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AN ANALYSIS OF TRENDS AND COMPOSITION OF EXTERNAL DEBT IN INDIA

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ABSTRACT
The present study makes an attempt to analyze the trends in and composition of India's external debt for the period 2010 to2020. External debtasa ratio to GD Proses lightly to 20.6 per cent in end March 2020 from 19.8 per cent a year ago. There has been a rise in ratio for five years from 2010 to 2015 continuously showing the high growth in external debt. The ratio of foreign currency reserves to external debt increased to 85.5 percent in March 2020, from 76.0 percent in March 2019. Short-term debt accounted for 19.1% of total debt, down from 20.0 percent in previous year. Similarly, the short-term debt-to-foreign-exchange-reserves ratio dropped from 26.3 percent to 22.4 percent. To study the behavior of the data, statistical techniques like trend analysis, analysis of variance (ANOVA) and line charts have been used. To measure the variability in Sovereign and Non-Sovereign, Outstanding External Debt, Multilateral debt, Commercial Borrowing, coefficient of variation (CV) has been computed. The results of the study reveal that since the mid-2010, there's been a significant growth in short-term debt (measured by original maturity) with a slow compositional shift in external indebtedness from the government to the non-government sector, with trade credit related debt being the fastest rising component.

Key Words:
Outstanding External Debt, Multilateral debt, Commercial Borrowing A NOVA, Coefficient of Variation (CV)

Introduction

Public debt refers to the debt of the government. It is the sum of the borrowings of the government over the past years. The government borrows whenever there is a deficit in the budget. Deficit in the budget arises when government spending exceeds government revenues. Whereas a budget deficit leads to borrowings and is an addition to the debt, a budget surplus can be used it to repay a part of the debt. However, it is seldom done. Public debt is a stock variable and is measured at points in time. The public debt at the end of the current year is previous year's debt plus current year's budget deficit. The absolute size of the debt is not significant from an economic point of view. What is important is the size of the debt relative to the size of the economy. So, the variable of interest for any economy is the debt-to GDP ratio. Change in the debt-to-GDP ratio explains an economy's position with respect to debt. It depends on two factors. First is the change in debt which isnothing else but the budget deficit. Second is the change in GDP. If debt grows faster than GDP the debt-to-GDP ratio increases and if GDP grows faster than debt the debt-to-GDP falls. Since GDP generally increases every year, modest size deficits are not a cause of worry. However persistently large budget deficits cause swelling of Public debt.

Public debt is sometimes considered a burden. The reason for this is that debt has to be serviced through interest payments till it is repaid. These interest payments come from current revenues and to that extent have the effect of reducing the current expenditure. The budget deficit can be divided into two parts namely the non interest budget deficit or the primary deficit and the interest payments. Interest payments are legacy of the past. A government can reduce the primary deficit through it's current tax and expenditure policies but it cannot do anything to reduce the interest payments except repaying the debt or refinancing it at a lower rate of interest. Such measures are not completely in the hands of the government and are rarely taken. Therefore, large deficits are undesirable. Larger the public debt larger is the interest payment liability of the government. In the absence of proportionate rise in current revenue net of current expenditure (excluding interest payments) the interest payment liability can be fulfilled either by cutting public expenditure or by hiking taxes. This means that the present generation is burdened by debt of the previous generations. The burden is in the form of debt service obligation. However, whether debt is a burden or not depends on how the loan finance or the money raised as debt was used. If it was used to finance capital expenditure that created assets with future benefits, then it is not purely a burden but if it was used to finance the consumption needs of the past generations then the present generation is paying for the extravagance of their ancestors.

Public debt can be broadly classified into two categories viz. internal debt and external debt. Internal debt refers to the debt raised domestically whereas external debt refers to debt that arises because of international borrowings of the government. Whereas, interest payments on the domestic debt accrue to the holders of the debt within the nation, the interest payments on the external debt accrue to the foreign holders of the external debt and therefore leave the country. This money is available neither for consumption nor for capital formation in the economy and is a drain of resources as it represents a recurring departure from a nation's income every year.

External debt, therefore, entails a foreign exchange obligation as the debt has to be serviced in dollars. It is a negative entry in the invisible account and it increases the current account deficit. If the export earnings and the net capital inflows are not sufficient to fulfill the total foreign exchange liability in any year then there may be a draw down of the foreign exchange reserves. If the foreign exchange reserves are insufficient then the nation may be forced to borrow more from other nations or multilateral agencies and it may get trapped in a vicious circle. Whether external debt becomes a burden or not again depends on how the external finance was used. If for instance it was used to enhance the productive capacity of the export sector that led to increased export earnings net of the foreign exchange debt service liability every year then it is definitely not a burden but if it was used to finance consumption, then it may turn into a burden for the present generations.

