

Article

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A Study of Public debt sustainability in India during post-reform and COVID-19

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Abstract

India is managing the Covid-19 fervently as it causes supply chain disruptions, health sector-related issues, lockdown and its impact on various sectors, unemployment, migration, hostile global environment, etc. The pandemic is causing sequential deceleration of all the parameters of macroeconomic factors of our country. The financial position of the Government is disturbed and it is taking all measures to curtail the downtrend that is set in by the pandemic. The financial position of the country is precarious as it is witnessing declining production and sales from the industries, shops have been closed and in turn expenditure from the people has declined. This resulted in a chain of causation viz., reduced output, unemployment, reduced wage or no wage, hike in prices etc. The ruthless effects are seen in reduced tax revenue but increasing public spending is ubiquitous as the appetite has enormously increased with its dwindle effect has resulted in mounting public debt in India. The total internal liabilities have increased from Rs. 317,704 in 1991-92 to Rs. 108,49,495 in 2020-21 and the growth rate is 3314.97 percent. The growth rate of total internal liabilities during Covid-19 is 35.46 percent. On the other hand, the total external liabilities have increased from Rs. 109,677 in 1991-92 to Rs. 589,997 in 2020-21 and the growth rate is 437.94 percent and its growth rate during Covid-19 is 15.09 percent. The economy gained better momentum due to reform measures initiated by NEP from 1991 onwards but it is shattered by the Covid-19 and its cascading effects. The spillover effects of Covid-19 is vividly seen in all the sectors and it has halted the growth of the country and the Government is taking measures to give momentum to it by way of several restoration measures. Hicksian theory is worth considering as he promulgated for bringing the economy back to its original peak position from the recessionary phase rather than allowing the

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economy to continue in recession and land up in depression. India can consider Keynes pump-priming concept and try to restore the economy by neglecting inflation which can be addressed later.

Keywords: Covid-19, macroeconomics, government finances, expenditure, revenue, export, import, GDP, ratios, Hicks, Keynes, recession, depression, internal debt, public debt, government securities.

INTRODUCTION

COVID-19 pandemic and its second wave is a big blow on all the economies of the world. The devastating effects of the pandemic directly affected the victims and his family economically, psychologically, sociologically etc. The dwindle effect of the virus is flamboyantly seen on innocent people and its spillover effects are found in terms of industrial slow down, MSMEs problems, large scale unemployment, supply chain issues, banking sector problems, internal and international trade issues, BOP crisis, peer effects, externalities, poverty, social interferences etc. The Government administration is forced to embark upon a lot of restrictions on the people by way of lockdown, shutting down of all means of transports encompassing national and international transits, all industrial and service sector establishments, all the educational institutions, public and private sectors, government offices etc., to control the spread. The vaccines have come and it is given to the people in a phased manner in two cycles covering people above 18 years of age without charges in the Government hospitals and with charges in the private hospitals in India. As a result, the Government is compelled to implement many ameliorative measures to combat the cruel effects of COVID-19 pandemic.

The pandemic has increased the public health expenditure of the Government as they are providing public health care facilities to the victims, the entire Government machinery is put into action mostly for rehabilitative actions and measures, educating people to save them from infection, public sanitization, curative measures for the infected people, steps for the casualties of the pandemic, procurement and distribution of vaccines and health related equipments, maintenance of law and order, provision for salary to the employees apart from its other routine governance and responsibilities. The financial position of the country is precarious as it is witnessing declining production and sales from the industries, shops have been closed and in turn expenditure from the people has declined. This resulted in a chain of causation viz., reduced output, unemployment, reduced wage or no wage, hike in prices etc. The ruthless effects are seen in reduced tax revenue but increasing public spending is ubiquitous as the appetite has enormously increased with its dwindle effect which has resulted in mounting public debt in countries like India.

Public debt is due to borrowing by the government and it is a debt owed by it for its citizens. It is borrowed from countries, national and international agencies and it is a financial obligation of payment in the local and foreign currency. It comprises domestic and external debt. Public debt is classified into different categories depending on the nature, purpose of debt and length of the debt. Public debt may be redeemable debt, long term debt and short term debt. The flotation of debt can be classified as voluntary debt or compulsory debt. Based on the place of flotation of loans, debt can be classified as internal debt and external debt. Based on purpose, it may be classified as productive debt or development debt or war debt and unproductive debt or dead weight debt. Public debt is also classified into funded and unfunded or floating, compulsory and voluntary debt.

In the Indian debt market, the Government securities market (G-Sec) is imperative as it is facilitating market borrowings by the Government, pricing of debt instruments and other debt instruments. The RBI is the debt manager of the central and state governments which derives power from the Government Securities Act. RBI issues and procedurally maintains the record of ownership

and the transactions of the Government securities and also performs as a regulator in India. Currently, the data on secondary market transactions, yield and turnover in Government securities are accounted in the Subsidiary General Ledger (SGL) which covers 98 per cent of the total transactions. According to the Ministry of Statistics and Programme Implementation, Government of India, “detailed data on ownership pattern of Central and State Government securities are not available. Earlier, detailed data were available on the ownership pattern based on ad hoc surveys conducted by the RBI since 1958. The last such survey was conducted by RBI for the period ended March 1990, and the results were published in the RBI Bulletin, December 1994” (Ministry of Statistics and Programme Implementation, Government of India, 2021).

The RBI's planned to purchase government securities (G-Secs) under the G-SAP caused 10-year bonds to fall below 6 per cent. This is to guarantee for continuance of moderate interest rate in the economy and to enhance the borrowing programme of the government to perform its economic activity. The RBI Governor informed that “G-SAP has engendered a softening bias in G-Sec yields which has continued since then. Given this positive response from the market, it has been decided that the second purchase of government securities for an aggregate amount of Rs 35,000 crore under G-SAP 1.0 will be conducted on May 20. With system liquidity assured, the RBI is now focusing on increasingly channelising its liquidity operations to support growth impulses, especially at the grass-root level....While laying out the liquidity management strategy for 2021-22, let me unequivocally state that the Reserve Bank endeavours to ensure orderly evolution of the yield curve, governed by fundamentals as distinct from any specific level thereof. Our objective is to eschew volatility in the G-sec market because of its central role in the pricing of other financial market instruments across the term structure and issuers, both in the public and private sectors” (The Indian Express, 19.05.2021; and mint 07.04.2021). The G-SAP 1.0 programme of the RBI fetched positive results with an increase in the BSE Sensex and an additional buying is found by a decline in G-Sec yields. With these an attempt is made in this article to conduct an empirical analysis on public debt sustainability in India during COVID-19 and the post-reform periods.

