A study on revenue and expenditure position of the Government of India Journal of Development Economics and Management Research Studies (JDMS), *A Peer Reviewed Open Access* International Journal ISSN: 2582 5119 (Online) Crossref Prefix No: 10.53422 08(10), 97-112, October-December, 2021 @Center for Development Economic Studies (CDES) Reprints and permissions http://www.cdes.org.in/ http://www.cdes.org.in/

A study on revenue and expenditure position of the Government of India

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Abstract

Tax revenue and non-tax revenue are the major sources of the revenue receipt of the Government. Its volume is determined by the needs and policies of the Government. The Government expenditure is ever demanding and ever ending due to implementation of many populist programmes in the country that is, the expenditure is increasing due to expanding State activities which pilot to a change in government revenues with reasonable tax level. It is noted that the determination of public expenditure leads to consequent increase in tax burden within the community. This article attempts to analyse the revenue position of the Government of India during the post-reform periods and highlighting the Covid-19 periods.

Keywords: India, Tax revenue, non-tax revenue, government expenditure, post-reform, Capital receipts, disinvestment receipts, recovery of loans, eternal loans, revenue expenditure, capital expenditure, expenditure management.

INTRODUCTION

Article

Revenue receipts of the government consist of tax revenue and non-tax revenue. Taxes are in the form of direct and indirect taxes. Tax revenue included proceeds of taxes and other duties levied by the Union government such as income tax, corporate tax, excise duty, customs duty, service tax, etc. The non-tax revenue consists of all receipts from sources other than taxes which come on account of administrative function of the government like interest, dividend, profit, fees, fines and external

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grants etc. Fiscal policies of a country consist of tax and government expenditure. Appropriate fiscal policy determines the level of output path and the growth rate.

The revenue sources of the Government are expanding but whether it is growing in consonance with public expenditure is debatable. It is because of the expanding State activities due to implementation of many populist programmes in the country. Adam Smith (1961) provides three reasons for public expenditure viz., protection against foreign invasion, law and order in the country and erecting and maintaining public institutions and public works. Wagner's law focused on increasing State activity and attempted to explicate the growth of public expenditure ((Mark Blaug, 1978). Pigou (1947) postulated that the higher the aggregate income of the community higher the government expenditure. However, he favoured for the distribution of expenditure "devoted to each of them yields the same return of satisfaction".

Peacock and Wiseman (1961) have argued that a change in government expenditure lead to a change in government revenues with tolerable tax level. They felt that, in situations of sudden war, natural disasters, or stagnation, will push expenditures and in turn increase the level of taxation.

Buchanan and Tullock (1962) have argued that majority vote tender to produce an oversupply of public services. The public services benefit a particular group while the tax is borne by all the people. To quote, "Any one voter will join in coalition with a majority of voters (say 51 out of 100) to gain support for their particular interests (e.g., an access road from their properties to a throughway). The marginal cost of the 51, however, will be only 51 percent of the total cost, since the 49 percent borne by the others (who have no interest in this road is disregarded. Thus oversupply results because part of the cost is imposed on non-beneficiaries".

The focal argument was "that government expenditure, at least in industrialising countries, must increase at faster rate than output; the law was based primarily on empirical observation of Western Europe (Cedric Sandford, 1983). He observed that social progress brought increasing State activity and demanded more government expenditure. He found three reasons for it viz., economic development and increasing division of labour made life more complex which require more resources on police and legal services; new technology and large scale production provided by public corporations; and increasing State activity in health and education also demands more allocation of resources. Moreover, his famous law predicting the growth of government services alongside the growth of national output.

Bauer and Yamey (1963) said that, "state intervention of some kind is indispensable because of indiscriminate benefits, on the ground that all economic activities are inter - related and inter - dependent". The functions of government includes: maintenance of law and order, expenditure yielding indiscriminate benefits, distribution of income and wealth, institutional framework, reform of land tenure, the consolidation of agricultural holdings, problems of resistance of economic change. Samuelson (1967) has differentiated between public and private goods. He said to provide such public goods; market principle need not be applied because in a democratic society... the ultimate justification of the governmental provision of public goods or other activities is the desire of the members of society for such goods and activities, rather than an authorisation determination that such action is desirable (J.F.Due and A.F.Friedlaunder). Musgrave (1976), in his pioneering work, emphasised that the public expenditure in relation to GNP, national income and personal income. The study shows that for providing public goods and public welfare, the public expenditure is inevitable for the governments.

