

*Full Length Research Paper*

# **Institutions, macroeconomic policy and foreign direct investment: South Asian countries case**

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**Recent economic literature suggests that institutional quality factors exert positive effect on foreign direct investment (FDI) inflows. The main focus of this study is to examine the role of institutional factors and macro economic policy factors on FDI inflows in a panel data of seven South Asian countries over the period of 12 years since 1996 to 2007. This study implies that a good institutional quality plays a key role in attractiveness of FDI inflows. A poor macroeconomic policy situation produces negative impact on FDI. Good Institutional quality and poor macroeconomic policy generate negative effect in a combined form on FDI. This study further implies that poor macro economic policy deteriorates institutional quality and creates negative effect on FDI inflows. Incredibility in trade liberalization policy may be a part of poor macro economic policy.**

**Key words:** Institutional quality, macro economic policy, attractiveness, incredibility, South Asia

## **INTRODUCTION**

Foreign direct investment (FDI) inflow is one of the most important factor in globalization. FDI inflow has widely received tremendous attention because of expanding production and financial markets. In previous century, FDI inflows have remained a major challenge for developing countries to build up their economies. It is generally argued that FDI is an engine of employment, productivity improvement through technological, management spillover and economic growth (Balasundram, 2000; Azmat, 1999; Gordon, 2001).

A large number of developing countries heavily rely on FDI inflows because it is an important source for external financing (Gao, 2004). According to UNCTAD report (2006), FDI inflows provide physical capital, employment possibilities and technological transfer and long term economic development among developing countries. Therefore, the main priority of developing countries national governments are is the attraction of foreign

capital in the country.

One of the major challenges for developing countries is to draw attention towards FDI flows. In recent economic literature, the importance of political environment in developing countries for FDI inflows still remained questionable. An extensive empirical literature has given substantial importance to political institutions variables for FDI attractiveness in host country including the work of Kaufman et al. (1999), Altomonte (2000), Bevan and Estrin (2000), Mody and Srinivasan (1998), Kinoshina and Campos (2003). In contrast to this a mixed kind of arguments have been reported by a group of scholars (Dawson, 1998; Przeworski et al., 2000; Li and Resnick, 2003; Stein and Daude, 2001). Lucas (1990) augmented the political factors and legal environments as an important determinant that can explain the FDI inflows from developed countries to developing countries. Levchenko (2004) considered that strong political institutions of developing countries had comparative advantage for FDI attractiveness. The strand of economic literature and the various channels, which have been identified by Political institutions, may affect FDI.

Despite political factors, macro economic policy is

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is considered as pre condition for FDI attractiveness (UNCTAD, 2006; Hadjmichael et al., 1996; Taylor, 2000; Kumar, 2002). A macro economic policy has three major contents like (1) monetary policy (2) fiscal policy (3) exchange rate or trade policy. A robust kind of arguments has been built to capture the impact of each contents of macroeconomic policy on FDI Inflows (Grubert and Mutti 1991; Loree and Guisinger, 1995). Most of the past studies have analyzed the effect of each policy separately in FDI perspective. Inflation targeting is one of major channel for monetary policy that affect FDI. It is generally argued that higher inflation will increase uncertainty about prices and make it more difficult for MNCs to predict host country (Fisher, 1993; Burdekin and Siklos, 2004). Fiscal policy adopted by host country government has gotten tremendous attention for MNCs concerning FDI decision. A fiscal spending and taxes are important theoretical channels that effect MNCs decision (Oman, 2000; Blomstrom et al., 2000). Similarly, trade openness policy is an important part of macro economic policy and its effect on FDI is ambiguous for developing countries.

Recently, a poor quality of institutional structure, high inflation rate, an increasing budget deficit and inconsistent trade liberalization are major problems that affect FDI in South Asia. Therefore, it is essential to investigate the relationship among political factors, macro economic policy and FDI. Few studies in South Asia investigate the importance of political factors for FDI. These studies focus only on political factors and macro-economic policy factors separately in disaggregated form. These studies completely ignore the combined importance of political factors and macro economic policy factors for FDI.

Keeping this in view, the purpose of this study is to fulfill the gap in economic literature by analyzing the relationship among political factors, macro economic policy and FDI. This study focus on the following questions:

Does institutional quality and macro economic policy effect FDI in disaggregated and combined form? What is the relationship among institutional quality, macro economic policy and FDI? Does macroeconomic policy depict a similar pattern as institutional quality factor for FDI?

### **Conceptual frame works**

In 19<sup>th</sup> century, FDI got a serious attention in theoretical economic literature. Classical economists predict that FDI increase efficiency and economic growth by gaining economies of scale in production process (Smith, 1776; Ricardo, 1817). Neoclassical economists argued that FDI expansion from home country to host country is because of interest rate differential characteristics. In this

ideological framework, capital movements took place from low return on capital economies to high return on capital economies and helpful for technological spillover and productivity improvements (Bergten et al., 1978; Reuber et al., 1973).

