Determinants of International Capital Inflows in Pakistan

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Abstract:-

This study attempts to ascertain the importance of international capital inflows (foreign direct investment and foreign portfolio investment) by empirically investigating the nature and determinants of disaggregated capital inflows to Pakistan for the period 1984-2019. The study employs the feasible modified OLS and dynamic OLS techniques to study the long run dynamics. The estimation results showed that market size, financial liberalization, financial depth, risk and cost factors are significant determinants of capital inflows in Pakistan. Real exchange rate is positively associated with foreign direct investment and negative relationship is established with foreign portfolio investment in Pakistan.

Key Words: Foreign direct investment, foreign portfolio investment, financial liberalization

1. Introduction

The size and the composition of capital inflows vary for each economy (Bird & Rowlands, 2004) depending upon its requirements. Generally, the need for international flows is linked with the lack of capital. Low saving and investment also determine the need for international flows in the host country. In developing economies, due to low household income the government's earnings from taxes are reduced resulting in slowing down of the economy. Under such circumstances international capital inflows play a role of safe resort to fill the resource gap and to keep the economy on steady growth track. As a result, the dependence of developing economies is increased on international capital inflows.

In late 1990's many developing countries by undergoing liberalisation of their economies in the ongoing process of integration of world economy have led to fierce competition for international capital inflows (Aqeel, Nishat, & Bilquees, 2004). Pakistan belongs to the group of least developed countries where domestic financial markets are very small as well as fragile. This aggravated situation increases the need for attracting international capital flows into Pakistan. Because of the grave importance of international capital flows in sustainability of the economy, the government of Pakistan thus made efforts to attract capital inflows by following policies of deregulation, privatization, and liberalization at the end of 1980s. In consequence to these policies, the international capital inflows faced upward trends (Khan & Kim, 1999). However, the long-term trend shows that Pakistan's economy face volatility in terms of inflows of international capital over time.

This study attempts to identify the key determinants of international capital inflows in context of Pakistan for the period 1984-2019. The capital inflows included in this study are foreign direct investment (FDI) and foreign portfolio investment (FPI). Literature suggests that the source country factors (*push factors*), host country factors (*pull factors*), and other economic ties between the host and source country are the key drivers of capital flows (Taylor and Sarno, 1997 and Çulha, 2006).

This study is motivated by several aspects. First, FDI has been considered to be among the fastest growing economic activities around the globe (Lucke and Eichler, 2016) which promotes economic growth (Iamsiraroj, 2016) and other developments in developing and emerging economies. Secondly, the drivers of capital inflows vary from country to country (Tintin, 2013 and Saini, & Singhania, 2018) which emphasizes the need for further investigation and understanding on the issue. Third, the current government policy emphasis is on attracting foreign investment and this study has the relevant policy implications. The findings of this study are meaningful as the focused period shows some significant fluctuations in capital inflows, key determinants of capital inflows are ascertained at disaggregated level, and detailed sector wise analysis of FDI with reference to neighboring countries is presented.

Furthermore, in the recent literature on capital inflows to Pakistan, less emphasizes is given to macroeconomic & financial determinants and the focus is on exploring the relationship of capital inflows with energy consumption (Shahbaz *et. al*, 2018), with stock and housing markets (Sajid *et. al*, 2021 and Ahmed *et. al*, 2021), and with institutional variables (Uddin et. al, 2019). Whereas this study contributes to the literature by focusing on macroeconomic determinants (including the risk factors) of capital inflows to Pakistan at disaggregate level.

Rest of the paper proceeds as follows: section 2 provides the overview of capital inflows to Pakistan, section 3 introduces the methodology and data, section 4 provides the discussion on the findings, and section 5 conclude the paper.

2. Overview of Capital Inflows to Pakistan

The transformation of world into a global village has resulted in the emergence of dependency of countries upon one another, bringing forth many perks one of which is foreign direct investment (FDI) for developing countries, leading to advancement in technology, human capital formation, more competitive business environment, integrated international trade and much more. Given the fact that capital inflows have an important role to play in the process of growth, there is a fierce competition among the developing countries leading to more liberal polices to attract foreign direct investment.

In early 1970's, nationalization was introduced as an industrial policy instrument. This policy resulted in major setback to the foreign investment in Pakistan as the confidence of the foreign investors shattered and they held themselves back from investing in Pakistan's economy. However, at the same time, the direct investment by public sector reached to a very high level extending its domain to all major sectors of the economy. Thus, the nationalization policy had negative impact on the FDI in Pakistan.

