THE EMPIRICAL STUDY ON DOMESTIC DEBT IN SRI LANKA: THE BEHAVIOUR OF DOMESTIC DEBT IN SRI LANKAN ECONOMY FROM 1960 TO 2009

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Introduction
Public debt of country plays a pivotal role within economy as it one hand fuel rapid economic development and another handcreates more indebtedness problem.Effective and farsighted debt management always fuel development while shortsighted and inefficient debt profile stay government in mired.Hence, management of debt profile is essential and very important.

The international financial organization like IMF, ADB, Kenediyanu Development Fund...etc, had paid much or satisfactory level of attention into foreign debt of Sri Lanka since past. However domestic debt had not been received a substantial attention from the international as well as Sri Lanka itself. So, this study tried at filling this literature gap investigating the behaviour of domestic debt in Sri Lankan economy, using time series data from 1960 to 2009. According to the historical data, domestic debt to GDP ratio had increased four hundred percent (400%) during past sixty years. The ratio was 13.7 percent in 1960 and was 49.8 percent in 2009. This mounting volume of domestic debt might affect on economy in various ways. At one extreme, it creates strong and healthy financial structure, facilitates for sound monitory policy and encourages fair distribution (Debt Management Profile, CBSL, 2009) of economy. At other stream it crowed out private investment, fuel inflation, low output growth, and budget deficit... etc. So behaviour of domestic debt in economy is question.

Objective
Identify the behaviour of Domestic Debt and GDP in Sri Lanka from 1960 to 2009

Methodology
The method of analysis and the approach adopted in this study was analytical in nature. The mathematical model was derived from the model developed by Adofu and Abula, to identify the empirical relationship between domestic debt and GDP in Nigeria. Based on that model researcher modified an OLS regression model as follows.

DBT= b1* GDP + b2*GDP^2 + b3* INT + b4*INT^2 + U
DBT = Domestic debt growth rate
GDP = GDP growth rate
GDP^2 = GDP growth rate square
INT = Interest growth rate
INT^2 = Interest growth rate square

Domestic debt growth rate was considered as dependent variable while GDP, GDP square, INT and INT square considering as independent variables. Data from 1960 to 2009 were selected as sample based on convenience method. GDP growth rate was taken from central bank annual reports but domestic debt growth rate and interest growth rate were taken from debt management profile published by Debt Department of Sri Lanka. So as to come to robust conclusion EViews statistical software packages was used and Heteroskedasticity, Auto correlation, Normality, Multicollinearity tests were conducted to check out the robustness of the regression.

Findings and discussions

Dependent Variable: DBT
Method: Least Squares
Date: 11/06/11 Time: 17:03
Sample: 1960 2009
Included observations: 50
Weighting series: GDP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDP	5.721152	0.978168	5.848843	0.0000
INT	0.095081	0.056239	1.690652	0.0977
GDP^2	-0.482547	0.147658	-3.268018	0.0021
INT^2	0.000462	0.000782	0.591177	0.5573

Weighted Statistics

R-squared	0.470656	Mean dependent var	16.27952
Adjusted R-squared	0.436134	S.D. dependent var	11.37596
S.E. of regression	8.542326	Akaike info criterion	7.204562
Sum squared resid	3356.681	Schwarz criterion	7.357524
Log likelihood	-176.1141	Durbin-Watson stat	1.795326

Substituted Estimation

DBT = 5.72*GDP + 0.093*INT - 0.482*GDP^2 + 0.00047*INT^2

Study indicated that in Sri Lankan context the gross domestic product was not a function of domestic debt, but domestic debt of Sri Lanka was a function of Gross Domestic Product over the period. Through the light of the analysis it was found that the GDP growth rate had affected on growth of domestic debt positively over the period. Swell of GDP growth in one percent lead domestic debt to increase by 5.72 percent in Sri Lanka. This positive relationship between GDP and Domestic Debt wasstatistically significant non-linear concave one with a turning point. Below the turning point (5.98 percent GDP growth) domestic debt of Sri Lanka increased in line with GDP growth, but when the GDP growth rate exceeded 5.98 percent (the turning point), domestic debt growth rate declined.

This was happening mainly due to the absence of the adequate revenue sources of government. As a result, government had to turnat domestic sources to finance capital expenditure for development. Not only that at that time, domestic debt was main financial facilitator of the economy increasing the thickness of monitory market.In another hand at late 1960, government invited rich people to invest on domestic debt securities so, overall saving level of the government increased by domestic debt. As a result, at the inception domestic debt growth rate increased in relate with GDP growth rate.In replying to expenditure when returns of the investment came, growth rate of GDP of country exceeded 5.98%, but domestic debt growths declined due to settlement or mature if the issued debt security.

Interestrate growth of Sri Lanka showed a positive non - linear U shape relationship with Domestic Debt Growth over the period. Light of the regression implied that one percent of Interest growth rate lead to 0.95% of domestic debt growth. But regression result was statistically insignificant because of less bargaining power over the interest rate. As country isin developing stage and absence of the adequate revenue sources, bargaining power of the economy on interest rate was very week. Hence, requirement of loans for development was determined by the necessity of economy. As a result, interest rate growth had not significantly affected on domestic debt growth over the period.

Conclusion

Management of Domestic Debt of Economy is very important as it's like a two side sharp knife. In one hand it encourage economic development and other hand create serious financial problem of the economy. Hence, the study investigated the behaviour of Domestic Debt in Sri Lanka from 1960 to 2009. Finally using OLS time serious datait found that domestic debt of Sri Lanka was a function of GDP and GDP had a positive non- linear concave statistical significant relationship with domestic debt while interest growth rate showed a non-linear U shape statistical insignificant relationship.