The product life cycle theory argued FDI flows process regarding products from home country to host country. Vernon (1966) explained that production process and sale of new products should be started in home country. The reason behind this argument is that product is not standardized, thereby per unit input requirement and cost is not uniform. The product will be standardized due to increase in the local demand of product and generate demand of high income and labor saving product outside the home country. FDI decision took place where cost of production is very low and firm face competition towards maturing the products when product reaches maturity stage the skilled labor contribute in production, a high income and labor saving product will be produced and host country becomes an attractive place.

Dunning (1988) developed "Eclectic or OLI paradigm theory" that FDI decision abroad depends upon following determinants. The term OLI refers to ownership, location and internationalization conditions accordingly. Firstly, the term (O) implies the ownership factors that matters for MNCs to take FDI decisions abroad. The ownership factor includes protection of property rights, enjoying monopoly power and controlling the supplies of outputs in that country. Secondly, another term (L) that belongs to Location factors that determine MNCs decision for FDI in developing countries. The location factors can be categorized on the basis of market seeking factors, efficiency seeking factors for MNCs. The market seeking factors include large market size. Large market size normally increases the productivity potential of MNCs by achieving economies of scale in host country (Asiedu, 2002; Schneider and Frey, 1984; Eaton and Tamura, 1994). The efficiency seeking factors that matters for FDI include cheap and skilled labor force in host country. The infrastructure factors include railway and road networks, communication system as well as the electric consumption capacity in host country are majors' determinants for FDI (DELBO, 2009).

In recent economic literature, an institutional approach has transformed categorical thinking of MNCs about FDI in host country. The institutional environment facing MNCs is very complex and conflicting in its nature (Henisz and Delios, 2001; Lu, 2002). According to North (1990) an institutional environment of host country includes rule and regulation, norms and customs, process and procedure that matters for MNCs. It is argued that government play an important role for MNCs by providing stable political and economic environments, contract enforcement, skilled workforce and sound infrastructure both at macro level and micro level. A country level institutional force can be conceptualized by including political influences and legitimate problems

which can be categories; formal rules, taxation laws and rates, informal pressure groups, operating constraints and regulations (Brouthers and Brouthers, 2000; Guler et al., 2002; Goodrick and Salancik, 1996; Scott, 1995; Huang and Sternquist, 2007). The institutional importance cannot be ignored when MNCs decide about extension abroad in the form of subsidiary setup. It can be concluded that bad governance results in less attractive environments for MNCs and as a result FDI decreased (Mauro, 1998).

Various theoretical explanations regarding the relationship between macro economic policy and FDI are documented. Monetary policy is considered as an important part of macro economic policy. Monetary policy effect FDI through credit rate channel (Kindleberger, 2000). A credit market has given substantial importance for explaining financial shocks that ultimately affect investment incentive (Gertle and Natalucci, 2003) for MNCs cost of credit has directly restricts banks borrowing (Gorton et al., 2008; Lown and Morgan, 2005). These financial constraints restrict not only local investment decisions but also foreign investment decisions (Xu, 2000; Kaplan and Zingales, 1997; Lamont, 1997). "Non Keynesian approach" has given prime importance to fiscal expansion for FDI attractiveness and better for economic activity (Alesina and Ardagna, 1998; Giavazzi and Pagano, 1990; Bertola and Drazen, 1993; Sutherland, 1997; Perotti, 1999). Budget deficit result in terms of high taxation that effect MNCs decision (Oman, 2000). The budget deficit increase in developing countries reinforces the governments to impose high taxes both on local and foreign firms. MNCs investment decision is badly affected by the taxes imposed to finance the budget deficit. A competitive tax rate environment in a country also support FDI by providing economies of scale in production and access to foreign markets. There is no doubt regarding the importance of trade liberalization policy for economy and it is helpful for efficient use of natural resources and encourages foreign investment (Kumar, 2002). In contrast to this, trade liberalization policy also effect FDI negatively through credibility of policy channel in developing countries (Rehamn, 2003). The credibility of trade liberalization policy affect negatively FDI inflows through time inconsistency which means that differentiation between different strategies adopted by host country. A trade liberalization policy may become potential source for taxation that negatively affect FDI inflows (Mash, 1999). Inconsistent measures of liberalization policy may out weight the benefits of trade liberalization policy (Papageorgiou et al., 1986; Aizenman, 1992).

A theoretical discussion identified that institutional quality matters for FDI. Institutional quality effect is transferred to FDI through contract enforcement, rules and regulation and investment security channels. Macro economic policy including monetary, fiscal and trade liberalization policy effect is translated to FDI through

cost of credit channel, tax channel and credibility of trade openness policy channel. There is strong possibility that institutional quality has positive impact on FDI and macro economic policy impact FDI negatively.