Lindahl's voluntary exchange theory noted that, "the determination of public expenditure in connection with the distribution of the corresponding tax burden among the groups within the

community. The distribution ratio for tax burden is similar to that of prices in the adjustment between supply and demand in any ordinary market" (Jesse Burkhead and Jerry Miner, 1971). Friedman's (1978) tax-and-spend hypothesis suggests that increases in tax revenues lead to increases in government spending and therefore worsening budget deficits.

Thirunavukkkarasu (1999) opined that the new economic policy is advocated for a reduced government spending to control the fiscal deficit in India. The high spending on social services are indispensable due to poverty, illiteracy health and hygienic and other social factors. He compared the social sector expenditure in Tamil Nadu during the pre and post reform period. He also emphasized that the Government of Tamil Nadu has accorded a high priority in the expenditure on the social service. The component wise - expenditure on social services included education, sports and Youth Services, art and culture medical and Public health, family welfare, water supply and sanitation, housing, urban development, welfare of water supply and sanitation, housing urban development, welfare or scheduled caste, scheduled tribes, backward class and others, labour and employment, Social Sovereignty and welfare, nutrition, natural calamities and other Social services.

S.K. Thorat et.al., (2000) and others have used simultaneous equation model to estimate the direct and indirect effects of different types of government expenditure on rural poverty and productivity growth in India by covering the period of 1970-93. The study found that the government expenditure on agricultural research and development and irrigation, rural infrastructure including roads and electricity, and rural development targeted directly to the rural and growth in agricultural productivity. Further, additional public spending on rural roads, education, community development, IRDP and irrigation investments have positively contributed to reduce poverty in the study area.

Deepak S. Parek (2000) states that "The emergence of social infrastructure sector as a driver of economic growth will fundamentally change the structure of the economy and the matter in which competitiveness and the market development will be established. To my mind, it is imperative that the second phase of economic reform focuses on the rapid development of India's social infrastructure, including addressing issues in relation to equity of access across the socio-economic spectrum. Our failure to seize this opportunity will result in India frittering away a unique opportunity to significantly improve the economic and social well being of its people".

Baghestani and McNown's (1994) theory states that the taxation and expenditure are independent from each other and works in opposite directions. Baghestani and McNown (1994) study shows that with regard to USA the expenditure and income decisions are independent from each other and support the institutional difference theory that taxes are not related to government expenditure. Micheal Bleany, Norman Gemmell, and Richard Kneller (2001) by using OECD data set it is found that when 'financed by non-productive expenditure and non-distortionary taxation, productive expenditure raises growth and distortionary taxes reduce it, in accordance with the Prediction of Barro model (1990)'.

Yinusa et al. (2017) have applied asymmetric cointegration test with TAR and MTAR models and found existence of relationship between revenues and expenditures. Irandoust (2018) has analysed government spending and government revenues for Sweden from 1722 to 2011 and found a bidirectional causal relationship between government spending and government income during the periods in the country. Mutinta Champita (2016) study by using Granger causality tests found that causality is running from government expenditure to government revenue. Temel Gurdal, Mucahit Aydin, and Veysel Inal (2021) have found 'positive effects of the taxation policies in the G7 countries on economic growth and government expenditure are indicative of the fact that their taxation policies are in line with their financial purposes. The taxation policies to be implemented on

the basis of the economic conjuncture of countries are a powerful financial tool, with the potential to serve the economic objectives to be achieved'.

