

# **Relationship between Domestic Debt and Gross Domestic Product in Sri Lanka: A Time Series Analysis**

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## **Abstract**

Achieving Millennium Development Goals (MDGs) is on the top of the developmental agenda in Sri Lanka since 2000. Among those goals, eradicating poverty has become a challenging task of the country due to the gravity of the issue. Accordingly, promoting faster economic growth is an essential condition to reduce poverty. However, due to numerous reasons still the country is lagging in attaining higher economic growth rate. One such constraint in Sri Lanka is escalating domestic debt volume as it threatens internal economic policies through continuous budget deficit, crowding private investment, absorbing large Gross Domestic production for payments...etc. Therefore it is of paramount importance for realizing the direction of the relationship between the Domestic Debt volume and Gross Domestic production (GDP) and also the reasons for escalating domestic debt of the country.

Accordingly the main objective of this paper is to explore the empirical relationship between domestic debt volume and economic growth of Sri Lanka. Moreover, the paper discusses the reasons, why domestic debt volume of Sri Lanka has been increasing since 1960.

In order to realize the aforesaid objectives, the study employs simple OLS regression technique for the time series data on domestic debt volume and economic growth of Sri Lanka. The relevant data for the period from 1960 to 2009 is available in Central Bank of Sri Lanka. Having tested for unit roots, OLS models are estimated. The estimations are revised with certain modifications depending on the results from post-estimation tests including multi-collinearity, normality, heteroskedasticity tests and auto-correlation test. Also, for the purpose of realizing the direction of relationship, Granger Causality test is applied.

The study finds that, the GDP of Sri Lanka is not a function of domestic debt, but domestic debt of Sri Lanka is a function of its gross domestic product and however, the functional relationship does not hold for the reverse direction. Further, it is estimated the relationship between GDP growth rates and domestic debt is non-linear with an inverted 'U' shape relationship. Accordingly, domestic debt volume is maximized when the country's GDP growth rate is 5.93 per cent.

Though the study finds U-shape non-linear relationship between interest rate and domestic debt, it is not statistically insignificant. Further, the study finds that escalating domestic debt is caused by continuing and larger budget deficit, larger public sector, depreciation of domestic currency, higher demand for domestic debt motivated by civil war. As well it associates inversely with external borrowings since 1978.

Finally, it should be noted that a deeply constructed time series analysis may provide vital estimations on how domestic debt volume and GDP growth rate are linked together. However, the analyses used in this study are confident enough at least to say that domestic debt growth is determined by country's GDP growth rate.

Effective exchange rate policy with sharp fiscal and monetary policy and minimum government intervention are required to minimize domestic debt growth rate and proper debt management policy and fair distribution policy also need to grab debt to substantially reduce poverty in Sri Lanka.

Key words: Gross Domestic Product, Domestic Debt, Millennium Development Goals

## **Introduction**

The debt level is a crucial factor of achieving Millennium Development Goals of a country, as it directly affects the developmental programs of economy either progressive or regressive manner. Effective and far-sighted debt management of a country accelerates sustain economic development while short-sighted and inefficient debt management lags the process. Hence management of debt profile is essential and paramount important in achieving Millennium Development Goals.

At present, developing countries attempt to accomplish MDGs embedding into their developmental programs and holding them at the top of their agenda on national policy, since it should be achieved within next three years. Thus the success of achieving MDGs directly depends on the commitments that a country makes towards in its development process. Economic growth with fair distribution policy nip poverty in the bud from society escaping poor in their pathetic state. This falls of poverty cycle reveals the ways poor to grab tertiary education, good health services and other social benefits...etc. In this process, diminution of malnutrition, child mortality ratio and awareness augment on prevention of diseases and good health practices will become indirect benefits of economic growth at one hand with achievement of MDGs on the other hand. Accordingly, promoting faster economic growth is an essential pre-requisite to achieve MDGs. However, due to several reasons still the country is lagging in attaining higher economic growth rate. One such constraint in Sri Lankan context is escalating domestic debt volume. Therefore management of debt profile is an ardent need in achieving MDGs.

International financial organizations such as International Monetary Organization, Asian Development Bank pay their constant attention to what extent foreign debt of Sri Lanka has been contributed to achieve the MDGs through their cross country studies. This contribution can only be measured through evaluating the role of domestic debt for economic growth as of domestic debt assists for growth either progressive or regressive. In positive perspective, domestic debt creates strong and healthy financial structure, formulate platform for monetary policy and finance capital project as well reduce poverty through fair distribution, whilst the flip side of that is, domestic debt threatens the internal economic consistency by crowding private investments, encouraging inflation and making pressures on budget etc. Thus, economic growth plays a vital role in materializing MDGs of a country. Accordingly, it is extremely important to identify the relationship between domestic debt and GDP when measuring the contribution of domestic debt in achieving MDGs. Hence, the objectives can be set out as; to find out the empirical relationship between domestic debt and GDP from 1960 to 2009, its direction and the reasons for escalating the debt level.