## LITERATURE REVIEW

### Economic determinant and FDI

Mottaleb (2007) incorporated the market size variable by analyzing the data of 60 developing countries over the period of 2003 to 2005 and used GDP as proxy for market size and study further explored that corruption deteriorate FDI inflows toward developing Countries. Din (1994) used per capita GDP as a proxy for market size by empirically estimating the data of 36 lower developing countries for the year 1983 and found that large market size increase FDI inflows (Lankes and Venables, 1996; Resmini, 2000; Garibaldi, 2002; Khan and samad, 2010; Nunes et al., 2006; Sahoo, 2006)

Sahoo (2006) analyzed the data for five South Asian countries and highlighted the importance of economic factors for FDI flows and used panel co integration technique to examine long run relationship between economic variables and FDI inflows and identified that market size; trade openness, infrastructure index and labor force growth rate were major determinants. For infrastructure the previous studies proved the same (Wheeler and Mody, 1992; Kumar, 1994; Loree and Guisinger, 1995; Asiedu (2002).

Hailu (2010) identified the demand side factors important for FDI inflows over the period of 1980 to 2007 for 45 African countries. The study utilized fixed effect least square dummy variable (LSDV) model for estimation and revealed that trade openness, Market size and infrastructure in host country exerted positive effect on FDI inflows. Furthermore, the findings of this study also highlight the significant of political factors and natural resources for FDI. The results suggest that a sustainable political condition in host country facilitate foreign investors regarding business expansion, property right protection, etc. that play crucial role for FDI attractiveness to African countries.

### Institutional quality and FDI

The impact of institutional quality on FDI has been investigated on limited extent in South Asian countries. Gliberman and Shapiro (1999) identified the importance of institutions quality for MNCs. They developed governance quality index using six governance indicators that include rule of law, corruption, etc of Kaufman et al. (1999). A good Governance effect positively FDI and inflows. They used principal components methodology for this index development. Quéré (2005) found that good

institutions are main source of attractiveness for FDI inflows. For empirical analysis they used data set of 52 countries. They also controlled the issue between institutions and market size. They evaluated good institutional quality raise bilateral FDI inflows. Hyun (2006) analyzed the short run and long run relationship between institution quality and FDI inflows by analyzing the data of 62 developing countries over the period of 1984 to 2003 .There is no short run causality between these two variables. Institutional quality affects FDI positively in long run and short run.

Wernick (2009) had estimated the relationship between institutional quality and FDI for the 64 emerging countries. It is evaluated that strong institutional quality creates a friendly environment and main source of attraction. FDI inflows took place comparatively to those countries having weak governments. In the strand of literature, Wei (2000) observed the data for 143 countries over the period of 1995 to 1997. He found that three main factors of institutional quality like regulating, legislation system and legal system are key determinants that attract FDI. Corruption factor is also observed to negatively affect FDI inflows. They argued that a good quality of institutional condition in host country attract more FDI as well as create feasible condition for emerging of new MNCs in host country. Vadlamannati (2008) analyzed the data for South Asian countries over the period of 1975 to 2006, highlighted the importance of institutional quality, GDP growth rate, per capita GDP for FDI inflows.

### Macro economic policy and FDI

It is generally argued that macro economic policy plays an important role for FDI inflows (Hadjmichael, 1996). Macro economic policies affect FDI through market imperfections. The relationship of macro economic policy with FDI is ambiguous that may increase or decrease FDI inflows (Grubert and Mutti, 1991; Loree and Guisinger, 1995; Taylor, 2000; Kumar, 2002). Ahnsy et al. (1998) explored the relationship between exchange rate, inflation and FDI over the period 1970 to 1981 for developing countries and found out that high inflation rate negatively affect FDI inflows. He also observed that over valuation of exchange rate is the result of high inflation rate that adversely affect FDI inflows.

Ahlquist (2006) analyzed the data of 90 developing countries over the period of 1985 to 2002, he investigated that FDI decision is sensitive to fiscal policy and political institution in host country. Investors take investment decision on the basis of perceived risk and government policy adopted by host country and further evaluate that FDI inflows decision relative to portfolio investment have different nature of determinants. A FDI inflow is not sensitive to Fiscal policy but more sensitive to political factors in host country.

Desai et al. (2004) identified the role of taxes on FDI in

host country .They found that high tax rate imposed on corporate sectors negatively affect profit of firms through capital and labor market. Corporate tax depress capital labor ratio and decrease the profit margin. A high level of income tax helps in substitutions of capital with labor market. High income taxation rates appear to encourage firms to substitute labor for capital and to reduce levels of taxable income, whereas high rates of indirect taxation do not. Rehman (2003) argued that credibility of trade liberalization policy of host country is more important for FDI inflows by analyzing the data of 74 developing countries over the period of 1980 to 1998 and concluded credibility of trade policy concerned with export promotion efforts to attract FDI inflows in developing countries. Credibility of trade liberalization policy is important for FDI inflows relative to portfolio equity investment because FDI inflows are based on long term decision. Lack of credibility regarding policies in host country may generate risk for foreign investment.

