

# Debt Sustainability in Pakistan:

# **Issues and Challenges**

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#### **EXECUTIVE SUMMARY**

Pakistan's is one of the most indebted countries in South Asia and South East Asia with the second highest debt-to-GDP ratio of 64 percent in the region. Despite much effort of the economic managers of the country, achieving debt sustainability still appears a distant dream. The paper conducts a debt sustainability analysis of Pakistan.

The debt ratio analysis indicates that there has been some improvement from 2013 to 2015 while other analysis contradicts this observation. On top of that, the paper also highlights that Pakistan's loan structure is inefficient which may have implication on Pakistan's debt sustainability. However, the paper predicts that external debt may be sustainable in the future given that external debt as a percent of exports stays within limits.

The paper recommends that non-conventional indicators of debt sustainability such as comparison of interest rate with GDP growth should be incorporated in national debt reduction strategy. It also suggests that the future debt sustainability should be a part of the general debate on public debt. Finally, the Fiscal Responsibility and Debt Limitation Act should also install a cap on external debt-to-exports ratio.

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# Debt Sustainability in Pakistan: Issues and Challenges

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#### INTRODUCTION

Debt plays an instrument role in realizing the development potential of any country unless it is unsustainable. This assertion is evident by the fact that despite high relative indebtedness on average, the richest countries have been able to sustain these astronomical debt levels. The testament to the wreck that debt unsustainabiliy can cause is not more evident than the recent European episodes of Sovereign Debt Crisis in Greece, Spain, Portugal, and Italy.

In general, the debate on economic implications of public debt is dominated by the curtailed pool of credit available to the private sector as a result of public borrowing to overcome fiscal deficits. It can also affect the foreign investment flows as investment environment is dented owing to risks associated with a prospective devaluation of the local currency. However, its ramifications are not limited to be purely economic in nature and can be diminutive at a large scale. It can impair the self-determination of nations and incite social unrest in what can be referred to as the ordinary business of life. The major brunt of this all, as a consequence, weighs the most on the inalienable individual freedoms.

In case of Pakistan and in line with the standard international practice, it has been customary to gauge the debt sustainability against such denominators as total government revenue and Gross Domestic Product (GDP). However, some of the studies have also used other methods to study the implications of public debt in Pakistan but they too utilized the debt ratios. Chaudhry and Anjum (1996) studying the sustainability of public debt in Pakistan concluded that the fiscal deficit is well above the sustainable level and directed the attention towards the need for lowering the fiscal deficit. Similarly, Bilquees (2003) analyzed that the poor resource mobilization in Pakistan has led to high debt burden attendant with large budget deficits and as a result, the brunt of debt servicing of large debt is borne by the available resources which compromises the development efforts. It has been observed that susceptibility of the Pakistani economy to debt has largely been viewed in the context of chronically large fiscal deficit that has become quite a characteristic of the economy (Mahmood *et al.*, 2009; Jafri, 2008; Fan, 2007; and Pasha and Ghaus, 1996).

This paper contributes to the debate on public debt in Pakistan especially in the context of its sustainability. Since most of the studies on debt sustainability have used debt ratios and have focused more on retrospective analysis of public debt, the paper attempts to address this in two ways. Firstly, along with using conventional debt ratios it utilizes non-conventional measures as well to gauge debt sustainability in Pakistan. Secondly, augmenting the retrospective analysis, the paper also conducts debt sustainability analysis in a futuristic context. For futuristic analysis, the study has developed arguably for the first time in Pakistan an intuitive Debt Sustainability Index (DSI). The structure of the paper is as follows. Section I studies the compositional bottlenecks innate in public debt structure of Pakistan. Section III evaluates the debt ratios along with some other means for measuring debt sustainability. Section III introduces the Debt Sustainability Index (DSI) for assessing debt sustainability futuristically while section IV analyzes the debt portfolio of Pakistan. The final section concludes.

#### I. STRUCTURAL INEFFICIENCY OF PUBLIC DEBT

The inefficiencies in the public debt composition of Pakistan come to light when loans' contracting is viewed. Firstly, the major source of loans to Pakistan is Multilateral Development Banks (MDBs) which account for about 65 percent of loans to Pakistan on average from 2006-07 to 2014-15. These loans have 2 percent of grant component while the rest of it comes in as interest bearing loans.

