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DETERMINANTS OF FOREIGN DIRECT INVESTMENT IN SOUTH ASIA: ANALYSIS OF ECONOMIC, INSTITUTIONAL AND POLITICAL FACTORS

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ABSTRACT

The growing importance of FDI among developing countries has led to a huge volume of empirical work on this topic. However, there is a dearth of research on factors that affect FDI to South Asia. Moreover, the existing studies on South Asia mostly focus on macroeconomic variables such as Gross Domestic Product (GDP), domestic capital formation, interest rate, real effective exchange rate, labour and trade openness and overlook the crucial role that institutions and political factors might play in determining FDI in South Asia. This paper attempts to understand the importance of various underlying determinants of FDI and using a dynamic panel data model for 1999-2013, argues that institutional and political factors are as important in determining FDI flows to South Asia as the conventional economic factors. The main findings of the paper are that countries with a large market size, stable macroeconomic environment, a higher level of existing FDI, a more liberal trading regime and lower country risk in terms of financial, economic, institutional and political stability are bound to attract more FDI. An understanding of such factors will enable policymakers of the South Asian countries to formulate and execute policies important for attracting FDI.

Keywords: South Asia, Foreign Direct Investment, Institutions, Political Stability, JEL Classification: D02, F15, F21, F23.

INTRODUCTION

Over the past two decades, the rapid growth of Foreign Direct Investment (FDI) has been one of the defining characteristics of the world economy. Recognizing the enormous potential FDI has in accelerating growth and economic development through injection of capital, technology and knowledge, attracting FDI has become an important prerogative for most developing countries with improvements in their FDI policy regimes (UNCTAD, 2005). This has resulted in developing countries becoming important destination for foreign investment. In 2015, FDI flows to developing economies stood at US\$ 765 billion, registering a rise of 9 per cent over the last year. Today even the global rankings of the largest recipients of FDI reflect the increasing importance of developing economies and changing pattern of investment flows: 5 of the 10 largest FDI recipients in 2015 were developing countries. (UNCTAD, 2016). Regionally,

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developing Asia was the largest FDI recipient in the world with its FDI inflows with its FDI inflows surpassing half a trillion dollars (Table 1).

Table 1: Global FDI Inflows-Distribution by Grouping and Region.

	2013	2014	2015
World	1427	1277	1762
Developed Economies	680	522	962
Developing Economies	662	698	765
Africa	52	58	54
Asia	431	468	541
East and South-East Asia	350	383	448
South Asia	36	41	50
West Asia	46	43	42
Latin America Caribbean	176	170	168
Oceania	3	2	2
Transition Economies	85	56	35

Source: UNCTAD (2016).

Like other developing countries, while South Asian nations have been experiencing increased FDI inflows over the past decade (Table 2), the region's share in total FDI inflows received by developing countries stands at just 6% (UNCTAD Statistics 2016). This is even though over the last two decades, a number of policy and regulatory measures have been undertaken to improve the investment climate and attract foreign investment in most South Asian countries.

Considering the importance of FDI for future economic development of South Asian developing economies, the objective of my paper is to analyze

Table 2. Trends in FDI (% of GDP), South Asia.

the role of economic, institutional and political factors in attracting FDI across six South Asian countries – India, Pakistan, Afghanistan, Bangladesh, Sri Lanka, and Nepal. Although there is a vast literature on FDI in developing countries, there is a dearth of research on factors that affect FDI to South Asia. Moreover, the existing studies on South Asia mostly focus on macroeconomic variables such as Gross Domestic Product (GDP), domestic capital formation, interest rate, real effective exchange rate, labour and trade openness and overlook the crucial role that institutions and political factors might play in determining FDI in South Asia. This paper attempts to understand the importance of various underlying determinants of FDI and using a dynamic panel data model for 1999-2013, argues that institutional and political factors are as important in determining FDI flow to South Asia as the conventional economic factors.

Country	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Afghanistan			0.03	1.21	1.26	3.54	4.32	3.37	1.92	0.45	1.58	0.34	0.32	0.30	0.20
Bangladesh	0.35	0.53	0.15	0.10	0.45	0.69	1.10	0.64	0.82	1.45	0.88	1.07	0.98	1.19	1.74
India	0.46	0.75	1.04	0.99	0.60	0.75	0.87	2.11	2.04	3.55	2.61	1.60	2.01	1.31	1.51
Sri Lanka	1.13	1.06	1.09	1.19	1.21	1.13	1.12	1.70	1.86	1.85	0.96	0.84	1.46	1.38	1.26
Nepal	0.09	-0.01	0.35	-0.10	0.23	-0.01	0.03	-0.07	0.06	0.01	0.30	0.55	0.50	0.49	0.39
Pakistan	0.84	0.42	0.52	1.14	0.64	1.14	2.01	3.11	3.67	3.20	1.39	1.14	0.62	0.38	0.58

Source: World Bank (2015).