Review of literature:

According to John Maynard Keynes, government spending boosted growth by infusing purchasing power into the economy. He said that economic downturns can be curtailed through borrowing money from the private sector and then reinjection of the money to the private sector by spending programs. This is his famous pump-priming concept asserted that government spending especially deficit spending could provide short term stimulus to end economic slowdown. Public debt has benefits and drawbacks with a trade-off between costs of borrowing and revelation to various types of risks that needs to be balanced to ensure its time management. It becomes much unsustainable when the debt burden mounting up as the debt growth surpasses its revenue growth. And it will be dangerous if internal and external debts servicing exceeds the accepted levels.

According to Orszag, Rubin, and Sinai (2004) and Ball and Mankiw (1995) the rising debt will make the country suffer while debt servicing and it can reduce investment. The rate of interest will go up to pay for the creditors and in turn, it will push the financial market in panic and pull down growth. The debt inflicts high economic cost to many countries and it can be controlled if they have independent monetary policies and strong exchange rate management. Manasse and Roubini (2005) observed that the simple ratio of public debt to GDP is not found to be a useful predictor variable for this. John Irons and Josh Bivens (2010) paper has shown that gross debt of about 90 percent will

lead to slower economic growth and severe danger to economic growth is policy inaction fueled by deficit fears.

Adam and Bevan (2005) have developed an endogenous growth model of financing for public deficits. They have analysed how growing internal public debt slows down the growth and in contrast how the rationed external public debt helps in economic growth. Contrary to this Aizerman, Kletzer and Pinto (2007) endogenous growth model proved that the higher the public debt and lower the growth of an economy. Yet another growth model developed by Checherita-Waetphal, Hallett and Rother (2014) is with the concept of public capital and public debt. They proved that public deficit is equal to public investment and a non-linear relationship is found between debt and growth. It is noted by them that an optimal debt to GDP ratio to maximize growth.

Enrique R. Casares (2015) has found that economic growth will be better if the indebtedness is low and an increase in the external debt to GDP ratio. On the other hand with high indebtedness and an increase in external debt to GDP ratio will impair economic growth. It is found by him that debt and growth have a nonlinear relationship. External debt and economic growth have an inverted U-shaped relationship and it portrays the high external debt. This is to avert a situation like the Latin American situation in the 80s and the European condition in the current scenario.

It is observed by the IMF in debt management that the “process of establishing and executing a strategy for managing the government’s debt to raise the required amount of funding, pursue its cost/risk objectives, and meet any other public debt management goals the government may have set, such as developing and maintaining an efficient and liquid market for government securities” (International Monetary Fund - World Bank, 2003).

The prudent levels of public debt target show that India’s public debt remains at 78 percent of GDP in 2008/09 against the average for emerging markets at 45 percent of GDP. The GDP debt ceiling for the emerging market is considered in 60 to 65 percent. These ranges of debt ratios provide room for substantial countercyclical fiscal policy and contingent liabilities. The IMF Public Debt Sustainability Analyses reveals that many emerging markets have gone through relatively long periods where the real growth rate has outpaced the real effective interest rate (Petia Topalova and Dan Nyberg, 2010).

A study on public debt management in 17 small states indicate that the higher the quality of a country's policies and institutions, the better is its capacity to carry debt and withstand exogenous shocks. It is accepted that sound debt management is undeniable for small states to mitigate the risks of the same. The successful measures in debt management by small states are relatively better than the other developing countries. (Abha Prasad, Malvina Pollock, Ying Li, 2013).

Managing public debt is the major responsibility of the Government to achieve financial stability in the short to medium term and intergenerational equity in the long run. India’s debt portfolio is steady and sustainable because of its strategy consisting of elongation of maturity, low foreign currency debt, large domestic investor base, low risks and other things. India is attempting to consolidate public debt. The debt management is performed by re-issuances, buybacks and switches. The separation of debt management from the central bank has to be effected by focusing on perfect coordination among the Debt Management Office, the Ministry of Finance and the Reserve Bank of India (Harun R Khan, 2014).

During the global crisis, an interaction between public debt management and monetary policy is contemplated worldwide. India requires an independent DMO and a middle office which is already been set up in the Ministry of Finance. The establishment of an independent DMO shifts the responsibility of SDM to the central bank for appropriate coordination between monetary policy and debt management. (Harun R Khan, 2014). M. Ayhan Kose, Franziska Ohnsorge, Peter Nagle, and

Naotaka Sugawara (2020) have found that due to COVID-19 a wave of debt accumulation and financial stress in the EMDEs. These factors have complicated these countries with the mounting fiscal deficit, huge current account deficit and subtle shifts towards riskier debts. The foreign currency corporate debt has increased from 43 percent in 2010 to 26 percent of GDP in 2018. The public debt of nonresident investors was 43 percent in 2018. The government debt on non-concessional terms is found more in the low-income countries.

According to the RBI report on State of the Economy “On the fiscal front, total budgetary and below the line support offered globally amounted to US\$ 16 trillion or 15.3 per cent of global GDP as of March 17, 2021 (IMF, Fiscal Monitor, April 2021), out of which US\$ 10 trillion was in the form of an additional spending or forgone revenue, and US\$ 6 trillion in liquidity support, including government loans, guarantees, and capital injections. An adverse fallout has been that global public debt has increased to 97.3 per cent of GDP in 2020, with aggregate expenditures recording the largest deficits and debts, resulting from an equal decline in revenues and increases in government spending. In other regions, bulging deficits largely reflect plunges in revenues resulting from subdued economic activity” (RBI, 26.04.2021). These studies clearly bring out the nuances of public debt, its consequences, and measures to control it in the countries.

Phases of Public Debt in India

According to the RBI phases of public debt in India consists of periods up to 1867 where public debt was used largely for the purposes of financing campaigns; from 1867 to 1916 during which public debt was for financing railways, canals and other such purposes; periods from 1917 to 1940 public debt was out of the considerations; from 1940 to 1946 was due to wartime inflation, the effort was to supplement wartime incomes; while from 1947 to 1951 it dealt with war, partition and to the economy; in the periods, the Government of India failed to achieve the estimates for borrowings for which credit had been taken in the annual budgets; from 1951 to 1985 the borrowing was for financing the five year plans; from 1985 to 1991 the Government made attempts to align the interest rates on government securities with market interest rates in the wake of the recommendations of the Chakraborti Committee Report; and, from 1991 onwards reforms in the Government Securities market were undertaken and debt management policy was put in to action. Ad-Hoc Treasury bill was abolished; selling of securities through the auction process was implemented; zero-coupon bonds, floating-rate bonds and capital indexed bonds were newly introduced; the Securities Trading Corporation of India was established; Primary Dealers in government securities was launched; the spectrum of maturities was broadened; delivery versus payment was instituted; standard valuation norms were prescribed; and to ensure transparency in operations through the market process, the dissemination of information and movement towards the secondary market was made into action by the authorities (Reserve Bank of India, 2021).

