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PUBLIC DEBT MANAGEMENT IN BANGLADESH: AN ANALYSIS OF DEBT PORTFOLIO PERSPECTIVE

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ABSTRACT: *The study has been illustrated to investigate the public debt management in Bangladesh special reference to debt portfolio perspective over the period of 2005 to 2016. Debt portfolio analysis has been constituted in various approaches including source of financing, multiple instruments, interest rate, currency composition and so on. Some figures, tables and facts have been utilized in each case of analysis. According to analysis total debt stock from external sources are decreasing during the study period and in case of domestic sources, banking sector contribution is also decreasing from 60% to 48% whereas National Savings Certificates (NSC) is exhibited to 19% in 2012 and then rose sharply to 27% in 2016. But other domestic sources (Treasury Bonds, Treasury Bills) were more or less remained constant during the study period. It is not fair indication for overall debt financing because of higher interest rate of NSC. However, from 2019-20 financial year, government has taken many pragmatic steps in capping the problem introducing online database for NSC. In contrast, interest rate in both domestic and external cases is around 97% fixed. In the case of currency composition, 60% debt financing is accounted in local currency whereas XDR and USD were around 28% and 8% respectively. After all, total debt in Bangladesh is visualized below around 4% of GDP growth and total debt is about 31% of GDP during the period. From the debt sustainability point of view, it is eventually a good indication that there is no major risk involved for debt financing.*

KEY WORDS: debt portfolio, National Savings Certificate (NSC), debt sustainability, debt financing

INTRODUCTION

Public debt management is a hot-button topic for deficit budget-oriented economy that has to be addressed by the policy maker efficiently. It is a usual phenomenon of the world economy both for many developing and developed countries (Slav'yuk and Slaviuk 2018) and important for overall macroeconomic policy to manage the debt with closely coordinated

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fiscal, monetary and other macroeconomic policies (Saifuddin 2016). In contrast, a report by the Unnayan Onneshan (2017) highlights that debt may be recognized as a fiscal inducement that has a multiple effect on economic growth if it is utilized for the purpose of productive sectors. Otherwise, it creates a long-term burden for country. According to the study by Rais and Anwar (2012) public debt is a vital linking means in minimizing government monetary gaps, but there should be a balanced management, planning and portfolios whereas it would not create any liabilities in future. So, fiscal as well as monetary authorities and debt managers should play in a coordinated way in choosing and maintaining debt portfolio.

Since its independence, Bangladesh is deeply relying to encounter budget deficit through domestic and external sources debt (Hasan and Akter 2016). It has long been concerned for both fiscal and monetary sector in Bangladesh. Therefore, efficient public debt management is important and crucial for our country. However, deficit financing can be managed either domestic or external sources with the help of different instruments. It depends on multi-dimensional aspects including availability of money, urgency, cost of fund (interest rate), conditions, variety and suitability of debt instruments, cost effectiveness and so on. In this context, a debt manager should be prudent in terms of managing efficient debt portfolio.

Public debt is an essential and integral part of our economy but its fruitful management is more important. Debt financing can be arranged from different sources as well as instruments considering currency and interest rate. So, efficient debt portfolio is prime need to make a balance debt financing operation. Some strategic plans have to accomplish for justifying which portfolio is appropriate in what situation. Otherwise, today’s public debt will create a future indebtedness for the country. However, the study aims to explore the following points precisely:

- To analyze public debt portfolios in terms of source, currency, interest rate, debt instruments
- To find out debt sustainability in Bangladesh
- To draw a concrete recommendation for further improvement.

LITERATURE REVIEW

In the international research arena, a huge number of literatures on public debt is available which emphasis on various aspects of debt management including its composition, impacts on economic growth, effects on investment, debt sustainability and so on. But, in Bangladesh context, literature is not much in numbers. Moreover, there are two separate forms of literature review in economics i.e. theoretical and empirical. In this assignment a general literature review will be presented.

