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## **The Impact of Exchange Rate Movement on Foreign Direct Investment Inflows in Pakistan: An Empirical Assessment Using ARDL Approach to Cointegration**

### **Abstract**

**Purpose:** The objective is to investigate the impact of exchange rate on FDI inflows in Pakistan, which is a developing economy. Along-with exchange rate, the cardinal variable, external debts and market size variables also have been used for the purpose of this study.

**Methodology:** To deal with integration of variables at different order, i.e. one or zero, bounds testing approach to cointegration and for short and long-run effects estimation, auto-regressive distributed lag (ARDL) model have been used.

**Findings:** Exchange rate is found positive highly significant with FDI inflows in short and long-run. Decrease in the value of exchange rate of recipient country results in the reduction of FDI inflows. Market size depicts positive impact in short and long-run for FDI inflows. External debts, surprisingly, show positive relationship in long-run and negative in short-run, where these positive and negative impacts are further investigated in the study.

**Originality:** Since the Pakistan is experiencing very low growth of FDI inflows when compared to the region, it becomes directly policy relevance to identify the underlying factors responsible for this decline.

**Keywords:** Exchange rate, FDI inflows, ARDL, Pakistan.

### **1. Introduction**

Foreign direct investment (FDI), being a major component of economic development, is deemed a fundamental segment of an effective and open international economic system. But benefits of FDI are not being originated spontaneously and evenly business sectors, across countries and local communities. For availing the benefits of FDI for economic development, international investment architecture and national policies do matter for developing countries. At the same time, challenges like establishment of broad, transparent and investor friendly environment with institutional capacity to implement them are the major to be addressed by host country. Christiansen and

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Ogutcu (2002) reported second category of challenges as those factors which influence the investor behavior, they are

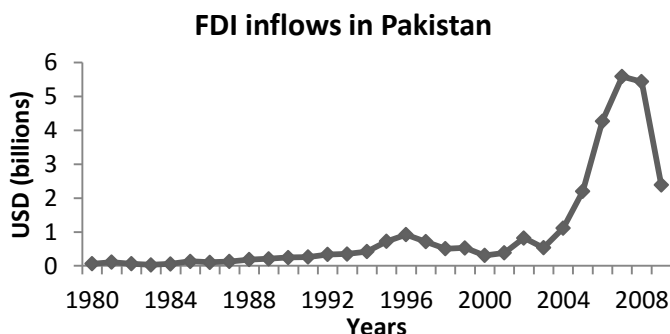
1. The ease with which compliance of investors' global strategies is integrated with subsidiaries' operations.
2. Projects profitability
3. Overall excellence of recipient country's enabling environment.

While considering merits of FDI to developing countries, potential drawbacks should also have the parallel consideration. Drawbacks "costs" can be economic or non-economic which depict the shortcomings in domestic policies of the recipient country. Potential drawbacks include lack of positive linkage with local stakeholders, potentially environmental effects in case of extractive and heavy industries, deterioration of balance of payments in the form of repatriation of profit, competition in domestic markets, and social disruptions. Moreover, the problem of loss of political sovereignty arises when recipient country perceives increasing reliance on MNCs. Some expected benefits may not be availed properly in the current state of economic development, for example, gains available due to technologies or know-how transferred due to FDI may not be fully materialized by host country.

Environmental and social benefits to recipient country via dissemination of technology and good and fair practices within MNEs are blessings of FDI. Moreover, such benefits can be further endorsed through subsequent spillovers to domestic business concerns by MNEs. However, there is a risk that MNEs could use foreign direct investment to "export" production which is no longer allowed to produce in their own home countries. In such cases, sometimes, recipient country authorities are committed to invite FDI, there remains risk of lowering or freezing of regulatory standards. Indeed, empirical evidence to support this risk scenario is little (OECD, 2002).

Small but vital role is played by the foreign direct investment (FDI) in Pakistan's economic development. Most of the years, the share was prevailing less than 1% of inward foreign direct investment to gross domestic production (GDP). Nevertheless, foreign direct investment was recognized as vital for the success of infant industry policies and import substitution in the formative years, through licensing or joint ventures, distribution arrangements and franchising between foreign companies and start-up Pakistani firms. Technology transfer was facilitated by the non-equity ties and FDI geared was attracted by manufacturing (vehicle assembly, auto parts, machinery, pharmaceuticals, consumer goods), Food processing, and services (insurance and banking).

