Economic Growth of Pakistan: Effects of Foreign Capital Inflows

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Abstract

In many developing countries, foreign capital inflows are increasingly becoming a significant source to raise the pace of economic growth. This research paper investigates the impact of capital inflows from the Developed nations on the economic growth of Pakistan. Using time series data for 30 years from 1985 to 2013 we found that foreign direct investment and worker remittances lead positively towards economic growth on one side while on the other hand foreign aid and external debt negatively affects economic growth of Pakistan. This research paper also discus a number of policy issues which arise from the result of the analysis relation to education, population growth rate, foreign direct investment, external debt, foreign aid and their proper utilization.

1. Introduction

Capital inflows play a significant role in the economic growth of developing countries. It is essential for the long-term growth because it creates a condition for sustainable development and solution of many macroeconomic problems, promotes the financial system, modern technologies, employment

opportunities, borrowing costs both for the government and corporate (Razin, 2001; Edward, 2004; and Boskovska). Moreover, it is important for the developing countries like Pakistan to bridge the resource gap, saving-investment gap, skill and technological gap and import-export gap because savings are low to required level (Chenry and Strout 1966; Waheed, 2004).

Moreover, an inflow of capital helps in the attainment of national economic, empowerment development strategy objectives and the millennium development goals of the developing countries. It allows, host countries to consume more than it produces, and the marginal productivity of capital is higher in the recipient country than the rich developing nations. Economies become more open to the world and friendly allow capital inflows in the form of Foreign aid, External Debt, Foreign direct Investment, worker remittances, from the donor country to the recipient country than it will significantly contribute transformation of the developing countries (Levin, 2004).

Based on the previous studies, External debt helps to achieve rapid economic growth, and significantly improve the financial deficiency of Pakistan (Wahab, 2004). However, empirical research on the effect of foreign capital inflows on the real exchange rate appreciation, stock market, and monetary expansion as well as on production and consumption have been largely studied (Calvo et. al, 1994; Calvo and Reinhart, 2000; Hutchison, 2002, Jitter, 2003; and Kamisky, 2003).

Research has been conducted on the impact of capital inflow on economic growth of Pakistan. However, there is empirical and theoretical controversy on the role of foreign capital and savings in economic growth and development (Ahmad and Ahmad, 2002). Studies on capital inflows indicate different magnitude sign (Ahmad and Ahmad, 2002) and some studies shows that there is a negative impact of capital inflow on economic performance.

The empirical research investigates that Foreign aid significantly contributes to the growth of developing countries at a micro level (Moreira, 2005). However, until recent results at the macro level about effects of official development assistance for on

economic growth inconclusive in developing countries and this contradiction is known as the micro-macro paradox (Mosley, 1986). However, time lags have been ignored with the aid and growth relationship largely in the literature. Conventionally, due to the low income, there is limited capacity to accumulate savings. Chenery and Strout (1966, 1979) expanded the model of Harrod-Door in their two-gap, theory. Hence, they concluded that foreign exchange shortage in the developing nations was the major constraint for the economic development of the developing countries. Hence, a fiscal gap between government revenue and expenditure the third gap which is very important has been ignored extensively in previous studies. However, aid is effective if it supplements government revenue because of the developing nation's deficit in budget restrict savings accumulations (Bacha, 1990). Foreign aid positively affects economic growth (Papanek 1973, Dowling and Hiemenz 1982, Gupta and Islam 1983, Hansen and Tarp 2000, Burnside and Dollar 2000, Gomanee, et al. 2003, Daugaard et al. 2004, and Karras2006)

Moreover, capital inflow in form of foreign debt promote industrial development, technical experts and technical know, also provides access to a foreign market for the mobilisation of a human and material resource from domestic to international level (Pattillo et al, 2004, Ahmad, 2008).But on the other hand, some researchers argue that debt accumulation negatively affects economic growth of developing countries (Krugman 1988, and Sach1989). Therefore, it is necessary to explain external debts effect separately.

Policy Makers and academics advocate that foreign direct investment affects host country s development, developing countries offers incentives to the farmers for foreign direct investment (Hanson, 2001). However, opponents argue. Singular verb does not appear to agree with opponents (many so argue is appropriate) that FDI negatively affects growth of host country (Gorg and Greenwood, 2002), another empirical study, investigate that foreign (not that foreign) direct investment have no impact on economy's growth also there is no consistent

relation between size of inflow in form of foreign direct investment; (Lipsey, 2002).

Objectives of the study

1. To identify the effect of official development assistance on economic growth
2. Investigate the impact of external debt on economic growth
3. To find the impact of foreign direct investment and worker remittances
4. To recommend some policy implications for the proper use of the resources.

