

ASSESSING THE IMPACT OF EXTERNAL DEBT ON ECONOMIC GROWTH IN SRI LANKA: THE PERIOD FROM 1987 TO 2017

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ABSTRACT

The lack of financial capital is becoming a huge threat to the incurring debt burden in the developing economies. Many of the developing countries' economies do not have sufficient financial capital to engage in public or private investment. Indeed, Sri Lanka also subjected to this problem with low growth, lack of savings, debts where funds are often used to repay previous debts, so there are less available funds for capital investment by government, crowding out which causes a relative shortage of capital and raises interest rates, absence of credit markets which discourages both lenders and borrowers. This situation made the economy of Sri Lanka to depend on external debt. Consequently, there is a need for the state to assess the impact of external debt to inform policymaking to take actions to protect the country against the adverse effects of external debt. Thus, this paper aims to investigate the impact of external debt on the economic growth in Sri Lanka. The finding of the study shows that the total external debt negatively influences on the GDP. The real effective exchange rate, investment share of GDP and labor force are significant and positively impact on the economic growth. This research would help to understand the problem of increasing external debt and its impact on Sri Lankan economy. Further, this study helps policymakers for considering to restructure the public financing source and to improve the public sector and productivity efficiency in the economy of Sri Lanka.

Keywords: external debt, economic growth, Sri Lanka

INTRODUCTION

Many developing countries failed to boost their economy development despite the long period due to varieties of socio, economic, and political challenges. Inefficiency within micro economy, imbalance in the structure of the economy, rapidly growing population, lack of financial and human capital, poor governance and corruption and the missing market are some of the challenges of the developing countries (Economics online, 2018). Indeed, Sri Lanka also subjected to this problem with low growth, lack of savings, debts where funds are often used to repay previous debts, so there are less available funds for capital investment by government, crowding out which causes a relative shortage of capital and raises interest rates, absence of credit markets which discourages both lenders and borrowers. According to Asian Development Bank (ADB) report Sri Lanka's gross domestic product (GDP) growth rate was 3.1 percent in 2017 and it was 4.5 percent in the previous year, 2016 and shows a reduction in the growth. Sri Lanka's domestic savings rate dropped to 20.9

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percent of gross domestic product in 2015 from 24.23 percent a year earlier, 2014 as state overspending increased. Sri Lanka national savings also dropped to 28.8 percent of GDP in 2015 from 29.8 percent. National savings includes current transfers from the rest of the world which is mainly remittances. In 2015 current transfers were marginally down to 7.5 percent of GDP, down from 7.8 percent (Central Bank of Sri Lanka (CBSL), 2016).

In case of Sri Lanka external debt increased to 51823.8 US dollar million in 2017 from 46418 US dollar million in 2016 (CBSL, 2017). Accordingly, it shows in increasing trend throughout the period. Meantime, lack of foreign direct investment (FDI) is highlighted as a major cause of the slow pace of development in the capital-starved Sri Lankan economy. The actual foreign capital flowing into the Sri Lankan economy has been comparatively low compared to the other frontier and emerging countries (Hettiarachchi, 2017). Sri Lanka's FDI has dropped to a very low level of slightly over 445 US dollar million in 2016 from 1161 US dollar million in 2015 and 1635 US dollar million in 2014. Beside this, foreign borrowing can assist in resolving constraints in foreign resources for development. Incurring foreign debt of a reasonable extent for developmental objectives is an economic strategy for the purposes of developing countries. According to the Ministry of Finance in Sri Lanka 75 percent of recent foreign borrowing has been for infrastructure development such as for power and energy, ports, roads, bridges, water supply, agriculture, fisheries and irrigation, among others.

External borrowings has a significant impact on the investment and growth of a nation and increasing level of external debt service payment leads to huge fiscal imbalances. The effect of indebtedness could create unfavorable circumstances such as crowding out of private investment and low GDP growth rate. This study investigate the impact of external debt burden on economic growth in Sri Lanka. The finding of the study would help to suggest policy making in offering policies aimed in managing debt crisis in Sri Lanka.

Literature Review

Theoretical background

Dependency theory explain the relationship between external debt and under-five mortality. First, increase in the size of the debt service payment reduces the proportion of gross domestic product reserved for physical and human capital investments. Second, external debt held by bilateral institutions are likely to have associated austerity programs attached to them that enforce the reduction in government spending on health and human welfare programs. Third, the structure of debt in terms of currency exchange may be prohibitive to a country managing their debt in a way that sustainable. Fourth, levels of external debt may have deleterious effects on central government by depleting assets and finally, increasing central government debt (Easterly, 1999).

