Table 4). Table 4 highlights the short run panel ARDL output. In the short run also, political stability significantly affects the FDI inflows. The GOVSTB, INVPRO, EXTCON, and MILPOL significantly impact influx of FDI in the short run as well (Table 4). This infers that political stability is a crucial determinant for FDI inflows as it affects in both longer and shorter run (Shah & Afridi, 2015).

Panel ARDL Co-integration Results

The panel ARDL analysis also provides results for each specific country. Table 5 describes all the results and

Table 5. ***Panel ARDL Results for Individual Nations***

	BANGLADESH		INDIA		PAKISTAN		SRILANKA	
Variable	**CV**	**PV**	**CV**	**PV**	**CV**	**PV**	**CV**	**PV**
ECT	–0.10***	0.00	–0.27***	0.00	–0.06***	0.00	–0.67***	0.00
D (EXTCON)	0.15***	0.01	0.05	0.64	–0.03	0.77	–0.12***	0.01
D (GOVSTB)	–0.21***	0	0.20***	0.00	–0.15***	0.00	0.15***	0.00
D (INTCON)	0.07***	0.01	–0.70***	0.01	0.07	0.16	–0.13***	0.00
D (ONVPRO)	0.39***	0.00	0.33***	0.01	0.25***	0.00	0.10	0.11
D (MILPOL)	0.11***	0.00	0.00	0.99	0.44	0.15	0.39**	0.05
C	0.78***	0.01	3.60	0.31	0.21	0.14	4.25	0.31

Note. CV : Coefficient value ; PV: Probability value ; *, **, *** signifies 10%, 5%, and 1% significance levels, respectively.

highlights significant impact of political stability on influx of FDI for each select SAARC nation. All the significant values of each component add to the importance of political stability on FDI (Khan & Akbar, 2013). The results are presented in Table 5.

Table 5 presents the output achieved for short run Panel ARDL test for each individual country. This table represents impact of PRR determinants on FDI in select nations.

To testify the conclusiveness of panel ARDL results, Wald test is applied. The Wald test statistics is based on the value of *f* - statistics explained in earlier section. Table 6 shows that the value of *F*-statistics equals to 3.82, which is above the upper limit. This signifies that the Wald test is significant and the variables are cointegrated amongst each other. The result is presented in Table 6.

Table 6. ***Wald Test***

Test Statistic	Value	*p* - value
***f*-statistic**	3.82***	0.00

Note. *** intends significance at 1% level.

Table 6 presents the output achieved for Wald Test. The result shows the influence of PRR determinants on inflows in FDI. The null hypothesis of Wald test is accepted ($p < 0.01$), which means the explanatory variables define the model fit. The value of *f*-statistics is beyond the upper limit; thus, it infers that long run cointegration exists amongst the variables.

Further, the cointegration amongst the variables is checked. This study applies Pedroni's and Kao's cointegration test. In Pedroni's test, all statistics are assigned $N(0,1)$ under hypothesis of no cointegration and deviate into negative infinity. Any value above 2 is considered significant and infers existence of cointegration in Pedroni's test. In Kao's cointegration test, if the *p* - value < 0.05, then the cointegration exists. Table 7 describes the results for both the tests. Since the values achieved are above 2 for Panel rho-statistics and Panel ADF statistics for Pedroni's cointegration and significant *p* - value of ADF statistics for Kao's cointegration test, we infer presence of cointegration. The significant results for Pedroni and Kao statistics mean cointegration exists amongst the select factors. The results are given in Table 7.

Table 7 presents the output achieved for Pedroni's and Kao's tests for cointegration in the select panel. The yearly time frame selected is from 2000 – 2017. In Pedroni and Kao both, the trend assumption is deterministic trend and intercept. The selection for automatic lag length is established on SIC. The null of no cointegration is not accepted, since the test statistic > Critical value.

Table 7. ***Pedroni's and Kao's Cointegration Test***

Test Statistics	Panel (Within Dimension)	Group (Between Dimension)
Pedroni's Test for Cointegration		
Panel v-Statistic	–0.89	
Panel rho-Statistic	2.93*	2.74*
Panel PP-Statistic	1.31	1.87
Panel ADF-Statistic	3.22*	3.41*
Kao Test for Cointegration		
ADF statistic	–1.744*	0.0406

Note. * denotes the critical value at 5%.

Table 8. ***Mean Group (MG) v/s Pooled Mean Group (PMG)***

Hausman Test Result	Probability > chi ^{2}	0.98

Table 9. ***Long Run Causality***

Variables	Coefficient	*P>z*
EXTCON	–0.52***	0.00
GOVSTB	–0.13***	0.00
INTCON	0.07	0.17
INVPRO	0.24**	0.05
MILPOL	0.03	0.90

Note. *, **, *** signifies 10%, 5%, and 1% significance levels, respectively.