Government differs from individuals as far as the question of debt is concerned because the debt of the governments is sovereign debt which they can refuse to pay and the lending nations can do nothing other than refusing to lend further. A sovereign default, still, is an undesirable thing for any nation as it adversely affects the future borrowing capacity of the defaulting nation and the ability to borrow is critical for the smooth functioning of any economy. Governments rarely repudiate their debts; in fact, they mostly repudiate debt when in crisis. If sovereign debts are to bere paid, then government spending has to be reduced or taxes are to be raised or both. This entails hardships for the people of the nation. In democratic set-ups there is great political pressure to default on external debt obligations instead of cutting down expenditures or raising taxes. The management of debt particularly foreign debt is central to the smooth functioning of any economy. The purpose of this paper is to analyze the trends in the external debt and also the composition of the external during the period 2010-2020 and to understand the external debt position of India.

Review of Literature

There exists vast literature in the international and national arena that deals with different issues related to public debt. The issues range from the debate on whether public debt is a burden or not, to studying and analyzing the impact of public debt on various variables of importance for an economy. Public debt is also widely studied at the disaggregated levels of internal debt and external debt. The classical economists, Smith (2003), and Mill were of the opinion that public debt entails a burden for the economy and the consequences of public debt were disastrous for an economy. Borrowings to finance public expenditure were glorified by Keynes (2012). According to Keynes borrowings can be used to create employment and increase aggregate demand particularly in times of recession.

Studies like Domar (1944) have suggested that the changes in the public debt should not be viewed in isolation but in relation to the changes in the national income. The debt-GDP ratio subsequently acquired importance in economic parlance and literature and it came to be realized that debt has the potential of becoming a burden for an economy if there is considerable difference between the growth rates of the GDP and the public debt. There is literature that argues that public debt is a burden for the future generations, for, it may lead to decline in private capital formation and adversely affect future income. Musgrave and Musgrave (2004) and Modigilani (1961) fall in this category. Cunningham (1993) and Ebril and Salman (2006) also confirm this view. Contrary to this view, is the Ricardian Equivalence Theorem on public debt. According to this theorem whether we finance public expenditure through public debt or through taxes does not make any difference as far as the real interest rates and private capital formation are concerned. Seater(1993) and Gulley (1994) suggest that the effect of public debt on economic growth is neutral.

Monetarists, however, argue that public debt causes the crowding out of private investment by increasing the interest rates in the economy, thereby adversely affecting economic growth. Friedman (1983) and Kumar and Woo (2010) have shown public debt to have an adverse effect on economic growth. Calvo (1988) has studied the role of expectations in the servicing of public debt. Bal and Rath (2016) have tried to find out if public debt has been a burden for India. They have used the augmented Bohn test for this purpose and have concluded that public debt has not been a burden for India for the period 1970-2013. Apart from studies that are based on public debt as a whole, there are studies that analyze the issues related to internal debt or external debt at the disaggregated level.

Ramakrishna (2004) has analyzed India's external debt position for the period 1970-2000 (three decades). In the study he has tested the debt overhang and the crowding out hypothesis for the Indian economy. Both the hypothesis have been confirmed for India as per his research. He has also suggested debt relief to avoid any crisis in the future. Chipalkatti and Rishi (2001) investigated whether there existed any relationship between foreign debt and capital flight in India. They have concluded that there exists a bi-directional relationship between external debt and outflow of capital in the Indian case.

Saxena and Shanker (2016) also suggest that the Indian post-reform experience supports the revolving door hypothesis. However our objective is only to understand India's external debt position over a specific period, mainly by looking at the composition of the external debt and analyzing the changes in the composition. This is mainly done with the help of tables and charts displaying the key external debt indicators. The tables and charts are so designed as to be self-explanatory requiring very little elucidation.

Analysis

In absolute terms the external debt has increased year by year from 2001-02 onwards. The external debt-GDP ratio has varied between 17% to 24% (approx) from 2002 to 2020.It increased from 18.6% in 2011 to 23.8% in 2015. Thereafter it declined and stood at 19.8 in 2019. The ratio of foreign debt that was as high as 138 in 2008 came down to 76 in 2019. This large variability may be reflection of dominance of short term portfolio investment in the foreign investment in India. The debt service ratio that stood at 16.1% in 2004 fell to 4.4% in 2010-11 but it increased thereafter to 8.8% in 2015-16 and stood at 6.4% in 2018-19. The debt service ratio reflects the burden of the debt repayment liability (interest plus principal) on the export earnings of the nation. The position in this respect improved over the period from 2001-02 to 2010-11. However, it slightly deteriorated in the last decade.

The share of concessional debt in external debt has declined in the last decade. It was around 15% in end march 2011 but fell to only 8.8% in end March 2019. This is not a pleasant development as with the decline in the share of concessional debt in external debt the interest payment liabilities are bound to increase. The rise in the debt service ratio from 4.4% in end March 2011 to 8.8% in end March 2016 may partially or completely be because of the dwindling of the concessional debt. Infact the share of concessional debt in total external debt has consistently declined in the last two decades.