This research paper revisited the impact of foreign capital inflows in the form of FDI, external debt, official development assistance and worker remittances on the economic growth of the Pakistan. The rest of the paper is organized as follows section one will explain the literature review, section three will describe the methodology, analysis is presented in the section four, section five shows conclusion, discussion and implications.

2. Literature Review

In recent years theoretical and empirical research on the role foreign capital inflows in economic growth has been investigated in different developing countries (Alfaro et al, 2005). Pakistan like many developing nations is known for high worker migration and remittances (Jongwanich, 2007; Jawaid and Raza, 2012; Dilshad, 2013).Worker remittances are an important source of the economic growth. However, there is debate over the effects of worker remittances are significant only in the short run not in long run (Waheed and Aleem, 2008). While on the other hand, Wakayama (2011) concluded that there is no correlation between GDP per capita and worker remittances in Europe and central

Asia. I, will investigate the impact of worker remittances as capital inflow on economic growth of developing countries.

Remittances are very important and biggest source of external borrowing and improved standard of living in most of the underdeveloped countries. However, the effects on growth are mixed, because huge remittances exterminate export and increase exchange rate (Ratha and Mohaparta, 2007). Jawaid and Raza (2012) concluded worker remittances directly affect economic growth of developing countries and leads towards lower poverty. On one hand, *Aid* in the form of capital inflow increase investment in the productive sector of the recipient country (Burniside and Dollar, 2000), while on the other hand, foreign aid can increase the pattern of consumption of the elite class in developing countries which ultimately negatively affect the economic growth. According to Mauro (1995) poor economic policies lead to inefficient use of the foreign resources.

Most of the developing countries like Pakistan heavily rely on FDI in the form of inflow to raise the process of development (Iemi 2004) on the other side researchers argue that FDI negatively affects domestic producers due to the skill and technological gap. These two extremes confuse the role of foreign direct investment, so, there is a need to investigate its role in the sustainable development.

The accumulation of past borrowing has become a common characteristic of most of the fiscal sector of the economies of developing countries (Ali and Mustafa 2000). Due to limited available domestic resources, external debt helps to sustain the growth rate of the economies (Todaro, 1988). The debate over the effect of external debt on economic growth is questionable from decades to decades for the policy makers. However, some researchers argue that debt accumulated effects positively, because it will help the economy to overcome problems of shortage in resources and stimulates savings to meet the fiscal needs of the developing countries.

3. Methodology

We use time series data from 1985 to 2013 for the variables foreign direct investment, external debt, and official development assistance and worker remittances. The data have been collected from government publications, annual economic survey WDI, federal bureau of statistics has been used to appendage the information. This study uses Augmented Dicky Fuller (ADF) and Phillips-Perron to check whether the variables are stationary or not. Moreover, Estimation base on none stationary variables may lead to a spurious relationship (Granger and Newbeld, 1974). Furthermore, Johnson co-integration technique has been used to check the long run relationship among variables (Johansen 1988) which further gives two likelihood ratios Trace test and Maximum Eigen value statistics. Moreover, Error correction mechanism (ECM) has been used for the short run and long run relationship and captures the information in both time periods.

Econometric Equation

$GDP_t = \beta_0 + \beta_1 EX_t + \beta_2 ODA_t + \beta_3 FDI_{t+} \beta_4 PR_t + €$
(Equation…..1)

$GDP_t = \beta_0 + \beta_1 dEX_t + \beta_2 dODA_t + \beta_3 d FDI_{t+} \beta_4 dPR_t + €$
(Equation …..2)

Variables Names	Description
GDP	GDP growth annual %
EX	External debt
ODA	Official Development assistance
FDI	Net inflow % of GDP
PR	Personal remittances received % of GDP

4. Empirical findings

Table 1
Descriptive statistics

Variable	Mean	Median	St. deviation	Maximum	Minimum
FDI	3.432	0.75	0.886	3.88	0.333
ODA	3.35	0.558	1.243	2.634	-1.332
EX	3.35	3.21	0.135	6.51	1.33
WR	4.163	3.98	1.746	8.143	1.453
GDP	4.46	4.677	2.43	7.705	1.002

Table 2
Unit root test

Variables	Phillips-Perron Test Statistic At level		Phillips-Perron Test Statistics At (first difference)	
	Statistics	Probability	Statistics	Probability
FDI	-1.650	0.44	-3.37	0.000
EX	-0.369	0.99	-2.6	0.01
WR	-2.218	0.2	-4.189	0.000
GDP	-3.12	0.02	-6.71	0.000
ODA	0.322	0.8	-2.99	0.00

Table 3

Variables	Augmented Dickey Fuller At level		Augmented Dickey Fuller At(first difference)	
	Statistics	Probability	Statistics	Probability
FDI	-2.78	0.08	-4.44	0.000
EX	-0.196	0.9	-3.37	0.002
WR	-2.1846	0.200	-4.227928	0.000
GDP	-3.36	0.02	-6.132	0.000
ODA	-3.00	0.1	-5.132	0.000

Table one present the result of descriptive statistics. Table 2 and 3 presents the results of stationary of data. None Stationary of time series data has always been considered a major problem in

empirical analysis. ADF and PP were used to check the stationary of data and above results indicate that only GDP is stationary at level rest of all variables are stationary at the first difference.