With these an attempt is made in this article to study and analyse the revenue position of the Government of India during the post-reform periods and highlighting the Covid-19 periods.

| Year | Tax | Direct | of w | hich | Indirect | of v | vhich | Non- | | Revenue | Capital | Total |
|---------|---------|--------|----------|----------|----------|--------|---------|---------|----------|----------|----------|----------|
| | revenue | tax | Personal | Corpora | tax | Excise | Customs | tax | Interest | receipts | receipts | receipts |
| | (net) | (net) | income | tion tax | | duties | duties | revenue | receipts | (2+9) | | (11+12) |
| | | | tax | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1991-92 | 50069 | 10103 | 1627 | 7853 | 39966 | 16017 | 22257 | 15961 | 10933 | 66030 | 38528 | 104558 |
| 1992-93 | 54044 | 12075 | 1831 | 8899 | 41969 | 16367 | 23776 | 20084 | 12487 | 74128 | 36178 | 110306 |
| 1993-94 | 53449 | 12522 | 1355 | 10060 | 40927 | 17224 | 22193 | 22004 | 15078 | 75453 | 55440 | 130893 |
| 1994-95 | 67454 | 18409 | 3468 | 13822 | 49045 | 21064 | 26789 | 23629 | 15797 | 91083 | 68695 | 159778 |
| 1995-96 | 81939 | 22287 | 4318 | 16487 | 59652 | 22176 | 35757 | 28191 | 18419 | 110130 | 58338 | 168468 |
| 1996-97 | 93701 | 25374 | 4715 | 18567 | 68326 | 23463 | 42851 | 32578 | 22106 | 126279 | 61544 | 187823 |
| 1997-98 | 95672 | 27172 | 3589 | 20016 | 68500 | 25516 | 40193 | 38214 | 25323 | 133886 | 99077 | 232963 |
| 1998-99 | 104652 | 32120 | 5760 | 24529 | 72532 | 28581 | 40668 | 44833 | 30076 | 149485 | 130064 | 279549 |
| 1999-00 | 128271 | 41436 | 9131 | 30692 | 86836 | 34944 | 48419 | 53211 | 33895 | 181482 | 115707 | 297189 |
| 2000-01 | 136658 | 49651 | 23766 | 25177 | 87007 | 49758 | 34163 | 55947 | 32811 | 192605 | 134184 | 326789 |
| 2001-02 | 133532 | 47703 | 22106 | 25133 | 85828 | 54469 | 28340 | 67774 | 35538 | 201306 | 162500 | 363806 |
| 2002-03 | 158544 | 61612 | 27779 | 33893 | 96932 | 62388 | 31898 | 72290 | 37622 | 230834 | 180531 | 411365 |
| 2003-04 | 186982 | 76590 | 30765 | 45706 | 110392 | 70245 | 34586 | 76831 | 38538 | 263813 | 211333 | 475146 |
| 2004-05 | 224798 | 95944 | 35443 | 60289 | 128854 | 77241 | 41811 | 81193 | 32387 | 305991 | 200391 | 506382 |
| 2005-06 | 270264 | 120692 | 45238 | 75187 | 149572 | 86642 | 46645 | 76813 | 22032 | 347077 | 179549 | 526626 |
| 2006-07 | 351182 | 169738 | 62707 | 106701 | 181444 | 92651 | 62819 | 83205 | 22524 | 434387 | 144482 | 578869 |
| 2007-08 | 439547 | 231574 | 86563 | 144660 | 207972 | 96178 | 75382 | 102317 | 21060 | 541864 | 197978 | 739842 |
| 2008-09 | 443319 | 248152 | 86985 | 160797 | 195169 | 81872 | 69217 | 96940 | 20717 | 540259 | 299863 | 840122 |
| 2009-10 | 456536 | 271623 | 94532 | 176797 | 184913 | 84383 | 60223 | 116275 | 21784 | 572811 | 453063 | 1025874 |
| 2010-11 | 569868 | 313501 | 102441 | 209115 | 256367 | 110222 | 97598 | 218602 | 19734 | 788471 | 402428 | 1190899 |
| 2011-12 | 629764 | 343310 | 118224 | 227411 | 286454 | 116226 | 105614 | 121672 | 20252 | 751437 | 568918 | 1320355 |
| 2012-13 | 741877 | 396585 | 140438 | 255570 | 345292 | 141245 | 115890 | 137354 | 20761 | 879232 | 582152 | 1461383 |
| 2013-14 | 815854 | 455829 | 169408 | 285742 | 360025 | 137975 | 121059 | 198870 | 21868 | 1014724 | 563894 | 1578618 |
| 2014-15 | 903615 | 500531 | 188336 | 311453 | 403085 | 153709 | 127994 | 197766 | 23734 | 1101381 | 484448 | 1585829 |
| 2015-16 | 943765 | 449296 | 172748 | 275917 | 494469 | 220473 | 128829 | 251260 | 25378 | 1195025 | 582579 | 1777604 |
| 2016-17 | 1101372 | 521287 | 225214 | 295960 | 580085 | 286088 | 135372 | 272831 | 16229 | 1374203 | 609886 | 1984089 |
| 2017-18 | 1242488 | 606216 | 258461 | 347712 | 636272 | 211393 | 78601 | 192745 | 13574 | 1435233 | 702650 | 2137883 |
| 2018-19 | 1317211 | 723492 | 303508 | 419953 | 593719 | 204021 | 75231 | 235704 | 12145 | 1552916 | 763518 | 2316434 |
| 2019-20 | 1504587 | 747046 | 358048 | 388991 | 757541 | 218217 | 78735 | 345513 | 11027 | 1850100 | 848450 | 2698551 |
| 2020-21 | 1635909 | 853512 | 413716 | 439788 | 782397 | 235021 | 89055 | 385017 | 11042 | 2020926 | 1074306 | 3095233 |