Table 1 Key External Debt Indicators

Year	External Debt (US$million)	Debt Service Ratio	Ratio of Foreign Exchange Reserves to Total Debt	Ratio of Total External Debt to GDP
2001-02	98843	13.7	54.7	20.8
2002-03	104914	16.0	72.5	20
2003-04	112653	16.1	100.3	17.7
2004-05	134002	5.9	105.6	18.4
2005-06	139114	10.1	109.0	17.1
2006-07	172360	4.7	115.6	17.7
2007-08	224407	4.8	138.0	18.3
2008-09	224498	4.4	112.2	20.7
2009-10	260935	5.8	106.9	18.5
2010-11	317891	4.4	95.9	18.6
2011-12	360766	6.0	81.6	21.1
2012-13	409374	5.9	71.3	22.4
2013-14	446178	5.9	68.2	23.8
2014-15	474675	7.6	72.0	23.9
2015-16	484791	8.8	74.3	23.4
2016-17	471012	8.3	78.5	19.8
2017-18	529290	7.5	80.2	20.1
2018-19	543112	6.4	76.0	19.8
2019-20 P	**558548**	**6.5**	**85.5**	**20.6**

Source: RBI

Table 2 External Debt (End-March India)

Items	2011	2012	2013	2014	2015	2016	2017	2018	2019
Concessional Debt as % of Total Debt	14.9	13.3	11.1	10.4	8.8	9	9.4	9.1	8.7
Short-term Debt as % of Total Debt	20.4	21.7	23.6	20.5	18	17.2	18.7	19.3	20
Debt Stock- GDP Ratio (%)	18.6	21.1	22.4	23.9	23.8	23.4	19.9	20.1	19.7
Debt Service Ratio (%)	4.4	6	5.9	5.9	7.6	8.8	8.3	7.5	6.4

The simultaneous increase in the share of the short term debt in the total external debt points out the possibility of replacement of long term concessional aid by short term external borrowings. This possibility is also reflected by the increase in the ratio of short term debt to the foreign exchange reserves (table-3). Short term debt management poses many challenges in front of a nation. It generally comes at a higher rate of interest and requires frequent refunding.

Table 3 Key External Debt Indicators

Year	Ratio of Concessional Debt to Total Debt	Ratio of Short- term Debt to Foreign Exchange Reserves	Ratio of Short- term Debt to Total Debt
2001-02	35.9	5.1	2.8
2002-03	36.8	6.1	4.5
2003-04	35.8	3.9	3.9
2004-05	30.7	12.5	13.2
2005-06	28.4	12.9	14.0
2006-07	23.0	14.1	16.3
2007-08	19.7	14.8	20.4
2008-09	18.7	17.2	19.3
2009-10	16.8	18.8	20.1
2010-11	14.9	21.3	20.4
2011-12	13.3	26.6	21.7
2012-13	11.1	33.1	23.6
2013-14	10.4	30.1	20.5
2014-15	8.8	25.0	18.0
2015-16	9.0	23.2	17.2
2016-17	9.4	23.8	18.7
2017-18	9.1	24.1	19.3
2018-19 PR	8.7	26.3	20.0
2019-20 P	**8.6**	**22.4**	**19.1**

Source: RBI

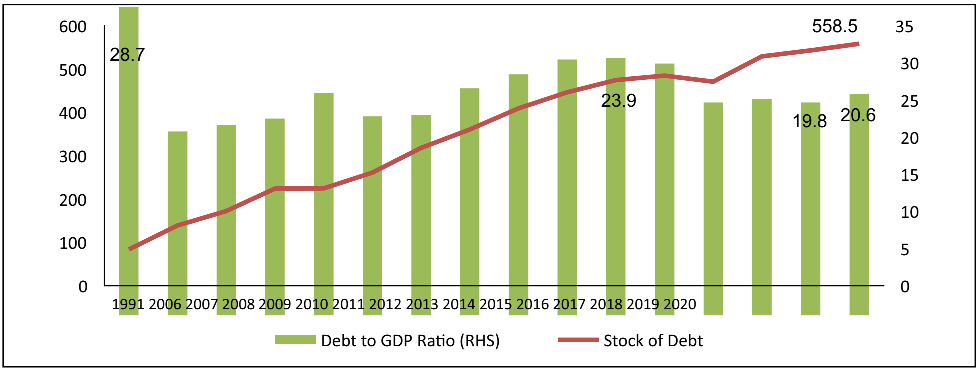

Fig.1 External Debt and GDP

The share of Sovereign debt in external debt has declined in the recent years. It fell from 21.2 % in in end March 2018 to 18.1% in end March 2020. The share of the Non- sovereign debt increased from 78.8% to 82% over the same period. This indicates that securities of the government of India have attracted less FII investments. This also suggests an increase in the external commercial borrowings.