It also observed that the share of non-project loans in total loans is 65 percent on average from 2007 to 2015. Since non-project loans are meant as a budgetary and balance of payments cushion and they don't add to the productive capacity of the economy, this increases the debt stocks of the country unsustainably. Furthermore, the composition of projects loans is also counter-productive as the share of loans for education, health, and poverty reduction and rural development are flimsy as evident from figure 1.



#### **Figure 1: Composition of Project Loans**

Another inefficiency apparent in debt composition of Pakistan is the high relative share of domestic debt as shown in figure 3. The debt from domestic sources is usually expensive as interest rates on such loans are higher than those for external debt. This argument is evident from the fact that interest payments on domestic debt as a percentage of GDP have been consistently higher as compare to external debt as shown in table 1. This is not difficult to comprehend, since the weighted average interest rate was 2.1 percent for external debt while for domestic debt it was 11.3 percent in 2014. The impact of high domestic debt also reduces the credit available to the private sector which decreases the investment in the economy. This trend is also clear in Pakistan as private sector credit for working capital has reduced from its level in 2014 to 2015 shown in figure 2. Subsequently, these structural shortcomings are purported to dent the capacity of the government to service debt on sustainable basis.



### **Figure 2: Private Sector Credit**

#### Table 1: Interest payments for external and domestic debt (as % of GDP)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Interest on									
Domestic Debt	3.5	4	4.2	3.9	3.4	4.1	4.1	4.3	3.3
Interest on Foreign									
Debt	0.5	0.6	0.6	0.4	0.4	0.3	0.3	0.3	0.2

Source: Pakistan Economic Survey, 2014-15.

#### Figure 3: Breakdown of Public Debt



Source: Ministry of Finance

#### II. DEBT SUSTAINABILITY – A RETROSPECTIVE ANALYSIS

Pakistan's performance in traditional debt ratio has undergone some mild improvements in the recent years as debt-to-GDP ratio has reduced to some extent. This can be viewed from figure 4. However, the target of bringing down debt-to-GDP ratio below 60 percent by 2013 as laid down in Fiscal Responsibility and Debt Limitation Act, 2005 still appears to be elusive. It is expected that government will miss out this target even in the future especially in the light of CPEC liabilities which are yet to be incorporated into public debt reduction strategy and other additional liabilities that are screened from the public debt definition<sup>1</sup>. Once these additional liabilities are accounted for the debt-to-GDP ratio increases to 75.1 percent as opposed to its current level of 64.8 percent reported by SBP<sup>2</sup>.



#### Figure 4: Trend for Debt-to-GDP<sup>3</sup>

Nevertheless, this improvement in Pakistan's debt outlook is also borne out when attention is moved towards debt-to-revenue ratio which has reduced from 494.7 percent in 2012 to 439.8 percent in 2014. However, it is held that public debt is unsustainable if debt-to-revenue ratio exceeds 350 percent. Furthermore, debt-to-revenue ratio goes to 523 percent once additional liabilities are accounted for.

This rosy picture, however, reverses once focus is leveled to non-conventional measures to measure debt sustainability. The preset study has used the method

<sup>&</sup>lt;sup>1</sup> Abdul Wajid Rana, 2<sup>nd</sup> National Debt Conference, 2015.

<sup>&</sup>lt;sup>2</sup> Sakib Sherani, 2<sup>ND</sup> National Debt Conference, 2015

<sup>&</sup>lt;sup>3</sup> Abdul Wajid Rana's Presentation, 2<sup>nd</sup> National Debt Conference, 2015

employed by Ejaz and Javid (2011) and has estimated the indicators for latest years as Ejaz and Javid (2011) only provides estimates till 2008.

			Nature of Public		
Year	(x-s)*	(r-y)**	Debt		
2009	0.02	12.14	Unsustainable		
2010	0.82	11.42	Unsustainable		
2011	2.47	8.38	Unsustainable		
2012	0.98	6.16	Unsustainable		
2013	2.92	6.35	Unsustainable		
2014	0.23	5.47	Unsustainable		

Table 2: Non-conventional debt sustainability indicators<sup>4</sup>

x =fiscal deficit; s = change in money base as percent of GDP. Debt is sustainable if (x-s) is negative and unsustainable if otherwise.

\*\* y = GDP growth rate, r = interest rate. Debt is sustainable if (r-y) is negative and unsustainable if otherwise.

The results from this method in table 2 shows that public debt has been unsustainable as rate of interest rate has been higher than GDP growth rate. Similarly, the change in money base as percent of GDP has been lower than fiscal deficit consistently implying unsustainability of public debt in Pakistan.

