

The Impact of External Debt on Economic Growth in Lower Middle-Income Countries in South Asia

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Introduction

With growth topping 6.9 percent in 2018, South Asia is firming up its position as the world's fastest growing region (South Asia focus spring 2018). According to the World Bank classification in 2017, Sri Lanka, India, Bangladesh, Bhutan and Pakistan are considered as lower middle-income countries based on the per capita income (from \$1,026 to \$4,035).

According to the economic theory, it is noted that a reasonable level of debt should help both developing and developed countries to enhance their economic growth. However, the theory of liquidity constraint hypothesis and debt overhang theory have pointed out higher debt levels crowd out economic growth because of increased government internal borrowing (Krugman 1988, Saches 1989, and Cohen, 1992). The increase in borrowing raises the interest rate, which makes the cost of borrowing for both investment and consumption become more expensive and this in turn result in crowding out effect. Moreover, poor debt management in developing countries would adversely affect the economic growth and financial sustainability of these countries. Hence, it is important to use the borrowed funds to finance productive investments that will generate future income. (Kharusi and Ada, 2018).

South Asia, one of the fastest growing regions in the world has shown a contraction in the total external debt outstanding in 2016 (International Debt Statistic, 2018). Figure 1 shows the comparison of South Asia's net external debt inflow with the other regions in the world.

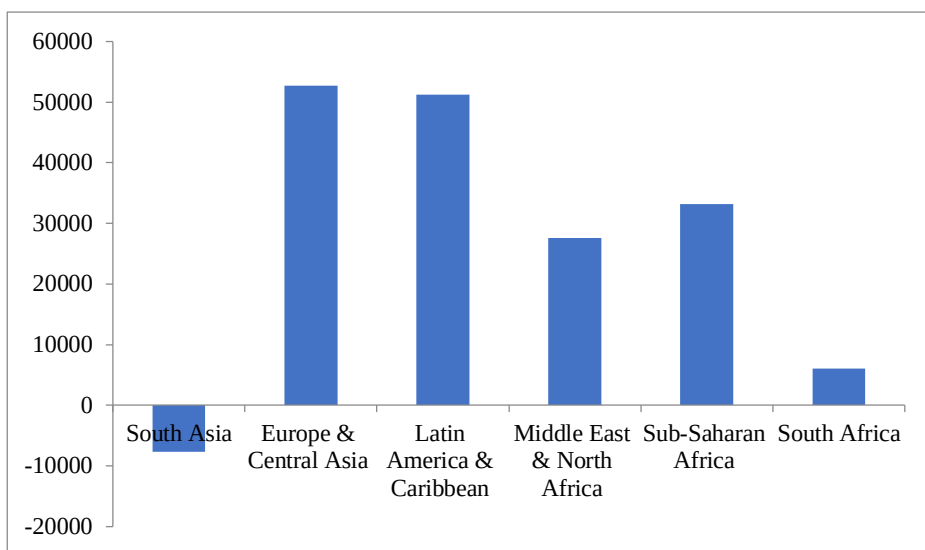
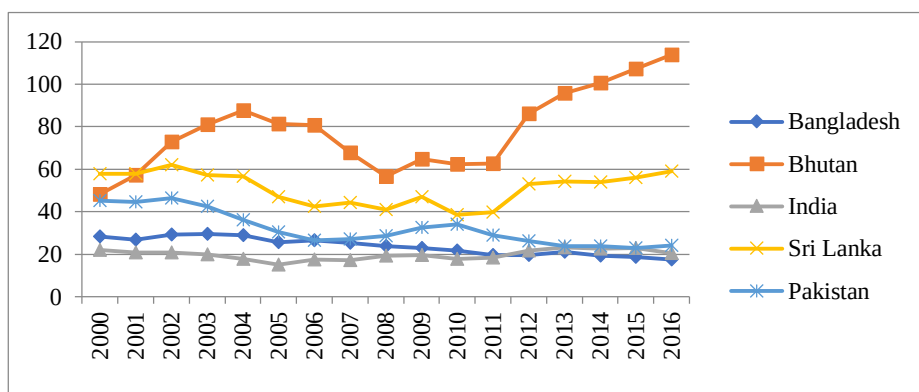


Figure 1 Net external debt inflow in different regions in the world in 2016 (Figures in US\$ million)

The total external debt stock of South Asia contracted by almost 2 percent as net debt flows into the region turned negative (\$-7.7 Billion) for the first time in the decade. The ratio of external debt to Gross National Income (GNI) of the region dropped by one percentage point from 23 percent in 2015 to 22 percent at the end of 2016, which is below the average of 26 percent for all developing countries (International Debt Statistic, 2018). Historically too, this ratio for South Asia has remained lower than the average of low-and-middle income countries (International Debt Statistic, 2018).



Source: International Debt Statistics 2018

As shown in Figure 2, in 2016, the external debt to GNI ratios of Bhutan and Sri Lanka is 113 percent and 59 percent respectively which is way above the average for other developing countries (World Bank, 2016). More importantly, the external debt to GNI ratios for these two economies has deteriorated markedly over the last few years and this trend has not seen in the other South Asian countries.