The evolution of foreign direct investment in Pakistan came by 1984 with the introduction of industrial policy statement. This industrial policy for the first time gave equal plank to both the private and public sectors. After the industrial policy statement of 1984, the industrial policy package 1989 was introduced, which acted as a milestone in recognizing the role and importance of private sector. Board of investment was formed in the same year which acted as a facilitator in providing assistance regarding direct investment in Pakistan. Along with the investment friendly government policies, better security and political conditions gained full benefit from rapid globalization in the world in 90's by attracting many investors from all over the world.

First investment policy was given in the year of 1997 by Board of Investment (BOI) which opened many dimensions for the foreign investors in the local economy. The main purpose of this policy was to provide investor friendly environment for foreign investors. Prior to the investment policy 1997, only manufacturing sector was open for foreign investment.

Fig. 1: FDI as share of GDP in Pakistan
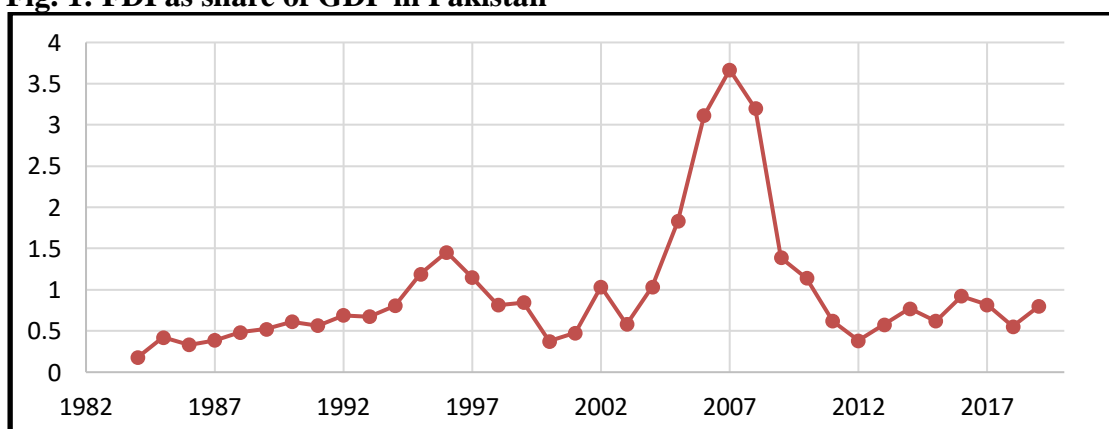
Fig. 2: FPI as share of GDP in Pakistan
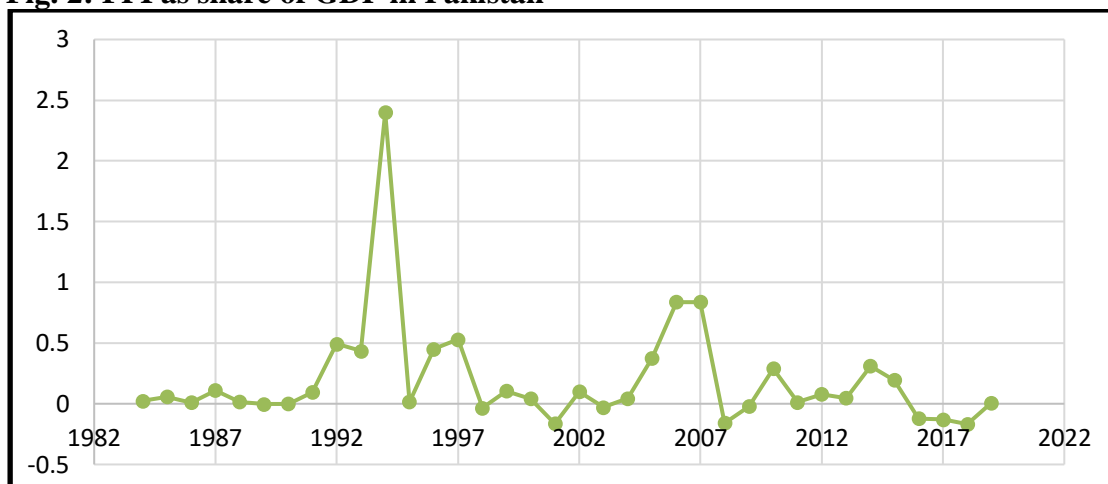
With the introduction of this policy, many sectors like services, infrastructure, and agriculture opened for foreign investors. Many facilities like fiscal and tariff relief, additional procedural and social facilitation and improving policy regimes were also given under this policy framework (Sahoo, 2006). However, FDI trend in Pakistan was on the decline for the period 1997-2001 (Fig. 1). Generous financial and fiscal benefits were not enough to attract FDI in Pakitan. After 2001, we have witnessed a sharp increase in FDI& FPI trends till the emergence of financial crises in 2008. After the financial crises, both FDI& FPI decline to less than one percent of GDP and to date Pakistan is struggling to get back on the track.