#### **III. DEBT SUSTAINABILITY – A FUTURISTIC ANALYSIS**

This section presents the debt sustainability assessment from a futuristic angle using the Debt Sustainability index (DSI). DSI is intuitively appealing and its fundamentals are laid down in an annexure at the end.

The crux of DSI revolves around using present value of public and publically guaranteed external debt (PPG) and expressing it against denominators of exports, GDP, and revenue. This index also uses debt sustainability thresholds as benchmarks which are delineated by Country Policy and Institutional Assessment (CPIA). Since CPIA adjusts these thresholds depending on the appetite of each country to service debt, the present study uses the thresholds consistent with a country of weak policy structure<sup>5</sup>. The index takes on a value of 100 if the three debt sustainability thresholds

<sup>&</sup>lt;sup>4</sup> Data for this analysis is retrieved from Pakistan Economic Surveys, World Development Indicators & SBP Economic Data Portal.

<sup>&</sup>lt;sup>5</sup> The choice for the thresholds is not arbitrary but is consistent with Pakistan's CPIA's score.

i.e. for revenue, exports and GDP are met simultaneously. Similarly, if DSI exceeds 100 debt may become unsustainable in the future and otherwise if DSI goes below 100.

The results for DSI along with the data for Pakistan and some selected regional economies are reported in table 3. The results show that Pakistan's DSI value is well below 100 which imply that future debt stocks in the country are not at alarmingly high unsustainable levels. This low value of DSI results from the fact that Pakistan has breached only one threshold of exports as public and publically guaranteed (PPG) external debt as percentage of exports is higher (130.33) than the defined threshold (100). This in case of external debt is not hard to understand, since government has been consistently moving towards domestic debt as shown in figure 2. Along with this, interest rate and interest payments as percent of GDP are also less on external debt as compare to domestic debt as presented in table 4 and table 1 respectively. However, since sustained external debt refinancing depends so much on export proceeds and fact that the export threshold is breached as reported in table 3; the sustainability of external debt may become an issue in the future.

	Threshold <sup>7</sup>	Pakistan	India	Sri Lanka	Bangladesh
PPG ED/GDP	30	16.08	5.27	32.75	11.93
PPG ED/Revenue	200	114.68	29.57	327.13	118.55
PPG ED/Exports	100	130.33	22.23	154.26	62.35
DSI		80.43	18.20	142.33	53.80

Table 3: Debt Sustainability index<sup>6</sup>

PPG ED = Present Value of Public & Publicly Guaranteed External Debt

It is interesting to note here that the recent ninth review by IMF has also held that "the position of the external sector appears comfortable from a debt-service point of view". However, stressing little room for complacency, the Review also directed the government to boost exports for debt sustainability<sup>8</sup>.

#### **IV. DEBT PORTFOLIO ANALYSIS**

The analysis of debt portfolio unlocks inconsistent patterns in the risk profile associated with public debt as shown in table 4. However, one overriding observation

<sup>&</sup>lt;sup>6</sup> The figures reported in the table pertain to 2014 for each country.

<sup>&</sup>lt;sup>7</sup> The thresholds represent the limit to which these ratios are feasible in the context of debt sustainability. Debt is unsustainable if the performance of any country exceeds these limits.

<sup>&</sup>lt;sup>8</sup> IMF Review. <u>http://www.dawn.com/news/1233038/imf-review</u>. Retrieved on 15<sup>th</sup> Jan, 2016.

can be made from the table that Pakistan's risk has marginally improved across some indicators.

The refinance risk has reduced marginally as average time to maturity (ATM) has decreased from 4.9 years in 2014 to 4.3 years in 2015. However, it increased in 2014 from its level in 2013. Similarly, the share of debt maturing in one year has gone down consistently from 2013 to 2015. It reduced from 46 percent in 2013 to 38.3 percent in 2014 and 36.2 percent in 2015.