Research Problem

The literature review reveals that external debt has a positive impact on economic growth in certain economies whereas it brings negative impact to certain countries (Adegbite & Ayadi, 2008; Pattillo et al., 2004; Paudel & Perera, 2009). Hence, it is clear that there is no definite relationship between external debt and economic growth.

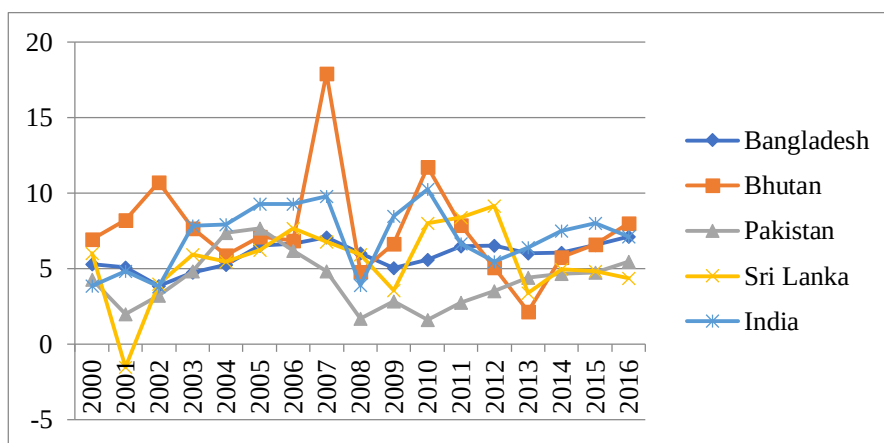


Figure 3: GDP growth rate (%)
Source: World Bank statistics 2018

It shows that there is a research gap exists regarding external debt and economic growth in lower middle income countries in South Asia. Therefore, the study attempts to investigate whether there is a link between economic growth and external debt.

Figure 3 above illustrates the GDP growth rates for South Asian lower middle-income countries for the period of 2000-2016. From the trend shown in figures 2 and 3 one cannot clearly identify whether external debts affect positively or negatively on economic growth. For instance, countries with higher percentage of external debt to GNI like Bhutan

record high economic growth, whereas Sri Lanka records lower economic growth. Hence, it is important to undertake a detail analysis to determine the relationship between external debt on economic growth in the South Asian context.

Objective

The prime objective of the study is to identify the relationship between external debt and economic growth in lower middle income countries in South Asia. Following are secondary objectives of the study:

- To estimate the impact of other economic indicators on the economic growth of lower middle income countries in South Asia.
- To identify the reasons affected on South Asia's deviation from the norms of International Debt Statistics 2018.

Methodology

Most of the former studies (Pattillo et al., 2004; Wijeweera & Dollery, 2005; Ayadi & Ayadi, 2008) employed quantitative method to determine the relationship between external and the economic growth. Therefore, the study uses panel data regression method to investigate this relationship. In estimating the model, the secondary data has been extracted from the World Bank database for the lower middle-income counties in South Asia for the period of 1990 to 2016.

Econometric model

The analysis has conducted through a panel data set using a linear regression model. The present study is based on the model used by Elbadawi, Ndulu and Ndungu (1999) which is widely employed in similar studies undertaken to ascertain the relationship between external debt and economic growth. The variables used in the model are commonly used variables in studies undertaken to determine the aforementioned relationship (Paudel, Perera, & Paude, 2009, Sichula, 2012).

$$YG_{it} = \beta_0 + \beta_1 DEBGDP_{it1} + \beta_2 LABF_{it2} + \beta_3 GCFGDP_{it3} + \beta_4 TRDGDGP_{it4} + U_{it}$$

Where, YG = GDP growth rate, DEBGDP =External Debt as a % of GNI, LABF = Labour force, GCFGDP =Gross capital formulation as a % of GDP, TRDGDGP =Trade as a % of GDP (Trade openness), U_{it} = idiosyncratic error term.

Results and Discussion

The study employs fixed effect model which is selected after running the huasman test (Prob>chi2 = 0.0000). The model results are presented in Table 1. The overall model is significant at 95% confidence level (prob > f =0.0010). The results indicate that external debt and labour force are significant, whereas gross capital formation and trade openness are insignificant, as the p-value of these variables are greater than 0.05 (at 95% confidence level).

Table 1 Panel data analysis, fixed effect model outcomes

R-sq.: within = 0.141	$\rho = .736$		
Between = 0.169			
Overall = 0.056	$\text{Corr}(u_i, Xb) = -0.936$		
Prob > f = 0.0010			
Variables	coefficient	Std.Error	Sig.
(constant)	3.394	.838	0.000
External debt	-0.121	.038	0.002*
Gross domestic capital formation	0.059	.042	0.163
Trade openness	0.003	.039	0.946
Labor force	2.080	7.580	0.007*

*Dependent variable: Annual GDP growth rate, *significant at 0.05 level*

It is interesting to note that, there is a negative relationship between external debt and economic growth in lower middle-income countries in South Asia. Moreover, labour force is positively related with the economic growth. The error terms are correlated with the regressors ($\text{corr}(u_i, xb) = -0.9356$) which is 73.57% of the variance is due to differences across panels ($\rho = .7357472$).