Review on empirical studies

There are similar studies being conducted on impact external debt on economic growth (Chowdhury, 2006; Paudel and Perera, 2009; Salotti and Trecroci, 2012; Presbitero, 2012; Westphal & Rother, 2012; Afonsoab & Jallesc, 2013; Winifred, 2014). The study of Winifred, (2014) proved an insignificant long run relationship and a bi-directional relationship between external debt and economic growth in Nigeria. Afonsoab & Jallesc, (2013) have conducted an empirical investigation for the euro area has found a non-linear impact of debt on growth with a turning point beyond which the government debt to GDP ratio has a negative impact on long-term growth at about 90–100% of GDP. The channels through which government debt is found to have a non-linear impact on the economic growth rate are private saving, public investment and total factor productivity. A study of Baum et al. (2013) shows that the short-run impact of debt on GDP growth is positive and highly statistically significant, but decreases to around zero and loses significance beyond public debt-to-GDP ratios of around 67%. And also for high debt-to-GDP ratios above 95%, and further debt has a negative impact on economic activity in line with the study of Muareen (2001) which indicates that external debt accumulation has a negative impact on economic growth and private investment. Salotti and Trecroci, (2012) found that public debt is increasing after the decline of aggregate investment spending and productivity growth. Study of Presbitero, (2012) shows on a panel of low and middle income countries over the period of 1990–2007, public debt has a negative impact on output growth until it reaches 90 per cent of GDP. Afonsoab & Jallesc (2013) used a panel of 155 countries to assess the links between growth, productivity and government debt on growth and productivity. The study found a negative effect of the debt ratio. For the OECD, the higher the debt maturity the higher the economic growth, financial crisis is detrimental for growth, fiscal consolidation promotes growth and higher debt ratios are beneficial to productivity growth.

Chaudhary, et al. (2001) found trend of foreign debt in South Asian countries and analyses the problem of ever-rising foreign debt burden, which may be increasing economic dependency of these countries to finance debt servicing. Sundell and Lemdal, (2011) shows that external debt exercised a negative influence on investments in developing countries during the whole LDC crisis which supports the theory of debt overhang. Ejigayehu, (2013) found that external debt affects economic growth by the debt crowding out effect rather than debt overhang. According to Paudel and Perera (2009), long run, labor force, trade openness and foreign debt have a positive impact on economic growth in Sri Lanka. Indonesia faces a debt overhang problem in the long run since increasing the public external debt service slows economic growth Cholifihani (2008). This study investigates the impact of external debt on economic growth in Sri Lanka. Further, this study would propose the way out the problem which is useful for the policy makers.

METHODOLOGY

Multiple regression analysis has being conducted using the time series data for a period of 30 years from 1987 to 2017. Mini tab software has being utilized to analyze the data.

Model Specification

$$\text{GDP} = \beta_0 + \beta_1 \text{TED} + \beta_2 \text{DSR} + \beta_3 \text{REER} + \beta_4 \text{INV} + \beta_5 \text{BOP} + \beta_6 \text{TOT} + \beta_7 \text{INFL} + \beta_8 \text{LF} + \beta_9 \text{COR} + u \text{ ----- Model 01}$$

Where:

- GDP = Gross Domestic Product (US dollar Million)
- TED = Total External Debt (as percent to GDP)
- DSR = Debt Service Ratio (as percent to export)
- REER = Real Effective Exchange Rate
- INV = Investment (as percent to GDP)
- BOP = Balance of Payment (as percent to GDP)
- TOT = Terms of Trade (percent change)
- INFL = Rate of Inflation (Colombo Consumer Price Index (CCPI))
- LF = Labor Force
- COR = Corruption
- U = Error Term

The direct channels which the indebtedness affects the economic growth have been identified as total external debt as percent of GDP. The model also incorporates other indirect channels such as investment which captures the accelerator principle, the terms of trade which is an external shock variable, inflation, exchange rate and balance of payment macroeconomic policy variables which shows the extent of vulnerability of the economy to the external factors and reliance on foreign resource financing and credibility of economic policies and their effect on economic growth. Labor force is to capture the human capital development. Corruption shows the credibility of the economy.