Table 4 India's External Debt: Sovereign and Non-Sovereign

(US $ Billion)

	2017	**2018**	**2019**(R)	**2020** (P)
Total Sovereign External Debt	95.8 (2.5)	111.9 (16.9)	103.8 (-7.2)	100.9 (-2.9)
Percentage Share	20.3	21.2	19.1	18.1
Total of Non-Sovereign Debt	375.5 (-4.1)	417.2 (11.1)	439.3 (5.3)	457.7 (4.2)
Percentage Share	79.7	78.8	80.9	81.9
Grand Total	**471.3**	**529.2**	**543.1**	**558.5**

Source: India's External Debt. Ministry of Finance, Govt. of India

Table 5 Selected Indicators of Outstanding External Debt in India

Year	(Rs. in Crore)			(In Percentage)	
	Outstanding Foreign Debt	Value of Exports	Interest on Foreign Debt	Interest of Foreign Debt as Percent of Value of Exports	Interest of Foreign Debt as Percent of Outstanding Foreign Debt
2000-01	189990	203571	4408	2.17	2.32
2001-02	199869	209018	4285	2.05	2.14
2002-03	196043	255137	4566	1.79	2.33
2003-04	184177	293367	3250	1.11	1.76
2004-05	191182	375340	2808	0.75	1.47
2005-06	194078	456418	3156	0.69	1.63
2006-07	201204	571779	3866	0.68	1.92
2007-08	210092	655864	3937	0.6	1.87
2008-09	264073	840755	4190	0.5	1.59
2009-10	249311	845534	3625	0.43	1.45
2010-11	278462	1136964	3156	0.28	1.13
2011-12	322892	1465959	3501	0.24	1.08
2012-13	332005	1634319	4019	0.25	1.21
2013-14	374483	1905011	3880	0.2	1.04
2014-15	366191	1896348	3766	0.2	1.03
2015-16	406586	1716378	3925	0.23	0.97
2016-17	408069	1854096	5020	0.28	1.23
2017-18	445288	1956514	5780	0.3	1.3

Source: RBI

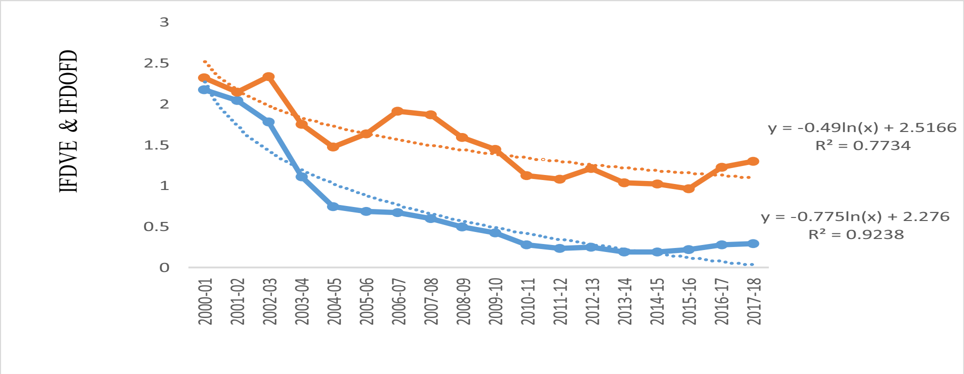

Fig.2Interest of Foreign Debt as Percent of Value of Exports and Outstanding Foreign Debt

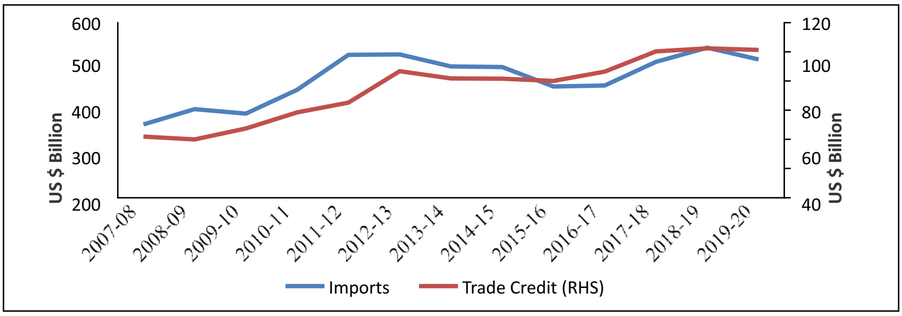

Figure 3 Imports and Trade credit

Both the outstanding foreign debt and the value of exports have increased in the last two decades in absolute terms. However, the value of exports has increased more than nine times whereas the absolute foreign debt has just more than doubled over the period. As a result of this the interest liability of foreign debt as percentage of value of exports has considerably declined from 2.17% for the year 2001-02 to 0.3% for the year 2017-18. The interest payment liability on foreign debt expressed as a percentage declined from 2.32% for the year 2001-02 to 1.13% for the 2010-11 which is a good sign as far as debt management is concerned as it conveys that the interest payments rose less than proportionately when compared to the rise in the outstanding external debt. This means that in these years' additional external debt has been obtained at lower rates of interest or the foreign debt has been refunded at lower cost. However, interest payment as percentage of outstanding foreign debt has increased in the recent years. It was 1.3% for the year 2017-18. This is corroborated by the fact that in the recent years concessional borrowings as percentage of total external debt have declined and the share of sovereign debt in total external debt has declined in the recent years. Although the trend is not alarming but persistence in this direction may cause some worry in the future.