## **Literature Review**

Domestic Government debt is debt instruments issued by the Federal Government and denominated in local currency (Oshadami 2006). According to the James (2008), economic growth of country was basically an increase in the amount of goods and services that was produced by a country's economy over a specific period of time.

According to the Hansn (2007), domestic debt level of country is being stimulated by supply and demand factors of economy. Financial crises, Growth of central bank debt, growing attractiveness were identified as supply factors while broadening demand for debt, high marketability and less risk were identified as demand factors. In addition, incessant budget deficit, government revenue growth rate are identified as major debt determinant factors in economy by Manna et al (2008) and Reinhant, (2010) consecutively. Nature of the economy and Economic policies also cause for debt level in economy, Ahmed (1984) cited by Adofu and Abala (2010).

Escalating public debt reins economy through strong and healthy financial structure enabling country to finance its development project as scheduled. Gurley and Shaw (1956) cited by Checherita and Rother (2010), they further explained that there was no risk of default in domestic securities as it has a ready marketability. Domestic debt encourages the level of saving, fair distribution through the re-allocation process in economy (Bathiya 2010). And it provides basic foundation for monetary policy through open market operations. Alison et al (2003) expressed that domestic debt not only made foundation for monetary policy but also developed the financial instruments, so as to deepen the financial market. When these borrowings were used for expanding the capacity of nation, debt would have a positive impact on economic growth (Winson Moor). Manna et al (2008) identified that domestic debt did not crowd out private sector lending in Kenya during the period in his study. Iron (2010), had identified that gross debt about 90% in the economy would necessarily lead to slower economic growth. But Reinhart and Marron (2008) found that high debt to GDP ratio (90%) were associated with notably lower growth outcomes, across both advanced countries and emerging markets.

Muhid and Sasaki (2009) examined the role of external and domestic debt in Indonesian macro economy and the study shown that the rising trend of external debt had become a central policy to overcome deficit, but rising trend of domestic debt discouraged private investment due to crowding out effect. Also Erda Ralagol mentioned the fact that, domestic debt of economy may reduce the accumulation of real capital assets of the economy. Modigliani (1960) cited by Dheerasinghe (1996) and Meada (1958) cited by Checherita and Rother (2010) postulated that both domestic and foreign debt may be a high burden for future generation. Because large stock of debt level crowd out private investment, force to money creation and absorb large GDP in one hand and debt service payments have been spread over number of future years on the other hand. But Shultz and Harries, (1965) emphasized that, long term domestic debt keeps the equity of society since the benefits of long term debt spread over number of future decades. In finally, escalating level of domestic debt of economy causes to increase the interest rate of the economy concerned (Auerbach, and Kotlikoff, 1987).

## **Development of Domestic Debt Profile in Sri Lanka**

Central government of Sri Lanka issues domestic debt securities and it comprises of government securities, provincial advances, tax reserve certificates and others. Government securities include Treasury bills, Treasury bonds, Sri Lankan Development bonds.

Initiation of Sri Lankan domestic debt securities goes back to colonial era, where government used Treasury bills and Rupees Loan to collect money domestically. Government issued treasury bills with 91 days, 182 days, and 364 days while Rupees loan was used as medium and long term debt securities. In 1950, domestic debt represented 13.7% of GDP in Sri Lanka. Reflecting 22.31% growth rate, Domestic debt to GDP ratio increased from 13.7% to 28.8% in 1960 primarily due to the capital expenditure for housing facilities, economic activities, and harbour and transport services.

Unremitting shortfall of export tax income and need of agriculture development forced government to issue domestic debt securities. Hence, Maskeliya, Kothmale, Randenigala, Victoria, and Maduru Oya Development project were financed by government, issuing 325 million Rupees loans and 125 million Treasury bill in 1966. As a result, domestic debt to GDP ratio swelled up to 50.7% in 1967 and Rupee loans covered larger portion of domestic debt. Although Domestic debt growth rate was peak in 1980 reflecting 48.06% growth due to entrance to the open economy, debt to GDP ratio declined up to 43.70% due to the increase in economic growth. However, gradually domestic debt to GDP ratio is trickle down in line with foreign debt hereafter. For the first time in Sri Lankan economy, domestic debt growth rate showcased -0.23% in 1982 due to shift of government from domestic to foreign debts and matured of previously issued domestic debt securities.