The research findings emanating from the empirical analysis will identify priority areas that could benefit from policy intervention thus leading to formulation and implementation of an effective FDI policy framework in the South Asian countries. The paper is organized as follows. Section 2 discusses related literature review on the determinants of FDI. Section 3 presents the empirical strategy followed in the paper. Section 4 provides a description of the data and variables used. The results are reported in Section 5 and Section 6 concludes the paper.

LITERATURE REVIEW

The strong growth of FDI in the past few decades

has led to a huge volume of empirical work on this topic. Traditionally, the literature of FDI was mainly devoted to conventional methods of analyzing economic determinants of FDI flows (Root and Ahmad, 1979; Dunning and Narula, 1996). However, the pioneer study by North (1990) emphasized the important role of institutions, as "humanly devised constraints that structure political, economic and social interactions", in establishing incentives for economic activity and thus foreign investment. The study laid down the foundation for future empirical studies on FDI, with significance to institutional quality as an important determinant. There are broadly three ways by which quality of institutions matter for FDI- firstly, a good governance and institutional mechanism raises the productivity prospects and thus attracts foreign investors; secondly, poor institutions can bring additional costs to FDI and thirdly, high sunk costs of FDI make it vulnerable to any form of uncertainty, including uncertainty arising from poor governance, political instability and weak enforcement of contracts (Quere et al., 2007). In recent years, several authors have tried to study the link between institutions and FDI (Kinoshita and Campos, 2003; Meon and Sekkat, 2004). Most of the studies find that countries that have weak institutions, in particular, high corruption and political instability, tend to receive less FDI (Wei, 2000; Gastanaga et al., 1998). A study by Kaufman et al. (1999) showed that 5 governance indicators: political instability and violence, government effectiveness, regulatory burden and rule of law and graft matter for FDI. The impact of institutions on FDI has also been analyzed within the framework of gravity models where bilateral FDI flows/stocks depend positively on GDP and/or population in source and/or host country and negatively on the geographic distance between countries (Eaton and Tamura, 1994).

The interest in FDI is even stronger when it comes to analyzing factors that drive FDI into developing countries. Not surprisingly, thus, the advent of new institutional economics has led researchers to focus on institutional factors as important determinants of FDI in developing countries.

One of the first attempts to study the link between institutions and FDI for developing countries was made by Jun and Singh (1995, 1996). The authors analyzed the effect of political risk and business conditions in addition to traditional macroeconomic variables such as GDP per capita, GDP growth and wage cost on investment flows to 31 developing countries. The coefficient of political risk index was found negative and statistically significant implying that developing countries with higher political risk attract less FDI. Business operating conditions was also shown to be important for attracting FDI flows.

A recent study by Cleeve (2012) examines the role of institutional factors and political stability in attracting FDI to 40 countries in Sub-Saharan Africa (SSA) using a cross-sectional time series data. It finds that institutional credibility is as important in determining FDI as political and macroeconomic stability. In yet another study on SSA, Asieudu (2006) argues that the perception that FDI in Sub-Saharan Africa is driven by natural resources and market sizes may not be true. The study uses fixed-effect panel data estimation for 22 countries of Africa over the period 1984-2000 to show that even though natural resources and large market size promote FDI, government policies, political stability and quality of host country's institutions have a similar effect. The natural endowment, market size, good infrastructure, an educated labor force, macroeconomic stability, openness to FDI, an efficient legal system, low corruption and political stability were all shown to positively impact FDI. The study offered strong policy implications for SSA since it empirically argued that even if some SSA countries lack natural resources, they could still attract FDI by improving the quality of their institutions and policy environment.

Ramirez (2010) analyzes some of the major economic and institutional determinants of FDI flows to nine major Latin American countries. The author estimates a pooled (fixed-effects) FDI investment function for the period 1980-2001. The study finds that market size, credit provided by private banking sector, government expenditure on education, real exchange rate and the level of economic freedom have a significant positive effect on FDI flows. On the other hand, public investment spending, debt-service ratio and macroeconomic uncertainty in the form of volatility of real exchange rate have a significant negative effect on FDI flows. The results are consistent with previous literature and emphasize the importance of macroeconomic stability and a conducive institutional framework for attracting FDI to developing countries. The importance of macroeconomic, political, institutional and socioeconomic factors has also been reaffirmed as crucial determinants of FDI even for South East Asia (Vadlamannati et al., 2009).