With the introduction of strategies like import substitution policies, reduction in tariff cuts and restriction on imports of second-hand consumer products (passenger cars, air conditioners and motorcycles etc.)The foreign investment in Pakistan faced a sharp decline (Pursell, Khan, & Gulzar, 2011). The other factors which contributed to the abrupt downward trend in foreign direct investment in 2008-09 were the deteriorating law and order conditions and slack functioning of stock markets. Foreign investors due to expectations of low profitability shied away. Despite the importance and prodigious benefits attained by foreign direct investment, Pakistan's economy has failed to attract foreign investors in considerable amount as compared to that of other emerging economies. The figures mentioned in the table 1 show that Pakistan, in comparison to its neighbouring countries, engaged less foreign direct investment.

Table 1: Share of FDI in GDP in neighbouring Countries of Pakistan

Year	Pakistan	India	Bangladesh	China	Iran
2009	1.4	2.6	0.9	2.6	0.7
2010	1.1	1.6	0.9	4.0	0.8
2011	0.6	1.9	1.1	3.7	0.5
2012	0.4	1.3	1.2	2.9	0.8
2013	0.6	1.5	1.7	3.1	0.6
2014	0.8	1.7	1.5	2.6	0.5
2015	0.3	2.1	1.7	2.27	0.52
2016	0.92	1.94	1.05	1.56	0.81
2017	0.82	1.51	0.72	1.35	1.13
2018	0.55	1.55	0.88	1.69	-
2019	0.80	1.76	0.66	1.09	-

Source: World Development Indicators

Table 2 captures the picture of the sectors in Pakistan's economy which are attracting foreign direct investment during the last decade. In table 2, foreign direct investment inflows in Pakistan were relatively high in year 2010 with bulk share of oil & gas sector, 34.4%. Private sector could not provide impetus to foreign investment. Communication sector attracted only 13.5% FDI while rest of the sectors could not attain the double-digit figures. In the recent years, financial business is doing well in terms of attracting FDI relative to other sectors in Pakistan.

Table 2: Sector-wise Inflow of Foreign Direct Investment in Pakistan (%age)

Sector	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Oil & Gas	34.4	31.3	76.7	38.4	29.6	29.1	10.4	6.1	13.4	25.7	12.2
Financial Business	7.6	19.0	7.8	21.6	11.4	24.8	12.1	12.4	14.4	21.0	10.7
Textiles	1.3	1.5	3.6	1.0	0.0	4.2	0.8	0.6	1.8	5.6	1.5
Trade	5.4	3.2	3.1	0.4	-0.2	4.9	1.1	1.4	5.1	5.6	1.3
Construction	4.7	3.7	8.8	3.3	1.7	5.2	1.5	0.3	1.5	5.2	0.8
Power	-5.6	9.5	-10.3	1.8	4.2	29.4	48.2	29.8	42.4	-23.8	29.8
Chemicals	5.2	1.9	11.7	-3.2	5.6	5.8	3.7	0.2	1.8	7.6	0.8
Transport	6.1	6.4	2.3	3.0	0.2	0.6	7.0	6.8	2.0	2.9	-0.2
Communication	13.5	-2.1	-38.1	-26.2	25.6	6.0	10.1	-2.0	4.1	-4.1	24.3
Others	27.3	25.5	34.4	60.0	22.1	-10.0	5.1	44.5	13.5	54.3	18.8

Source: BOI, Pakistan

Sharp decline in foreign direct investment inflows in 2012-13 emerged from the political uncertainty owing to elections in the same year and security concerns. State Bank of Pakistan's annual report for the year 2014 points out that the most concerning issues which Pakistan is facing due to which investors are losing confidence are security and lack of quality electricity supply. The '*World Economic Forum*' ranks Pakistan as the lowest for the year 2014 in terms of competitiveness in *'Global Competitiveness Index (2014)'*. Pakistan faced serious issues while implementation of the foreign investment policies. Fiscal Year 2015 faced decline in foreign direct investment owing to the political instability in the country due to long march in first half of the fiscal year. Along with political instability, foreign investment also decreased due to acute energy shortage and war against terrorism (Pakistan Economic Survey 2014-2015).

Portfolio investment being short term investment is highly volatile. Immediate response emerges out with the changes in factors which directly or indirectly affect investment in stock market. Pakistan's stock market is characterized by low turnover and limited liquidity. This is because of the malpractices of brokers, which act as serious barrier to attracting investors and from the inefficacy of the regulatory authorities. Similarly, stock prices are volatile and due to manipulation, the technical re-adjustments can often wipe out substantial values. Along with this, the investor must deal with the insider dealing by the brokers and an abysmal record on dividend payments by the listed companies.