RESULTS AND DISCUSSION

The adjusted R^2 of linear model of the growth equation is 0.937, means that 93 percent variation is occurred in GDP during the time period of 1987-2017 due to the total external debt, debt service ratio, real effective exchange rate, investment, terms of trade, inflation, labor force, corruption. F value is 50.96, variance inflation factor is between 1.1- 4.9. This range indicates that there is no multi-collinearity among the variables. Also the Durbin-Watson statistic is 1.36544 where it is less than 2, so it represents that there is no autocorrelation among the variables.

$$\text{GDP} = - 2100278 - 506.5 \text{TED} + 1312 \text{DSR} + 729.1 \text{REER} + 2813.9 \text{INV} + 115.2 \text{TOT} + 909.4 \text{BOP} + 186.4 \text{INF} + 1798.9 \text{LF} + 457.5 \text{COR}$$

According to the theoretical expectation the coefficient of total external debt is statistically significant and negative in the model. A rise in the external debt as percent to GDP leads to a decline in economic growth. when total external debt increase by 1 percent GDP decrease by -506 US dollar million at 5% significant level, and the total external debt negatively influence on the GDP. This conforms the debt over hang effect on economic growth in Sri Lanka.

Table 1. Estimation Results for the Growth Equation of Linear Model

Predictor	Coefficient	T	P	VIF
Constant	-2100278	-5.79	0.000*	
TED	-506.5	-3.19	0.004*	1.9
DSR	1312	5.14	0.000*	1.4
REER	729.1	2.72	0.013**	2.9
INV	2812.9	4.82	0.000*	4.9
TOT	115.2	0.70	0.489 ^{ns}	1.1
BOP	909.4	1.05	0.307 ^{ns}	2.4
INF	186.4	0.49	0.626 ^{ns}	2.3
LF	1798.9	2.06	0.052***	2.7
COR	457.5	0.60	0.555 ^{ns}	4.0

R² = 93.7

Source: Computed from Secondary Data, 2018.

*1% significant level, **5% significant level, ***10% significant level, ^{ns} not significant

The significant and positive effect of debt service ratio on economic growth was unexpected. However, it has been argued that actual debt service payments are inadequate indicators of the debt burden (Fosu, 1999, as cited in Maureen, 2001). The real effective exchange rate is significant and positively impact to the model. When real effective exchange rate increase by 1 percent GDP increase by 729 US dollar million. The investment share of GDP and labor force are significant and positively impact on the economic growth. When investment increase by 1 percent GDP increase by 2812 US dollar million and when labor force increase by 1 percent GDP increase by 1789 US dollar million. However, The BOP as percent to GDP, TOT percent change, inflation and the coefficient of corruption statistically insignificant in the model as shown in Table 1.

CONCLUSION

Developing countries mostly rely on external debt to finance its deficit balance of payment and stimulate the economic growth. As it is Sri Lanka also mostly relied on external debt for the financing requirements, deep dependence on external debt affect the economic growth. Therefore, this study is investigating the impact of external debt on economic growth in Sri Lanka. External debt does not contribute to encourage the economic growth in Sri Lanka, total external debt has a negative impact on the economic growth in growth equation. The real effective exchange rate, investment share of GDP and labor force are significant and positively impact on the economic growth. Meantime, BOP as percent to GDP, TOT percent change, inflation and the coefficient of corruption statistically insignificant to the model.

The causes of external debt in Sri Lanka can be traced to both internal and external factors. Internal factors are mainly overly expansionary fiscal policies and highly distorted trade policies, especially policies that created a heavy partiality against exports. The external factors include deterioration of terms of trade leading to BOP deficits, high world interest rates and increased trade barriers by developed countries, which tented to discriminate against less development countries exports. In addition to these factors most of the foreign borrowing were invested on the infrastructures which failed to provide sufficient economic return. Moreover, the mismanagement of external debt, lack of transparency and high level of corruption. Corruption considered to be one of the main obstacle of economic growth in Sri Lanka. Sri Lanka is ranked eighty-nine out of hundred and seventy-five countries, according to the 2018 CPI reported by TI (Transparency International, 2018).

The presence of weak policy conditions and unexpected exogenous shocks will further bring more risk on deep dependence on external debt in the future. The simultaneous attainment of sustainable economic growth and external debts appear difficult and could remain exclusive if aggressive measures are not undertaken. The government should put efforts to increase sources of internal revenue to finance its development plans. In addition government should diversify its economy in providing more opportunities to new sectors to develop and generate revenue to contribute in economic development of the country.

The government could play an important role in stimulating the economy if the resources obtained from the debt relief initiatives are targeted at productive public investments with the resultant crowding-in effects on private investment, and social spending for the poor to maximize returns to its external debt. Proper macroeconomic management of economy and create credibility on external finance policy framework including political will increase investor confidence for both local and foreign investments. Further the practice of equity base financing would be much relief to the interest burden of the external debt. In contrast a rational degree of fiscal adjustments must be made to either reduce its external debt stock or stabilize it to a certain fiscally sustainable level.

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