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Akbar and Chauveau (2009) investigated exchange rate risk related to three currencies namely US dollar, euro and Japanese yen on public debt portfolio of Pakistan through value-at-risk (VAR) methodology between 2001 and 2006 whereas Chandia and Javid (2013) tested debt sustainability in the economy of Pakistan and found a positive relationship between surplus-to-GDP ratio and lag debt-to-GDP ratio for period 1971-2008. In contrast, Kaur and Mukherjee (2012) investigated the debt sustainability and growth in India during 1980-81 to 2012-13. They found that the debt position in India is maintainable in the long run and debt-GDP ratio is 61%, beyond which an opposite connection is visualized between growth and debt. Besides, Doi et al (2006) studied the debt sustainability and debt management policy with fiscal and monetary authority in Japan. They found that public bonds could not be sold when more debt outstanding prevailed. So, fiscal authority had to set upper limit of debt stocks. In addition, Bua et al (2014) analyzed the domestic debt stock and structure in 36 Low-Income Countries (LICs) over the period 1971-2011. The study found that debt was increasing since 1996 and poor countries had been able to issue long-term instruments that minimized the debt costing, but dominancy over banking sector created crowding out effect.

Islam and Biswas (2006) analyzed the debt composition, financing sources and sustainability of Bangladesh covering growth rate, inflation, interest rate, exchange rate and primary deficit for the period of FY1981-FY2006. They identified that interest rate component demonstrates stronger influence of primary deficit and exchange rate depreciation variables in changing the debt-GDP ratio. The paper summarized that recent dynamics of debt-GDP ratio was marginally convergent and suggested that interest rate on NSD debt should be maintained in a sustained level. Hasan and Akter (2016) identified whether Bangladesh government borrowing its domestic sources unreasonably which adversely affecting the country's economy during 1980-81 and 2011-12. Public Debt Model and Growth Model have been used to testify the study. In contrast, Saifuddin (2016) found more or less same result as Hasan and Akter (2016), but the study period was between 1974 and 2014 and used a TSLS regression model. In addition, Yeasmin and Chowdhury (2014) investigated the impact of external debt on the economic development in Bangladesh during 1972 to 2010 and found that foreign debt has been created burden for the country with a substantial negative effect on growth and suggested to manage debt effectively. According to IMF-WB (2002), debt portfolio is the principal financial portfolio of a country that multifaced structure produces significant balance sheet risk. Moreover, economic shocks and vulnerability can be assumed by poorly organized and bulky debt portfolio. Although, a report by Ingves and Wheeler (2003) analyzed the debt portfolio's cost and risk which might contain fiscal authority's necessary evidence. The debt managers perform a vital role in composing debt portfolio from financial market with the direct help of market participants in both primary and secondary market.

According to MTDS (2014), debt sustainability point of view, debt portfolio in Bangladesh does not show any significant uncertainty or risk over the medium term whereas CPD (2018) identified that in public debt context Bangladesh has been remained comfortable zone because last few years its debt to GDP ratio is registered below 35%, but domestic borrowing was higher than external borrowing.

METHODOLOGY

The methodology includes the methods and procedures applied in collecting as well as analyzing data in order to manage the public debt in Bangladesh in reference to debt portfolio perspective. The study was primarily conducted on secondary data from various reliable sources including World Bank, Asian Development Bank, Ministry of Finance, Bangladesh, Bangladesh Bank (Central Bank of Bangladesh). Different types of secondary sources were considered such as books, peer reviewed journals articles, reports, periodicals, newspaper articles, magazines and so on. Some primary data and conceptual idea as well as practical knowledge have been acquired from the learned experts in particular field during the class lectures of Fiscal Economics and Economic Management (FEEM) training course under the Institute of Public Finance (IPF), Finance Division, Ministry of Finance, Bangladesh. Few figures, tables and charts have been utilized to represent pictorial results and subsequently drawn an analysis and discussion.

RESULTS AND ANALYSIS

Before analyzing debt portfolio in Bangladesh, it is essential to understand the sources/ways of debt financing and instruments in Bangladesh. There are basically four sources/modes are utilized in Bangladesh for debt financing and for this purpose the subsequent instruments are used to fulfil deficit budget (Table 1).