Developing Asian countries faced huge surge of foreign capital inflows in two waves over the period of last two decades. The first wave of capital inflows started in second half of 1980's, it gained momentum abruptly in the early 1990's. However, owing to the Asian financial crisis of 1997, this gush of capital inflows came to end. The second wave of foreign capital inflows started in the year of 2002 and kept on moving until the onset of financial crises. This led to a major setback to the inflow of capital in Asian countries (Jongwanich, 2010).

Under the application of liberalization policies in Pakistan in late 1980's, foreign portfolio investment started facing an upward trend. This increase in capital was indebted to different programmes mainly the commonwealth equity fund and the Pakistan fund. Other factors included declining international interest rates which resulted in increased foreign investment in Pakistan's stock market. At the same time, Pakistan was offering modest interest rate which played a major role in attracting foreign investment. Being among the initial emerging countries to open its market for foreign investors, Pakistan attracted a commendable amount of investment in 1990's (Khan & Khilji, 1997).

However, this increased investment in stock market was not persistent and faced an extreme downward trend in early 2000's when foreign investors pulled their investment out of the Pakistan's stock market. The intriguing forces behind this sharp decline were the information asymmetry, minimal liquidity, and absence of well-developed overall financial system. Similarly, the instability and uncertainty associated with the future of democratic government badly affected the investment in stock market which led to the withdrawal of foreign investment from local stock market. After 9/11 attacks, the USA policy of war against terror further deteriorated the inflows of foreign investment in Pakistan's stock market. The uncertainty and instable security environment led the foreign investors to hold back their investment (Le & Ataullah, 2006).

Fiscal year 2005 faced a remarkable increase in portfolio investment in Pakistan mainly due to the issuance of International Islamic Bond for the first time. Along with this venture of worth US$ 600 million, astounding performance of stock market attracted huge foreign investment of US$ 151 million (SBP, Annual Report 2004-2005). Fiscal year 2006 witnessed rise in foreign portfolio investment in Pakistan contributing a share of 16.7% of the total financial inflows in this fiscal year. The increased foreign investment by US$ 985.0 million in stock market is captured from the investors from USA, UAE, and Hong Kong, reflecting the rise in confidence of the foreign investors in Pakistan's economy (SBP, Annual Report 2005-2006).

In 2010, stock market saw an extreme downfall because of imposition of Capital Gain Tax (CGT). The uncertainty associated with CGT played the role in discouraging foreign investors to consider investing in Pakistan's stock market. The other factors which levied major setback to the foreign investment in stock market included sharp depreciation of value of Pakistani rupee against US dollar, absence of leverage products, and low volume shares. Foreign investors hold back their funds in cases where volume of stocks reaches their lowest level. Pakistan's stock market faced lower stock volumes in 2010, which resulted in keeping the foreign holdings out of the stock market. On the other hand, developed economies by providing excessive monetary easing induced investors to shift their funds in search of better return.

3. Data & Methodology

The theoretical model by Agarwal (1997) suggests that the movement of capital across borders helps borrowers and lenders in accelerating their income as well as

consumption. Foreign investors invest in developing countries only if the host economy has investment opportunities which they find profitable. The main factors which help foreign investors in making decisions regarding their investments in developing countries are stable real and monetary factors in the host country, liberalization policies adopted by government, and risk factors. Economies which follow liberalization policies and have better macroeconomic conditions like high growth rates, stable exchange rate, financial depth etc., tend to attract more foreign investment as compared to small, closed economies with sluggish growth rate (Shah, Ahmed & Siddiqui, 2003).

Thus, following the work of Agarwal (1997) and Shah, Ahmed & Siddiqui (2003), this study estimates the following empirical model for the period 1984-2019. Data is extracted from World Development Indicators (WDI).

$$CI_t = \beta_0 + \beta_1 GDP_t + \beta_2 ER + \beta_3 FD + \beta_4 INFRA + \beta_5 CA + \beta_6 DEBT + \beta_7 D + \varepsilon_t \ldots (1)$$

In the above model, CI_t represents the capital inflows i.e. 'FDI' & 'FPI'-foreign direct investment and portfolio investment inflows as percentage to GDP in Pakistan, GDP is used as proxy for market size of Pakistan's economy (in logs), ER is representing exchange rate and is used as proxy for cost. Financial depth (FD) measures the size of financial institutions, banks and financial market and the proxy used for the representation of financial depth is domestic credit given to private sector (DCPS) as percentage to GDP. Last but not the least, official development assistance (ODA) as percentage to GDP is used as a proxy for infrastructure (INFRA). Current account deficit (CA) and public debt as shares of GDP (DEBT) are used to capture the risk factors. A dummy variable is incorporated in the model to cater for the structural breaks both in FDI & FPI data (see Fig. 1 &2).