Table 6 Summary statistics

	Outstanding Foreign Debt	*Value of Exports*	*Interest on Foreign Debt*
Mean	278555.28	1015131.78	3952.11
Sample Standard Deviation	90400.10	675843.83	713.99
Minimum	184177.00	203571.00	2808.00
Maximum	445288.00	1956514.00	5780.00
Range	261111.00	1752943.00	2972.00
Standard Error Of The Mean	21307.51	159297.92	168.29
Skewness	0.54	0.22	0.86
Kurtosis	-1.26	-1.71	1.38
Coefficient Of Variation (CV)	0.32	0.67	0.18

Source: Authors' calculations based on data collected from RBI's Database on Indian Economy

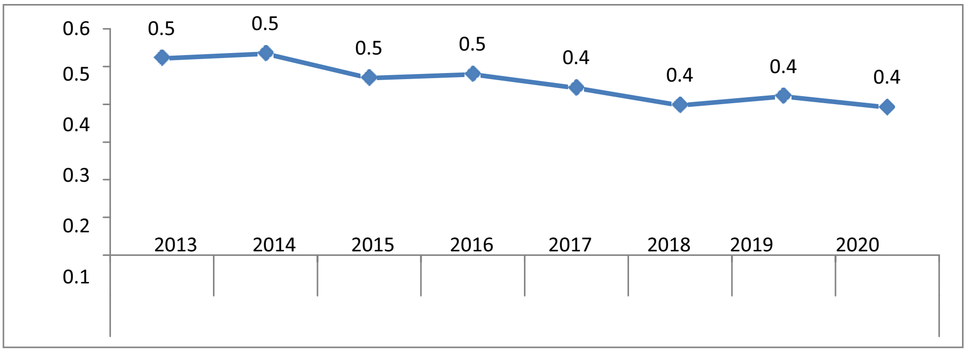

Figure 4Growth rate in external debts

Table 7 gives the composition of the external debt over the period from end March 2011 to end March 2019.

Table 7 External Debt (End-March India) (In Rs. Crore)

Items	2011	2012	2013	2014	2015	2016	2017	2018	2019
I. Multilateral	**216672**	**257088**	**279310**	**321560**	**328148**	**359490**	**354118**	**371783**	**396005**
A. Govt. Borrowing	190326	222579	235670	268491	269431	294122	288246	304595	320330
i) Concessional	120653	138691	143130	163589	154581	166506	156726	164002	160421
a) IDA	119068	136816	141119	161165	152171	163772	154050	160970	157188
b) Others	1585	1875	2011	2424	2410	2734	2676	3032	3233
ii) Non-concessional	69673	83888	92540	104902	114850	127616	131519	140593	159909
a) IBRD	39218	45328	48239	53433	57107	61553	60667	61663	67248
b) Others	30455	38560	44301	51469	57743	66063	70852	78930	92661
B. Non-Government Borrowing	26346	34509	43640	53069	58717	65368	65872	67188	75675
B. Non-Government Borrowing	26346	34509	43640	53069	58717	65368	65872	67188	75675
i) Concessional	0	0	0	0	0	0	0	0	0
ii) Non-concessional	26346	34509	43640	53069	58717	65368	65872	67188	75675
a) Public Sector	15802	19407	23414	28105	31385	35409	32123	33715	38495
IBRD	9193	11092	12749	14412	15674	17005	16625	16935	18652
Others	6609	8315	10664	13693	15711	18404	15498	16780	19843
b) Financial Institutions	7511	10290	14370	18881	21859	25190	29829	30231	35482
IBRD	1899	2707	2973	3820	3709	5984	7276	7418	8449
Others	5612	7583	11397	15061	18150	19206	22553	22812	27033
c) Private Sector	3033	4812	5856	6083	5473	4769	3920	3242	1698
IBRD	0	0	0	0	0	0	0	0	0
Others	3033	4812	5856	6083	5473	4769	3920	3242	1698
II. Bilateral	**114905**	**137086**	**136329**	**148813**	**136060**	**149378**	**150808**	**164847**	**177140**
A. Govt.Borrowing	80406	91641	88007	96918	88452	102925	109742	128945	141312
i) Concessional	80406	91641	88007	96918	88452	102925	109742	128945	141312
ii) Non-concessional	0	0	0	0	0	0	0	0	0
B. Non-Govt.Borrowing	34499	45445	48322	51895	47608	46453	41066	35902	35828
i) Concessional	4101	7648	8435	10318	10080	11892	11988	12973	17389
a) Public Sector	1621	4963	5916	7763	7546	9052	6758	7600	12182
b) Financial Institutions	2480	2685	2519	2555	2534	2840	5230	5373	5207
c) Private Sector	0	0	0	0	0	0	0	0	0
ii) Non-concessional	30398	37797	39887	41577	37528	34560	29077	22930	18439
a) Public Sector	13789	14200	13010	13374	11561	10938	9478	8531	7586
b) Financial Institutions	3754	3886	4206	4361	3323	3029	3169	2530	2290
c) Private Sector	12855	19711	22671	23842	22644	20594	16430	11869	8563
III. IMF	**28163**	**31528**	**32439**	**36910**	**34350**	**37177**	**35129**	**37716**	**38202**
IV. Trade Credit	**83112**	**97117**	**96556**	**93275**	**78915**	**70001**	**62426**	**61660**	**54898**