Table 4
Co integration test

Trace test				
No of Co-integrated equations	Eigen value	Calculated values	Critical value	Probability
None *	0.75	74.63	47.85	0.00
At most 1*	0.67	38.13	29.79	0.00
At most 2	0.32	10.21	15.49	0.02
At most 3	0.12	1.20	3.85	0.64

Table 5

Maximum Eigen value				
No of Co-integrated equations	Eigen value	Calculated values	Critical value	Probability
None *	0.75	36.49	27.68	0.00
At most 1*	0.66	28.10	21.13	0.00
At most 2	0.31	9.85	14.26	0.23
At most 3	0.00	0.20	3.85	0.65

Table 4 and 5 reveals the results of Johnson co integration base on trace test and max Eigen values respectively. Results of these two tests indicate that whether there is a long run relationship exists between economic growth, foreign direct investment official development assistance, external debt. Alternative hypothesis have been accepted because two variables are integrated and two test significance values are less than 0.005 so the null hypothesis was rejected. As mentioned in above table integration exists among variables.

Table 6
Error Correction Model

Variables	Beta	Std. Error	T statistics	Sig.
C	-3.77	1.56	947	0.00
D(EX)	-3.13	2.07	-4.99	0.00
D(FDI)	1.86	0.70	2.90	0.00
D(ODA)	4.27	12.99	12.99	0.00
D(PR)	-0.42	2.07	-1.6	0.10
GDP(-1)	-1.23	-0.99	-4.99	0.00
EX(-1)	-4.99	3.63	-2.00	0.05
FDI(-1)	0.83	0.68	2.00	0.06
ODA(-1)	3.27	2.8	3.45	0.00
PR(-1)	0.60	2.48	0.02	0.00
Dependent variable	GDP annual growth rate			
R Square	.62			
Adjusted R^2	.49			
Durban Watson Statistics	1.98			
F statistics	84		0.0000	

Results indicate that external debt has negative significant short run as well as a long run impact on economic growth of Pakistan (Krugman, 1987, Scah, 1984, and 1986). My results support the previous findings of the researchers that external debt will negatively influence economic growth. Also results opponents against the findings of Omet and Kalaji (2003) Baker (2008) that debt positively and significantly affect growth of developing economies. However, foreign direct investment positively and significantly affects both the short run and in the long run. Worker remittances have no impact on economic growth in the short run due to the consumption habits, but in long run remittances have significant impact because households starts savings and switch towards investment. Foreign aid in the form of inflows enhances the process of economic growth in the short run and is not significant in the long run.

5. Conclusion

The long run relationship was obtained by applying Johnson co integration techniques. And short relationship and the long run relationship was jointly were determined by applying the error correction technique. Foreign aid positively affects economic growth, provided if utilized properly in developing countries above results shows that official development assistance significantly enhances the performance of different sector of the developing countries (Ashfaq and Ahmad 2005). However, worker remittances contribute to the development only in the long run. Moreover, inflows in the form of foreign direct investment significantly effect if the political and business conditions are favorable in the host countries (Yousaf, Husain and Ahmad, 2008). The objective of the research paper was to investigate the impact of foreign capital inflows on economic growth of Pakistan from the time period of 1980 to 2013. The common belief that foreign capital inflows help to promote the stable growth in developing countries is a debate able issue in its origin.

The Ample body of literature available on the effect of capital inflows on developing economic welfare but results are not clear. There are a number of factors which can affect the proper utilization of the inflows in the recipient countries like Political instability, macroeconomic environment, policy ineffectiveness, and institutional quality. It is very important for the policy makers to pay attention towards creating the conducive environment for the foreign direct investment and much focus should be on the side of policy to minimize external debt and official development assistance and to raise investment. My findings suggest that sound economic management policies and their implementation are needed to achieve the positive effect of inflows on economic growth, which ultimately lowers inflation and raise opportunities for trade openness and foreign direct investment. Inflows in the form of debt and official development assistance are an unstable and unpredictable source of financing in Pakistan. Hence, for stimulating economic growth promotion of portfolio investment

and exports are the best source of external financings in developing countries

Notes and References

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