Once again, domestic debt growth rate increased up to 24.18% and debt to GDP ratio increased up to 44.42% in 1988 owing to expansionary monetary policy. Further, unfavorable financial conditions compelled government to issue 1883 million Treasury bills in 1994. Sri Lankan Government has issued new medium and long term domestic debt security named Treasury bond in 1999 and it tarnished the image of rupees loan which was developed over five decades. In 2001 government issued Callable Treasury bond which had the ability to be matured after one year it were issued. At present, Treasury bonds consist of 63.03% of domestic debt and Treasury Bills represent 18.36% and rest is covered by Rupees loans.

## Methodology

The method of analysis and the approach of this study were analytical in nature. The study employs simple OLS regression technique for the time series data and it was derived from the model developed by Adofu and Abula (2010), as to identify the empirical relationship between domestic debt and GDP in Nigeria. Based on it, study constructed an OLS regression analysis model as follows.

$$DBT = b_1 * GDP + b_2 * GDP^2 + b_3 * INT + b_4 * INT^2 + U$$

DBT = Domestic debt growth rate

GDP = GDP growth rate GDP<sup>2</sup> = GDP growth rate square INT = Interest growth rate

INT<sup>2</sup> = Interest growth rate square

Domestic debt growth rate was considered as dependent variable while GDP, GDP square, INT and INT square were considered as independent variables. Data from 1960 to 2009 were selected as sample for the study based on convenience method and availability of data in the Central Bank and Debt Management Profile of Sri Lanka. Having tested unit roots test, OLS model was estimated. The estimations were generated with from post-estimation tests including multi-collinierity test, normality test, heteroskedasticity test, and auto-correlation test through EViews statistical packages. Also, for the purpose of realizing the direction of relationship Granger Causality test was applied.

## Findings and Discussion

**Table 1. Granger Causality Test**

Pair wise Granger Causality Tests

Sample: 1960 2009

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Probability
GDP does not Granger Cause DBT	48	3.24998	0.04848
DBT does not Granger Cause GDP		0.43992	0.64696

Following hypothesis demonstrate the direction of relationships via Granger test.

**H0:** Gross Domestic Product does not cause Domestic Debt in Sri Lanka

**H1:** Gross Domestic Product cause Domestic Debt in Sri Lanka

As Granger test vindicated, the probability value of Gross Domestic Product was less than

0.05, null hypothesis was rejected, that Gross Domestic Product does not cause Domestic Debt in Sri Lanka accepting alternative hypothesis, i.e. Gross Domestic Product cause Domestic Debt in Sri Lanka at 5% significant level.

**H0:** Domestic debt does not cause Gross Domestic Product in Sri Lanka

**H1:** Domestic debt causes Gross Domestic Product in Sri Lanka

As above test shown, the probability value of domestic debt was 0.646%. Hence, null hypothesis was accepted that, domestic debt does not cause Gross Domestic Product in Sri Lanka rejecting alternative hypothesis that domestic debt cause Gross Domestic Product in Sri Lanka. Therefore, in Sri Lankan context domestic debt has not affected for GDP growth but GDP of Sri Lanka has affected for domestic debt growth. Therefore, domestic debt was a function of Gross Domestic Product.

*Domestic Debt = f (Gross Domestic Product) ... .. 1*

**Table 2. OLS Regression Analysis**

Method: Least Squares  
 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

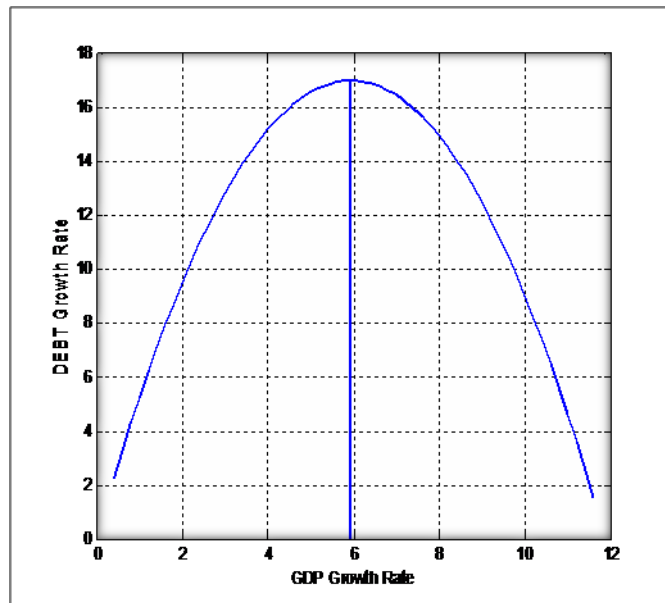
Durbin Watson Statistic 1.795326  
 Adjusted R-squared 0.436134