### THE MODEL SPECIFICATION, METHODOLOGY AND DATA

There are different empirical models specified in economic literature for identification of economic determinants for FDI. There is no unanimous ideology accepted theoretically for FDI determinants (Kamaly, 2004). A recent economic literature highlighted that market size (Buckley et al., 2007) labor force, a good institutional quality and macro economic policy are main important variables for determining FDI. For purpose of empirical analysis of different factors on FDI, the study used model is as follows:

$$FDI_{it} = f(Y_{it}, LF_{it}, PI_{it}, IQ_{it}, INU_{it}), \quad (1)$$

where

$FDI_{it}$  = Foreign Direct Investment Inflows

$Y_{it}$  = GDP per capita

$LF_{it}$  = Labor Force

$PI_{it}$  = Macro economic Policy Index

$IQ_{it}$  = Institutional Quality Index

$INU_{it}$  = Internet Users (per 1000 people)

A panel data is an appropriate methodology used for time specific and cross section specific analysis (Beven et al., 2000). In panel data analysis, a time and space dimensions are covered by surveying cross section units over time. A balanced panel data has been used because each cross section units contained equal number of observations. Panel data estimation methodology is helpful in reducing econometrics problems and omitted or miss measured variables have strong correlation with explanatory variables (Hsiao, 1989). The econometric equation applied in this study can be specified as:

$$y_{it} = \alpha_{1i} + \sum_{j=2}^9 \beta_j x_{jit} + \varepsilon_{it} \dots$$

In Equation (1),  $y_{it}$  is the dependent variables, that is, FDI Inflows for  $i$ th country and  $t$ th years. (2) The number of cross section countries are represented by  $i = 1, 2, \dots, N$  Where the value of  $N = 7$  or seven countries (Pakistan, Bangladesh, India, Afghanistan, Srilanka, Maldives and Bhutan) and time period  $t = 1, 2, \dots, T$  where  $T = 12$  years of Data. (3)  $\alpha_i, i = 1, 2, \dots, N$  represent the intercept term that remained constant over time but varied across countries. (4)  $\beta_j, j = 1, 2, \dots, J$  represent the slope coefficient and it remained constant overtime and across countries (5)  $x_{jit}$  it captures the  $j$ th explanatory variable for  $i$ th country at  $t$ th years. A set of explanatory variables include GDP per capita (Lankes and Venables, 1996; Resmini, 2000; Garibaldi, 2002; Bevan and Estrin, 2000; Nunes et al., 2006; Sahoo, 2006) infrastructure. The previous studies of Wheeler and Mody (1992), Kumar (1994), Loree and Guisinger (1995) and Asiedu (2002) included market size, institutional quality index and policy variables. (6)  $\varepsilon_{it}$  is stochastic random term for  $i$ th country and  $t$ th years with its mean is independent and identically distributed (iid) with zero mean value and constant variance. A fixed effect and random effect model can be specified for regression analysis that depend upon the assumptions made about  $\alpha_i$ . A country specific effect can be captured by fixed effect model that includes  $N-1$  countries specific dummies. It is assumed that  $\alpha_i$  remained fixed.

A general equation for fixed effect model can be written as:

$$y_{it} = \sum_{k=1}^N \alpha_{1k} D_{ki} + \sum_{j=2}^9 \beta_j x_{jit} + \varepsilon_{it}$$

where in above equation,  $D_{ki}$  dummy variable that take value 1 for  $k$  country and zero observations for other countries. A fixed effect model can be specified in our study as for estimation:

$$NFDI_{it} = \sum_{k=1}^9 \alpha_{1k} D_{ki} + \beta_1 y_{it} + \beta_2 LF_{it} + \beta_3 INU_{it} + \beta_4 IQ_{it} + \beta_5 PI_{it} + \beta_6 IQ^* PI_{it} + \varepsilon_{it} \dots 4$$

In case of random effect model  $\alpha_i$  is assumed to be random not fixed. It is also assumed that its mean is equal to  $\bar{\alpha}_i$  and its variance is  $\delta_{\mu}^2$ . In this way, generalized least square estimators are obtained in Random Effect or Error Component Model. A general form of equation in Random Effect Model can be specified as:

$$y_{it} = \bar{\alpha}_1 + \sum_{j=2}^9 \beta_j x_{jit} + \mu_i + \varepsilon_{it} \quad (5)$$

where  $\alpha_i = \bar{\alpha}_1 + \mu_i$

A random effect model can be specified as in our Study:

$$NFDI_{it} = \bar{\alpha}_1 + \beta_1 y_{it} + \beta_2 LF_{it} + \beta_3 INU_{it} + \beta_4 IQ_{it} + \beta_5 PI_{it} + \beta_6 IQ^* PI_{it} + \varepsilon_{it} \quad (6)$$

In this study, the data set is a balanced panel data set that consists of seven countries including Pakistan, Bangladesh, India, Afghanistan, Srilanka, Maldives and Bhutan for the period of 1996 to 2007. The data on FDI inflows have been taken from relevant countries central banks reports. Recently, institutional factors have got tremendous importance for FDI in most of the developing countries (Morrissey and Rai, 1995; Brenton et al., 1999; Meyer, 1998; Globerman and Shapiro, 2002; 2003). For institutional quality measurement, six indicators have been introduced that include voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption (Kaufmann et al., 2009). We used these indicators for institutional quality index. Macro economic policy variables have their own significant importance for net FDI inflows. These macro economic policy variables include monetary policy, fiscal policy and trade liberalization policy. Inflation as GDP deflator has been used as a proxy for monetary policy. Budget deficit has been used as proxy for fiscal policy. Trade as percentage of GDP used for trade openness has been used as proxy trade liberalization policy. In This study, a macroeconomic policy index has been developed by following a principal component. The data source on budget deficit, inflation as percentage of GDP deflator trade openness, labor force and internet user is taken from relevant country data source and world development indicators respectively.