**Figure 01: Foreign Direct Investment inflows**



Source: World Development Indicators, (WDI-WB), Mark 2010

## **2. Review of Literature**

### **2.1 Exchange Rate Movements and FDI inflows**

While dealing with public and international finance, various issues remain of vital importance to discuss with respect to foreign direct investment. For example, benefits of FDI for economic growth, market imperfections, portfolio investment, decision about exporting or licensing or FDI, public or private investment in infrastructure, and exchange rate movement as a blessing or pain to FDI. A large literature have been generated during past two decades to address the issues of FDI. Some studies, such as Kishor (2000), Gordon (2001), Chakrabarti et al. (1997), Chakrabarti (2001), Azmat (1999), Balasundram (2000), Marino (2000) and Blonigen and Wang (2005) in order to specify the benefit of FDI to the economic growth of host country. Ragazzi (1973), Aliber (1970, 1971), Scaperlandra and Mauer (1969), Scaperlandra and Balough (1983), Lunn (1980, 1983) and Ray (1977) argued that some sort of market imperfection exist while explaining the existence of foreign direct investment. Whereas, Rugman (1977), Hartman (1977) and Aggarwal (1977) reported that portfolio diversification process is the cause of foreign direct investment. In addition, many studies have been conducted concerned with different questions e.g. why foreign firms make investment in host country? (Buckley, 1979; & Buckley and Dunning, 1976). Why FDI exists rather exporting or licensing? (Contractor, 1984; Lall, 1980; Buckley and Mathew, 1979, 1980; & Buckley and Dunning, 1976. Whereas, Aqeel and Nishat (2004) addressed exchange rate movement impact on FDI along-with other explanatory variables in case of Pakistan.

As far as determinates of FDI are concerned, extensive number of determinants of foreign direct investment have been identified and analyzed in literature. Numerous empirical studies such as Mossa, (2002), Chakrabarti (2001), Gastanaga et al.(1998) and Agarwal, 1980 help us to select a significant widely used set of explanatory variables while studying the issues regarding FDI inflows. For example Mossa (2002), Lipsey (2000), Love and Lage-Hidalgo (2000), Lim (2001), Kok and Ersoy (2009) & Mughal and Akram (2011) reports various important determinates to FDI like public debt, energy resources, technology gap,

debt servicing, inflation, capital formation, market size, cross border trade and exchange rate etc.

## **2.2 Exchange Rate and FDI inflows Behaviours in Developing Countries**

1. Akhtar ( 2000) found the negative relation between exchange rate and FDI which means that FDI increases due to the devaluation of exchange rate.
2. A study conducted by Kyereboah-Coleman & Agyire-Tettey (2006) with the aim to know the effect of exchange rate on the FDI of Ghana by taking the time series data during the period of 1970-2002 using cointegration and ECM. This study concludes that exchange rate has a negative impact on the FDI inflows. Generally, it can be revealed that FDI inflows increase due to the Ghana currency depreciation and it is discouraged by exchange rate volatility.
3. Mughal & Akram (2011) reported significant positive impact on the FDI inflows both in short and long-run.
4. Hakro & Ghumro (2011) found no relationship between exchange rate and FDI in Pakistan while examining the effects of determinants on the FDI flows during the period of 1970-2007. This non-variation was due to the fixed exchange rate controlled by the government upto 1990's.

## **3. Model and Variables**

### **3.1 Data and Variables**

The study uses exchange rate (ER), market size (MS), external debts (ED) and – foreign direct investment (FDI), with their empirical and theoretical justification as discussed below. The data for FDI, ER, MS and ED is obtained from the World Development Indicator (WDI) mark 2010 online of World Bank (WB) from official website for the period of 30 years (1980-2009) with annual frequency.

#### **3.1.1 Exchange Rate**

Countries use different exchange rate systems as per their domestic and international financial interest. As a result they can have greater share in international exports and in FDI inflows as it is evidenced in case of China (Akram et al., 2011). Using exchange rate as a tool in financial environment is not a new game. Normally, economies follow fixed exchange rate system or floating exchange rate system or floating with bounds. Countries with weak currencies are able to attract more FDI inflows as more purchasing power is made usable in host economy. The opposite of is also correct: strong economies with strong currencies deter FDI as the investment becomes much more expensive (Clegg & Scott-Green, 1999). This negative relationship of exchange rate and FDI inflows is witnessed in various previous studies (Caves, 1989; Froot & Stein, 1991; Zheng, 2009). On the other hand, there are various studies which believe that depreciation of host country currency discourages FDI inflows and vice versa (Edwards, 1990; Goldberg & Kolstad, 1995; Aqeel & Nishat, 2004; Alba et al., 2009). The positive case normally arises when depreciation of host country currency is backed by inflation which leads to lessor purchasing power in host