**Substituted Estimation**

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

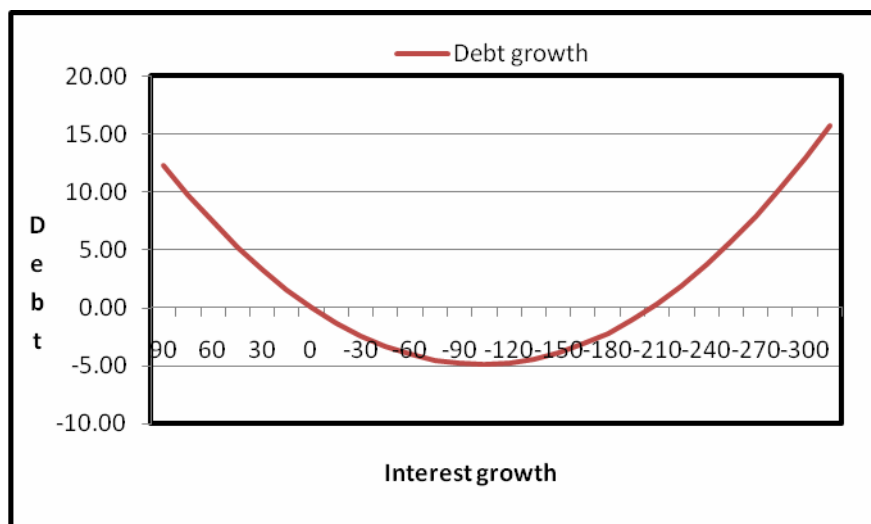
Through the light of the analysis, it was found that there was a statistically significant positive relationship between domestic debt and GDP in Sri Lanka over the period. It implies that, an expansion in GDP growth rate by 1% causes 5.72% increase of domestic debt in Sri Lankan economy. But this is not a linear one. Non-linear relationship between domestic debt and Gross Domestic Product is unambiguously explained by this chart. The regression showed a concave (inverted U-shape) relationship between variables. It implies when increasing GDP growth rate in Sri Lanka, domestic debt also increased in line with GDP growth. But that increment brings to an end at 5.98% of GDP growth. Afterwards, domestic debt of Sri Lanka declined even though GDP increased continuously. Following reasons advocate such a relationship in Sri Lanka.

□ Being Sri Lanka is a developing country, government paid much attention on development since independence. But the process was lagged by inadequate revenues as well as infant agricultural and industrial foundation. Nevertheless peer countries in the Asian region such as Singapore, Malaysia, India are moving to the development at a fast pace. In line with those countries, therefore Sri Lankan government has been borrowing money from domestic sources to finance the capital projects such as infrastructure development for agriculture since 1956, established 200 Garment factories in 1990, Mahaveli accelerate program (1976), Housing projects, Road constructions, Power generations and irrigation developments activities...etc. On the other hand domestic debt encouraged overall savings, grabbing excess money from people. Therefore Sri Lankan government was in a position to finance existing capital expenditure program and initiate new income generating programs. When government invested progressively on capital assets borrowing money, GDP growth rate as well as domestic debt growth rate increased together in Sri Lanka. But later continuous financial and non financial receipts of such investments trickled down the domestic debt growth rate and accelerated economic growth. For instance, investment like Mahaveli program is still generating benefits for the economy. Thus, in long term Sri Lankan government was in a position to finance its capital expenditure programs as well as re-pay the domestic debt obligation using those returns. Then domestic debts of Sri Lanka decreased although GDP growth rate increased than 5.98%.



Based on the regression, it was found that there was a positive U shape relationship between domestic debt and interest growth rate in Sri Lankan economy over the period. This relationship implied that, one% increase of interest growth rate cause 0.95% increase of domestic debt. U shape implied that when decreasing interest rate, domestic debt growth rate also decreased in line with interest growth. But the decrease in domestic debt, brings to an end at -103.26 interest growth. Afterwards, domestic debt increases although interest rate decreases continuously. But this positive non linear relationship was not statistically significant at 5% significant level. Following evidence attest the robustness of the relationship.

□ As a developing nation Sri Lanka's Domestic debt growth has not depended up on the rate of interest but based on the financial requirement of the country. Therefore interest rate was not a key determinant factor of domestic debt in Sri Lanka. Before 1978 government totally financed development projects via domestic borrowings, due to insufficient income sources. Therefore whatever the interest rate, government collected money internally. As a result, importance and bargaining power of interest rate was tarnished over the time. But the situation was fractionally favorable with the opened up economy. But developed countries had surplus money to finance their capital expenditure; therefore bargaining power on interest rate of those countries was very high. As their interest bargaining power was high, interest rate was the key determinant factor of borrowings. But in Sri Lanka context, it is inevitable for Sri Lankan government to borrow money even at higher interest rates for its development projects. Therefore the relationship between domestic debt and interest rate was not significant in Sri Lanka over the period.