While there has been substantial research on FDI in other developing regions of the world, South Asia remains largely unexplored. The overarching theme related to South Asia is the paradox that despite having experienced a long period of robust economic growth and being classified as among the fastest growing regions in the world (World Bank, 2015) the region has remained largely unsuccessful in attracting FDI. The success of the region in terms of economic indicators needs to be viewed against its dismal performance in most World Bank governance indicators which indicate that institutional and political factors might be the reason behind low levels of FDI. This necessitates a rethink of the determinants of FDI in the region under the ambit of new institutional economics. Except Sahoo (2006, 2012) which focuses on infrastructure and reforms and Azam et al. (2012) which focuses on impact of political risk and macroeconomic uncertainty, no study on South Asia has included institutional and political factors as potential determinants of FDI. In this paper, I contribute to the literature on FDI and examine the extent to which the economic, institutional and political variables included in previous studies explain the flow of FDI to South Asia. The paper also focuses on agglomeration effects, an issue that has been highlighted in the areas of economic geography but has remained relatively neglected in the literature on determinants of FDI to South Asia¹.

Empirical Strategy: The primary objective of foreign investment is to maximize expected return on the investment. FDI inflows are thus positively affected by economic factors such as size of the economy, GDP growth rate and macroeconomic stability which play an important role in determining the return on investment. However, in a world of increasing uncertainty associated with foreign investment, the variance of returns becomes a crucial element in the location decision. Hence, we can identify FDI to be a mean-variance problem. The variance in a country's return could be caused by common global or regional factors (Cochrane, 2001) or could be a result of *idiosyncratic risk*². While studying determinants of FDI to South Asia, it is important to recognize that there are certain risks in the region that returns to investment need to be weighed against. These risks are the result of uncertainty associated with an unstable political environment, high levels of corruption, low institutional quality etc that has already impacted South Asia's development problems and might be responsible for low levels of FDI (Jain and Bimal, 2014; Raihan and De, 2013).

In this light, the present study examines the influence of a set of economic, institutional and political explanatory variables on FDI inflows; those that have been found to be important in influencing in investor's decision making and those that may be important for developing countries. The equation to be estimated is:

FDI_{it} = α + β (Economic Variables)_{it}+¥(Institutional

Variables)_{it}+ μ (Political Variables)_{it}+ \in_{it} (1)

where FDI_{it} is the net FDI inflows (in the percentage of GDP) in country i at time t and B, ¥ and μ are the parameters to be estimated and \in is the random error term.

Most of the studies cited in the paper employ panel data regression (fixed or random effects) to examine the relationship between FDI and its determinants. However, since we are interested in studying the importance of agglomeration effects too, the model includes lag of dependent variable and hence becomes a *linear dynamic panel data* model³. We can rewrite the model to be estimated as:

$Y_{it}=aY_{it-1}+\beta X_{it}+V_{it}$ (2).

where Yit (dependent variable) is net FDI inflows (in percentage of GDP) in country i at time t and X_{it} is a vector of other explanatory variables (economic, institutional and political). Such models that include lagged value of the dependent variable as an independent variable may suffer from endogeneity bias when the time dimension of the panel is short (Nickell, 1981). Further, in cases of empirical analysis using policy variables, it may be the case that the variables are not strictly exogenous and may be simultaneously determined or influenced by past values of the outcome variables (Besley and Case, 2000). There could be causality running in both directions, example in the case of trade openness and FDI causing bias in the econometric estimation. Moreover, there could be country-specific effects that are unobservable. Due to these endogeneity problems, ordinary least squares, fixed effects or random effects estimators are biased and inconsistent. Therefore, I use the system Generalized Method of Moments (GMM) technique which produces consistent parameter estimates for a finite number of time-period (Arellano and Bond, 1991; Arellano and Bover, 1995; Blundell and Bond, 1998). The advantage of this technique lies in its ability of dealing with endogeneity of all explanatory variables by using both lagged levels as well as lagged differences as valid instruments for the lagged endogenous variables and this increases efficiency of the estimator⁴. In addition, this technique specifies a dynamic model which allows for time-invariant country-specific effects. This seems plausible in the case of FDI, where some variables, like

¹ The role of agglomeration effects is vital for location decisions associated with Foreign Direct Investment. Agglomeration effects refer to clustering of economic activities in one form or the other which results in cost savings and productivity gains for firms, thereby influencing their location decisions.

² Idiosyncratic risk is a term used to refer to country specific risk that captures, among other things, changes in political and institutional environment.

³ By definition, linear dynamic panel data contains p lags of dependent variable as covariates and contains unobserved panel-level effects, fixed or random (Baum, 2006).

⁴ This methodology implies that variables in the differenced equation are instrumented by their lagged levels and that variables in the level equation are instrumented by their lagged differences.

political and institutional variables, display little, if any, variation over the period of the analysis.

