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Full Length Article

Comparative Analysis of Foreign Capital Inflows and Domestic Resources in the Economic Growth of Pakistan

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ABSTRACT

The present study was designed to investigate the impact of foreign capital inflows and domestic resources on the economic growth of Pakistan. For this purpose, the data (year 1975 to 2008) on different parameters was analyzed by multiple linear regression employing ordinary least square method. Results of empirical analysis revealed that foreign direct investment has positive and statistically significant contribution in the economic growth of Pakistan. However, foreign aid has insignificant impact on the economic growth of country primarily due to the improper utilization of these funds. Moreover, domestic resources were found to contribute more in accelerating the economic growth rate as compared to foreign resources. It was concluded that reliance on foreign direct investment and domestic resources is the best alternative to finance growth. However, the dependence on the foreign aid must either be stopped or utilized only for productive purposes. © 2012 Friends Science Publishers

Key Words: Economic growth; Foreign direct investment; Foreign aid; Domestic resources

INTRODUCTION

Foreign Capital Inflow (FCI) is considered vital for enhancing the economic growth rates of developing economies. As per economic theory, the availability of higher capital per worker in the developed countries means that the return to investment is low. Therefore, the free movement of capital allows these countries to reap higher benefits of their investments in underdeveloped countries and is also expected to equally benefit the poor nations in promoting sustainable economic development (Rana & Dowling, 1988; Abdel & Wahed, 2003). There are however, considerable empirical evidences that this developmental role of FCI in developing countries is not always positive (Griffin, 1970; Shabbir & Mahmood, 1992; Ahmad & Ahmad 2002; Kamalakanthan & Laurenceson, 2005; Prasad *et al.,* 2007).

As the government of Pakistan is also striving hard to attract foreign capital, it is therefore, essential to empirically investigate the role of FCI with respect to the economic growth performance of country. The main purpose of this study was to test the hypothesis that reliance on external sources of financing helps Pakistan to pace up the economic growth rate. In particular, this research seeks to investigate whether it is in the collective national interest to keep relying on external sources of financing.

MATERIALS AND METHODS

In order to investigate the impact of FCI on the economic growth of Pakistan, secondary data ranging from year 1975 to 2008 was used. The whole data set was compiled from the Federal Bureau of Statistics and Economic Survey of Pakistan. For the purpose of empirical analysis, Ordinary Least Square (OLS) method was used.

In the empirical analysis, production function framework was used. The most commonly used production function is Cobb-Douglas production function (Cobb & Douglas, 1928). This production function in general form, with two variables is represented as:

$$Y_{1t} = \beta_1 X_{2t}^{\beta 2} X_{3t}^{\beta 3} e^{\mu t} \quad \ldots\ldots\ldots\

Following Torau (2004), Cobb-Douglas (1928) production function in log linear form was used. The final form of the model used in the present study is given by equation 3.

$$\ln Y_t=\beta_1+\beta_2 \ln FDI_t+\beta_3 \ln FA_t+\beta_4 \ln L_t+\beta_5 \ln X_t+\beta_6 \ln DPI_t+\mu_t \quad ...(3).$$

Where,

$\ln Y_t$ = Natural logarithm of gross domestic product in million dollars.

$\ln FDI_t$ = Natural logarithm of foreign direct investment in million dollars.

$\ln FA_t$ = Natural logarithm of foreign aid in million dollars.

$\ln L_t$ = Natural logarithm of labor force in millions.

$\ln X_t$ = Natural logarithm of export in million dollars.

lnDPI = Natural logarithm of domestic private investment in million dollars.

β_1 = Constant term.

μ_i is an error term, which is assumed to be independently and normally distributed with zero mean and constant variance.

RESULTS AND DISCUSSION

For the purpose of empirical analysis, first of all the whole data was tested for the presence of unit root by using Augmented Dickey Fuller (ADF) test of data stationarity. Results of ADF test at level and first difference series are presented in the Table I.

Results of ADF test revealed that all the variables are non-stationary at their level form. However, after first difference all these variables became stationary, showing that there exists a long run relationship between these variables.

The estimated coefficient of FDI was 0.051 which shows that 1% increase in the FDI leads to 5% increase in the GDP growth of Pakistan. This clearly depicts that FDI has positive and statistically significant contribution in the economic growth, because it is the key source of needed capital, advance technology along with the managerial and operational skills into the country. The low value of the coefficient can be justified on the ground that the inflow of FDI remained small in case of Pakistan over an extended period of its history. It is only after the liberalization policies of the military government in Pakistan in the year 2000, that the growth in FDI started to pick up. This finding is in line with the view of neoclassical growth model (as discussed by Borensztein *et al*., 1998) that predicts "FDI accelerates the economic growth by increasing volume as well as efficiency of investment" and is also in accordance with the endogenous growth model that says "FDI increases the growth performance of recipient countries through technological diffusion from developed countries to recipient countries".

The estimated coefficient of foreign aid had the expected negative signs but statistically insignificant impact on the economic growth of Pakistan. The insignificant implications of these foreign resources on the economic growth of Pakistan are obviously due to the improper utilization of the foreign funds in unproductive wasteful projects rather than developmental projects. This situation not only increases the external dependence but also increases the problem of debt services over time in Pakistan. Furthermore, all these factors lead towards the macroeconomic imbalances and loss of competitiveness in the international market.

The estimated coefficients of exports, labor force and domestic private investment showed positive and statistically significant contribution in the economic growth of Pakistan. These results are consistent with the earlier findings (Rana & Dowling, 1988; Iqbal & Zahid, 1998; Fosu, 2002; Kiong & Jomo, 2005). These findings support the self- reliance approach of growth and suggests that

Table I: Results of Augmented Dickey Fuller Test

Variables	Level		First Difference	
	ADF Test Statistics	Critical Values	ADF Test Statistics	Critical Values
lnGDP	-0.319588	-2.9558	-3.069077	-2.9591
lnFDI	-0.042044	-2.9558	-5.263218	-2.9591
lnFA	-1.016881	-2.9558	-6.761286	-2.9591
lnL	-0.120636	-2.9558	-3.759986	-2.9591
lnX	-1.090397	-2.9558	-4.142706	-2.9591
lnDPI	-0.476809	-2.9558	-4.360358	-2.9591

Table II: Econometrics Analysis Dependent Variable: (lnGDP)

Independent variables	Coefficients	t-value
Constant	2.770	4.844***
lnFDI	0.051	1.989**
lnFA	-0.032	-0.584
lnL	0.847	4.760***
lnX	0.151	1.850*
lnDPI	0.407	5.760***

R^2= 0.99; F-value = 912.534

*** Highly Significant at less than 1%; ** Significant at 5%; * Significant at 7%

reliance on domestic resources is a best alternative to finance growth rather than focusing on those external financial strategies that have placed greater emphasis on debt creating sources of external finance into the country.

CONCLUSION

FDI is desirable as it has positive and significant contribution in the economic growth of Pakistan. However, the foreign aid has statistical insignificant impact on the economic growth of Pakistan, which was mainly due to the unprecedented rise in debt to GDP ratio over time along with the mismanagement of these funds. Additionally, it was concluded from the empirical analysis that domestic resources effected the economic growth significantly, which suggests that reliance on these domestic resources and FDI is a best alternative to finance growth rather than relying heavily on foreign aid.

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