## EMPIRICAL RESULTS

Before the estimation of equation (3), we estimate the order of integration of each variable other wise econometric specification lead to spurious kinds of results (Asterieou and Hall, 2007). To check the stationary of variables so we have applied Hadri<sup>1</sup> unit root test approach. This test measure Z-statistics for unit root. Hadri test is performed on some conditions at level and 1<sup>st</sup> difference unit root testing. The results of Hadri test at level and first difference are reported in Table 1.

The results show that all variables included are stationary (without taking any difference). This implies that the null hypothesis of unit root is rejected for all variables at level. Hence these variables are integrated of order zero, that is,  $I(0)$  or stationary at level. So we can estimate parameters of panel data by panel least square, fixed effect and random effect specification at level.

In Table 2, the results are estimated by panel least square, fixed and random effects pecification.<sup>2</sup> The results estimated from different panel estimation specification are almost same. A Hausmann test is used for more appropriate model specification. In our study, the value of Chi-square statistics of Hausmann test is insignificant, suggesting that the results of random effect fixed model is more appropriate and efficient. However

<sup>1</sup>For detailed methodology Giullietti and Otero (2005) work can be concerned.

<sup>2</sup> The descriptive statistics of Political risk index as well as economic variables are given in Annex part respectively.

**Table 1.** Hadri panel unit root test.

Variable name	Hadri (Z-stat ) at 1st difference	Hadri (Z-stat ) at 1st difference
$FDI_{it}$	3.73(0.000)*	4.90(0.000)*
$Y_{it}$	4.80(0.000)*	5.87(0.000)*
$IQ_{it}$	2.54(0.0055)***	2.10(0.017)**
$PI_{it}$	4.79(0.000)*	2.70(0.0034)**
$LF_{it}$	5.09(0.000)*	5.75(0.000)*
$INU_{it}$	4.47(0.000)*	3.67(0.000)*

Note: \*, \*\*, \*\*\* indicate the significance at 1,5 and 10% respectively, The value in parenthesis are the p-value.

**Table 2.** A Panel regression results for FDI inflows.

Independent variables	Dependant variable: $FDI_{it}$		
	Panel least square	Fixed effect model	Random effect model
C	-9.000.(-6.65)*	-8.21(-21.35)*	5.29(5.29)**
$Y_{it}$	8.49E-05(7.23)*	6.08E-06(5.15)*	4.67E-0.6(3.290)**
$LF_{it}$	1.87E-05(7.62)*	1.47E-05(14.33)*	1.40E-4(3.37)*
$INU_{it}$	0.17(2.44)**	0.085(2.50)**	0.21(2.69)**
$IQ_{it}$	1.19(3.05)*	1.46(2.45)**	2.40(2.37)**
$PI_{it}$	-0.26(-3.40)*	-0.15(-3.23)*	-0.28(-2.06)**
$(IQ_{it} * PI_{it})$	-0.21(-5.25)*	-0.15(-4.73)*	-0.26(-2.32)**
$R^2$	0.64	0.85	0.64
$\overline{R^2}$	0.62	0.80	0.62

A Haussmann test-  $\chi^2 = 0.0095(0.985)$

Note: \*, \*\*, \*\*\* indicate the significance at 1%,5%,10% respectively, The value in parenthesis are the t-value.

we have reported the results estimated from three specifications. GDP per capita used as proxy for market size exerts positive and significant effect on FDI inflows that is consistent to literature. This implies that a large market size generates more demand for goods and services and help MNCs to achieve economies of scale in host country. We find labor force to have significant positive effect on FDI inflows. The labor force indicates that as population in host country increase, that ultimately increase the demand of goods and services which attract more FDI from outside the world. The results of internet users represent the communication facility that improves and provides a feasible facility for MNCs. It ultimately shows a positive effect on FDI. The institutional quality exerts positive and significant effect on FDI. The result implies that as political institutions quality improves this

will attract more FDI. An improvement in rules of laws, deterioration of corruption and government stability etc provide a fair and friendly environment regarding investment protection point of view.

Concerning the macro economic policy, a negative and significant effect was shown on FDI. The result of the macro economic policy implies that increase in budget deficit, inflation and increase in with regards to the creditability of trade openness has negative effect on FDI inflows. Currently, it is argued that trade liberalization policy effect on FDI inflows through credibility channel in developing countries. The foreign investors are interested in policy consistency in long run. But developing countries have lack of creditability regarding policy inconsistency of trade openness. Similarly, an improvement in intuitional conditions exerts positive effect on FDI.