Table 10. ***Joint Causality and Short Run Causality***

Variables	Coefficient	*P>z*
ECT	–0.52***	0.00
EXTCON	0.08	0.55
GOVSTB	–0.05	0.54
INTCON	–0.99	0.45
INVPRO	0.09	0.50
MILPOL	0.11	0.52

Note. *** means significant at the 1% level.

Next, in this study, mean group (MG) and pooled mean group (PMG) estimation is tested. The MG and PMG estimation is obtained from ARDL models for each unit consisting of a long-term average. The Hausman test helps to check the homogeneity in long-term and choose between MG and PMG. The results find MG estimator not to be valid, but a significant probability value ($p > 0.05$) for PMG is derived. It infers that PMG (panel ARDL) is the best suited methodology for the analysis. Table 8 shows the result for Hausman that tests the hypothesis of long-run elasticity. The results are presented in Table 8.

Since the p-value > 0.10, we can infer that the Hausman test is statistically insignificant. Thus, in the long-run,

pooled mean group estimator is more appropriate. Lastly, the causality amongst the variables is tested. Long run, short run, and joint causality are tested for all the listed variables. The significant coefficient values at 5% show the presence of long run causality amongst the variables – government stability, external conflict, and investment profile. This infers that political stability impacts FDI in the long term. The significant coefficients of the variables signify the presence of joint causality amongst all the components of political stability and FDI (Cai et al., 2018). In shorter run, no significant causality is found amongst listed variables. Table 9 and Table 10 show the causality test results.

Conclusion and Implications

The study evaluates the impact of political stability on FDI inflows for the SAARC countries. SAARC countries are emerging economies and FDI inflows at higher levels are crucial and significant for pushing growth to higher levels in these economies (Bhavan, Xu, & Zhong, 2011). Various factors contribute to the obstructions that developing countries face in attracting FDI in their economies (Krifa-Schneider & Matei, 2010 ; Shah & Faiz, 2015). Political stability is one amongst the few reasons that impact FDI inflows. Higher stability in political system in a nation advances to a higher level of FDI inflows, and lower stability in political system advances towards reduced levels of FDI inflows in the economy (Cai et al., 2018; Goswami & Haider, 2014 ; Kim & Wu, 2008). The present study empirically scans the influence of stability in politics through political risk ratings on the inflows in FDI using panel ARDL cointegration approach. The study employs yearly dataset from 2000 – 2017 for four select SAARC nations namely India, Bangladesh, Pakistan, and Sri Lanka.

The application of panel ARDL cointegration results show that political stability significantly affects FDI inflows in the long run. Similarly, the results are observed to be significant for the short run period also. These empirical results are similar with the studies that have been conducted in the past. Ginevičius and Šimelytė (2011) conducted a study in central and eastern Europe and found significant exogenous variables that influenced foreign investments. Similarly, Mijiyawa (2015) highlighted that politically stable countries and countries offering higher returns on investments attracted more FDI in Africa. Masron and Naseem (2017) found significant influence of quality of institutions on inflows in FDI in ASEAN countries. Empirical findings of this present research work also showed a significant effect of political stability on inflows in FDI in select SAARC nations in the long and short run. The findings confirm the impact of political stability on FDI inflows.

Thus, from the analysis, we can infer that the SAARC countries should ensure law and order, and aim to keep lower levels of corruption. The government should ensure minimal internal conflicts within the nation and maintain cordial relations with other nations to avoid external conflicts. The policy makers are also advised to keep up higher levels of government stability and maintain high investment profile. The government should ensure a minimal role of military in politics since higher participation of military in politics means lower risk ratings, which indicates increased political risk levels. This stability and high ratings shall ensure good governance and help to attract foreign capital flows.

The government, leaders, and policy makers are advised to pay due consideration to the political risk components to reduce investors' scepticism and highlight true FDI hosting potential of the economies. Moreover, the select SAARC nations need to adopt policies that contribute a substantial increase in economic base and improve the local skills. Such effective measures will eventually compose human capital resources, liberalize their market, and upgrade stability in the economy to attract long - term FDI inflows.

Limitations of the Study and Scope for Further Research

The study has few limitations. This study is conducted for only four countries and can be extended to a larger panel

by including more countries. Also, this study focuses only on FDI to have an in-depth analysis. Further research studies can be extended by considering various other macro-economic variables like trade openness, exchange rate, industrialization, and gross domestic product.

Authors' Contribution

Muskan Kaur, under the guidance of Prof. Madhu Vij, explored the research gap, developed theoretical background, and performed the econometric analysis. Both the authors contributed towards the final version of the research paper and Prof. Madhu Vij supervised the same.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest in the subject matter, or materials discussed in this manuscript.

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