Table 1: Major Components of Receipts of Government of India from 1991-92 to 2020-2021(₹ Crore)

Source : Budget documents of the Government of India and Finance Accounts (various issues), as given in RBI websites and accessed on 26.12.2020.



Table 1 and Chart 1 shows that the various components of receipts of the Government of India during the post-reform periods indicate an increasing trend from 1991-92 to 2020-2021 with wide variation from 2016-17 onwards. Tax net revenue has increased by 3267.31 percent, net direct tax by 8460.196 percent, indirect tax by 1957.66 percent, non-tax revenue by 2412.24 percent, revenue receipt by 3030.62 percent, capital receipt by 2788.38 percent and total receipt by 2960.30 percent from 1991 to 2021. This is endorsed by the Pearson correlation values given in table 3 which portrays that all the values are highly significant 0.01 percent level. The Pearson correlation value is 0.999 between tax revenue and revenue receipts.

| Tabl | Table 3: Correlations between major Components of Receipts of Government of India from | | | | | | | | | |
|--------------|--|----------------|---------------|-------------|----------------|----------|----------|----------|--|--|
| | 1991-92 to 2020-2021 | | | | | | | | | |
| | | Tax | Direct | Indirect | Non-tax | Revenue | Capital | Total | | |
| | | revenue | tax | tax | revenue | receipts | receipts | receipts | | |
| Tax | Pearson Correlation | 1 | .996** | .995** | .958** | .999** | .972** | .996** | | |
| revenue | Sig. (2-tailed) | | .000 | .000 | .000 | .000 | .000 | .000 | | |
| | Ν | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | |
| Direct tax | Pearson Correlation | .996** | 1 | .981** | .950** | .994** | .976** | .994** | | |
| | Sig. (2-tailed) | .000 | | .000 | .000 | .000 | .000 | .000 | | |
| | Ν | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | |
| Indirect tax | Pearson Correlation | .995** | .981** | 1 | .956** | .994** | .958** | .988** | | |
| | Sig. (2-tailed) | .000 | .000 | | .000 | .000 | .000 | .000 | | |
| | Ν | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | |
| Non-tax | Pearson Correlation | .958** | .950** | .956** | 1 | .971** | .942** | .967** | | |
| revenue | Sig. (2-tailed) | .000 | .000 | .000 | | .000 | .000 | .000 | | |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | |
| Revenue | Pearson Correlation | .999** | .994** | .994** | .971** | 1 | .973** | .997** | | |
| receipts | Sig. (2-tailed) | .000 | .000 | .000 | .000 | | .000 | .000 | | |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | |
| Capital | Pearson Correlation | .972** | .976** | .958** | .942** | .973** | 1 | .988** | | |
| receipts | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | | .000 | | |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | |
| Total | Pearson Correlation | .996** | .994** | .988** | .967** | .997** | .988** | 1 | | |
| receipts | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | | | |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | |
| | * | *. Correlation | on is signifi | cant at the | 0.01 level (2- | tailed). | | | | |