To capture the combined effect of macroeconomic policy and institutional quality, we include interaction term in our model specification. This term investigate the impact of institutional quality on FDI through macro economic policy channel. The relationship between interactive term and FDI is positive and significant. The result is little bit surprising, institutional quality negatively affect FDI in South Asia only in case of weak macro economic policy that includes mismanagement of budget deficit, a high inflation rate and incredible trade liberalization policy structure.

## CONCLUSIONS

FDI inflows have received considerable attention due to its undeniable importance for developing countries in form of industrial development and source of financing. The situation of FDI in South Asian countries is not satisfactory despite a continuous process of FDI related policy relaxation. This study focuses on the impact of institutional quality and macrocosmic policy on FDI. The coefficient of institutional quality is positive suggesting that an improvement in voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption are indicators on FDI inflows. A macro economic policy exerts a negative effect on FDI inflows, suggesting that weak condition of fiscal policy, monetary policy and lack of credibility trade liberalization policy is not favorable for MNCs.

The interactive term suggest that a poor macro-economic policy condition deteriorate the institutional quality and negatively affect FDI. The main findings of the present study suggest that macro economic policy including fiscal policy, monetary policy and trade liberalization policy deteriorate not only institutional quality but also reduce FDI in South Asia. The policy makers should also considered political and macro economic policy conditions when designing policy regarding FDI.

## REFERENCES

- Ahlquist JS (2006). Economic Policy, Institutions, and Capital Flows: Portfolio and Direct Investment Flows in Developing Countries. *Int. Stud. Q.*, 50: 681–704.
- Ahn YS, Adji SS, Willett TD (1998). The effects of inflation and exchange rate policies and direct investment to developing countries. *Int. Econ. J.*, 12(1): 95-104.
- Aizenman J (1992). Trade Reforms, Credibility and Development. *J. Dev. Econ.*, 39: 163-187.
- Alesina A, Ardagna S (1998). Tales of Fiscal Adjustment. *Eco Policy* 27: 489-545.
- Altomonte C (2000). Economic determinants and institutional frameworks: FDI in economies in transition. *Trans Corp.*, 9 (2): 75-106.
- Asiedu E (2002). On Determinants of Foreign Direct Investment to Developing Countries: Is Africa different? *World Dev.*, 30(1): 107-119.
- Asterieou D, Hall GS (2007). *Applied Econometrics: A Modern Approach using Eviews and Microfit.* Palgrave Macmillan, New York.
- Azmat G (1999). Foreign Direct Investment in Fiji. *Pac. Eco. Bull.*, 14(1): 87-92.
- Balasundram M (2000). U.S. FDI in Latin America: A new perspective'. *Sam Houston State University Proc. Acad. Econ. Econ. Educ.*, 3(2)
- Bergten CFT, Horst, Moran H (1978). *American Multinationals and American Interests.* Washington, D.C.: Brookings Institute.
- Bertola G, Drazen A (1993). Trigger points and budget cuts: ex- paining the expects of social austerity. *Am. Econ. Rev.*, 83(1): 11-26.
- Bevan AA, Estrin S, Meyer K (2000). *Institution Building and the Integration of Eastern Europe in International Production,* Centre for New and Emerging Markets Discussion Paper No.11, London Business School.
- Blomstrom M, Kokko A, Zejan M (2000). *Foreign Direct Investment: Firm and Host Country Strategies,* London: Macmillan Press.
- Brenton PF, Di Mauro, Lucke M, (1999). *Economic Integration and FDI: An Empirical Analysis of Foreign Investment in the EU and in Central and Eastern Europe.* *Empirica*, 26(2): 95-121.
- Brouthers K, Brouthers L (2000). Acquisition or green field start-up? International cultural and transaction cost influences. *Strateg. Man. J.*, 21(1): 89-97.
- Burdekin RCK, Siklos PI (2004). Fears of Deflation and the Role of Monetary Policy: Some Lessons and an Overview', in RCK. Burdekin, PL Siklos (Eds.), *Deflation: Current and Historical Perspectives,* Cambridge: Cambridge University Press, pp. 1-27.
- Dawson JW (1998). Institutions, investment and growth: new cross-country and panel data evidence", *Econ. Enquiry*, 36: 603-619.
- DELBOC (2009). *Recent advances in public investment, fiscal policy and growth,* Departemental Working Papers 2009-2025, Department of Economics University of Milan Italy.
- Din M (1994). Export processing zones and backward linkages. *J. Dev. Econ.*, 43(2): 369-385
- Dunning JH (1988). *Explaining International Production.* London: Unwin Hyman.
- Fischer S (1993). The role of macroeconomic factors in growth. *J. Monetary Econ.*, 32: 485-512.
- Gao T (2004). FDI, Openness and Income. *J. Int. Trade Econ. Dev.*, 13(3): 305-323.
- Garibaldi P, Mora N, Sahay R, Zettelmeyer J (2002). What moves capital to transition economies? IMF working paper WP/02/64.
- Gertle MSG, Natalucci FM (2003). External constraints on monetary policy and the financial accelerator. *Bank for International Settlements. BIS Work. Paper*, p. 139.
- Giavazzi F, Pagano M (1990). Can Severe Fiscal Contractions be Expansionary? A Tale of Two Small Economies", in O. Blanchard and S. Fischer (eds) *National Bureau Econ. Res. Macroecon. Ann.*, pp. 75-110.
- Globerman S, Shapiro D (1999). The impact of government policies on foreign direct investment: the Canadian experience. *J. Int. Bus. Stud.*, 30(3): 513-532.
- Globerman S, Shapiro D (2002). *Global foreign direct investment flows: The Role of Governance Infrastructure". World Dev.*, 30 (11): 1899-1919.
- Goodrick E, Salancik GR (1996). Organizational discretion in responding to institutional practices: Hospitals and cesarean births. *Adm. Sci. Q.*, 41: 1-28.
- Gordon H, Hanson (2001). *Should Countries Promote Foreign Direct Investment?* United Nations Conference on Trade and Development-Center for International Development Harvard University. Research papers for the Intergovernmental Group of Twenty-Four on International Monetary Affairs.
- Gorton G, He P, Huang D (2006). *Asset Prices When Agents are Marked-to-Market,* NBER Working Papers, No. 12075. National Bureau of Economic Research, Inc.
- Grubert H, Mutti M (1991). *Financial Flows versus Capital depending: Alternative Measures of U.S.-Canadian Investment and Trade in the Analysis of Taxes.* Mimeo
- Guler I, Guillén MF, Macpherson JM (2002). *Global Competition, Institutions, and the Diffusion of ISO 9000 Quality Certificates'. Adm. Sci. Q.*, 47: 207-232.
- Hadjimichael M (1996). *Adjustment for Growth: The African Experience", Occasional Paper No. 143,* Washington DC, International Monetary Fund.
- Henisz WJ, Delios A (2001). *Uncertainty, imitation and plant location:*