3.1.Econometric Methodology

The conventional ADF test is usually criticized due to its low power properties. Therefore, the DF-GLS test proposed by Elliott, Rothenberg, and Stock, (1996) is used to explore the stochastic properties of the data.

Consider,

$$\Delta y_t^d = \alpha_0 y_t^d + \alpha_1 \Delta y_{t-1}^d + \cdots + \alpha_p \Delta y_{t-p}^d + error \ldots (2)$$

where y_t^d is the locally de-trended series yt. The local de-trending depends on whether we consider a model with drift only or a linear trend. The latter is the most used. In this case we have

$$y_t^d = y_t - \widehat{\beta_0} - \widehat{\beta_1} t \ldots (3)$$

where $(\widehat{\beta_0}, \widehat{\beta_1})$ are obtained by regression $\bar{y}$ on $\bar{z}$, where

$$\bar{y} = [y_1, (1 - \bar{\alpha}L)y_2, \ldots, (1 - \bar{\alpha}L)y_T]$$
$$\bar{z} = [z_1, (1 - \bar{\alpha}L)z_2, \ldots, (1 - \bar{\alpha}L)z_T]'$$

and $z_t = (1 \ t)'$, $\bar{\alpha} = 1 + c/T$. Note c = -7 in the model with drift and c = -13.5 in the linear trend case. Critical values are given in Elliott, Rothenberg, and Stock, (1996).

After determining the order of integration, I(d), for the variables of interest, next econometric issue is to estimate the long-run relationship among the variables. It is well established in literature that capital inflows are driven both by external and internal factors. Due to this endogeneity issue arises while estimating the capital inflows model. The FMOLS modifies Ordinary Least Squares to cater for the serial correlation and endogeneity problems. Dynamic Least Squares (DOLS) is used as a robustness check as it allows us to overcome the problem of inferences due to

stochastic trend in the variables. The stochastic trend variables are differenced in DOLS and our OLS parameters asymptotically support usual t- & F-statistics in the co-integration relationship.

4. Results and Discussion

Table 3 presents the descriptive statistics of the variables employed in this empirical investigation. All variables are showing normal fluctuations (see Jarque-Bera test results)except for FDI and FPI. High kurtosis values (7.1 & 16.6) for FDI & FPI respectively are indicative of the volatile nature of capital inflows to Pakistan which motivates this study to explore the factors causing this volatility.

Table 3: Descriptive Statistics

	CA	FD	DEBT	ER	FDI	FPI	LGDP	INFRA
Mean	-2.6822	22.7031	38.0408	58.6577	0.97331	0.19688	25.5574	1.5348
Median	-2.7586	23.9901	39.4126	58.0049	0.73026	0.04673	25.5306	1.4354
Maximum	4.8232	29.7860	54.7721	150.036	3.66832	2.39875	26.2712	3.0279
Minimum	-9.2043	15.3860	23.2317	14.0463	0.17819	-0.16784	24.7421	0.4329
Std. Dev.	2.7721	4.1033	9.96912	35.1640	0.80189	0.45387	0.44042	0.6851
Skewness	0.5217	-0.3056	0.01988	0.59833	2.18308	3.40617	-0.09825	0.4645
Kurtosis	4.1547	1.9625	1.58375	2.56453	7.11962	16.5947	1.92817	2.3306
Jarque-Bera	3.6338	2.1752	3.0110	2.4325	54.0521	346.8388	1.7811	1.9671
Probability	0.1625	0.3370	0.2219	0.2963	0.0000	0.0000	0.4104	0.3739
Observations	36	36	36	36	36	36	36	36

Table 4: DF-GLS Unit Root Test Results

Variable	t-ADF		
	At Level	At 1st Difference	Conclusion
CA	-2.59**	--	I(0)
ER	-1.44	-4.46***	I(1)
DCPS	-1.26	-3.58***	I(1)
DEBT	-1.16	-4.29***	I(1)
FDI	-2.68***	--	I(0)
ODA	-2.65***	--	I(0)
PFI	-4.44***	--	I(0)
*** & ** denote the significance at 1% & 5% levels, respectively.			