## Reasons for increasing domestic debt level in Sri Lanka from 1960 to 2009

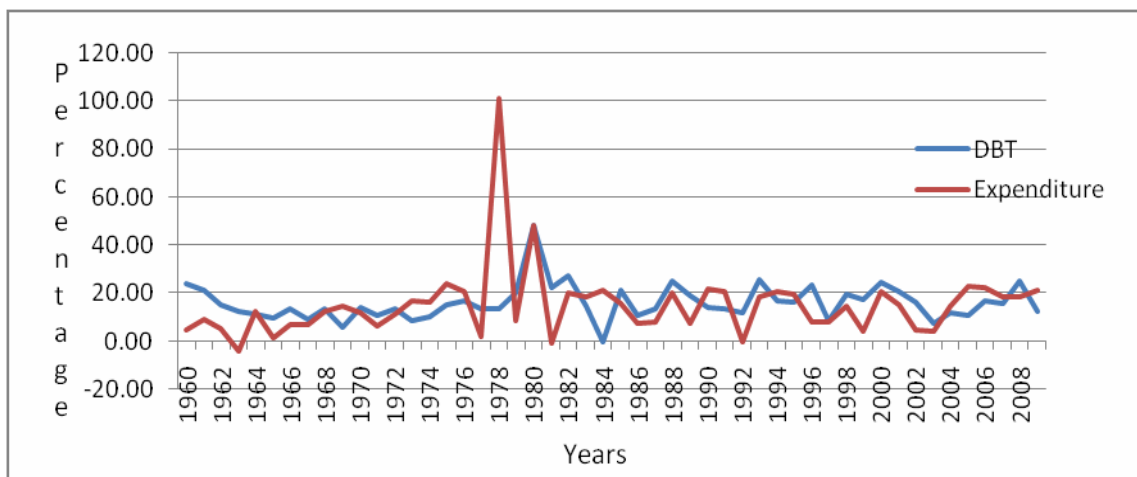
The second objective of this study mainly focused on debt stimulations of economy and followings were identified as debt inflating factors in Sri Lanka over the period.

### □ Increase the role of the government in development process

Sri Lankan government has been playing a critical role in social and economic development via formulating, implementing, and coordinating specific projects and programs covering entire country since independence. Government investments are intensively and extensively covered all the aspect of the economy as Sri Lanka was developing country and poverty alleviation, free education, health, defense were always at the top of agenda in national policy. Already Sri Lanka is the only one developing country which is providing free education for tertiary level in the world. As well as billions of money has already been allocated to bring people out from the poverty through various programs.

In addition, government is being inspired to pump up investment in industries which require larger investments such as power generation and are treated as essential for community wellbeing like water, electricity, defense...etc. Simultaneously, government encourages people to engage in more agricultural actives providing certified price for paddy, vegetables and fertilizer subsidies...etc. This continuous process instinctively swells domestic borrowings through government expenditures.

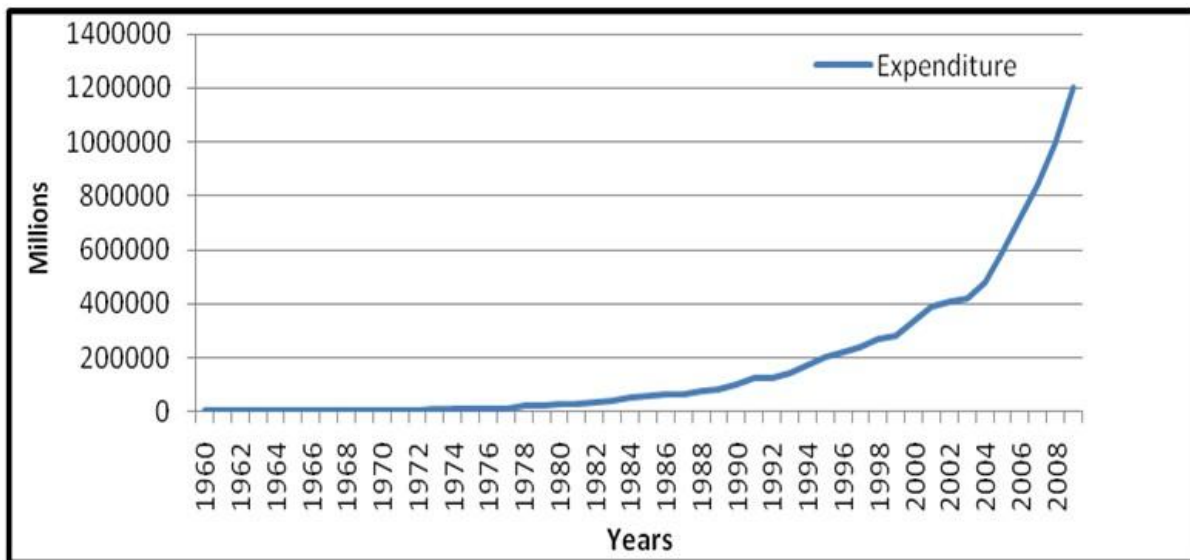
**Chart 1. Domestic Debt growth and Government Expenditure growth (1960 -2009)**



