

Fiscal Policy and the Determinants of Private Investment in Sri Lanka

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Introduction

Although the government involvement in economic development has been substantially high in Sri Lanka, the investment has been highly dominated by the private sector accounting for 20 % of GDP on average over the proceeding decades. It apparently indicates that the fiscal policy and budget deficit is conducive for thriving private sector businesses. Hence public sector spending may have helped in developing infrastructure and work force development for encouraging private investment. With this move, fiscal policy influences the macro economy through a number of ways; it changes the level and composition of aggregate demand, changes aggregate supply and influences national savings and investments (through expenditure and taxation). As an emerging economy Sri Lanka and its government expenditures show the directions to develop productive investments and human capital infrastructure through the government economic policy packages. However, this field of study in economics have no clear policy direction given and highly debatable over the experience of different contexts (Biza, *et. al.*, 2013; Rathnasekara, 2016). With this background, this research therefore focuses on empirical study on how budget deficit and fiscal policy of the country effect on private investment maintaining macroeconomic stability to achieve sustainable growth. This study attempts to investigate whether there is an empirical

relationship between budget deficit and private investment. We consider two types of investment: Domestic Private Investment and Foreign direct investment.

Objectives

The main objective of this study is to assess the policy effectiveness of the government in achieving high and sustainable economic growth in compliance with fiscal consolidation effort.

The secondary objectives are to investigate the determinant factors of private investment and also to examine whether there is a crowding out or in effect between budget deficit and private investment.

Methodology

The empirical model constructed for this study is based on the regression model by Samwel (2016) that used for his study regarding the Tanzanian economy. We have modified that model by adding new variables suitably to conduct our study. We took log difference for all variables.

$$DPI_t = \beta_0 + \beta_1 CPI_t + \beta_2 ER_t + \beta_3 BD_t + \varepsilon_t \quad (1)$$

$$FDI_t = \beta_0 + \beta_1 CPI_t + \beta_2 ER_t + \beta_3 BD_t + \varepsilon_t \quad (2)$$

Where PI refers to Private investment which can be divided into two, those are DPI and FDI (Domestic Private Investment and Foreign Direct Investment respectively as a ratio of GDP); CPI refers to Consumer Price Index, ER refers to Exchange rate (LKR per \$) and BD refers to Budget deficit. There is no surplus value for the relevant period. So we consider only absolute value of BD defined as a ratio of GDP. This study covers time period of 1990 to 2015. The relevant data were collected from annual Reports of Central bank of Sri Lanka.

At the first step of the estimation procedure, ADF test and Phillip Peron tests were used to check the stationary of data. Johansen co-integration test was used to identify the long-run relationship and also VECM was

used to identify both short-run and long-run relationship as well as long-run equilibrium among the variables.

Results and Discussion

Unit root test revealed that all variables were non-stationary at the initial level, but stationary at the First difference. According to lag length criteria, AIC and HQ criteria were selected 2 lags. LR, FPE and SC criteria were selected 1 lag. Most criteria were selected in 1 lag. So lag length test suggested 1 lag. Johnsen co- integration trace test has detected co-integration relationship for both model which implies that there is a long -run relationship, long -run speed adjustment and short-run relationship are examine using Vector Error Correction Model.

The Equation 3`and 4 show long-run relationship:

$$\widehat{DPI} = 0.06 + 1.75CPI - 1.26ER + 5.27BD \quad (3)$$

[2.13] [1.98] [2.01]

$$\widehat{FDI} = 0.22 - 1.97CPI - 4.35ER + 1.03BD \quad (4)$$

[2.08] [1.99] [2.02]

According to above results, all variables are significant at the 5 % significant level at the long-run. Therefore, this results show that government fiscal deficit positively impact on domestic investment and also on foreign direct investment. For instance, when BD increases in 1 %, DPI increases in 5.27 % and also FDI increases in 1.03%. As it similar to the findings of literature, (Coban and Tugcu, 2015) the empirical estimation results of our model reveals that there is a long-term relationship between private investment and its determinants specified in the model. Also it clearly shows that government budget has been favourable for investment.

Since Error Correction term of the both models are significant and negative the long-run adjustment relationship can be identified related to PI and FDI (See Table 2). According to Equation 1 speed adjustment

is -0.59 which means that after an external shock, domestic private investment moves, from short-run to long-run steady state after one year. And also According to equation 2, speed adjustment is 1.57 means that after an external shock, foreign direct investment moves from short-run to long-run steady state after one year.

Table 2(a):Results of Vector Error Correction Model 1

Variables	D(PI)	D(ER)	D(CPI)	D(BD)
CointEq1	-0.598056 [-3.27009]	0.057185 [0.16198]	0.468096 [1.23512]	0.200595 [-1.98364]
D(PI(-1))	-0.227332 [-1.09818]	0.203101 [0.50825]	0.950293 [2.21526]	0.103896 [0.86193]
D(ER(-1))	-0.081750 [-0.64036]	-0.160033 [-0.64938]	0.395966 [1.49675]	-0.037117 [-0.49930]
D(CPI(-1))	-0.108050 [-1.04957]	0.203332 [1.02317]	-0.280293 [-1.31387]	0.083918 [1.39992]
D(BD(-1))	0.690887 [1.31020]	0.262355 [0.25773]	-0.913076 [-0.83559]	0.199638 [0.65018]
C	0.800881	4.678817	-2.427133	0.094491

Note: t values are in parenthesis

Table 2(b):Results of Vector Error Correction Model 2

Variables	D(FDI)	D(CPI)	D(ER)	D(BD)
CointEq1	-1.571298 [-6.97364]	-2.244077 [-0.61001]	0.801247 [0.27528]	2.130264 [2.55627]
D(FDI(-1))	0.395101 [2.44121]	0.785509 [0.29726]	1.271670 [0.60825]	-0.432030 [-0.72174]
D(CPI(-1))	0.010719 [0.76536]	-0.264413 [-1.15638]	0.208139 [1.15050]	0.060313 [1.16440]
D(ER(-1))	0.016398 [0.95045]	0.167695 [0.59532]	-0.220233 [-0.98817]	-0.078755 [-1.23420]
D(BD(-1))	-0.013435 [-0.23612]	-0.093364 [-0.10050]	0.602869 [0.82021]	-0.259699 [-1.23405]
C	-0.052179	-1.329681	4.943202	0.229505

Note: t values e in parenthesis

According to above results there is no significant relationship among the variables at the short-run consider about DPI. However, Last year FDI and Current year FDI has positive significant relationship.

Conclusion and Policy Implications

The empirical results indicate that budget deficits have been favourable for both domestic and foreign direct investment in the long-run. Also budget deficits are favourable for foreign direct investment at the short-run. Under the current fiscal policy the government spends more on improving public welfare, physical and social infrastructure development. These expenditures will have a tremendous positive impact on investment potentials in Sri Lanka. And also, government established BOI and tax reduction and concessions have made an optimistic view for investors. Therefore, current phase of fiscal policy stance is conducive for foreign investment in the short-run and long-run. Also we can say that although there is a crowding out effect on

domestic private investment in the short-run, the current fiscal policy has a crowding in effect on domestic private investment in the long-run

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