To test the hypotheses of unit root, the study calls in the DF-GLS test and results are reported in table 4. Foreign direct investment (FDI), official development assistance (ODA) and portfolio investment (PFI) as percentage to GDP are integrated of order zero i.e. stationary at levels whereas the current account deficit (CA), exchange rate (ER), domestic credit to private sector (DCPS), and public debt (DEBT) variables are stationary at first difference i.e. integrated of order one.

For data with mixed order of integration, natural choice seems to be an ARDL modelling. However, with sample size (n=36) and ARDL specification of the model, it was hard to maintaining a good degree of freedom for unbiased results. This lead the study to consider alternative econometric methods. So, to cater for the econometric issues including degree of freedom, endogeneity and robustness of the results, this study relies on Feasible Modified Ordinary Least Square (FMOLS) and Dynamic OLS (DOLS) for the estimation of equation (1).

The FMOLS & DOLS long run estimation results are furnished in table 4 (see appendix for cointegration test results). All the variables carry expected signs and all diagnostic tests validate the models. Current account deficit to GDP and public debt to GDP, used as proxy variables to measure the risk factor, negatively affect the foreign direct investment (FDI) in Pakistan which is in line with the findings in Jabbar & Awan, (2014), Agarwal (1997) and Taylor & Sarno (1997). The results show that by increase of one percent in the GDP, foreign direct investment and foreign portfolio investment increase by 2.5& 1.3 percent respectively in the long run showing that the size of market is a significant determinant of capital inflows in Pakistan. This result corroborates with theory which states that market size represents the demand of products of multinational firms in the host country. Hence large market size has positive impact on foreign direct investment inflows in the long run. The findings of the study are in line with the work of Vo, (2018), Jabbar & Awan, (2014), Amaya& Rowland (2004) and Shah Ahmed& Siddiqui (2003).

Table 5:Determinants of FDI & FPI

FDI/GDP					FPI/GDP			
	FMOLS		DOLS		FMOLS		DOLS	
Variables	β	t-stat	β	t-stat	β	t-stat	β	t-stat
CA	-0.012	-0.62	-0.017	-1.94*	-0.035	-0.291	-0.071	-3.29***
FD	0.118	5.39***	0.137	2.25**	0.024	1.81*	0.054	3.03***
DEBT	-0.019	-1.98*	-0.062	-2.11**	-0.029	-4.98***	-0.040	-4.65***
LGDP	2.505	7.62***	2.462	2.06**	1.301	3.75***	1.622	1.77*
INFRA	0.057	0.53	0.091	3.26***	0.161	2.40**	0.313	2.32**
ER	0.048	5.53***	0.062	2.19**	-0.063	-6.45***	-0.080	-3.55***
Dummy_FC	1.769	2.43**	4.361	4.58***	2.183	12.04***	1.380	6.37***
Constant	-113.495	-7.71***	-52.554	-1.88*	-29.329	-3.39***	-10.134	-1.207

***, **, & * denote the significance at 1, 5, & 10% levels, respectively.

The relation of real exchange rate with foreign direct investment is positive indicating an increase in the financial support for families of migrant labour in times of economic hardship. This result is consistent with the findings of Aqeel, Nishat & Bilquees (2004), Ang, Bekaert, & Wei (2008), and Kuncoro, (2020). The relation of real effective exchange rate with FPI is negative suggesting that with increase in real exchange rate, local currency depreciates, which gives the image of unstable economy to the foreign investor due to which they shy away. This result is consistent with the findings in Amaya & Rowland (2004) and Ang, Bekaert, & Wei (2008).

Financial liberalization started in 1980s in Pakistan under which the government of Pakistan took substantial measures to attract foreign capital in the country. The empirical results show the significant positive impact of financial depth (measured through DCPS to GDP) on capital inflows in Pakistan. The liberalization policies make access of foreign investors in the economy easy as a result foreign investment increase (Amaya& Rowland, 2004). Infrastructure (ODA to GDP) is significant determinant of capital inflows in Pakistan in the long run because better infrastructure implies better position of a country in the race of attracting foreign investment

(Lokesha & Leelavathy, 2012). Dummy variable is introduced in the model to cater for the financial crises period 2007-08.

5. Conclusion

Due to immense significance of international capital flows in the integrated world economies, many countries across the world have taken steps to encourage cross border investment flows. Pakistan also undertook significant measures to attract international capital including liberalization and deregulation policies. This study attempts to ascertain the key determinants of capital inflows at disaggregate level.

This study is motivated by several aspects. First, FDI being the fastest growing economic activity around the globe is a key contributor to economic growth in developing economies. Secondly, the drivers of capital inflows vary from country to country which requires the further understanding of the issue at country level for the period 1984-2019. Third, current policy emphasis of Pakistan government is on attracting foreign investment and this study has the relevant implications.