Estimation of two models in analysis: model 1 estimating equation (2) and model 2 estimating the following equation:

$$Y_{it} = \delta Y_{it-1} + \beta X_{it-1} + \mu X_{it} + U_{it} \quad (3)$$

In this model, I use one year lagged values of the independent variables along with lagged value of the dependent variable. This model signifying existence of temporal dynamics of the explanatory variables assumes that the effect of an independent variable at time period t-1 appears only with a lag of one year. Intuitively also, FDI is a long term commitment and decisions are made rationally based on performance of variables not in the current year but on all available past information. While estimating FDI, it could be argued that there could be two-way simultaneity in the relationship among variables: some of its determinants like GDP growth rate and trade openness while influencing FDI could be influenced by it too. To deal with this situation also, several studies advocate the use of lagged values of determinants (Baccini and Urpelainen, 2014).

The following hypotheses will be tested during the empirical analysis:

- Hypothesis 1: Higher FDI flows are associated with a more stable macroeconomic environment.
- Hypothesis 2: Positive relationship exists between institutional quality and FDI inflows.
- Hypothesis 3: The higher the existing levels of FDI, the higher are the current levels of FDI.4.

Description of Data and Variables: The analysis covers 6 countries in South Asia, namely, Afghanistan, Bangladesh, India, Nepal, Pakistan and Sri Lanka over the period 1999-2013. As is standard in the literature, the dependent variable is ratio of net FDI flows to GDP⁵ (Asiedu, 2002). All the data has been obtained from World Development Indicators published by the World Bank. It needs to be noted that all indicators for institutional and political factors taken from World Bank Governance Indicators need to be treated with caution. The true level of governance is inherently unobservable

and thus difficult to measure. In this regard, WGI measures of governance are imperfect proxies for broader dimensions of governance (Kaufmann et al 2010). Moreover, they are based on several hundred variables obtained from different data sources that reflect perceptions of a very diverse group of respondents including survey of firms and households, non-governmental organizations, commercial business information providers, and public sector organizations worldwide. Nonetheless, the empirical literature on institutional and political determinants of FDI has successfully employed these indicators.

Description of Explanatory Variables: Based on the discussed literature review, the study analyzes the influence of potential determinants (economic, institutional and political) on FDI flows. Table 3 gives the expected effect of the selected variables on FDI.

a)- Economic Variables: The profitability of investment is a key determining factor of an investor's location decision. FDI is expected to go to countries that offer a higher rate of return. However, in developing countries the capital markets are not well-functioning. Therefore, finding an appropriate measure for return on investment is difficult. I assume that the marginal product of capital is equal to the return on capital (Edwards, 1990; Jaspersen et al., 2000; Asiedu, 2001)⁶. This implies that countries with scarce capital will yield higher return. Also, since capital scarce countries tend to be poor we can find a proxy for return on investment using inverse of GDP per capita⁷. By this assumption, we can conclude that countries with higher per capita income would yield a lower return on investment and therefore GDP per capita is inversely proportional to FDI.

Market size is considered as an important determinant of FDI. Multinational Enterprises (MNEs) often enter a market with an intention to enhance the market share of its product (Dunning 1993). Thus, a large market and higher growth rate of domestic GDP implies a greater demand for goods and services and is important for efficient utilization of resources and exploitation of economies of scale (Charkrabati, 2001). Thus, as the market size grows, FDI is expected to increase. In this paper, GDP growth rate is used as a measure of attractiveness of the host country's market.

⁵ Foreign Direct Investment is defined to be net inflows of investment to acquire a lasting management interest in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term or short term capital as shown in the balance of payment of a reporting country (World Bank, 2015).

⁶Assumption in line with standard neoclassical models of trade (see Krugman and Obstfeld, 2002).

⁷ Other potential proxies (eg. return on equity) can also be used for capturing return on investment.

Explanatory Variables	Indicators	Expected Sign
Economic	Economic Market Size (GDP growth rate)	
	Return on Investment (inverse of GDP per capita)	+
	Macroeconomic Stability (Inflation Rate)	-
	Trade Openness (Imports+ Exports/GDP)	+
	Agglomeration Effects (Lagged FDI/GDP)	+
Institutional	Control of Corruption	+
	Rule of Law	+
Political	Political Stability - Absence of Violence/Terrorism	+
	Government Effectiveness	+
	Regulatory Quality	+
	Voice and Accountability	+

Table 3. Effect of Selected Variables on FDI.

Note: Percentile rank among all countries has been used for institutional and political variables. Ranges from 0 (lowest) to 100 (highest).