Table 1: Sources/Ways of debt financing and instruments in Bangladesh

Sl. No	Sources of financing	Instruments	
1	Domestic borrowing	Marketable instruments	-Treasury Bills -Treasury Bonds -Debentures -Notes
		Non-marketable instruments	-National Savings Certificate (NSC) -General Provident Fund (GPF)
2	External borrowing	-Concessional -Non-concessional	
3	Money printing (from Bangladesh bank)	-Ways and Means Advance (WMA) -Overdraft Current (ODC) -Overdraft Block (ODB)	
4	Use of foreign reserves	--	

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Analysis of debt portfolio in Bangladesh

Public debt portfolio analysis may be constituted by source of financing, various instruments, interest rate, currency composition and so on. Some figures, tables and facts will be utilized in each case of analysis.

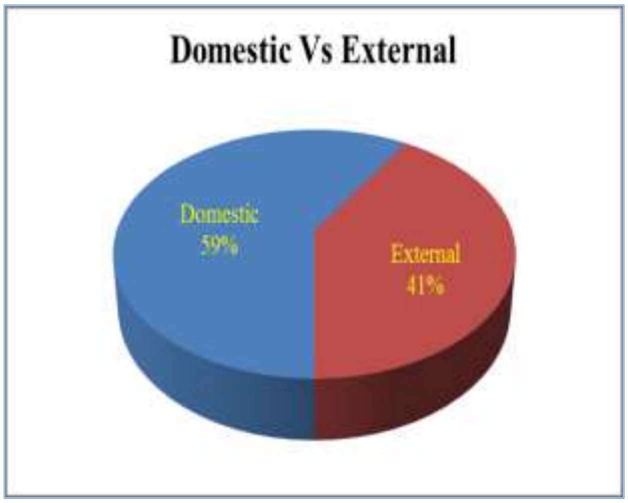

Figure 1: Domestic and external sources of debt financing (as on 30/06/2016)

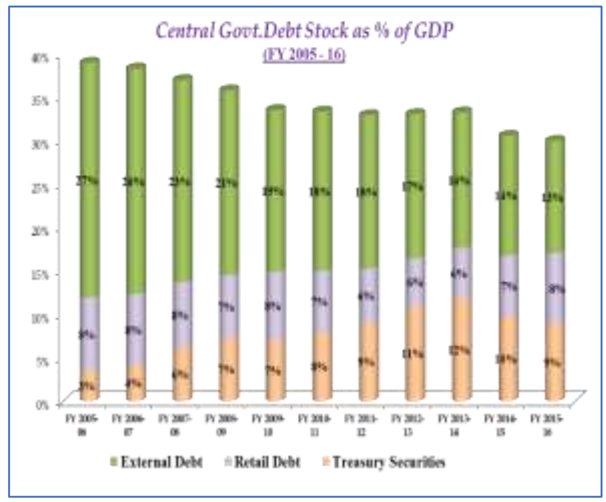

Figure 2: Total debt stock (as on FY 2005-06 to 2015-16)

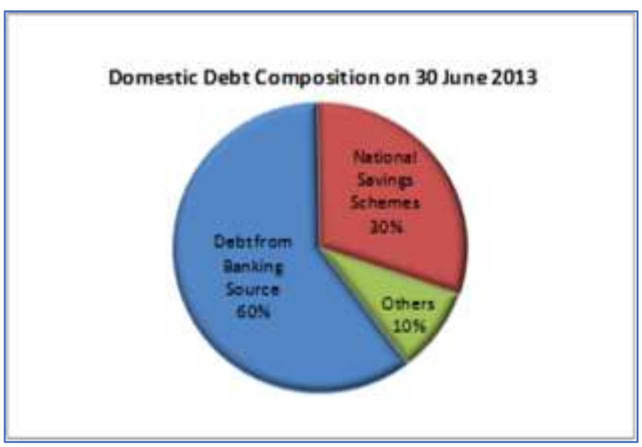

Figure 3: Domestic debt composition (as on 30/06/2013)