economy of investor. Whereas, Calderon-Rossell (1985), Tuman and Emmert (1999) and Hakro & Ghumro (2011) reported insignificant relationship between exchange rate and FDI inflows. Official exchange rate (LCU per US\$, period average) has been used as proxy for exchange rate (ER). While expecting the sign of ER, it is ambiguous as now a days Pakistan is using floating exchange rate system and before one decade, fixed exchange rate system remained under use.

### **3.1.2 Market Size**

Asiedu (2006) explained three benefits of FDI available under regional economic cooperation (REC). First is the coordination of policies under REC member countries curbs corruption, investor friendly environment and implementation of sound and stable macro-economic policies. Secondly, regionalization uplifts political stability by restricting membership only to those countries where democracy prevails. Lastly and most importantly, expansion in market size which makes the region more attractive for FDI. The study is further extended to elaborate the benefits to small in size and income countries that by joining REC, they can also have benefits of FDI in a better manner. A lot of previous studies support this hypothesis that greater the market size, higher the inward FDI (Chakrabarti, 2001; Aqeel & Nishat, 2004; Tsen, 2005; Kok & Ersoy, 2009; Zheng, 2009). No study can be traced with negative or insignificant impact of market size on FDI inflows. GDP (current US\$) is used for proxy of market size (MS) and positive sign of MS coefficient is expected. The trend GDP over 1980-2009 is explained in the following figure.

### **3.1.3 External Debts**

While determining exchange rate, demand and supply of home and foreign currency play vital role. Other things being constant, if the demand of foreign currency increases, home currency is subject to depreciation and vice versa (Madura, 2010). To make continuous inflows of foreign exchange, governments of developing countries promote various modes like exports, FDI, external debts, overseas remittances. Sometimes, for exchange rate stability means continuous foreign exchange inflows reliance on only one specific mode is not better policy, as at various oceans, government of Pakistan has to borrow externally for stability of exchange rate like borrowing from Paris Club, IMF etc. Hence, uncertainty of foreign exchange inflows becomes the reason of depreciation. But at the same time, a lot of harms are associated with external borrowing like debt servicing, implementation of foreign policies and much more hard terms and conditions of loan normally unfavorable to borrowing country. By realizing this fact, countries try to invite and encourage FDI as it have many merits, but at the same time, the investor scan the scenario and if he feels that the prospective host country is already over-debt economy with weak negotiation power for international financial issues, then he negotiate with governments for making FDI at his own terms and conditions. If government agrees on major terms and conditions, the foreign investor makes the investment happily. So, it can be infer that more the external debts, more the FDI due to weak government negotiation position. This is the case with Pakistan as it was witnessed in Privatization transaction of Pakistan Telecommunication Company Limited (PTCL) with Etisalat in 2005. External loans have become necessary for Pakistan to meet balance of payment

requirements, exchange rate stability and budgetary deficit as it was evidenced in 2008 when just due to non-availability of donation or loan, PKR depreciated more than 30%. As a lender of last resort, Government of Pakistan has to join IMF stand-by-arrangements (SBA) programme. Kok and Ersoy (2009) conducted the study on FDI determinants for 24 developing countries including Pakistan and he found negative impact of external debts on FDI inflows. This study expects mixed sign of coefficient of external debts. External debt stocks, total (current US\$) is used as proxy for external debts. The trend of external debts in Pakistan can be viewed with the help of following figure.

Foreign direct investment (FDI) is taken as dependent variable and for proxy we use Foreign direct investment, net inflows (BoP, current US\$). The definition of proxy used in the WDI-2010 is as “Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) 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 capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors. Data are in current U.S. USD.”