Public Debt in India

The gross borrowing of the Government of India has increased by 64 per cent during the current year (2021) that is; it has jumped from Rs 12.8 lakh crore against the Budget Estimate of Rs 7.8 lakh crore. The Finance Minister reported that “we would need another Rs 80,000 crores for which we would be approaching the markets in these 2 months. To ensure that the economy is given the required push, our BE estimates for expenditure in 2021-2022, are Rs 34.83 lakh crores. This includes Rs 5.54 lakh crores as capital expenditure, an increase of 34.5 per cent over the BE figure of 2020-2021” (The Economic Times, 01.02.2021). The State Governments are in the doldrums financially due to Covid-19 as its appetite is much more with widening revenue deficit under the demand for higher public spending during the same time in our country.

The IMF warned India of an enormous increase in public spending which causes swelling in public debt ratio to 70 percent of the GDP since 1991 and expected to increase further by 17 percent points to almost 90 percent of the same due to Covid-19. It is observed that “In our projections, the increase in public spending, in response to COVID-19, and the fall in tax revenue and economic activity, will make public debt jump by 17 percentage points to almost 90% of GDP.....Going forward, it is projected to stabilise in 2021, before slowly declining up to the end of the projection period, in 2025. Broadly speaking, the pattern of public debt in India is close to the norm around the world” (The Hindu, 15.10.2020). This is much against the NK Singh Committee recommendation of FRBM for a debt-to-GDP ratio of 40 per cent for the central government and 20 per cent for states aiming for a total of 60 per cent general government debt-to-GDP. In addition, some major policy measures by moving from the Public Debt Management Cell to Public Debt Management Agency etc., will curtail the mounting public debt in our country.

Table 1: Outstanding Liabilities of Government of India from 1991-92 to 2020-2021(₹ Crore)

Year (end-March)	Internal debt	of which			Small savings, deposits & provident funds	Other accounts	Reserve funds and deposits	Total internal liabilities (2+6+7+8)	External liabilities	Total liabilities (9+10)
		Market loans	91-day treasury bills	182/364-day treasury bills						
1	2	3	4	5	6	7	8	9	10	11
1991-92	172750	78023	8840	3986	69682	51818	23464	317714	109677	427391
1992-93	199100	81693	20614	8777	77005	59797	23753	359655	120979	480634
1993-94	245712	110611	32595	8386	87877	72478	24556	430623	127798	558421
1994-95	266467	130908	32327	8165	106435	85787	28993	487682	142514	630196
1995-96	307869	163986	43790	1875	121425	92010	33680	554983	148398	703381
1996-97	344476	184101	56519	8241	138955	100088	37919	621437	149564	771001
1997-98	388998	216598	1601	16243	167780	124087	42097	722962	161418	884380
1998-99	459696	285585	1501	10196	206458	126802	41595	834552	177934	1012486
1999-00	714254	355862	1521	14296	66406	134425	47508	962592	186791	1149383
2000-01	803698	428793	1876	16296	96343	144020	58535	1102596	189990	1292586
2001-02	913061	516517	5047	19584	144511	164157	73133	1294862	199639	1494501
2002-03	1020689	619105	9673	26122	226400	172374	80126	1499589	196067	1695656
2003-04	1141706	707965	7184	26132	288378	168094	92376	1690554	184177	1874731
2004-05	1275971	758995	8338	26148	390477	174107	92989	1933544	191182	2124726
2005-06	1389758	862370	16364	35785	479761	186921	109462	2165902	194070	2359972
2006-07	1544975	972801	30802	42625	539450	220160	131295	2435880	201199	2637079
2007-08	1799651	1104564	30371	41381	553620	245081	127043	2725394	210086	2935480
2008-09	2019841	1338194	75595	65721	553518	334091	128682	3036132	263976	3300108
2009-10	2328339	1746619	71549	62993	620627	327457	119453	3395877	249288	3645165
2010-11	2667115	2072033	70391	64479	680561	304697	128762	3781135	278455	4059590
2011-12	3230622	2516953	124656	142379	704762	277904	133877	4347164	322890	4670054
2012-13	3764566	2984309	105142	194663	731409	257424	139904	4893303	332004	5225307
2013-14	4240767	3441641	125761	213374	772609	315421	156051	5484848	374484	5859332
2014-15	4738291	3891734	128961	220490	802230	315630	188857	6045007	366193	6411200
2015-16	5304835	4298784	132855	231840	868561	319800	198512	6691709	406589	7098298
2016-17	5750876	4649487	106840	227962	936137	321857	208099	7216970	408108	7625078
2017-18	6425537	5068408	138726	246557	1006422	324632	252758	8009349	483005	8492354
2018-19	7164805	5500141	92183	328699	1109484	326619	302510	8903418	512641	9416059
2019-20	8057391	5986113	121069	324813	1164071	328770	335216	9885448	585325	10470773
2020-21	8906152	6500983	124228	346654	1238008	331154	374181	10849495	589997	11439492

Notes: 1. Data for 2019-20 are Revised Estimates and data for 2020-21 are budget estimates.
 2. External Liabilities are calculated at current exchange rate.
 3. Sharp decline in 91-day treasury bills is on account of conversion of adhoc treasury bills into special securities in 1997-98.
 4. Internal Debt Data from 2004-05 to 2012-13 include liabilities on account of Market Stabilisation Scheme (MSS).
 5. From 2016-17 onwards, borrowings through Extra-Budgetary Resources (EBR) are included in Internal Debt.
 Source: Budget documents of the Government of India, Status Paper on Government Debt and Quarterly Report on Public Debt Management as given in RBI websites and accessed on 26.12.2020.

Table 1 shows that the total internal liabilities have increased from Rs. 317,704 in 1991-92 to Rs. 108,49,495 in 2020-21 and the growth rate is 3314.97 percent. The growth rate of total internal liabilities during Covid-19 is 35.46 percent. On the other hand, the total external liabilities have increased from Rs. 109,677 in 1991-92 to Rs. 589,997 in 2020-21 and the growth rate is 437.94 percent and its growth rate during Covid-19 is 15.09 percent. Chart 2 clearly explains the outstanding liabilities during the Covid-19 periods in comparison with 1991-92, 2016-17, 2017-18, 2017-19, 2019-20, and 2020-21. A sharp increase in the components of outstanding liabilities is observed from the slope of the curves.