According to the estimated results India constitute more than 70 percent of the external debt in South Asia. Among South Asian countries, India and Afghanistan are the only countries that record a negative net debt flow in 2016.

Conclusions and Policy Recommendations

The findings of the study reveal that external debt and labour force are the factors that affect significantly on GDP growth rate in lower middle-income countries in South Asia. It shows that gross capital formation and trade openness are not significant factors in determining GDP Growth in South Asian context. However, this is contrary to the conventional view on the growth effects of trade openness and gross capital formation. According to the study undertaken by Rodrik, Subramanian, & Trebbi, 2018 indicate that the trade is almost always insignificant, and often enters the income equation with the “wrong” (i.e., negative) sign. From the South Asian context, it is noticed that countries started liberalising their economies in late 1990s, other than Sri Lanka. Hence, trade openness may not directly affect to the economic growth in South Asia. Study relating to capital formation concluded (Borensztein, Gregorio, & Lee, 1998) that foreign direct investments (FDI) contribute significantly to the economic growth only when a sufficient absorptive capability of the advanced technologies is available in the host economy.

There is a significant positive relationship between labour force and GDP growth rate in South Asia as these counties are abundant with labour. The findings indicate that GDP growth rates and external debt in lower middle-income countries in South Asia are negatively related. Increase in external debts in this region will results in fall in the GDP growth rate. Moreover, it shows that there are unobservable random variables (cultural factors, national policies, federal regulations, international agreements) that have impact on the specified independent variables in the model.

Identifying the reasons affected on South Asia’s deviation from the norms of International Debt Statistics 2018 is one of the sub objectives

of this study. Afghanistan and India are the only two countries in the region that registered negative net debt flows in 2016. Hence, the overall trend of South Asia reflects this trend given India is the largest economy of the region and alone constitutes more than 70 percent of the external debt stock of South Asia. In 2016 India showed a massive increase of 70 percent in its principal repayments on long term external debt (Report A S, 2017).

The prime objective of the study is to investigate the impact of external debt on economic growth in lower middle-income countries in South Asia. It is seen that external debt has negatively affect economic growth. Higher external debt results in higher debt service payment which ultimately results in depreciation of the domestic currency, BOP crisis, inflation etc. which led to hamper economic growth. Hence the policy makers should pay attention on how to use them in productive manner. The lending institutes like Asian Development Bank needs to consider the overall impact on the region through external debt related decisions. Also policy makers should take into consideration that debt overhang is still a paradox that may exist, but debt relief plays a major role in GDP growth.

References

- Al Kharusi, S., & Ada, M. S. (2018). External debt and economic growth: The case of emerging economy. *Journal of Economic Integration*, 33(1), 1141-1157. <https://doi.org/10.11130/jei.2018.33.1.1141>
- Adegbite, E. O., & Ayadi, O. F. (2008). The impact of Nigeria ' s external debt on economic development, 3(3), 285–301. <https://doi.org/10.1108/17468800810883693>
- Ayadi, F. S., & Ayadi, F. O. (2008). The Impact of External Debt on Economic Growth: A Comparative Study of Niegeria and South Africa. *Journal of Sustainable Development in Africa*, 10(3).
- Borensztein, E., Gregorio, J. De, & Lee, J. (1998). How does foreign direct investment affect economic, 45, 115–135.

- Pattillo, C., Poirson, H., Ricci, L., Ross, D. C., Valdivieso, L. M., Clark, P., Ross, D. (2004). What Are the Channels Through Which External Debt Affects Growth? Authorized for distribution.
- Paudel, R. C., & Perera, N. (2009). Foreign Debt , Trade Openness , Labor Force and Economic Growth : Evidence from Sri Lanka Foreign Debt , Trade Openness , Labor Force and Economic Growth :, 8, 57–64.
- Rodrik, D., Subramanian, A., & Trebbi, F. (2018). Institutions Rule : The Primacy of Institutions over Geography and Integration in Economic Development Institutions Rule : The Primacy of Institutions Over Geography and Integration in Economic, 9(2), 131–165.
- Wijeweera, A., & Dollery, B. (2005). Economic Growth and External Debt Servicing : A Cointegration Analysis of Sri Lanka , 1952 to 2002 University of New England School of Economics .
- Nw, H. S., & Dc, W. (2018). *Growth ?* <https://doi.org/10.1596/978-1-4648-1284-2>.
- Indicators, W. D. (2017). World Development Indicators, World Bank, Washinton DC.
- Report, A. S. (2017). India's External Debt, Mnistry of Finace, Department of Economic Affairs , India