### **3.2 Model Specification**

An appropriate proxy in reduced form specification has been used for exchange rate. Following equation is specified to investigate the impact of exchange rate on FDI inflows.

$$\ln(FDI_t) = \beta_0 + \beta_1 \ln(ER_t) + \beta_2 \ln(MS_t) + \beta_3 \ln(ED_t) + U_t \quad 3.1$$

Where,  $FDI_t$  is the foreign direct investment;  $ER_t$  denotes exchange rate;  $MS_t$  is the market size and  $ED_t$  represents external debts. The expected signs of  $\beta_1$  and  $\beta_3$  are ambiguous whereas, positive sign is expected for  $\beta_2$ . Possibility of using logarithmic version of above variable is also under consideration as it becomes easy to interpret in term of elasticity.

### **4. Methodology**

The computation of long-run relationship is important (Engle & Granger, 1987 & Johansen-Juselius (1990). It is necessary that the sample size should be large and variables also must be stationary at same certain level (Chaudhry & Choudhary, 2006).

Two step level procedure is used for estimating long-run relationship. First in equation 3.1 and second in equation 4.1 given. In our model (equation (3.1)), suppose, long-run relationship among  $FDI_t$ ,  $ER_t$ ,  $MS_t$  and  $ED_t$  exists unrestricted EC regressions are estimated.

By considering merits of ARDL approach to cointegration, following model is specified:

$$\begin{aligned} \Delta \ln(FDI_t) = & \beta_0 + \sum_{i=1}^q \beta_{1i} \Delta \ln(FDI_{t-i}) + \sum_{i=0}^q \beta_{2i} \Delta \ln(ER_{t-i}) \\ & + \sum_{i=0}^q \beta_{3i} \Delta \ln(MS_{t-i}) + \sum_{i=0}^q \beta_{4i} \Delta \ln(ED_{t-i}) + \beta_5 \ln(FDI_{t-1}) \\ & + \beta_6 \ln(ER_{t-1}) + \beta_7 \ln(MS_{t-1}) + \beta_8 \ln(ED_{t-1}) \\ & + U_t \end{aligned} \tag{4.1}$$

Where,  $q$  is optimal lag length,  $\Delta$  is the first difference operator used in the model,  $\beta_1, \beta_2, \beta_3$  and  $\beta_4$  represent short-run dynamics of the model and  $\beta_5, \beta_6, \beta_7$  and  $\beta_8$  are long-run elasticities. For testing the presence of long-run relationship, the  $F$ -tests are applied with upper and lower bounds to estimate long-run relationship. For null hypothesis, no cointegration is assumed and null hypothesis is rejected if the value of  $F$ -statistic is greater than the upper bound. The test is termed as inconclusive in case the value of  $F$ -statistic remains between lower and upper bounds. The null hypothesis for no cointegration in equation (4.1) is ( $H_0 : \beta_5 = \beta_6 = \beta_7 = \beta_8 = 0$ ) against the alternative hypothesis ( $H_1 : \beta_5 \neq \beta_6 \neq \beta_7 \neq \beta_8 \neq 0$ ) and it can also be denoted as follows: ( $F_{FDI} | ER, MS, ED$ ).

Level of integration of all variables has been tested before applying ARDL model, as in case of  $I(2)$ , ARDL model is not applicable. For this purpose, Augmented Dickey-Fuller (ADF) test is applied. To estimate long-run relationship in equation (3.1), bounds test of equation (4.1) is conducted with upper and lower bounds. After testing cointegration, Akaike Information Criterion (AIC) is used for selection of optimal lag length of variables. In equation (4.2), error correction version of equation (4.1) is given below.

$$\begin{aligned} \Delta \ln(FDI_t) = & \beta_0 + \sum_{i=1}^{q1} \beta_{1i} \Delta \ln(FDI_{t-i}) + \sum_{i=0}^{q2} \beta_{2i} \Delta \ln(ER_{t-i}) \\ & + \sum_{i=0}^{q3} \beta_{3i} \Delta \ln(MS_{t-i}) + \sum_{i=0}^{q4} \beta_{4i} \Delta \ln(ED_{t-i}) + \lambda EC_{t-1} \\ & + \varepsilon_t \end{aligned} \tag{4.2}$$

$q^1, q^2, q^3$  and  $q^4$  express optimal lag length, whereas  $\lambda$  is the speed of adjustment parameter, for the representation of long-run relationship in equation (4.1),  $EC$  denotes the error correction term which is derived from the equation (4.1).

## 5. Empirical Findings and Discussion

Before applying ARDL model, unit root test of all variables has been conducted.