Inflation is used to measure macroeconomic stability of the countries. Investors prefer to invest in economies with less uncertainty and more macroeconomic stability and hence macroeconomic instability may inhibit FDI inflows (Nonnenberg and Mendonca, 2004).

Trade openness is defined as the ratio of sum of exports and imports to total GDP. Several studies have argued that greater the degree of trade openness, larger is the FDI flows (Gastanaga et al., 1998). With greater trade openness, more markets are open for exporters thereby leading to possibilities of more efficient resource allocation.

Agglomeration effects are also an important determinant of FDI. Agglomeration is encouraged by investors "herd behavior". Foreign investors are disposed to invest and enter a country that has received foreign investments in the past since pre-existence of FDI signals high quality of institutions, good infrastructure, specialization and higher competition among other things. This also suggests that the country is open to business and signals a kind of confidence or yields "demonstration effects" to other investors (Barry et al, 2004). Agglomeration effects or "pull factors for new FDI" have been found to be positive and highly significant in previous studies on FDI (Wheeler and Mody, 1992). In this paper, I use a one-year lag of FDI as an independent variable to capture these agglomeration effects⁸(Anyanwu, 2011; Walsh and Yu, 2010). This indicator is also selected since FDI projects tend to last for more than a year and flows into the current year.

b)- Institutional Variables: Good governance and strong institutions are important determinants of FDI and a country's economic development in general. Quality institutions reduce financial, time and effort costs related to doing business in a country. They help in creating a business-friendly economic environment and thereby increase FDI inflows. I will study effects of two indicators under institutional variables: control of corruption and rule of law.

Corruption is usually defined as abuse of public office for private gains (World Bank, 1997 and UNDP, 1999). This may be the result of excessive bureaucracy, inefficient legal system, and high level of discretion used in the implementation of policies. Corruption is an economic problem since it raises the cost of doing business and thus may potentially reduce investment (Keefer and Knack, 1996). For my analysis, I use Control of Corruption indicator which measures the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

The indicator for Rule of Law measures the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.

c)- Political Variables: Apart from economic and financial risks, political risks also impact FDI into an economy⁹. Political risk has a disincentive effect on

⁸ The inclusion of the lagged dependent variable introduces endogeneity problems which I have discussed in Section 3.

⁹ Political risk can be defined as the possibility that political events in a country will adversely impact the business climate and investors will not be able to gain as much profit as could be expected (Howell, 2001).

investments as it increases the risk and uncertainty encountered by investors and thus discourages investment in political risky economies. I will study effects of four indicators under political variables: Political Stability and Absence of Violence/Terrorism, Government Effectiveness, Regulatory Quality and Voice and Accountability.

The Political Stability and Absence of Violence/Terrorism indicator measures perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism.

The Government Effectiveness indicator measures the quality of public services and civil service and its

Table 4. Summary Statistics, 1	1999-2013 (6 countries).
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independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to its policies.

The Regulatory Quality indicator measures the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

The Voice and Accountability indicator measures the extent to which a country's citizens can participate in selecting their government, as well as freedom of expression, association and free media.

Summary statistics of the variables are reported in Table 4.

Variable Name	Mean	SD	Min	Max
FDI (% of GDP)	1.10	0.93	-0.10	4.32
GDP growth rate (%)	5.74	3.10	-1.55	21.02
Return on Investment ¹⁰	0.00	0.00	0.00	0.01
Inflation Rate	7.56	4.48	-8.28	22.56
Trade Openness	48.02	23.81	2.91	137.90
Agglomeration Effects (Lagged FDI/GDP)	1.09	0.93	-0.10	4.32
Control of Corruption	25.67	17.27	0.49	56.80
Rule of Law	30.49	19.84	0.47	60.77
Political Stability - Absence of Violence/Terrorism	7.94	4.93	1.90	14.42
Government Effectiveness	32.18	16.50	1.95	56.80
Regulatory Quality	28.30	15.12	0.98	60.29
Voice and Accountability	31.32	16.10	1.44	61.14

Note: Countries in the sample are Afghanistan, Bangladesh, India, Nepal, Pakistan and Sri Lanka.

RESULTS

The regression results are presented in table 5¹¹. Column 1 reports the results for model 1 and column 2 reports the results for model 2.

¹⁰ The variable defined as inverse of GDP per capita takes very small values and thus after rounding off the values are being reflected as 0 in the table. The mean for the variable is 0.0018962 with min 0.0003048 and max 0.0083404. ¹¹ Time dummies are considered as exogenous and I use respectively lags explanatory variables as instruments.