**Source:** Annual Reports of Central Bank of Sri Lanka

Above chart clearly demonstrates that a strong positive relationship between domestic debt and government expenditure. It implied that increase of government expenditure caused, domestic debt increase. Government expenditure growth rate was 11.89% and domestic debt growth rate was 11.35% in 1964. Government expenditure increased consecutively 47.92%, 21.48%, 20.30%, and 22.04% in 1980, 1990 and 2000 and 2006. In line with government expenditure, domestic debt growth rate were 48.06% in 1980, 13.89% in 1990, 20.59% in 2000 and 16.87% in 2006. The salient feature of government expenditure is continuously increasing. It clearly demonstrates by below chart.

**Chart 2. Total Government Expenditure (1960-2009)**



**Source:** Annual Reports of Central Bank of Sri Lanka

According to the chart total government expenditure was 1826 million in 1960 and 55243 million in 1985 and 996126 million in 2008. As domestic debt has a positive relationship with expenditure, it is increasing in line with expenditure. So, it can be authentically tolled that increase of government expenditure of Sri Lanka has caused domestic debt increase over the period.

**□ Incessant increase of budget deficit over the period**

Incessant increase of budget deficit is paramount reason for swelling the domestic debt level in Sri Lanka over the period. Continuous budget deficit is caused by large scale development programs, subsidies, strong government interventions. This deficit can be fulfilled either cutting expenditure or financing deficit. The first option isn't a practical one in Sri Lanka because after 1987, Current Account consecutively shown a deficit up to now. Hence, always government financed deficit across domestic sources, foreign sources, and privatization. Domestic financing means fill up deficit in place of domestic debt securities. Therefore, budget deficit directly enrich the domestic debt growth. Following empirical evidences postulate that how much domestic borrowings have been used to finance budget deficit in Sri Lanka.



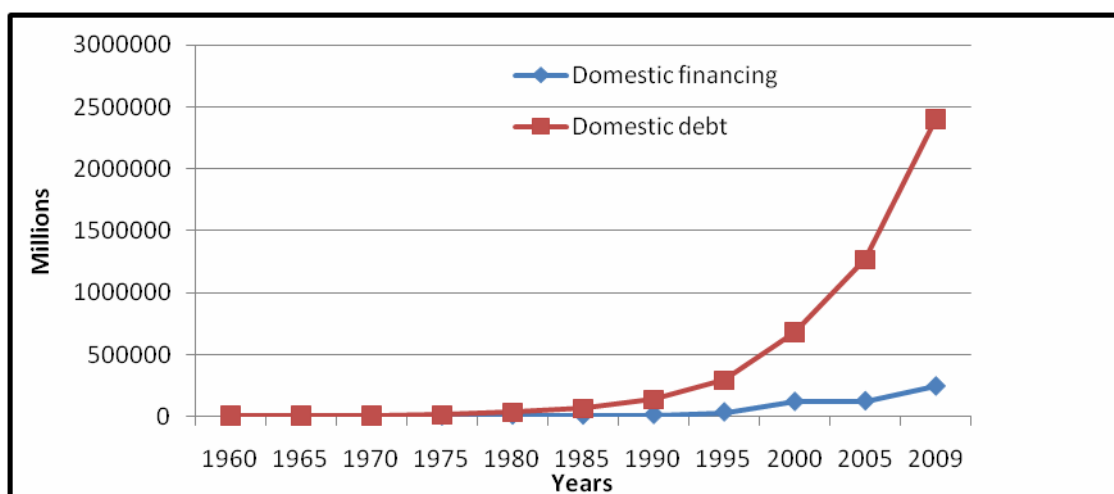
**Table 3. Budget deficit financing in Sri Lanka, At current prices (million) 1960-2009**

Year	Foreign	Foreign as %	Domestic	Domestic as %	Privatization	Privatization %
1960	24	5.87	385	94.22	0	0.00
1965	76	18.67	331	82.15	0	0.00
1970	163	22.96	710	77.04	0	0.00
1975	310	22.33	1,388	77.67	0	0.00
1980	3,516	27.59	9,230	72.47	0	0.00
1985	7,109	45.34	8,569	54.79	0	0.00
1990	11,644	46.29	13,508	53.79	0	0.00
1995	21,224	38.45	33,972	61.51	3,001	0.09
2000	495	0.42	118,500	99.58	401	0.003
2005	47,773	27.88	123,604	72.11	1,020	0.04
2009	230,807	48.76	242,554	51.25	0	0.00

**Source:** Annual Report of Central Bank of Sri Lanka (2009)

As above table depicts, government is exploiting domestic source as a salient source of deficit financing over the time. Sri Lankan government took 385 millions from domestic holders issuing securities in 1960 to finance the budget deficit. This amount increased up to 8569 million in 1985, and 242554 million in 2009. It is obligatory to mention here that, 99.58% of budget deficit in 2000 was financed merely by domestic sources. Hence, In line with domestic financing, Sri Lankan domestic debt has been increasing over the period.