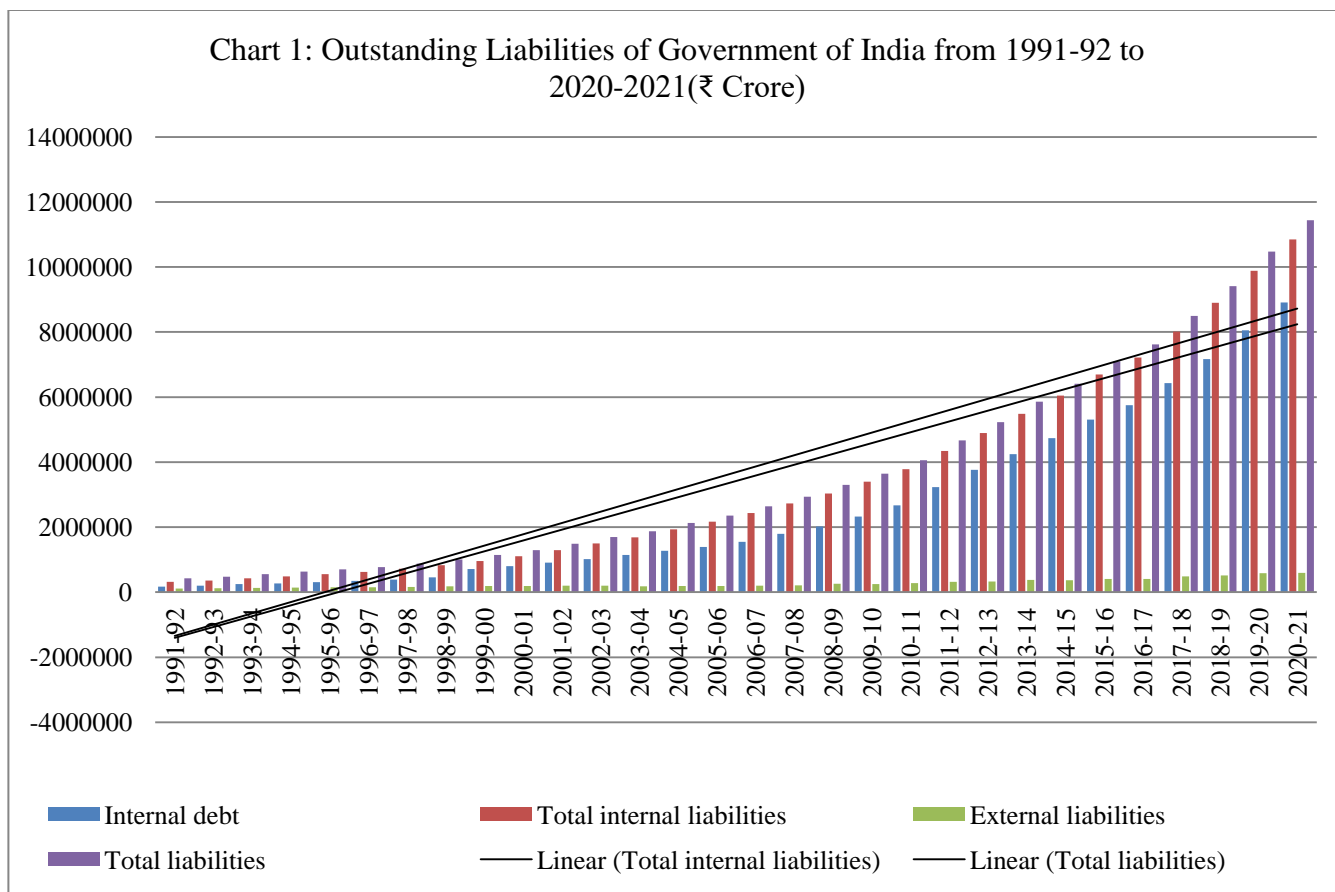


Chart 1 portrays the outstanding liabilities of the Government of India from 1991-92 to 2020-21 which are showing increasing gradient in the chart over the periods. The increase is more after 2015-16 onwards and highest during 2019-20 and 2020-21. The internal liabilities and the internal debt are the major contributors to the total liabilities of the Government of India. This is vividly seen from the gap of the trend lines between total liabilities and total internal liabilities.

		Internal liabilities	External liabilities	Total liabilities
Internal liabilities	Pearson Correlation	1	.992**	1.000**
	Sig. (2-tailed)		.000	.000
	N	30	30	30
External liabilities	Pearson Correlation	.992**	1	.993**
	Sig. (2-tailed)	.000		.000
	N	30	30	30
Total liabilities	Pearson Correlation	1.000**	.993**	1
	Sig. (2-tailed)	.000	.000	
	N	30	30	30

** . Correlation is significant at the 0.01 level (2-tailed).

Pearson correlations between internal liabilities (0.992) and external liabilities (0.993) with total liabilities are highly correlated and they are significant at one percent level.