Table 5.	Determinants	of FDI:	Results	of System	n-GMM	Estimation.
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Variable Name	Model 1	Model 2
GDP growth rate (%)	0.19**	0.17**
	(0.10)	(0.07)
Return on Investment	0.07	1.97***
	(0.08)	(0.37)
Inflation Rate	0.01	-0.09
	(0.06)	(0.07)
Trade Openness	0.45**	0.47***
	(0.20)	(0.12)
Agglomeration Effects (Lagged	0.62***	0.43***
FDI/GDP)	(0.07)	(0.08)
Control of Corruption	0.05	0.37***
	(0.18)	(0.09)
Rule of Law	-1.28***	-1.20***
	(0.25)	(0.33)
Political Stability and Absence of	0.01	-0.21
Violence/Terrorism	(0.11)	(0.13)
Government Effectiveness	0.99***	1.05***
	(0.29)	(0.12)
Regulatory Quality	0.40**	-0.21
	(0.19)	(0.16)
Voice and Accountability	0.09	0.60**
	(0.12)	(0.26)
Lag.GDP growth rate (%)	-	-0.06
		(0.04)
Lag. Return on Investment	-	1.76***
		(0.39)
Lag. Inflation Rate	-	-0.00**
Lee True de Orenne en e		(0.03)
Lag. Trade Openness	-	0.07
		(0.06)
Lag. Control of Corruption	-	0.31^{+++}
Log Dula of Low		(0.09)
Lag. Rule of Law	-	-1.11
Lag Dolitical Stability and Absonge		0.09
of Violence / Terrorism	-	(0.06)
Lag Covernment Effectiveness		0.61**
Lag. dovernment Enectiveness	-	(0.26)
Lag Regulatory Quality		0.88***
Lag. Regulatory Quality		(0.21)
Lag Voice and Accountability		-0.35
Lug. voice and necountability		(0.26)
No. of observations	74	63
Arellano-Bond test for AR(1)	z=-1 79	 z=-1.69
	Pr>z=0.07*	Pr>z=0.08*
Arellano-Bond test for AR(2)	z=-0.61	z=-0.86
	Pr > z = 0.54	Pr>z=0.38

Note: Reported numbers show the coefficients of the explanatory variables on FDI (% of GDP); ***, **, and * indicate 1 percent, 5 percent and 10 percent significance level; Figures in parentheses are robust standard errors; Arellano-Bond test for autocorrelation has a null hypothesis of no autocorrelation. The test for AR(1) is rejected and for AR(2) is not rejected in both models; Sargan test for over-identifying restrictions cannot be computed with robust standard errors.

Market size of the host country, openness to trade, agglomeration effects and government effectiveness turn out to be positive and statistically significant determinants of FDI in South Asia in both models.

In addition, in model 1, regulatory quality also turns out to be a positive and statistically significant determinant of FDI. In this model, all variables have the expected signs except inflation which is positive but not statistically significant and rule of law which is negative but statistically significant. A statistically significant negative sign of rule of law implies that it does not matter to MNEs if the agents in host country do not have much confidence in and abide by the rules of society and the quality of contract enforcement, property rights, the police and the courts. Though this is counter-intuitive, it may be because MNEs establish business under strict contracts which are guaranteed for protection by the central bank and board of investment of particular countries. Sometimes MNE may bring in investment under a particular investment treaty which allows foreign investors to settle disputes through international arbitration council and thus need not worry about domestic rules¹².

We get more robust results in model 2 that includes lags of independent variables. All current period variables have expected signs except rule of law which is negative and statistically significant, political stability and absence of violence/terrorism and regulatory quality both of which are negative but not statistically significant. All previous period variables also have the expected sign except rule of law which is negative and statistically significant, GDP growth rate and voice and accountability both of which are both of which are negative but not statistically significant. Statistical significance of most of the previous period variables indicates the rational behavior of investors who base their investment decisions on available previous information.

The overall result is clear and supports the purpose of the study: institutional and political factors are as important in determining FDI flows to South Asia as the conventional economic factors. The three hypotheses stated in Section 3 are also well-supported by the regression results.

A word of caution is important while interpreting the results. The current analysis entails a small number of time periods and this may lead to inference problems. There might be a small sample bias in coefficient estimation and hypothesis testing. A further study should be made to incorporate other factors that affect FDI in the region for a longer time duration, since the variable chosen for the study are too small to generalize the results.

CONCLUSION

In this paper, I examined economic, institutional and political determinants likely to attract FDI in 6 South Asian economies. The research finds provide useful policy implications. The main findings are that countries with a large market size, stable macroeconomic environment, a higher level of existing FDI, a more liberal trading regime and lower country risk in terms of financial, economic, institutional and political stability are bound to attract more FDI.