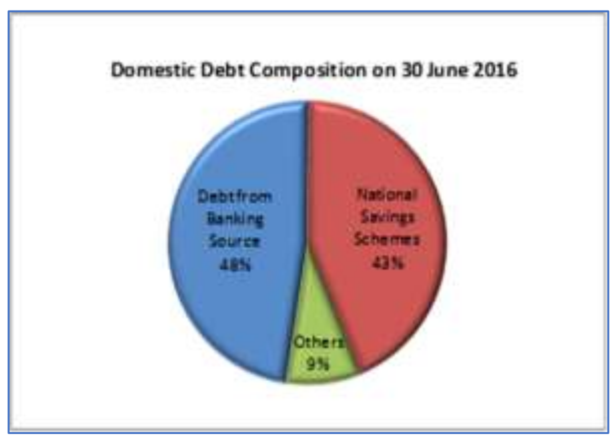

Figure 4: Domestic debt composition (as on 30/06/2016)

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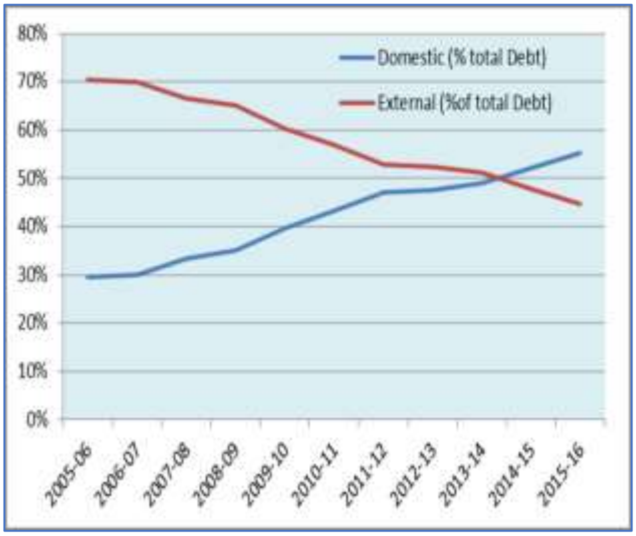

Figure 5: Trend of demestic and external debt composition (as on 30/06/2016)

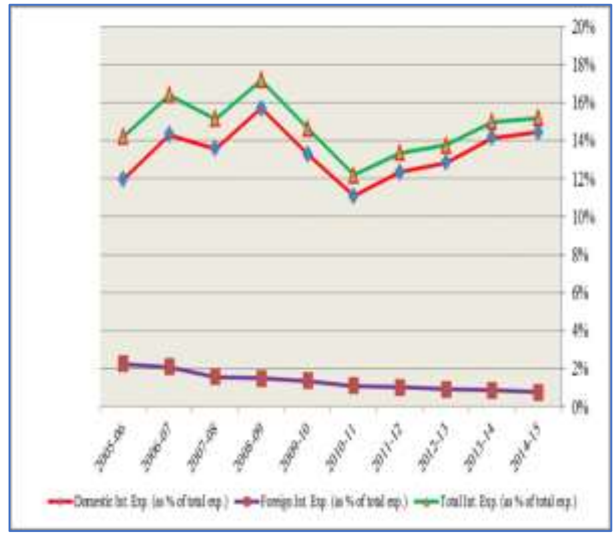

Figure 6: Trend of interest rate (as on 30/06/2016)

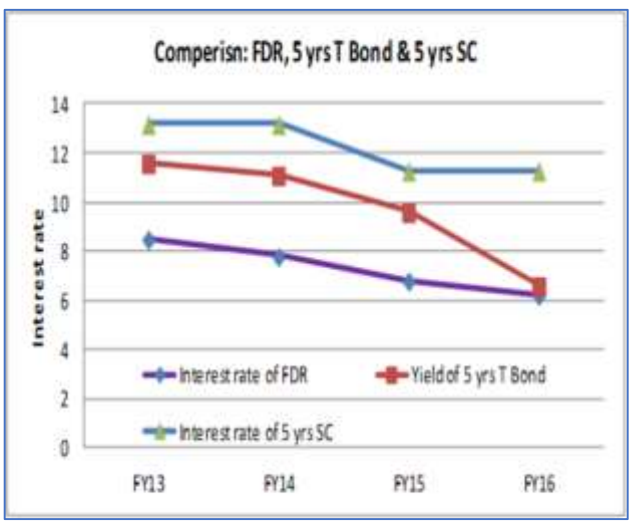

Figure 7: Trend of interest rate on FDR, T-Bond and Savings Certificates (as on 30/06/2016)