This study contributes methodologically as well. It is well established in literature that capital inflows are driven both by internal and external factors. This phenomenon leads to the problem of endogeneity and this study calls in the Feasible Modified OLS to cater for endogeneity issue. Furthermore, Dynamic Least Squares (DOLS) is used as a robustness check as it allows us to overcome the problem of inferences due to stochastic trend in the variables.

The empirical estimates showed that though all the variables are significant determinants of capital inflows to Pakistan, market risks have negative relation with both foreign direct investment (FDI) and foreign portfolio investment (FPI). Real exchange rate is associated positively with FDI and negatively with FPI in Pakistan. The positive relationship between exchange rate and FDI indicates the enhanced financial support for families of migrant labour in times of economic hardship and negative association between exchange rate and FPI is attributed to the image of unstable economy due to the depreciation in the local currency. Financial depth and liberalization of the country plays a significant role in attracting foreign capital inflows.

Due consideration should be given to longer term and less volatile capital flows i.e. FDI because it tends to stabilize in comparison to other forms of capital flows. Infrastructure upgradation attains significant importance in terms of quantity as well as quality in this regard. Banks in Pakistan are taking securities which are not feasible for investors. The need of the moment is to ensure easy availability of credit facilities to foreign investors. The financial institutions of Pakistan need to create the channels to allocate capital in the country and increase options for investors to invest as well. International image of a country plays pivotal role for foreign investors in making decisions regarding investment in a country. Pakistan needs to show progress on market risk indicators to build a positive image and attract international investment.

References

Agarwal, R. N. (1997). Foreign portfolio investment in some developing countries: A study of determinants and macroeconomic impact. *Indian Economic Review*, 217-229.

Ahmed, R., Jawaid, S. T., & Khalil, S. (2021). Foreign capital inflows and housing market in Pakistan. *International Journal of Housing Markets and Analysis*.

Amaya, C. A., & Rowland, P. (2004). Determinants of investment flows into emerging markets. *Borradores de Economía; No. 313*.

Ang, A., Bekaert, G., & Wei, M. (2008). The Term Structure of Real Rates and Expected Inflation. *The Journal of Finance, 63*(2), 797-849.

Aqeel, A., Nishat, M., & Bilquees, F. (2004). The determinants of foreign direct investment in Pakistan [with comments]. *The Pakistan Development Review*, 651-664.

Bird, G., & Rowlands, D. (2004). The catalytic effect of lending by the international financial institutions. In *International Finance and the Developing Economies* (pp. 204-226). Palgrave Macmillan, London.

Çulha, A. (2006). A structural VAR analysis of the determinants of capital flows into Turkey. *Central Bank Review*, 2(2), 11-35.

Elliott, G., Rothenberg, T. J., & Stock, J. H. (1992). Efficient tests for an autoregressive unit root. *NBER Technical Working Paper Series, No. 130*.

Iamsiraroj, S. (2016). The foreign direct investment–economic growth nexus. *International Review of Economics & Finance*, *42*, 116-133.

Jabbar, A., & Awan, A. G. (2014). The determinants of capital inflow in developing countries with special reference to Pakistan. *Developing Country Studies*, *4*(12), 159-183.

Khan, A. H., & Khilji, N. M. (1997). Foreign direct investment in Pakistan: Policies and trends [with Comments]. *The Pakistan Development Review*, 959-985.

Khan, A., & Kim, Y. H. (1999). Foreign direct investment in Pakistan: policy issues and operational implications. EDRC Report Series No. 66.

Kuncoro, H. (2020). The role of exchange rate in remittance inflows: Evidence from Indonesia. *Economics Bulletin*, *40*(2), 1508-1521.

Le, M. H., & Ataullah, A. (2006). Foreign Capital and Economic Performance of Pakistan. *The Lahore Journal of Economics, 7*(1).

Lokesha, B. K., & Leelavathy, D. S. (2012). Determinants of foreign direct investment: A macro perspective. *Indian Journal of Industrial Relations*, 459-469.

Pursell, G., Khan, A., & Gulzar, S. (2011). Pakistan's trade policies: Future Directions. *International Growth Centre, report prepared for the Planning Commission of Pakistan*.

Sahoo, P. (2006). Foreign direct investment in South Asia: Policy, trends, impact and determinants. *ADB Institute Discussion Paper No. 56*.

Saini, N., & Singhania, M. (2018). Determinants of FDI in developed and developing countries: a quantitative analysis using GMM. *Journal of Economic Studies*.

Sajid, A., Hashmi, M. A., Abdullah, A., & Hassan, M. A. (2021). Foreign Capital Inflows and Stock Market Development in Pakistan. *The Journal of Asian Finance, Economics and Business*, *8*(6), 543-552.