- Japanese multinational corporations, 1990–1996. *Adm. Sci. Q.*, 46: 443-477.
- Hsiao C (1989). Modeling Ontario Regional Electricity System Demand Using a Mixed Fixed and Random Coefficients Approach. *Regional Sci. Urban Econ.*, 19: 565-587.
- Huang Y, Sternquist B (2007). Retailer's foreign market entry decisions: an institutional perspective. *Int. Bus. Rev.*, 16(5): 613-629.
- Hyun HJ (2006). Quality of Institutions and Foreign Direct Investment in Developing Countries: Causality Tests for Cross-Country Panels", working paper, Korea Institute for International Economic Policy. Investment Decisions, *World Econ.*, 23: 635-648.
- Kamaly A (2004). Evaluation of FDI flows into MENA region, economic research forum working paper series, Cairo, Egypt.
- Kaplan S, Zingales L (1997). Do Investment-Cash Flow Sensitivities Provide Useful Measures of Financing Constraints?" *Q. J. Econ.*, 112(1): 169-215.
- Kauffman D, Kraay A, Mastruzzi M (2009). Governance Matters VIII: Aggregate and Individual Governance Indicators, 1996-2008. World Bank Policy Research Working Paper, No. 4978.
- Kaufmann D, Kraay A, Zoido-Lobaton P (1999). Governance Matters', World Bank Policy. Research Working Paper, No. 2196.
- Khan AM, Samad G (2010). Intellectual Property Rights and Foreign Direct Investment: Analysis of 14 South and South East Asian Countries, 1970-2005. *Appl. Econ. Int. Dev.*, 10(1): 219-230.
- Kindleberger CP (2000). *Maioas panic and crashes: a history of financial crises* 4th edition New York John Nweily and sons.
- Kinoshita Y, Campos N (2003). Why Does FDI Goes Where It Goes? New Evidence from the Transition Economies. Williamson Institute Working Paper, No. 573.
- Kumar N (1994a). Determinants of Export-Oriented Production by U.S. Multinationals: An Inter Country Analysis. *J. Int. Bus. Stud.*, 25(1): 141-56.
- Kumar N (2002). Globalisation and the Quality of Foreign Direct Investment, Oxford University Press.
- Lamont O (1997). Cash flow and investment: Evidence from internal capital markets. *J. Finan.*, 52: 83-109.
- Lankes HP, Venables AJ (1996). Foreign Direct Investment in Economic Transition: The Changing Pattern of Investments. *Econ. Transit.*, 4: 331-347.
- Levchenko AA (2004). Institutional Quality and International Trade, IMF Research Department Working Paper, No. 04231.
- Li Q, Resnick A (2003). Reversal of Fortunes: Democratic Institutions and Foreign Direct Investment Inflows to Developing Countries. *Int. Organ.*, 57(1):
- Loree DW, Guisinger SE (1995). Policy and non-policy determinants of U.S. equity foreign direct investment. *J. Int. Bus. Stud.*, 26 (2): 281-299.
- Lown C, Morgan DP (2005). The Credit Cycle and the Business Cycle: new findings using the survey of senior loan officers." *J. Money Credit Bank.*, 38(6): 1575-1597.
- Lu JW (2002). Intra and Inter-organizational Imitative Behavior: Institutional Influences on Japanese Firms' Entry Mode Choice. *J. Int. Bus. Stud.*, 33(1): 19-37.
- Lucas RE (1990). Why doesn't capital flow from rich to poor countries?", AEA Papers and Proceedings. *Am. Econ. Rev.*, 80(2): 92-96.
- Mash R (1999). The Investment Response to Imperfectly Credible Trade Liberalization, Centre for the Study of African Economies Working Paper.
- Mauro P (1998). Corruption and the composition of government expenditure. *J. Pub. Econ.*, 69(2): 263-79.
- Meyer KE (1998). *Direct investment in economies in transition*. Cheltenham, United Kingdom: Edward Elgar.
- Mody A, Srinivasan K (1998). Japanese and U.S. Firms as Foreign Investors: Do They March to the Same Tune? *Can. J. Econ.*, 31(4): 778-799.
- Morrisey O, Rai Y (1995). The GATT Agreement on Trade-Related Investment and Their Relationship with Transactional Corporations. *J. Dev. Stud.* 31: 702-24.