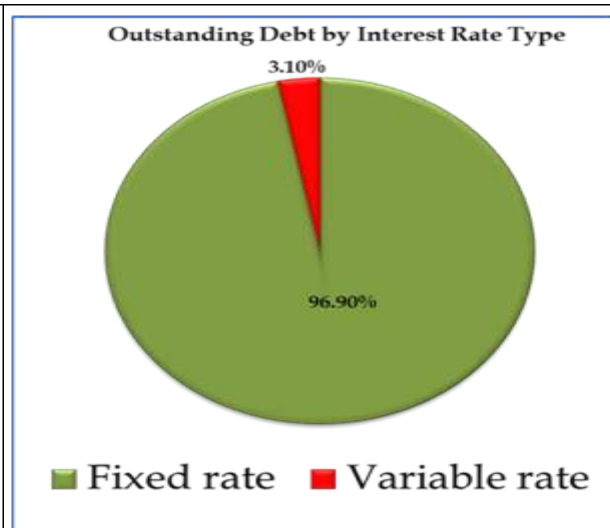

Figure 8: Debt portfolio by interest rate (as on 30/06/2016)

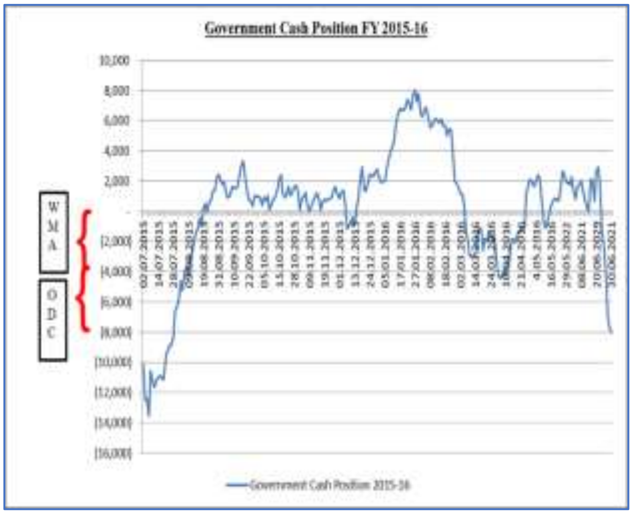

Figure 9: Trend of Overdrafts from Bangladesh Bank (Govt. cash position for FY 2015-2016)

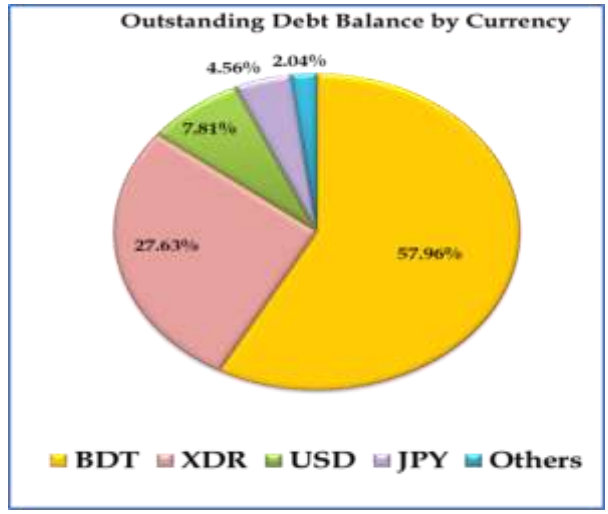

Figure 10: Debt portfolio by currency composition (as on 30/06/2016)