The governments of South Asian countries should undertake reforms and encourage sound macroeconomic policies that promote sustainable growth and stable economic health. In addition, South Asian countries should continue to liberalize their economies to external trade since attracting FDI is also linked to degree of a country's integration into the world economy. Furthermore, the full benefits of reforms will be realized only if the investors perceive these reforms to be credible and effectively implemented. Improving institutional quality by controlling for corruption, formulating and implementing policies to strengthen and promote private sector development, maintaining political stability are also likely to attract FDI.

It is important to enhance regional cooperation efforts which may enhance FDI in several ways: 1) increase cumulative market size of the region and attract investors who will not be then constrained by size of any particular economy 2) regional cooperation can increase political stability of the region 3) regionalism can help formulate coordinated effective policies to

¹² Some studies have shown that even though rule of law is a good predictor of FDI, the relative difference between institutional conditions of source and host country is a key determining factor for FDI flows (Xu and Shenkar, 2002). This means that countries from a medium rule of law nature may not be impacted much by a host country's institutional standards. Also, it is important to note here that India accounts for 85% of total FDI inflows received by the sample countries for the period of study. While India ranks at the 50-55th percentile for the mentioned indicator, the aggregation over other heterogeneous group of countries may have biased the results.

attract FDI in the region. Lastly, governments in all South Asian countries should also draw lessons from other regionally integrated regions such as East Asia, where regional integration efforts have enabled development of value chains, for successful regionalism in South Asia.

REFERENCES

- Anyanwu, J. (2011, September). Determinants of Foreign Direct Investment Inflows to Africa, 1980-2007. Working Paper No. 136. *African Development Bank Group*.
- Arellano, M. and O. Bover (1995). Another look at the instrumental variable estimation of errorcomponents models. *Journal of Econometrics* 68, 29-51.
- Arellano, M. and S. Bond (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies* 58, 277-298.
- Asiedu, E. (2006). Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability. *The World Economy*, 29(1), 63-77.
- Azam, M., Khan, M. and Iqbal, N. (2012). Impact of Political Risk and Uncertainty on FDI in South Asia. *Transition Studies Review*, 19(1), 59-77.
- Baccini, Leonardo, and Johannes Urpelainen (2014).
 International Institutions and Domestic Politics:
 Can Preferential Trading Agreements Help
 Leaders Promote Economic Reform? *Journal of Politics* 76(1), 195-214.
- Barry, F., H. Görg and E. Strobl (2004). Foreign direct investment, agglomerations, and demonstration effects: An empirical investigation. *Review of World Economics*, 140 (3), 583-600
- Baum, C. (2006). An Introduction to Modern Econometrics Using Stata. Stata Press.
- Besley, T. and A. Case (2000). Unnatural experiments? Estimating the incidence of endogenous policies. *The Economic Journal 110*, F672-F694.
- Blundell, R. and S. Bond (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics* 87, 115-143
- Cleeve, E. (2012). Political and institutional impediments to foreign direct investment inflows to Sub-Saharan Africa. *Thunderbird International Business Rev.*, 54, 469–477. Retrieved from doi: 10.1002/tie.21477.

- Cochrane, J. H. (2001). *Asset Pricing*. Princeton: Princeton University Press.
- Dunning, J. and Narula, R. (1996). The Investment Development Path Revisited: Some Emerging Issues in Dunning, John and Rajneesh Narula (eds.) Foreign Direct Investment and Governments: Catalysts for Economic Restructuring. London: Routledge, 1-41.
- Dunning, J. H. (1993). Multinational enterprises and the Global Economy. Wokinghman, UK: Addison-Wesley
- Eaton, J. and A. Tamura (1994). Bilateralism and Regionalism in Japanese and U.S. Trade and Direct Foreign Investment Patterns. *Journal of the Japanese and International Economies*, 8(4), 478– 510.
- Edwards, S. (1990). Capital flows, foreign direct investment and debt-equity swaps in developing countries. *NBER Working Paper No. 3497*. Cambridge, MA: NBER.
- Gastanaga, V., Nugent, J. and Pashamova, B. (1998). Host Country Reforms and FDI Inflows: How Much Difference do they Make? *World Development*, 26(7), 1299-1314.
- Howell, L.D. (2001). *The Handbook of Country and Political Risk Analysis*. New York: The PRS Group, East Syracuse.
- Jain, P and Bimal, S. (2014). Enhancing India-Pakistan Economic Cooperation: Prospects for Indian Investment in Pakistan. *ICRIER Working Paper* 274, May 2014.
- Jaspersen, F. Z., Aylward, A. H., and Knox, A.D. (2000). The effect of risk on private investment: Africa compared with other developing areas. In P. Collier. & C. Pattillo (Eds.) *Investment and risk in Africa* (pp. 71-95). New York: St Martin's Press.
- Jordaan, J. C. (2004), Foreign Direct Investment and Neighbouring Influences. Unpublished doctoral thesis. University of Pretoria.
- Jun, K. and Singh, H. (1996). The Determinants of Foreign Direct Investment in Developing Countries. *Transnational Corporations*, 5 (2)s, 67-105.
- Kaufman, D., Kraay, A. and P. Zoido-Lobaton (1999). Aggregating Governance Indicators. *Policy Research Paper 2195*. The World Bank.
- Kaufmann, D., Kraay, A. and Mastruzzi, M. (2010).The Worldwide Governance Indicators Methodology

and Analytical Issues. *Policy Research Working Paper 5430*. The World Bank.