Public Debt Sustainability Indicators										
Cost and Risl		Exte	ernal		Don	nestic		Total	debt	
		debt de					ebt	bt		
		2013	2014	2015	2013	2014	2015	2013	2014	2015
Cost of	Weighted	1.7	2.1	-	10.7	11.3	-	7.7	8.4	-
Debt	Average IR									
	(%)									
Refinancing	ATM (years)	10.1	10.5	9.4	1.8	2.3	2.3	4.5	4.9	4.3
risk	Debt	8.9	7.7	8.1	64.2	52.1	47.3	46	38.2	36.2
	maturing in									
	1yr (% of									
	total)									
Interest rate	ATR (years)	9.2	9.7	8.6	1.8	2.3	2.3	4.2	4.6	4.1
risk	Debt Re-	22.2	20.3	20.6	67.2	53.4	47.7	52.4	43.1	40
	fixing in 1yr									
	(% of total)									
	Fixed rate	83.4	83.3	83.3	39.6	54.1	58.9	54	52.4	65.8
	debt (% of									
	total)									
FX risk	FX debt (%							32.9		28.3
	of total debt)									
	ST FX debt							68.5		27.9
	(% of official									
	liquid									
	reserves)									

#### **Table 4: Public Debt Risk Indicators**

Source: Pakistan Economy Survey, 2014-15

As for interest rate risk, the average time to re-fixing (ATR) has remained almost same on public debt indicating no change in interest rate risk. However, as for external debt the average time to re-fixing has come down from 9.2 years in 2013 to 8.6 years in 2015 while that of domestic debt has increased from 1.8 years in 2013 to 2.3 years. Moreover, interest rate risk is further reduced as share of total debt under fixed interest rate has increased while it has decreased for debt under floating interest rate.

In is noted from table 4 that in case of external debt the performance of the risk indicators has not improved markedly but has been sluggish. As a result, the country's sustainability of external debt may become a tough pill to swallow especially if viewed against the fact that prospects for sustained foreign investment flows and exports proceeds are still slim despite the potential turnaround in economic activity expected as a result of CPEC<sup>9</sup>.

Finally, while acknowledging the efforts of the government in managing public debt effectively, this study contends that debt management is a long-term exercise due to the very nature of public debt and any one-year improvement in debt risk indicators, although praiseworthy, may not imply sustainable management of public debt.

#### CONCLUSION

The study has attempted to shed light on the sustainability of public debt in Pakistan. Since the phenomenon of public debt is dynamic in nature, it is more appropriate to employ means other than conventional debt ratios to analyze the debt sustainability. The paper reveals that despite some improvements in debt ratios and the debt risk indicators, debt stocks still appear to be at unsustainable levels when nonconventional debt indicators are evaluated. Some of the other overriding conclusions are presented as hereunder:

- 1. Sustainability of external debt may not appear a problem in the future for Pakistan.
- 2. The futuristic analysis has revealed that Pakistan has breached the exports thresholds and since external debt's sustainability depends so much on exports proceeds, it is recommended that FRDL should also incorporate a cap on external debt-to-exports ratio.

<sup>&</sup>lt;sup>9</sup> Dr. Hafiz A. Pasha and Dr. Kaiser Bengali, 2<sup>nd</sup> National Debt Conference, 2015.

- 3. Debt sustainability should be studied in a futuristic context by assessing the present value for public debt.
- 4. The traditional debt-ratios should be supplemented by other non-traditional measures of debt sustainability in framing debt reduction strategy.
- 5. Finally, it is recommended that competitive policies should be adhered to for pricing of government debt instruments and interest rate on these instruments should be market-based which can potentially reduce the cost associated with debt and hence, help increase sustainability.

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#### ANNEXURE

To ascertain whether external debt will be sustainable in Pakistan in a futuristic context, the study has developed Debt Sustainability Index (DSI). The Debt Sustainability Index is based on three debt-ratios for external debt only, that is, present value of external debt as a percent of GDP, exports receipts, and total government revenue. The present value of external debt is calculated by discounting the short-term external debt plus the total debt service payments due on public and publicly guaranteed external debt over the life of existing loans<sup>10</sup>. The formula for calculating DSI is hereunder:

$$DSI = \frac{1}{3} \left( 100 * \frac{PVED - GDP}{TPVED - GDP} \right) + \frac{1}{3} \left( 100 * \frac{PVED - EXP}{TPVED - EXP} \right) + \frac{1}{3} \left( 100 * \frac{PVED - REV}{TPVED - REV} \right)$$

PVED – GDP = Present Value of External Debt as a percent of GDP

TPVED – GDP = Threshold for present value of external debt as a percent of GDP

PVED – EXP = Present Value of External Debt as percent of exports.

TPVED – EXP = Threshold for present value of external debt as a percent of exports.

PVED – REV = Present Value of External Debt as percent of revenue.

TPVED – REV = Threshold for present value of external debt as percent of revenue

<sup>&</sup>lt;sup>10</sup> This indicator is calculated and reported by The World Bank. <u>http://data.worldbank.org/indicator/DT.DOD.PVLX.CD</u>