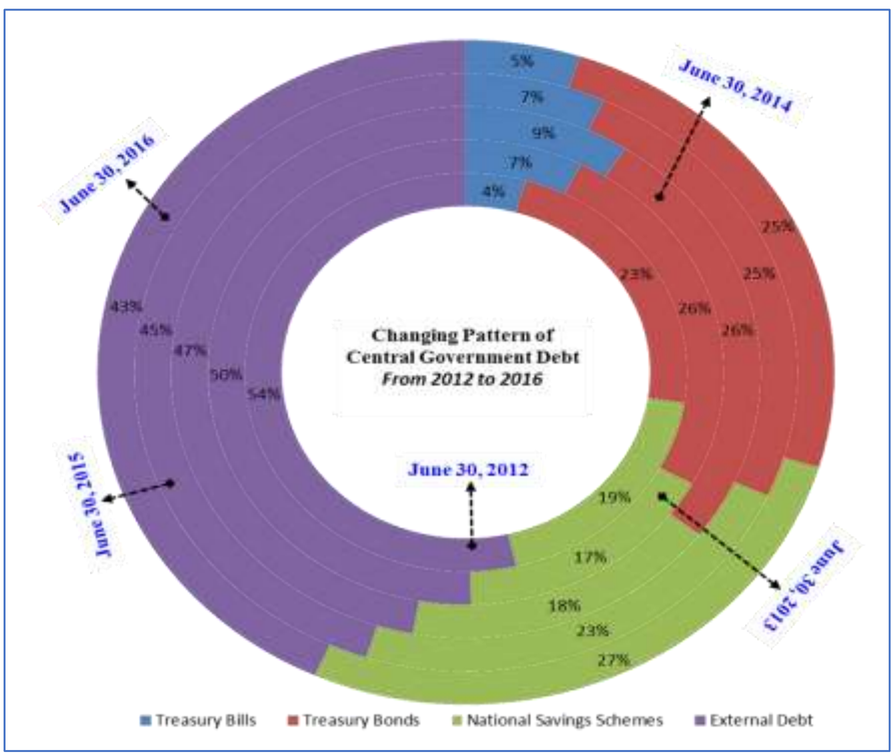

Figure 11: Changing pattern of overall debt portfolio in Bangladesh (from 2012 to 2016)

Source: Figures 1-11 are taken from the Power Point lectures of Module-3 (FEEM-21) those were presented by A.R.M Nasmus Sakib, Additional Secretary, Finance Division (Module Coordinator) and Mohd. Rashedul Amin, Deputy Secretary, Treasury and Debt Management Wing, FD (Co-Trainer).

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Table 2: Budget deficit and financing

(billion taka)

Source of Financing	FY13	FY14	FY15	FY16	FY17
Total Financing required	467.7	478.4	584.2	654.9	675.0
	(3.9)	(3.6)	(3.9)	(3.8)	(3.4)
External (Net)	129.6	97.1	72.3	147.7	128.8
	(1.1)	(0.7)	(0.5)	(0.9)	(0.7)
Loans	138.9	119.4	119.9	195.5	188.5
Grants	72.7	63.6	23.2	19.1	12.3
Amortization	82.0	85.9	70.8	66.9	72.0
Domestic	338.09	381.4	511.7	506.0	558.7
	(2.8)	(2.8)	(3.4)	(2.9)	(2.8)
Bank	252.3	181.7	5.1	106.1	-83.8
Non-Bank	85.8	199.7	506.6	399.9	642.5
NSC	7.7	117.1	287.1	341.5	518.0
Others	78.1	82.6	219.5	58.4	124.5

Source: MTMPS (2018); Figures in () indicate % of GDP

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Table 3: Medium-Term Outlook of Debt Stock

(billion taka)

Indicators	Actual	Budget	Budget(R)	Projection		
	FY17	FY18	FY18	FY19	FY20	FY21
Total Debt	6083.2	6676.0	6676.0	7930.3	9333.7	10920.5
	(30.8)	(30.0)	(29.8)	(31.2)	(32.3)	(33.2)
Domestic	3736.5	3973.0	3973.0	4712.2	5672.3	6820.1
	(18.9)	(17.9)	(17.7)	(18.6)	(19.7)	(20.7)
	{61.4}	{59.5}	{59.5}	{59.4}	{60.8}	{62.5}
External	2346.7	2703.1	2703.1	3218.1	3661.4	4100.4
	(11.9)	(12.2)	(12.1)	(12.7)	(12.7)	(12.5)
	{38.6}	{40.5}	{40.5}	{40.6}	{39.2}	{37.5}

Source: MTMPS (2018); Figures in () indicate % of GDP and {} indicate % of total debt stock