Shah, Z., Ahmed, Q. M., & Siddiqui, R. (2003). The Determinants of Foreign Direct Investment in Pakistan: An Empirical Investigation [with Comments]. *The Pakistan Development Review*, 697-714.

Shahbaz, M., Chaudhary, A. R., & Shahzad, S. J. H. (2018). Is energy consumption

sensitive to foreign capital inflows and currency devaluation in Pakistan? *Applied Economics*, *50*(52), 5641-5658.

Taylor, M. P., &Sarno, L. (1997). Capital flows to developing countries: long-and short-term determinants. *The World Bank Economic Review*, *11*(3), 451-470.

Tintin, C. (2013). The determinants of foreign direct investment inflows in the Central and Eastern European Countries: The importance of institutions. *Communist and Post-Communist Studies*, *46*(2), 287-298.

Vo, X. V. (2018). Determinants of capital flows to emerging economies-Evidence from Vietnam. *Finance research letters*, *27*, 23-27.

Appendix: Cointegration Test Results for Capital Inflows (FDI & FPI).

Date: 09/10/21 Time: 10:54				
Sample (adjusted): 1986 2019				
Included observations: 34 after adjustments				
Trend assumption: Linear deterministic trend (restricted)				
Series: FDI_GDP CA_GDP DCPS_GDP DEBT_GDP ER LGDP ODA_GDP D07				
Lags interval (in first differences): 1 to 1				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.913094	286.9956	187.4701	0.0000
At most 1 *	0.835986	203.9360	150.5585	0.0000
At most 2 *	0.712247	142.4707	117.7082	0.0006
At most 3 *	0.629464	100.1186	88.80380	0.0060
At most 4 *	0.537978	66.36324	63.87610	0.0304
At most 5	0.464711	40.11039	42.91525	0.0928
At most 6	0.309149	18.86217	25.87211	0.2890
At most 7	0.168845	6.287921	12.51798	0.4246
Trace test indicates 5 cointegrating eqn(s) at the 0.05 level				

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)					
Hypothesized		Max-Eigen	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**	
None *	0.913094	83.05960	56.70519	0.0000	
At most 1 *	0.835986	61.46531	50.59985	0.0027	
At most 2	0.712247	42.35216	44.49720	0.0840	
At most 3	0.629464	33.75532	38.33101	0.1529	
At most 4	0.537978	26.25285	32.11832	0.2195	
At most 5	0.464711	21.24822	25.82321	0.1793	
At most 6	0.309149	12.57425	19.38704	0.3636	
At most 7	0.168845	6.287921	12.51798	0.4246	
Max-eigen value test indicates 2 cointegratingeqn(s) at the 0.05 level					

Date: 09/10/21 Time: 10:56					
Sample (adjusted): 1986 2019					
Included observations: 34 after adjustments					
Trend assumption: Linear deterministic trend (restricted)					
Series: FPI_GDP CA_GDP DCPS_GDP DEBT_GDP ER LGDP ODA_GDP D07					
Lags interval (in first differences): 1 to 1					
Unrestricted Cointegration Rank Test (Trace)					
Hypothesized		Trace	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**	
None *	0.923645	274.9504	187.4701	0.0000	
At most 1 *	0.835817	187.4903	150.5585	0.0001	
At most 2 *	0.699633	126.0600	117.7082	0.0133	
At most 3	0.587261	85.16650	88.80380	0.0889	
At most 4	0.462427	55.07858	63.87610	0.2196	
At most 5	0.421216	33.97511	42.91525	0.2896	
At most 6	0.250656	15.38302	25.87211	0.5428	
At most 7	0.151160	5.572062	12.51798	0.5165	
Trace test indicates 3 cointegratingeqn(s) at the 0.05 level					
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)					
Hypothesized		Max-Eigen	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**	
None *	0.923645	87.46017	56.70519	0.0000	
At most 1 *	0.835817	61.43023	50.59985	0.0027	
At most 2	0.699633	40.89353	44.49720	0.1172	
At most 3	0.587261	30.08793	38.33101	0.3216	
At most 4	0.462427	21.10347	32.11832	0.5641	
At most 5	0.421216	18.59209	25.82321	0.3335	
At most 6	0.250656	9.810962	19.38704	0.6391	
At most 7	0.151160	5.572062	12.51798	0.5165	
Max-eigen value test indicates 2 cointegrating eqn(s) at the 0.05 level					
* denotes rejection of the hypothesis at the 0.05 level					
**MacKinnon-Haug-Michelis (1999) p-values					