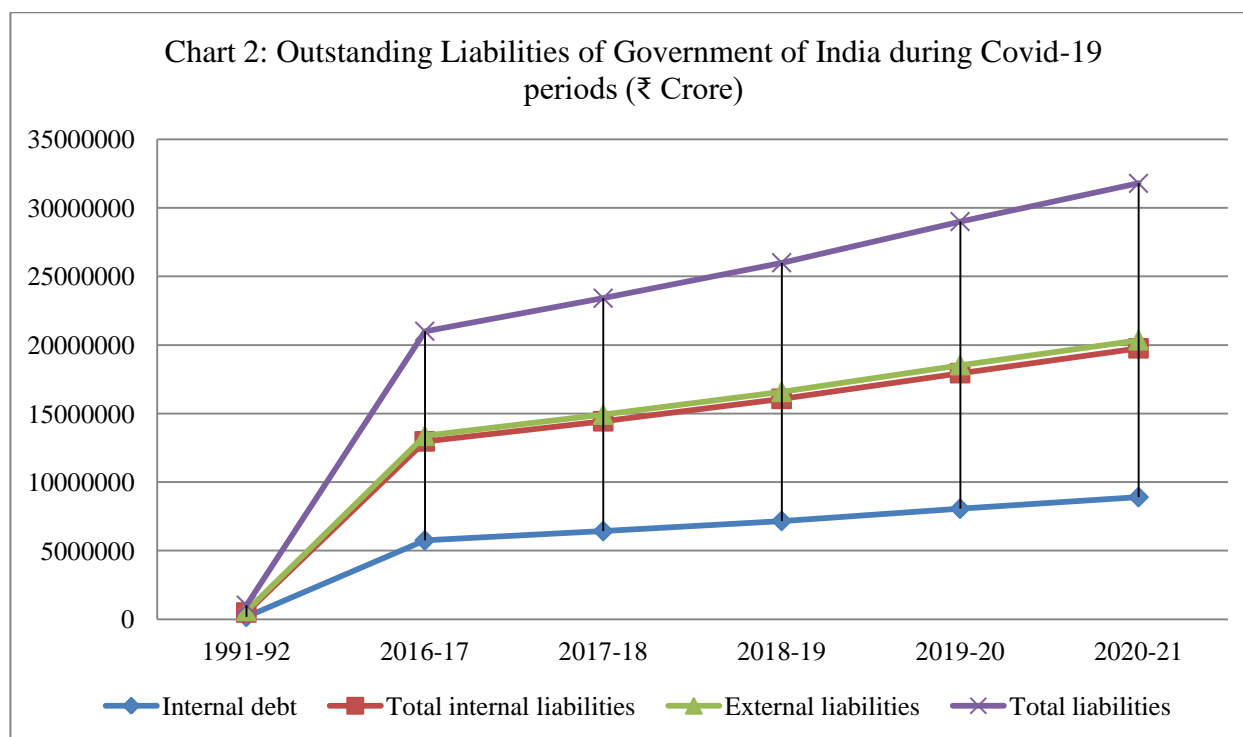
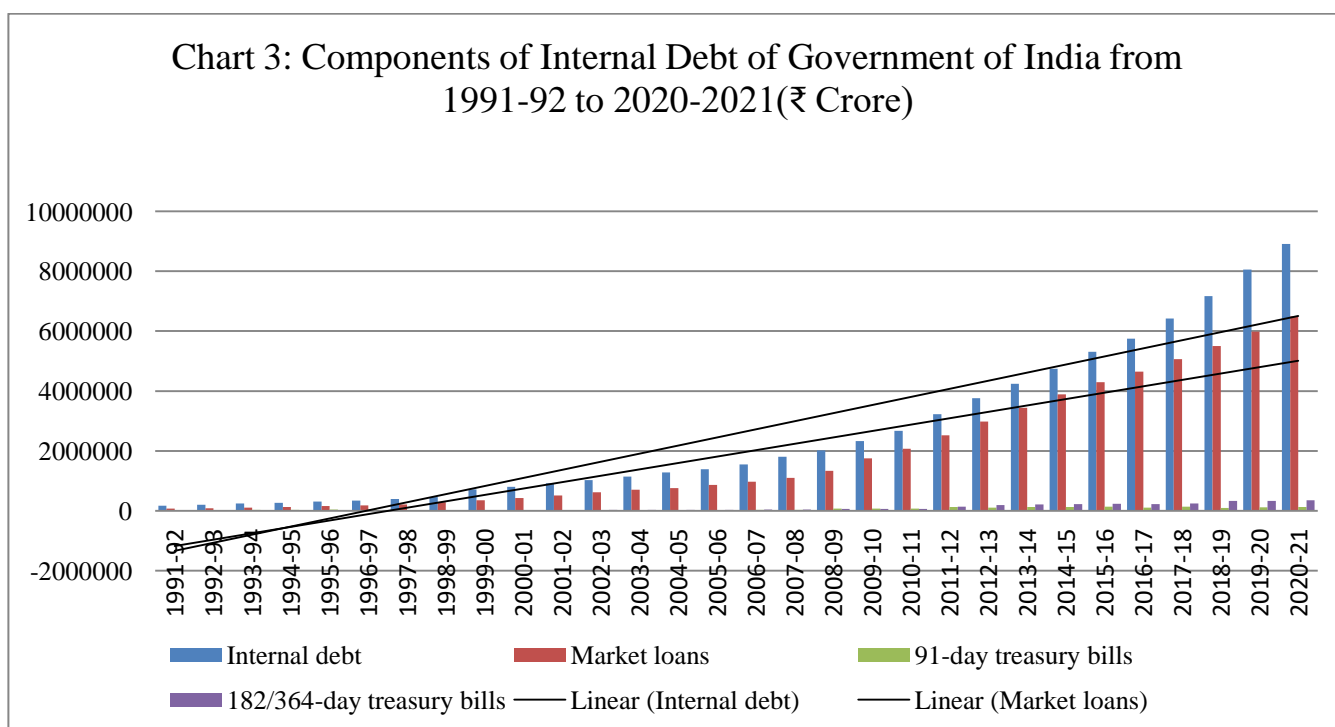


Chart 2 presents the outstanding liabilities of the Government of India during the Covid-19 periods with a comparison from 1991-92, 2016-17 to 2018-19 and between 2019-2020 and 2020-21 which is the Covid-19 periods. The slopes of the total liabilities, total internal liabilities, external liabilities and internal debt indicate the gradual increase over the periods and continuing during the Covid-19 period also in our country. Further, Table 1 explains that the internal debt has increased from Rs.72,750 crores in 1991 to Rs. 89,061,52 crores in 2021 with a growth of 1727.5 percent. It is recorded a growth rate of 24.304 percent from 2018-19 to 2020-21 i.e., during Covid-19 periods. The market borrowings has risen from Rs.78,023 crores in 1991 to Rs. 65,009,83 crores in 2021 with a growth of 780.23 percent. The growth of internal debt, market loans, 91-days treasury bills, and 182/364-day treasury bills are drawn in Chart 3. The gap between the linear trend lines of internal debt and market loans from 2015-16 onwards.



Multiple regression (stepwise) of the following form has been used to test the relationship between Internal debt on market loans, 91-day treasury bills, and 182/364-day treasury bills.

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4$$

Where

Y=GFD

a=constant

x₁= Market loans

x₂=91-day treasury bills

x₃=182/364-day treasury bills

b₁, b₂, and b₃ are coefficients.