Capital Receipts of Government

Capital receipts are loans of the government from the public, foreign countries and institutions, RBI, recovery of loans given by the Centre to states etc. Table 4 presents the major heads of capital receipts of Government of India from 1991-92 to 2020-2021. The data explains that the net market borrowings by 6001.704 percent, small savings by 4244.78 percent, provident funds by 797.17 percent, recovery of loans by 248.58 percent, disinvestment receipts by 6867.23 percent, and total capital receipts by 2788.38 percent from 1991-92 to 2020-2021, but net external loans declined by 85.63 percent during the same periods and special deposits stopped after 2005-06.

| Year | Market | Small | Provide | Special | Recovery | Disinves | External | Total |
|---------|------------|---------|---------|----------|----------|----------|----------|----------|
| | borrowings | savings | nt | deposits | of loans | tment | loans | capital |
| | (net) | | funds | | | receipts | (net) | receipts |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1991-92 | 7510 | 5654 | 2258 | 6670 | 6021 | 3038 | 5421 | 38528 |
| 1992-93 | 3676 | 4373 | 2952 | 7144 | 6356 | 1961 | 5319 | 36178 |
| 1993-94 | 28928 | 7157 | 3716 | 7568 | 6191 | -48 | 5074 | 55440 |
| 1994-95 | 20326 | 14447 | 4134 | 8262 | 6345 | 5078 | 3582 | 68695 |
| 1995-96 | 34001 | 10104 | 4918 | 5295 | 6505 | 362 | 318 | 58338 |
| 1996-97 | 19093 | 12174 | 5417 | 6162 | 7540 | 380 | 2987 | 61544 |
| 1997-98 | 32499 | 20463 | 8417 | 7905 | 8318 | 912 | 1091 | 99077 |
| 1998-99 | 68988 | 33035 | 5737 | 8130 | 10633 | 5874 | 1920 | 130064 |
| 1999-00 | 62076 | 8979 | 6579 | 6526 | 10131 | 1724 | 1180 | 115707 |
| 2000-01 | 73431 | 8316 | 4922 | 8452 | 12046 | 2125 | 7505 | 134184 |
| 2001-02 | 90812 | 8755 | 4173 | 8070 | 16403 | 3646 | 5601 | 162500 |
| 2002-03 | 104126 | - | 4621 | 9326 | 34191 | 3151 | -11934 | 180531 |
| 2003-04 | 88870 | - | 4892 | 110 | 67165 | 16953 | -13488 | 211333 |
| 2004-05 | 50939 | - | 5310 | -5750 | 62043 | 4424 | 14753 | 200391 |
| 2005-06 | 106241 | - | 5545 | 487 | 10645 | 1581 | 7472 | 179549 |
| 2006-07 | 114801 | - | 5178 | - | 5893 | 534 | 8472 | 144482 |
| 2007-08 | 130600 | -11302 | 3897 | - | 5100 | 38795 | 9315 | 197978 |
| 2008-09 | 246975 | -1302 | 8041 | - | 6139 | 566 | 11015 | 299863 |
| 2009-10 | 394371 | 13256 | 16056 | - | 8613 | 24581 | 11038 | 453063 |
| 2010-11 | 326399 | 11233 | 12514 | - | 12420 | 22846 | 23556 | 402428 |
| 2011-12 | 484111 | -10302 | 10804 | - | 18850 | 18088 | 12448 | 568918 |
| 2012-13 | 507445 | 8626 | 10920 | _ | 15060 | 25890 | 7201 | 582152 |
| 2013-14 | 475626 | 12357 | 9753 | _ | 12497 | 29368 | 7292 | 563894 |
| 2014-15 | 457617 | 32226 | 11920 | _ | 13738 | 37737 | 12933 | 484448 |
| 2015-16 | 414931 | 52465 | 11858 | _ | 20835 | 42132 | 12748 | 582579 |
| 2016-17 | 338149 | 67435 | 17745 | _ | 17630 | 47743 | 17997 | 609886 |
| 2017-18 | 450728 | 102628 | 15799 | - | 15633 | 100045 | 7931 | 702650 |
| 2018-19 | 422735 | 125000 | 16059 | - | 18052 | 94727 | 5519 | 763518 |
| 2019-20 | 473972 | 240000 | 18000 | - | 16604 | 65000 | 4933 | 848450 |
| 2020-21 | 544870 | 240000 | 18000 | - | 14967 | 210000 | 4622 | 1074306 |