**Table 01: “Unit Root Test**

Variables	Augmented Dickey Fuller Test (At Level)	Augmented Dickey Fuller Test Statistic (At First Difference)	Phillips-Perron Test Statistic (At Level)	Phillips-Perron Test Statistic (At First Difference)"
lnFDI	-0.93	-4.41**	-0.93	-4.34**
lnER	-1.39	-3.83**	-1.03	-4.28**
lnMS	0.60	-5.05**	0.77	-5.05**
lnED	-1.00	-4.42**	-0.84	-3.24*

Note: \*and \*\* show significance level at 5% and 1% respectively

Table 02 presents the results of unit root test under Augmented Dickey Fuller (ADF) test statistic and Phillips-Perron (PP) test statistic at level and first difference form. As per result, lnFDI, lnER and lnMS are stationary at first difference with one percent significance level whereas, lnED is integrated at first difference form under ADF at one percent and at five percent significant level under PP. As no variable is integrated at  $I(2)$ , ARDL model can now be applied.

**Table 02: Existence of Long-Run Relationship (*F*-Statistic)**

Lag order	<i>F</i> -Statistics
2	6.035

Note: “The lower and upper bound values 3.79 and 4.85 at 95% for *F*-Statistics are taken from Table CI (iii) case III: Unrestricted intercept and no trend given in Pesaran et al. (2001)”

The results of long-run relationship are sensitive to lag length selected in the model (Bahmani-Oskooee and Bohal, 2000). In table 02, computed *F*-Statistic value is higher than the upper bound critical value means evidence against null hypothesis of no level effect, and it can be concluded that long-run relationship exists in the model.

**Table 03: Results of ARDL**

**Dependent Variable “ln(FDI)” Long Run (2,0,0,2) Model**

Regressor	Coefficient	Standard Error	t-Ratio	p-value
Constant	-100.84	16.87	-5.98	0.000
ln(ER)	-2.15	0.61	-3.50	0.002
ln(MS)	2.36	0.36	6.55	0.000
ln(ED)	2.92	0.67	4.35	0.000



In long-run, ER and FDI are positively related (Table 03) consistent with the findings of previous studies on developing countries (Aqeel & Nishat, 2004). One percent increase in depreciation in home currency of host (recipient) country decreases FDI inflows by 2.15% or in other words, one percent appreciation of home currency uplifts FDI inflows by 2.15% which is statistically significant at one percent. ‘Positively related’ requires explanation. The coefficient of  $ER_t$  is in negative, which apparently looks negatively related with FDI inflows, but the case is different. Direct quotation of reporting exchange rate is used in the proxy of  $ER_t$ , which means units of host currency are defined in terms of one unit of foreign currency. As this term is used as international standard, that is why the study incorporates this proxy in this form. In case of depreciation of home currency, the quantum of units of home currency to fetch one unit of foreign currency rises, as is in our case. In net shell, rise in the quantum of  $ER_t$  decreases FDI inflows, means depreciation of home currency discourages FDI inflows, in other words, appreciation of home currency rises FDI inflows in the country, that is why it is the case of positive relationship. If we use indirect quotation of reporting exchange rate, the coefficient would be in positive but the result would be the same as earlier discussed.

Other things remaining the constant, it is general hypothesis that investor prefer such economy for investment purpose whose currency is depreciated or subject to devaluation as more purchasing power in host country and if the investors’ business is export oriented, then more market share in the shape of more exports and hence rise in FDI inflows. But, when the decline in the value of host currency is backed by proportional or reasonable inflation, then the case becomes reverse as discussed. In this scenario, decline in currency value results in decline in FDI inflows as it lowers the value of FDI inflows and FDI stock in that country which discourages foreign investor to make investment in that home country. Moreover, investors feel hesitation in broadening their business base in that country as, with every depreciation activity of home currency reduces the value of that MNC’s assets. Most of the time, MNCs prefer to repatriate a major portion of its subsidiary rather to reinvest. This is the case with Pakistan. Pakistan is experiencing double digit inflation since last one decade. Government borrowings, domestically and externally, are on rise which ultimately results in inflation that leads to decline in the value of currency and hence reduction to FDI inflows.