The results of the regression coefficients are given in the following Table 3.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	158620.608	48993.993		3.238	.003
	Market loans	1.265	.018	.997	71.595	.000
2	(Constant)	234522.263	44742.575		5.242	.000
	Market loans	1.362	.029	1.073	46.887	.000
	91-day treasury bills	-4.540	1.183	-.088	-3.838	.001
3	(Constant)	226084.262	47573.039		4.752	.000
	Market loans	1.418	.101	1.118	14.056	.000
	91-day treasury bills	-4.456	1.206	-.086	-3.694	.001
	182/364-day treasury bills	-1.045	1.798	-.046	-.581	.566

a. Dependent Variable: Internal debt

The stepwise multiple regression analysis of internal debt on market loans, 91-day treasury bills, and 182/364-day treasury bills is given in Table 3. The highly influencing parameter is a market loan on internal debt which comes in Model 1 and the result is as given below:

$$Y=158620.61+1.27 x_1.....(1)$$

In Model 1, the regression coefficient of market loans is 1.27. This explains that a one rupee increase in market loans increases the internal debt by Rs.1.27.

$$Y=234522.27+1.36 x_1-4.54 x_2.....(2)$$

In Model 2, the regression coefficient of market loans is 1.36 and it explains that a one rupee increase in market loans increases the internal debt by Rs.1.36. The regression coefficient of 91-day treasury bills is -4.54 and it explains that a one rupee increase in 91-day treasury bills decreases the internal debt by Rs.4.54.

$$Y=226084.26+1.42 x_1-4.46 x_2-4.46 x_3...(3)$$

In Model 3, the regression coefficient of market loans is 1.42 and it explains that a one rupee increase in market loans increases the internal debt by Rs.1.42. The regression coefficient of 91-day treasury bills is -4.46 and it explains that a one rupee increase in 91-day treasury bills decreases the internal debt by Rs.4.46. The regression coefficient of 182/364-day treasury bills is -1.05 and it explains that a one rupee increase in this decreases the internal debt by Rs.1.05.

Table 4: India's external debt from 1991 to 2020 (in rupees crores)

Year	Total Multilateral	Government Borrowing						
		Total Government Borrowing	Concessional			Non - Concessional		
			Total	a) IDA	b) Others	Total	a) IBRD	b) Others
1991	40386	38429	25849	25221	628	12580	12161	419
1992	68262	63787	40990	40017	973	22797	21134	1663
1993	77758	72286	48206	47167	1039	24080	21602	2478
1994	82199	75617	50250	49238	1012	25367	22518	2849
1995	89819	82223	55963	54897	1066	26260	22442	3818
1996	98173	89428	60425	59349	1076	29003	23721	5282
1997	105066	94824	63418	62343	1075	31406	24354	7052
1998	116904	104218	70560	69392	1168	33658	25438	8220
1999	129682	114531	78979	77725	1254	35552	25747	9805
2000	137132	120321	84051	82721	1330	36270	25343	10927
2001	145105	127886	89008	87753	1255	38878	26376	12502
2002	155633	138023	96177	94848	1329	41846	28012	13834
2003	142683	129727	102559	101122	1437	27168	19069	8099
2004	131105	120073	101490	100065	1425	18583	14074	4509
2005	138897	127782	105114	103671	1443	22668	16500	6168
2006	145503	133800	105852	104457	1395	27948	19626	8322
2007	154053	141746	108448	107019	1429	33298	21864	11434
2008	157901	144627	107395	105947	1448	37232	22631	14601
2009	201425	181997	127771	126127	1644	54226	29948	24278
2010	193436	170722	116046	114552	1494	54676	28874	25802
2011	216672	190326	120653	119068	1585	69673	39218	30455
2012	257088	222579	138691	136816	1875	83888	45328	38560
2013	279310	235670	143130	141119	2011	92540	48239	44301
2014	321560	268491	163589	161165	2424	104902	53433	51469
2015	328148	269431	154581	152171	2410	114850	57107	57743
2016	359490	294122	166506	163772	2734	127616	61553	66063
2017	354118	288246	156726	154050	2676	131519	60667	70852
2018	371781	304595	164002	160970	3032	140593	61663	78930
2019	396131	320336	160421	157188	3233	159915	67248	92667
2020	449066	362028	166300	162506	3794	195728	82787	112940

Table 4 explains that the total multilateral borrowings have increased from Rs. 40386 in 1991 to Rs. 449,066 in 2020 and it has grown by 1011.93 percent. The Governmental borrowings have increased from Rs. 38,429 in 1991 to Rs. 362,028 in 2020 and it has grown by 842.07 percent. This indicates the growth is higher in the multilateral borrowings during the post-reform periods. In this, the concessional borrowing recorded from Rs. 25,849 in 1991 to Rs. 166,300 in 2020 and the non-

concessional borrowings have increased from Rs. 12,580 in 1991 to Rs. 195,728 in 2020. The total non-government and non-concessional borrowing has increased from Rs. 1957 in 1991 to Rs. 87,038 in 2020 with a growth rate 4347.52.49 percent. Chart 4 combines the external debt of India from 1991 to 2020.

Table 4: India's external debt from 1991 to 2020 (in rupees crores).....continued

Year	Non - Government Borrowing											
	Total Non - Government Borrowing	Concessional	Non - Concessional									
			Total	a) Public sector	a.1) IBRD	a.2) Others	b) Financial institutions	b.1) IBRD	b.2) Others	c) Private sector	c.1) IBRD	c.2) Others
1991	1957	0	1957	303	303	0	1270	872	398	384	330	54
1992	4475	0	4475	1424	962	462	2345	1720	625	706	628	78
1993	5472	0	5472	1777	1300	477	2883	1791	1092	812	709	103
1994	6582	0	6582	2786	2158	628	2718	1667	1051	1078	953	125
1995	7596	0	7596	3248	2013	1235	2559	1605	954	1789	1610	179
1996	8745	0	8745	4628	2942	1686	2464	1643	821	1653	1244	409
1997	10242	0	10242	4738	3341	1397	2391	1618	773	3113	1639	474
1998	12686	0	12686	8765	5217	3548	2171	1011	1160	1750	1321	429
1999	15151	0	15151	10716	6349	4367	2723	1057	1666	1712	1312	400
2000	16811	0	16811	12183	6931	5252	3099	999	2100	1529	1173	356
2001	17219	0	17219	12386	7114	5272	3368	1017	2351	1465	1148	317
2002	17610	0	17610	12729	7298	5431	3736	1049	2687	1145	929	216
2003	12956	0	12956	9255	4378	4877	3177	525	2652	524	298	226
2004	11032	0	11032	7916	4402	3514	2902	381	2521	214	0	214
2005	11115	0	11115	8000	4462	3538	2789	252	2537	326	0	326
2006	11703	0	11703	8510	4594	3916	2628	630	1998	565	0	565
2007	12307	0	12307	9315	4550	4765	2414	655	1759	578	0	578
2008	13274	0	13274	10352	4690	5662	2350	593	1757	572	0	572
2009	19428	0	19428	14298	7105	7193	3721	744	2977	1409	0	1409
2010	22714	0	22714	14919	8544	6375	5385	1343	4042	2410	0	2410
2011	26346	0	26346	15802	9193	6609	7511	1899	5612	3033	0	3033
2012	34509	0	34509	19407	11092	8315	10290	2707	7583	4812	0	4812
2013	43640	0	43640	23414	12749	10664	14370	2973	11397	5856	0	5856
2014	53069	0	53069	28105	14412	13693	18881	3820	15061	6083	0	6083
2015	58717	0	58717	31385	15674	15711	21859	3709	18150	5473	0	5473
2016	65368	0	65368	35409	17005	18404	25190	5984	19206	4769	0	4769
2017	65872	0	65872	32123	16625	15498	29829	7276	22553	3920	0	3920
2018	67186	0	67186	33715	16935	16780	30245	7418	22826	3226	0	3226
2019	75795	0	75795	39028	18652	20375	35155	8449	26706	1612	0	1612
2020	87038	0	87038	41042	21544	19498	44376	8609	35767	1620	0	1620