a) Buyers Credit	73273	85896	84667	80069	66006	54963	46790	43683	35703
b) Suppliers Credit	2847	3252	4236	4779	5217	6088	6094	6764	6907
c) Export Credit Component of Bilateral Credit	6992	7969	7653	8427	7692	8950	9543	11213	12288
d) Export Credit for Defence Purpose	0	0	0	0	0	0	0	0	0
V. Commercial Borrowing	**448448**	**614623**	**762128**	**897744**	**1128501**	**1197176**	**1115514**	**1312756**	**1427773**
a) Commercial Bank Loans	261678	373194	454450	582644	635246	647311	567286	550820	660518
b) Securitized Borrowings	183504	238849	306070	313416	490895	547465	545906	759701	765183
(Inclu. IDBs and FCCBs)									
c) Loans/Securitize Borrowings etc. with Multilateral/Bilateral Guarantee and IFC (W)	3266	2580	1608	1684	2360	2400	2323	2234	2072
d) Self Liquidating Loans	0	0	0	0	0	0	0	0	0
VI. NRI & FC (B&O) Deposits	230812	299840	385202	624101	720997	841956	757751	820737	902152
VII. Rupee Debt	7147	6922	6839	8826	9426	8479	7962	7886	8007
a) Defence	6416	6220	6164	8179	8807	7887	7398	7350	7498
b) Civilian	731	702	675	647	619	592	564	536	509
VIII. Total Long-term Debt (I to VII)	1129258	1444205	1698803	2131229	2436397	2663657	2483708	2777385	3004177
IX. Short-term Debt	290149	399962	525931	550985	535144	553906	571387	664575	749924
a) NRI Deposits (up to 1 year maturity)	0	0	0	0	0	0	0	0	0
c) Trade related credits	261006	333202	472026	491271	510938	530806	560781	652969	708379
1) Up to 6 Months	157806	200454	321010	330500	334267	339674	364104	431225	362982
2) 6 Months and Above up to 1 Year	103200	132748	151016	160771	176671	191132	196677	221744	345397
d) FII Investments in Govt. T Bills and Other Instruments	24214	48066	29671	33686	7307	132	260	580	12003
e) Investments in T.B. by Foreign Central Banks and International Institutions	225	326	447	572	714	1576	1577	1791	1820
f) External Debt Liabilities of (i+ii)	4704	18368	23787	25456	16186	21392	8768	9234	27721
i) Central Bank	693	871	985	892	939	1197	1575	1782	1529
ii) Commercial Bank	4011	17497	22802	24564	15247	20195	7194	7453	26193
X. Gross Total Debt	1419407	1844167	2224734	2682214	2971542	3217563	3055095	3441960	3754101

Source: India's External Debt. Ministry of Finance, Govt. of India

Table 8 gives the share of different creditors in the external debt in percentage terms. Form the table it is clear the share of multilateral debt has declined from as high as 23.4 % in end March 2006 to as low as 5.1% in end march 2018. On a similar footing the share of bilateral debt declined from 11.3% in 2006 to 3.4 % in 2017. The share of commercial borrowings increased from 19% in 2006 to 37.3% in 2016. The share of NRI deposits declined from 26.1% in 2006 to 16.2% in 2012 but bounced back to 26.1% in 2016. The shares of IMF, Export Credit and Rupee debt are very small as compared to the shares of Multilateral, Bilateral, NRI Deposits, Commercial Borrowings categories. The share of long term debt in total external debt has fluctuated between 76% to 86% over the entire period. It dipped to 76.4% in 2013 but then rose to 82.8% in 2016.The share of short term debt rose from 14.1 % in 2006 to 21.7 % in 2012 but came down to 15.9 percent in 2018. It is generally believed that larger the share of long term debt in the total external debt the better it is for the economy. Long term debt induces stability in the external sector as well as the entire economy whereas short term debt if not managed properly has the potential of destabilizing the economy.