DISCUSSION

From the figure 1, it is visualized that 59% debt financing is managed by domestic sources whereas 41% from external sources. Figure 2 indicates that total debt stock from external sources is decreasing during FY2005-06 to 2015-16. On the other hand, in case of domestic sources, banking sector contribution is decreasing from 60% to 48% whereas NSC is increasing from 30% to 43% during 2013 to 2016 (figure 3 & 4). This debt portfolio is not good for overall debt financing because of higher interest rate of NSC. From figure 5, 6 and 7, it is observed that in both domestic and external cases, interest rate is decreasing whereas most of the debt around 97% is fixed rate (figure 8). So, there is no such interest rate risk over the debt portfolio in Bangladesh. But domestic interest rate is much higher than external rate. In contrast, borrowing from Bangladesh Bank through Ways and Means Advance (WMA) and Over Draft Current (ODC) were not highly volatile during 2015-16 (figure 9). However, debt portfolio in terms of currency composition is highlighted in figure 10. Around 60% debt financing is achieved in local currency whereas XDR and USD were about 28% and 8% respectively as on 30th June 2016 that indicate no such major currency risk is involved. Overall, the debt position of Bangladesh is showed during 2012 to 2016 from the figure 11. The figure for external debt is registered to 54% in 2012 and then gradually decreased to 43% in 2016. Although, in case of domestic debt, amount for the National Savings Schemes (NSC) exhibited to 19% in 2012 and then rose sharply to 27% in 2016.

But other domestic sources (Treasury Bonds, Treasury Bills) were more or less remained constant during the period. The incremental growth of higher interest rate incurred NSC is really a headache for debt sustainability as well as managing sound fiscal policy in Bangladesh. However, it is optimistic that from the financial year (2019-20) government is taking many pragmatic steps in capping the problem such introducing online database for NSC and buying ceiling for individual.

On the other hand, total debt in Bangladesh is visualized below around 4% of GDP growth during FY2013 to FY2017 (table 2) and total debt is about 31% of GDP during FY2017 (table 3). From the debt sustainability point of view, it is a good indication that there is no major risk involved for debt financing. Because a study by Chandia and Javid (2013) found that public debt is considered as sustainable if the growth of debt is not bigger than growth of GDP. Moreover, government of Bangladesh designs to cap up to 5% of GDP growth on average for deficit financing (MTDMS 2018).

Implication to the research and practice

Efficient debt management is potentially important for the economy of deficit budget and debt portfolio is also equally necessary to maintain debt sustainability. Balanced fiscal and monetary policy is largely rely on effective public debt management. In contrast, well-adjusted debt portfolio management is essential to maintain stability to the money market, capital market, banking sector and financial markets as a whole.

CONCLUSION

The prime target of debt financing in Bangladesh is to minimize inequalities, eradicate poverty and bring qualitative changes of mass people in the society (BB 2019). External source of financing is reducing vis-à-vis domestic source is increasing and that is also inevitable in graduation of Bangladesh from Least Development Countries (LDCs). Because after graduation, we will not have concessional loans from external sources. However, according to the study by Chandia and Javid (2013) public debt is considered as maintainable if the growth of debt is not greater than growth of GDP. In Bangladesh, this flow is sustained previous years and it is a positive indicator in terms of debt sustainability. Furthermore, debt to GDP ratio in our country remains below 40% for last few years which also represent debt sustainability in our country. So, it can be said that the portfolio of public debt in Bangladesh is justified in terms of debt sustainability analysis (DSA).

Recommendations for future research

After analyzing the debt portfolio in Bangladesh, it is assumed that overall debt financing exists within a sustainable limit. But there are still some loop holes in public debt management in Bangladesh. In case of domestic sources, priority should be given to banking sector but a rigorous research should be conducted to visualize crowding out effect. Among marketable instruments (Treasury Bonds, Bills, Debentures) of domestic sources, a fair research should be conducted for the expansion of capital market as small investors get confidence to invest there. Besides, the following recommendations should be administered for efficient debt management in Bangladesh—

- more emphasis given to domestic sources than external
- to set up an independent debt office and prepare an efficient debt managers pool
- maintenance of balanced coordination among debt front, middle and back offices
- automation for managing National Savings Certificate (NSC) should be fasten and interest should be reduced
- a balanced debt portfolio should be maintained
- analyzing debt sustainability and risks frequently

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