**Chart 3. Domestic debt and domestic financing (1960-2009)**



**Source:** Annual Reports of Central Bank of Sri Lanka

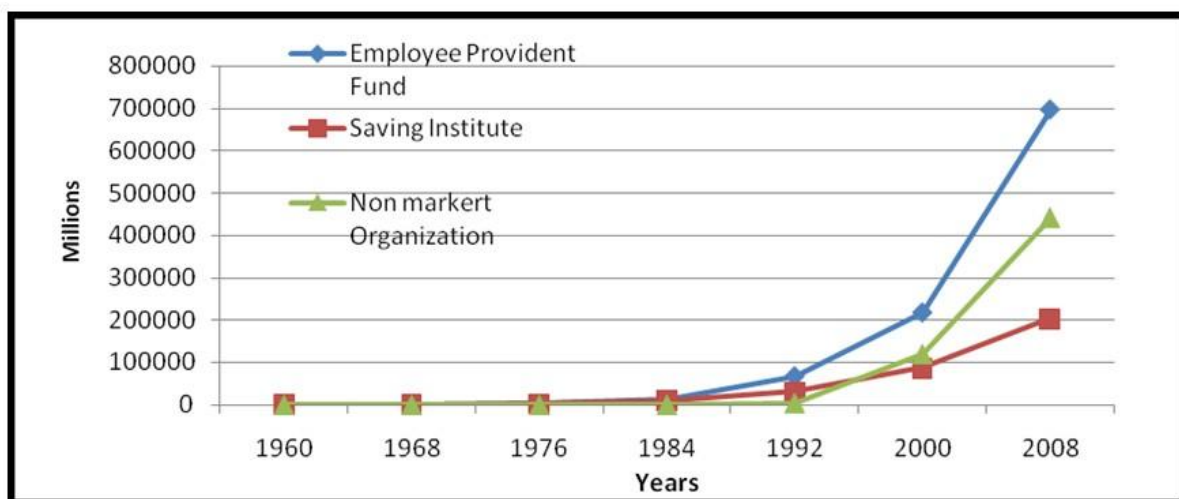
This chart clearly indicated a strong positive relationship between domestic debts with domestic financing over the period. As a result domestic debt profile has inflated in line with domestic financing over the period.

□ **Increased demand for public debt**

Increasing demand for public debt was a major fact which stimulates the growth of domestic debt over the period because the debt volume was subjected to change due to the demand upon on it. At present, there is high demand for public debt beyond its traditional holders. In the past, government debt was demanded by central bank or private commercial banks or both. But now coverage has expanded to non financial, non banking organizations due to high marketability, high security and less risk involved in it. Treasury computes the interest rate by using market interest rate and bids upon on them. Treasure bonds and Treasury bills have been opened to secondary market providing unbelievable offers to debt holders. Now most of debt securities are issued as Scrip less securities and some of them are issued via the open auction.

Embedding new features such as Scrip Less Security Settlement System, Real Time Gross Settlement, and Central Depository System, secondary market is being developed by government. As well as, marketability and security of domestic debt were very high when compare with private debts as debt is covered by Gold and consolidate funds. Hence, demands for domestic debts have been increasing since last two decades.

**Chart 4. Demand on domestic debt securities (1960-2009)**



**Source:** Annual Reports of Central Bank of Sri Lanka

As per the above chart, the demand for domestic debt has been increased rapidly. Employee Provident Fund is increasing its demand continuously as clients are able to get more benefits via debt securities than other. As a result, In 1960 EPF covered 189.9 million of domestic debt and the amount had been increased up to 698,192 million in 2009. As the same time, 44.5 millions of domestic debt was held by saving institutes in 1960 and they also increased their holdings up to 204,067 million in 2009 due to special features of domestic debt securities. Not only market organizations but also non market organizations such as Insurances Companies, individual investors and other parties had been increasing their demand on domestic debt over fifty years. They all had held 44.5 millions of securities in 1960 and increased holdings up to 442,984 millions in 2009. Accordingly, both financial and non financial organization had been increasing their demand on domestic debt over the period, as a result, Sri Lankan domestic debt market reflected eternally increment over the period.