Table 8Share of External Debt by Creditor Category in India (in percent)

Category	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Multilateral	23.4	20.5	17.6	17.6	16.4	15.2	14	12.6	12	11	11.1	0.9	5.1
Bilateral	11.3	9.3	8.8	9.2	8.7	8.1	7.4	6.1	5.5	4.6	4.6	3.4	9.2
IMF	0.7	0.6	0.5	0.5	2.3	2	1.7	1.5	1.4	1.2	1.2	-3.5	6.9
Export Credit	3.9	4.2	4.5	6.5	6.5	5.9	5.3	4.3	3.5	2.7	2.2	-8.9	-1.7
Commercial Borrowings	19	24	27.8	27.8	27.1	31.6	33.3	34.2	33.5	38	37.3	-4.5	17.4
NRI Deposits	26.1	23.9	19.5	18.5	18.3	16.3	16.2	17.3	23.3	24.2	26.1	-7.9	8
Rupee Debt	1.5	1.1	0.9	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.3	-3.9	-1.2
Total Long Term	**85.9**	**83.6**	**79.6**	**80.8**	**79.9**	**79.6**	**78.3**	**76.4**	**79.5**	**82**	**82.8**		
Short-Term	14.1	16.4	20.4	19.2	20.1	20.4	21.7	23.6	20.5	18	17.2	5.5	15.9
of which Trade credits	-	-	-	-	-	-	-	-	18.3	17.2	16.5	8.1	16.1
Grand Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**-2.8**	**12.4**

Source: India's External Debt. Ministry of Finance, Govt. of India

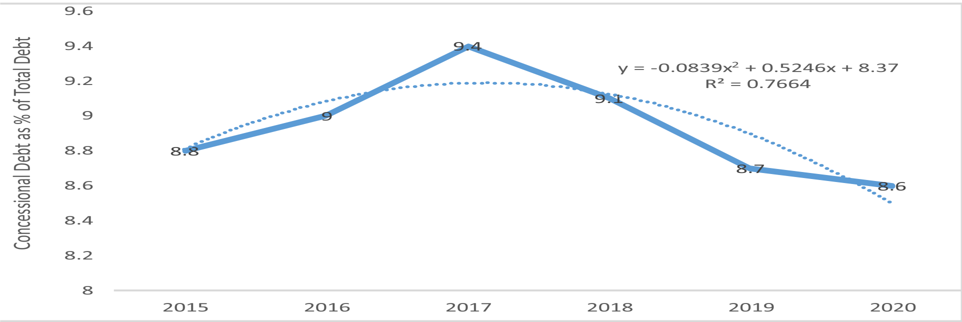

Fig.5 Concessional Debt as % of Total Debt

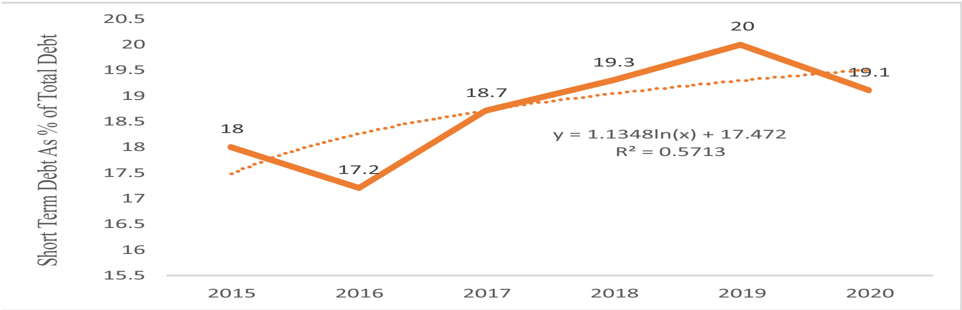

Fig.6 Short Term Debt as % of Total Debt

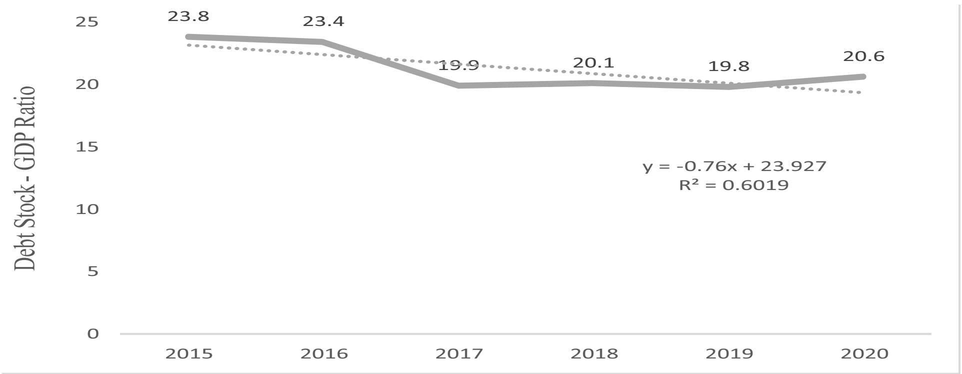

Fig. 7 Debt Stock - GDP Ratio

Table 9ANOVA

Source	*SS*	*MS*	*F*	*p-value*
Treatments	856.255	285.4183	180.87	5.35E-12
Blocks	3.053	0.6107	0.39	.8500
Error	23.670	1.5780		
Total	882.978			
Post Hoc Analysis				
p-values for pairwise t-tests				
		CD-TD	ST-TD	DS-GDPR
		8.9333	18.7167	21.2667
DSR	7.5167			
CD-TD	8.9333			
ST-TD	18.7167	8.60E-10		
DS-GDPR	21.2667	3.26E-11	.0031	
Tukey simultaneous comparison t-values				
		CD-TD	ST-TD	DS-GDPR
		8.9333	18.7167	21.2667
DSR	7.5167			
CD-TD	8.9333			
ST-TD	18.7167	13.49		
DS-GDPR	21.2667	17.01	3.52	
critical values for experiment wise error rate:				
		2.88		
		3.71		