IDBs : India Development Bonds

FCCBs : Foreign Currency Convertible Bonds

IFC(W) : International Finance Corporation (Washington)

FC(B&O) : Foreign Currency (Banks & Others) Deposits

Note :

1. Other concessional multilateral Government borrowing refers to debt outstanding to Institutions like IFAD, OPEC & EEC (SAC).
2. Multilateral non-concessional Government/ public sector/ financial institutions other borrowings refers to debt outstanding against loans from ADB.
3. Securitised commercial borrowings (inclu. IDBs and FCCBs) includes net Investment by 100% FII debt funds, Resurgent India Bonds (RIBs) and India Millenium Deposits (IMDs).
4. Rupee debt refers to debt owed to Russia denominated in Rupees and converted at current exchange rates, payable in exports.
5. Civillian's rupee debt includes Supplier's credit from end-March 1990 onwards.
6. Short-term debt does not include suppliers' credit of up to 180 days from 1994 till 2004.
7. Multilateral loans do not include revaluation of IBRD pooled loans and exchange rate adjustment under IDA loans for Pre-1971 credits.
8. Debt- service ratio from the year 1992 - 93 includes the revised private transfer contra-entry on account of gold and silver imports.

Source : External Debt Management Unit, Ministry of Finance and Reserve Bank of India.

Chart 4: India's external debt from 1991 to 2020 (in rupees crores)

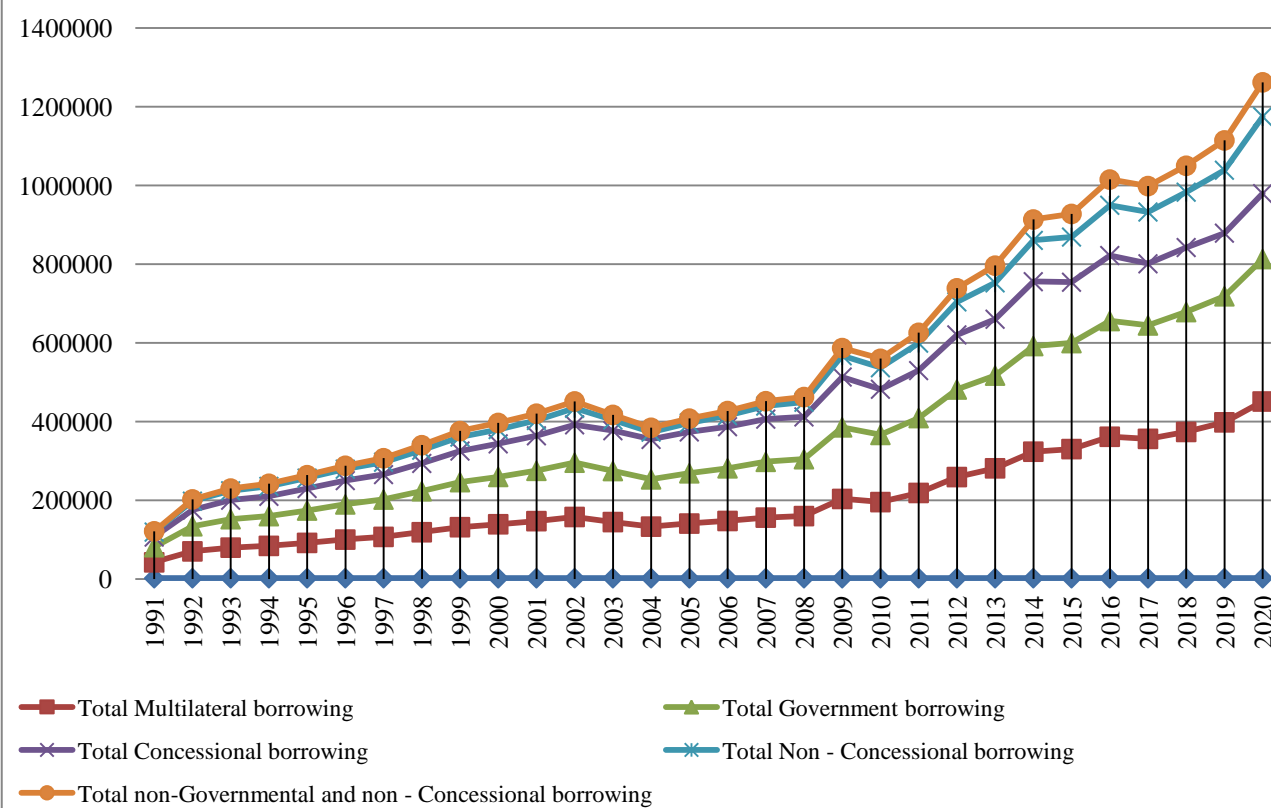
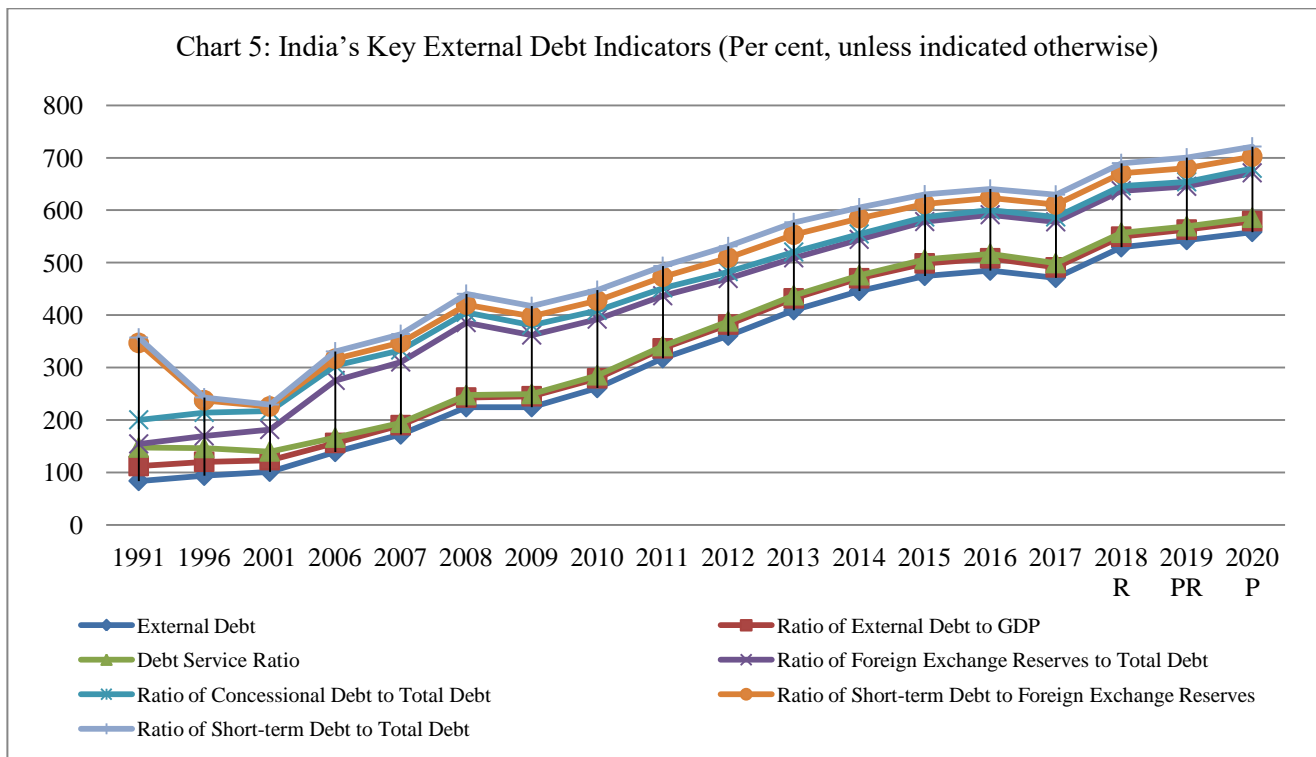