**Table 04: Selected ARDL (2,0,0,2) Model of Error Correction Representation**

**Dependent Variable “ $\Delta \ln(\text{FDI})$ ”**

Regressor	Coefficient	Standard Error	t-Ratio	p-value
$\Delta \ln(\text{ER})$	-2.47	0.73	-3.37	0.003
$\Delta \ln(\text{MS})$	2.72	0.58	4.72	0.000
$\Delta \ln(\text{ED})$	-4.37	1.40	-3.11	0.005
$\text{ECM}(-1)$	-1.15	0.22	-5.33	0.000

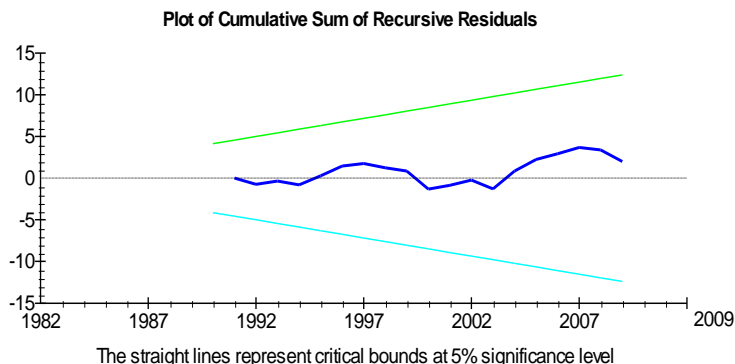
$R^2 = 0.664$ , Adj.  $R^2 = 0.546$ ,  $F(6, 21) = 6.58(0.001)$ , D.W. Statistic = 2.01

In the short-run, again, exchange rate exerts positive relationship (Table 04). One percent rise in the value of home currency increases 2.47% FDI which is statistically significant at one percent level. In other words, one percent rise in depreciation, decrease FDI by 2.47%.

The MS appeared with the correct sign as expected and also statistically significant at one percent level in long and short-run. One percent rise in MS leads to 2.36% increase in FDI in long-run. These results are consistent with some previous findings for developing countries (Mughal & Akram, 2011; Tsen, 2005). Whereas in short-run, one percent increase in MS results in 2.72% rise in FDI.

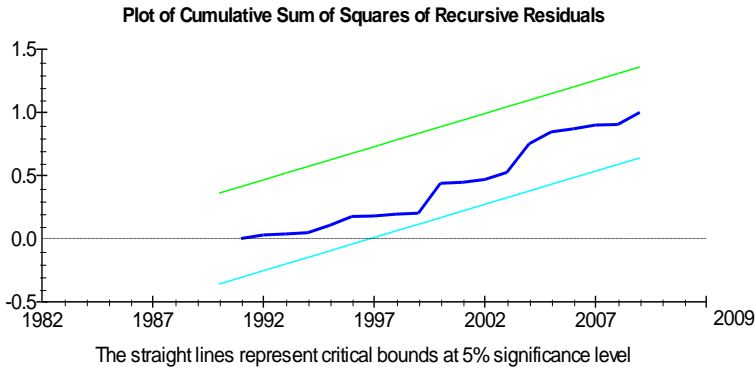
ED produces mixed results. In long-run, ED shows positive relationship with FDI. One percent rise in ED leads to 2.92% increase in FDI. This positive impact requires explanation. Countries especially developing countries need continuous inflow of foreign exchange so that they can meet the demand of foreign exchange market for foreign currency to stable the exchange rate. Among the major sources of foreign exchange inflows, external debts and FDI are the major sources. External debts are made available on hard terms including higher interest rates that may not be beneficial for economy of recipient country. If that economy is already burdened economy and external debts are on rise, debt servicing is on increase, the government tries to make sure the foreign exchange inflows through another source as well which is FDI. But at the same time foreign investors also perceive this notion as the weak host government negotiation power with MNCs. Foreign investor, then, tries to make investment at his own terms. Most of the times, government agrees. Hence, as the external debts rise, host government negotiation power with foreign investors decreases, which results in more FDI but on terms favourable to foreign investors. This is the scenario with Pakistan, as it was witnessed in the privatization process of Pakistan Telecommunication Company Limited (PTCL), by Privatization Commission of Pakistan. Privatization transaction of PTCL is the heaviest privatization in terms of amount ever in the history of Pakistan. In short-run, ED presents negative relationship with FDI and these results are consistent with previous studies (Kok and Ersoy, 2009). One percent rise in ED leads to 4.37% decline in FDI in short-run in case of Pakistan.

**Figure 02: “Plot of cumulative sum of Recursive Residuals**



**Figure 03: of Squares of Recursive Residuals [Plot of cumulative sum]”**

Brown et al. (1975) presented cumulative sum of recursive residuals (CUSUM) and cumulative sum of squares of recursive residuals (CUSUMSQ) to check the



stability of ARDL based ECM. In figure 02 and 03, plots are well with limit of critical bound of 5% level of significance means model is structurally stable.