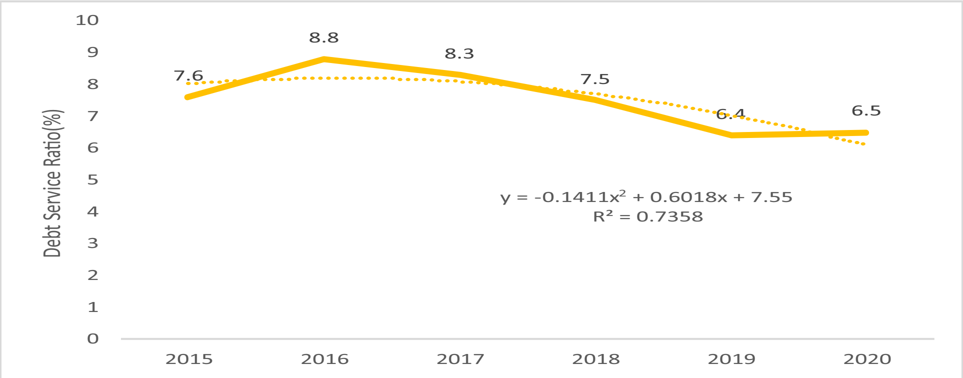

Figure 8 Debt-service ratio

Table 10 Summary Statistics

	CD-TD	*ST-TD*	*DS-GDPR*	*DSR*
Mean	8.933	18.717	21.267	7.517
Variance	0.087	0.990	3.359	0.910
Standard Deviation	0.294	0.995	1.833	0.954
Minimum	8.6	17.2	19.8	6.4
Maximum	9.4	20	23.8	8.8
Range	0.8	2.8	4	2.4
Standard Error of Mean	0.120	0.406	0.748	0.389
Skewness	0.640	-0.454	0.896	0.052
Kurtosis	-0.300	-0.243	-1.778	-1.418
Coefficient of Variation (CV)	3.30%	5.32%	8.62%	12.69%

Table 11Composition of External Debt: Currency-Wise

Currency	At end-March (Per cent)										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019PR	2020 P
US Dollar	53.2	55.3	56.9	59.1	61.1	58.3	57.1	52.1	49.5	50.4	53.7
Indian Rupee	18.7	18.8	20.5	22.9	21.8	27.8	28.9	33.6	35.8	35.7	31.9
SDR	10.7	9.4	8.3	7.2	6.8	5.8	5.8	5.8	5.5	4.9	4.5
Japanese Yen	11.5	10.9	8.7	6.1	5	4	4.4	4.6	4.7	5.0	5.6
Euro	3.6	3.6	3.7	3.4	3.3	2.3	2.5	2.9	3.4	3.1	3.5
Pound Sterling	1.8	1.6	0.9	0.7	1.1	0.9	0.8	0.6	0.6	0.5	0.4
Others	0.5	0.4	1	0.6	0.9	0.9	0.5	0.4	0.5	0.4	0.4
Total (1 to 7)	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	100	100

Currency wise the more than 50% of the external debt is held in dollars. Debt in terms of Rupees occupiesthe second position. Next in terms of share of the total external debts aredebt in terms of Japanese Yen and SDRs.

Conclusion

With the debt service ratio at 6.5%, ratio of foreign exchange reserves to debt at 76% and the external debt to GDP ratio at around 20% the position of India on the external debt front is reasonable and is not a cause of concern.The share of concessional debtin total external debt has come down over the past ten years. It stood at 8.8% in end March 2019. Concessional debt if utilized properly is a boon for a nation particularly for the developing nations that lack resources because it comes at relatively cheaper rate of interest. If the concessional debt is replaced by the non-concessional finance, then the interest liability increases.Whereas the share of external commercial borrowings increased in the recent years and stood at 38% of the total external debt in 2015;that of NRI deposits in total external debt stood at 26% in 2016 the shares of multilateral and bilateral borrowings in total external debt have declined significantly. This development is an indication of increased reliance on dearer means of external finance. Despite this development the interest liability of foreign debt as percentage of value of exports has considerably declined over the period under consideration because of the manifold increase in the value of exports in this period. The share of sovereign debt in the total external debt has declined and the share of short term debt in the total external debt has increased indicating an increased reliance on volatile sources of external finance and increased frequency of refunding of an increasing portion of external debt. However, by all the standards the Indian economy is in a very comfortable zone as far as its external debt position is concerned. This stage does not warrant any intervention or any sort of debt relief.

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