- Mottaleb KA (2007). Determinants of Foreign Direct Investment and Its Impact on Economic Growth in Developing Countries. *Munich Personal Repec. Arch.*, pp.1-15.
- North NC (1990). *Institutions, institutional change, and economic performance*. Cambridge university press.
- Nunes CL, Oscategui J, peschiera J (2006). Determinants of FDI in Latin America', Documento De Trabajo 252 of U.S. firms. *J. Int. Econ.*, 33: 57-76.
- Oman C (2000). *Policy Competition and Foreign Direct Investment: A Study of Competition Among Governments to Attract FDI*, Paris: Organization for Economic Co-operation and Development.
- Papageorgiou DM, Choksi AM (1986). The Phasing of a Trade Liberalization Policy: Preliminary Evidence. World Bank Discussion Paper No. 42.
- Perotti R (2002). Estimating the effects of fiscal policy in oecd countries. European Central Bank Working Paper, No. 168.
- Przeworski A, Michael EA, Jose AC, Fernando L (2000). *Democracy and Development: Political Institutions and Material Well-Being in the World, 1950-1990*. Cambridge: Cambridge University Press.
- Rahman XX (2003). Credibility of Trade Liberalization and Foreign Direct Investment: Can Problems in Governance Muddle Bangladesh's Development, seminar participants at the AEDSB, New Orleans.
- Resmini L (2000). The determinants of foreign direct investment into the CEECs: new evidence from sectoral patterns. *Econ. Transit.*, 8(3): 665- 689.
- Reuber GL (1973). *Private Foreign Investment in Development*. Oxford: Clarendon Press.
- Ricardo D (1817). *On the Principles of Political Economy and taxation*, Variorum edition in P. Sraffa, ed., *Works and Correspondence of David Ricardo*, Cambridge: Cambridge University Press.
- Sahoo P (2006). *Foreign Direct Investment in South Asia: Policy, Trends, Impact and Determinants*. ADB Institute. Discussion paper No. 56.
- Schneider F, Frey B (1985). Economic and Political Determinants of Foreign Direct Investment, *World Dev.*, 13(2): 161-175.
- Scott WR (1995) *Institutions and organizations*. CA: Sage: Thousand Oaks.
- Smith A (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*. RH Campbell, AS Skinner, eds., Indianapolis, USA: Liberty Fund. Vol. I and II.
- Stein E, Daude C (2001). *Institutions, Integration, and the Location of Foreign Direct Investment*." Washington, DC, United States: Inter-American Development Bank.
- Sutherland A (1997). Fiscal Crises And Aggregate Demand: Can High Public Debt Reverse The Effects Of Fiscal Policy?" *J Pub. Econ.*, 65: 147-162.
- Tamura A (1994). Bilateralism and regionalism in Japanese and U.S. trade and direct foreign investment patterns. *J. Jap. Int. Econ.*, 8 (4): 478-510.
- Taylor CT (2000). The Impact of Host Country Government Policy on US Multinational the role of governance infrastructure,' *World Dev.*, 30(11): 1898-1919.
- Vadlamannati KC (2008). Do Elections Slow Down Economic Globalization Process In India? Itactms Politics Stupid!, William Davidson Institute Working Papers Series wp929, William Davidson Institute at the University of Michigan.
- Vernon R (1966). International Investment and International Trade in the Product Cycle. *Q. J. Econ.*, 80: 190-207.
- Wei S (2000a). How taxing is corruption on international investors?". *Rev. Econ. Stat.*, 82(1): 1-11.
- Wernick, David A, Haar J, Singh S (2009). Do Governing Institutions Affect Foreign Direct Investment Inflows? New Evidence from Emerging Economies." *Int. J. Econ. Bus. Res.*, 13: 317-332.
- Wheeler D, Mody A (1992). International investment location decisions: The case with Endogenous Probability of Reversal." Centre for the Study of African Economies Working Paper 98-13. University of Oxford
- Xu B (2000). Multinational Enterprises, Technology Diffusion, and Host Country Productivity Growth. *J. Dev. Econ.*, 62: 477-493.