## 6. Conclusions and Policy Implications

This study empirically examines the impact of exchange rate in attracting foreign direct investment inflows for a low income developing country Pakistan. For this purpose 30 years data with annual frequency from 1980 to 2009 is used in this study.

External debts and market size variables have been used along with cardinal variable, exchange rate, to highlight the short-run and long-run dynamics for FDI inflows. This study depicts negative coefficient of exchange rate which requires further explanation. Direct quotation is used for exchange rate proxy, which reflects depreciation of home currency when there is rise in the units of home currency to acquire one unit of foreign currency. So, whenever there is rise in units in direct quotation, which means depreciation of home currency, it negatively affects FDI inflows in case of Pakistan. It can be concluded so, that depreciation of host currency declines the FDI inflows in short-run and long-run as far as Pakistan is concerned. This relationship is term as positive between the exchange rate and FDI. Findings can be summarized in the following points.

- a) In short-run and long-run, one percent decrease in exchange rate results in 3.37 percent and 3.50 percent reduction in FDI inflows.
- b) Market size has witnessed positive impact for FDI inflows.
- c) External debts, in short-run has negative and whereas, in long-run it has positive role in attracting FDI. External debt these relationships require some issues to be discovered.

Following measures may help the decision makers of authorities.

- a) To deal with the higher rate of repatriation of profit, special focus must be paid to reduce inflation so that foreign investor can prefer reinvestment

strategies rather repatriation of profits. This measure will increase FDI inflows and FDI stock in short and long-run. Moreover, inflation backed depreciation resulting in reduction of FDI, dealing with inflation can resolve the matter and ultimately the result would be again in higher inflows of FDI.

- b) For the stability of exchange rate, certainty in foreign exchange inflows must be assured. To tackle the issue of uncertainty in foreign exchange inflows, the government authorities should prompt positive and long-run alternatives rather dependence on external loans and donations. For example, remittances of overseas Pakistani should be brought into Pakistan through proper banking channels. Incentive schemes may be adopted for the user of such channels. Moreover, proper legislation should be made for people having billions of USD in banks outside Pakistan; either they are businessmen, politicians or any other category.
- c) As more the external debts, higher FDI inflows but with weak negotiation power of Pakistan with stakeholders. The government should reduce external debts and reliance on debts either they are domestic or foreign so that negotiation power should not be influenced by such factors. It can be done by reducing non-development government expenditures and by boarding the tax base by considering this fact that weather should pay and pay more taxes in Pakistan. Surprisingly, only 2% of total population is registered taxpayers with Federal Board of Revenue (FBR) Pakistan, and the people who pay tax is lower than 2%. Moreover, Pakistan is at 145<sup>th</sup> rank in the world in tax payment ranking countries for the year 2011 (Pakistan today, 2011).
- d) For exports promotion, the traditional and important measure, the authorities will have to go into structural reforms as cost of production is increasing in Pakistan which discourages exporters and foreign investors as well. It can be two-step process, first is internal and second is external. Former deals with the availability of energy resources at cheaper cost, better infrastructure, tax credits, banking channel incentives from SBP. Second deals with the more preferential trade agreements (PTAs) with countries with those Pakistan have more imports or they have the great potential of trade for Pakistani businessmen.
- e) More the market size, higher the FDI inflows. This potential can better be incorporated by establishing regional trading-blocks with least trading and investment barriers with neighbouring countries. It can generate unimaginable multidimensional positive results, along-with core benefit in the shape of higher FDI, of South East Asia, if possible.

The results of this study cannot be generalized for other developing countries as this study has been conducted for Pakistan and Pakistan has its own domestic dynamics which may differ for other developing countries. This study also explores numerous dimensions for researchers to research. Some of them may be list down as.

*The Impact of Exchange Rate Movement on Foreign Direct Investment .....*

- a) Viability, and impacts of single currency in South East Asia and on FDI inflows in the region.
- b) Impact of low taxes payment and its impact on FDI for Pakistan and developing countries.
- c) Detailed coverage of dimensions of domestic and external debts and its impact on FDI.
- d) Viability and impact of regional trading-blocks on FDI on Pakistan, India etc. and its possible effects on FDI pattern of the world.

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