Table 5: India's Key External Debt Indicators (Per cent, unless indicated otherwise)

End-March	External Debt (US\$ billions)	Ratio of External Debt to GDP	Debt Service Ratio	Ratio of Foreign Exchange Reserves to Total Debt	Ratio of Concessional Debt to Total Debt	Ratio of Short-term Debt to Foreign Exchange Reserves	Ratio of Short-term Debt (original maturity) to Total Debt
1991	83.8	28.3	35.3	7.0	45.9	146.5	10.2
1996	93.7	26.6	26.2	23.1	44.7	23.2	5.4
2001	101.3	22.1	16.6	41.7	35.4	8.6	3.6
2006	139.1	17.1	10.1#	109.0	28.4	12.9	14.0
2007	172.4	17.7	4.7	115.6	23.0	14.1	16.3
2008	224.4	18.3	4.8	138.0	19.7	14.8	20.4
2009	224.5	20.7	4.4	112.2	18.7	17.2	19.3
2010	260.9	18.5	5.8	106.9	16.8	18.8	20.1
2011	317.9	18.6	4.4	95.9	14.9	21.3	20.4
2012	360.8	21.1	6.0	81.6	13.3	26.6	21.7
2013	409.4	22.4	5.9	71.3	11.1	33.1	23.6
2014	446.2	23.9	5.9	68.2	10.4	30.1	20.5
2015	474.7	23.8	7.6	72.0	8.8	25.0	18.0
2016	484.8	23.4	8.8	74.3	9.0	23.2	17.2
2017	471.0	19.8	8.3	78.5	9.4	23.8	18.7
2018 R	529.3	20.1	7.5	80.2	9.1	24.1	19.3
2019 PR	543.1	19.8	6.4	76.0	8.7	26.3	20.0
2020 P	558.5	20.6	6.5	85.5	8.6	22.4	19.1
R: Revised. PR: Partially Revised. P: Provisional.							
#: works out to 6.3 per cent with the exclusion of India Millennium Deposits (IMDs) repayments of US\$ 7.1 billion and pre-payment of external debt of US\$ 23.5 million.							

Source: RBI Press Release, 30.06.2020.

Table 5 portrays the mounting external debt of India from 83.8 US\$ billion in 1991 to 558.5 US\$ billion in 2020 with a growth rate of 566.47 percent during the post-reform periods. The ratio of External Debt to GDP has fallen from 28.3 percent in 1991 to 20.6 percent in 2020. The debt Service Ratio also decreased from 35.3 percent in 1991 to 6.5 percent in 2020. Ratio of Foreign Exchange Reserves to Total Debt has increased from 7.0 percent in 1991 to 85.5 percent in 2020. The ratio of Concessional Debt to Total Debt has decreed from 146.5 percent in 1991 to 22.4 percent in 2020. The ratio of Short-term Debt (original maturity) to Total Debt has increased from 10.2 percent in 1991 to 19.1 percent in 2020. Chart 5 presents India's Key External Debt Indicators from 1991 to 2020 that is during the post-reform and the beginning of the Covid-19 periods.



CONCLUSION

Indian is managing the Covid-19 fervently as it causes supply disruptions, health-related issues, lockdown and its impact on various sectors, unemployment, migration, hostile global environment, etc. The pandemic is causing sequential deceleration of all the parameters of macroeconomic factors in our country. The financial position of the Government is disturbed and it is taking all measures to curtail the downtrend that is set in by the pandemic. However, the market borrowing of the Government of India has increased by ₹4.20 lakh crore in 2020-21 and it further increased twice during the same year. The net market borrowings through dated G-sec increased by 141.2 per cent in 2021-21 when compared to 2019-20 and the net market borrowings through dated G-sec financed 61.8 per cent of the centre's budgeted gross fiscal deficit (GFD) as against 50.8 per cent 2019-20. The data indicates the worsening situation of the country to finance its budgetary requirements. The economy gained better momentum due to reform measures initiated by NEP from 1991 onwards but it is shattered by the Covid-19 due to its cascading effects. The spillover effects of Covid-19 is vividly seen in all the sectors and it has halted the growth of the country and the Government is taking measures to give momentum to the economy by way of several restoration measures. Here Hicksian theory is worth considering as he articulated for bringing the economy back to its original peak position from the recessionary phase with appropriate measures in the short run rather than allowing it to continue in recession and finally land up in depression which will require enormous expenditure and more time to get cured in the recovery phase. In addition, India can consider Keynes pump-priming concept and try to restore the economy by neglecting inflation which can be addressed later.

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