## ➤ Depreciation of domestic currency

Exchange rate depreciation is one of factors which stimulates domestic debt level in Sri Lanka. Under the authority of Foreign Loan Act No. 29 of 1957, Sri Lankan Development Bonds are issued by government dominating in US Dollars since 2001. As a result, depreciation of rupees value directly increased nominal value of Development Bond from the start.

Sri Lankan rupee value had been depreciated continuously from 1992 to 2009 in relation to US dollars. In 1991 government had to pay Rs. 79.5 to buy one US dollar. But, in 2000 government had to pay 119.3 in 2000 and 114.3 in 2009 for one dollar due to the continuous depreciation of rupee value. This depreciation increased the nominal value of domestic debt as it was denominated in US dollars. Following table reflect how much this depreciation has increased the domestic debt value over the period.

**Table 4. Value of the SLDB in real term and nominal term (Million 2002-2009)**

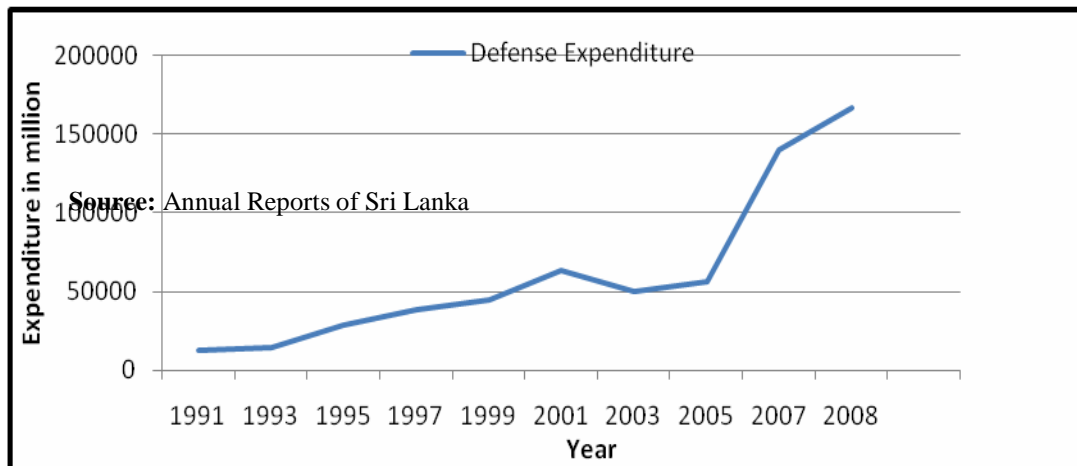
<b>Year</b>	<b>Nominal value</b>	<b>Real value</b>	<b>Change</b>
<b>2002</b>	24177	24177	0
<b>2004</b>	26083	24252	1830
<b>2006</b>	62469	55742	6726
<b>2008</b>	158805	135778	23027
<b>2009</b>	168079	142198	25880

**Source:** Annual Reports of Central Bank of Sri Lanka

Real value was computed holding 2002 exchange rate as the base year. As a result, both nominal and real value of SLDB is equal in 2002. Reflecting the absence of strong exchange control policy within country, Sri Lankan rupee was depreciated by 35.3% in 2009; this deification caused 25881 million increased in nominal value of SLDB. These evidences postulated that depreciation of rupees value has increased the volume of domestic debt over last decade.

The prevailed war had significantly affected for escalating domestic debt level over last two decades. Purchasing military equipments, caring refuge people, and reconstruction of property created additional burden on budget deficit throughout the period. Following chart show how much money has been allocated for civil war by government during last three years.

**Chart 5. Defense expenditure at current prices (million 1991-2009)**



**Source:** Annual Reports of Central Bank of Sri Lanka

As table illustrated, government had allocated Rs.12759 millions for defense activities in 1991. The amount has significantly been increased up to Rs. 63390 millions in 2001 and 166447 millions in 2008 reflecting around 300% increase. This continuous increase of military expenditure enlarged demand for domestic debt in Sri Lanka. But **Rogoff and Rein** mentioned this war debt would not affect adversely on economy as it is less problematic for future growth and inflation than larger debt that are accumulated in peace time.

### Conclusion and Recommendation

In this attempt to identify the relationship between domestic debt and GDP, it was 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 whilst interest growth rate reflected a non-linear U shape statistical insignificant relationship. Budget deficit, role of the government, demand for public debt, depreciation of domestic currency and civil war were the major facts that stimulated the level of domestic debt in Sri Lanka over the period. As well as declining of foreign concession loans, pumped up domestic debt level due to domestic debt associates inversely with external borrowings in Sri Lanka economy. It is recommended that, effective exchange rate policy with sound fiscal and monetary policy and minimum government intervention are required to minimize domestic debt growth rate as well as effective debt management policy and fair distribution policy is also needed to grab debt to substantially reduce poverty in Sri Lanka.

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