- Keefer, Philip and Stephen Knack (1997). Why Don't Poor Countries Catch Up? A Cross- National Test of an Institutional Explanation. *Economic Inquiry* 35:590-602.
- Kinoshita, Y. and N. Campos (2003).Why Does FDI Go Where it Goes? New Evidence from the Transition Economies. *Williamson Institute Working Paper No. 573.*
- Krugman, P. and Obstfeld, M. (2002, July 26). International Economics: Theory and Policy. Addison Wesley, 6 edn.
- Méon, P.-G. and K. Sekkat (2004). Does the Quality of Institutions Limit the MENA's Integration in the World Economy? *The World Economy*, 27(9), pp. 1475–98.
- Nickell, S. (1981). Biases in dynamic models with fixed effects. *Econometrica* 49 (6), 1417-26
- Nonnenberg, M. and Mendonca, M., 2004. The determinants of direct foreign investment in developing countries. Working Paper, Institute of Applied Economic Research.
- North, D. (1990). Institutions, Institutional Change and Economic Performance, Cambridge: Cambridge University Press.
- Quéré, A., Coupet, M. and Mayer, T. (2007). Institutional Determinants of Foreign Direct Investment. *The World Economy*, 30(5), 764-782.
- Raihan, S. & De, P. (2013). India-Pakistan economic cooperation: Implications for regional integration in South Asia. Commonwealth Secretariat. Retrieved from http://www.sanemnet.org/wp-content/uploads/2013/05/PS11953-5-India-Pakistan.pdf. Accessed April 1, 2014.
- Ramirez, M.(2010). Economic and Institutional Determinants of FDI Flows to Latin America: A Panel Study. Trinity College, Department of Economic Working Paper, 10-03.
- Root, F. and Ahmed, A. (1979). Empirical Determinants of Manufacturing Direct Foreign Investment in Developing Countries. *Economic Development and Cultural Change*, 27(4), 751-67.
- Sahoo, P. (2006). Foreign Direct Investment in South Asia: Policy, Trends, Impact and Determinants. *ADB Institute Discussion Paper* No. 56.
- Sahoo, P. (2012). Determinants of FDI in South Asia: Role of Infrastructure, Trade Openness and Reforms.

Journal of World Investment and Trade, 13(2), 256-278, Geneva, Switzerland.

- Singh, H. and Jun, K. (1995). Some New Evidence on Determinants of Foreign Direct Investment in Developing Countries. *Policy Research Working Paper* 1531. The World Bank.
- UNCTAD (2016). World Investment Report 2016 --Investor Nationality: Policy ChallengesReforming International Investment GovernanceUNCTAD (2005). Economic development in Africa: Rethinking the role of foreign direct investment. United Nations Conference on Trade and Development, Geneva.
- UNDP (1999, February). Fighting Corruption to Improve Governance.
- Vadlamannati, K., Tamazian, A. and Irala, L. (2009). Determinants of foreign direct investment and volatility in South East Asian economies. *Journal of the Asia Pacific Economy*, 14(3).
- Walsh, J and Yu, J. (2010). Determinants of Foreign Direct Investment: A Sectoral and Institutional Approach. *IMF Working Paper WP/10/187*. Asia Pacific Department
- Wei, S.-J. (2000). How Taxing is Corruption on Internal Investors? *Review of Economics and Statistics*, 82(1), 1–11.
- Wheeler, D. and A. Mody (1992). International investment location decisions: The case of U.S. firms. *Journal of International Economics* 33, 57-76.
- World Bank (1997). Helping Countries Combat Corruption: The Role of the World Bank, prepared by the Poverty Reduction and Economic Management. *World Bank*. September
- World Bank (2015). South Asia, now the fastest-growing region in the world, could take greater advantage of cheap oil to reform energy pricing. Press Release.
- World Bank (2015). World Governance Indicators. Available at
- World Investment Report 2016 Investor Nationality: Policy Challenges, UNCTAD
- Xu, D. &Shenkar, O. (2002). Institutional distance and the multinational enterprise. Academy of Management Review, 27(4), 608–618.