Table 4: Major Heads of Capital Receipts of Government of India from 1991-92 to 2020-2021(₹ Crore)

Source : Budget documents of the Government of India, as given in RBI websites and accessed on 26.12.2020.

Expenditure of Government of India

The Government of India's major heads of expenditure as given in Table 5 shows that the revenue expenditure increased by 3196.11 percent, capital expenditure increased by 1415.03 percent, and total expenditure increased by 2730.56 percent from 1991-92 to 2020.2021.

| Year | Revenue | 7 | of Which | | Capital | Loans | Capital | | Total |
|---------|-------------|---------|----------|-----------|---------|-----------------|---------|---------|---------|
| | expenditure | Defence | Interest | Subsidies | (7+8) | and advances | outlay | Defence | (2+6) |
| 1 | 2 | 3 | A | 5 | 6 | 7 | 8 | Q | 10 |
| 1001_07 | 82292 | 11442 | 26596 | 12253 | 29122 | 17723 | 11043 | /905 | 111/1/ |
| 1992-93 | 92702 | 12109 | 31075 | 10824 | 29916 | 16297 | 13385 | 5473 | 122618 |
| 1003_0/ | 108169 | 1/1078 | 367/1 | 11605 | 33684 | 20454 | 13080 | 6867 | 1/1853 |
| 1994-95 | 122112 | 16/26 | 44060 | 11854 | 38627 | 20+3+ | 1/1891 | 6819 | 160739 |
| 1995-96 | 139861 | 188/11 | 50045 | 12666 | 38/1/ | 23730 | 1/099 | 8015 | 178275 |
| 1996-97 | 159001 | 20997 | 59478 | 15/199 | 42074 | 27878 | 1/196 | 8508 | 201007 |
| 1997-98 | 180335 | 26174 | 65637 | 18540 | 51718 | 34193 | 17526 | 9104 | 232053 |
| 1998-99 | 216461 | 29861 | 77882 | 23593 | 62879 | 44037 | 18841 | 10036 | 232033 |
| 1999-00 | 249078 | 35216 | 90249 | 23373 | 48975 | 24938 | 24037 | 11855 | 298053 |
| 2000-01 | 277839 | 37238 | 99314 | 26838 | 47753 | 23008 | 24745 | 12384 | 325592 |
| 2000-01 | 301468 | 38059 | 107460 | 31210 | 60842 | 34284 | 26558 | 16207 | 362310 |
| 2002-03 | 338713 | 40709 | 117804 | 43533 | 74535 | 31668 | 20350 | 14953 | 413248 |
| 2003-04 | 362074 | 43203 | 124088 | 44323 | 109129 | 28768 | 34150 | 16863 | 471203 |
| 2004-05 | 384329 | 43862 | 126934 | 45957 | 113331 | 28910 | 52338 | 31994 | 498252 |
| 2005-06 | 439376 | 48211 | 132630 | 47522 | 66362 | 11337 | 55025 | 32338 | 505738 |
| 2006-07 | 514609 | 51682 | 150272 | 57125 | 68778 | 8524 | 60254 | 33828 | 583387 |
| 2007-08 | 594433 | 54219 | 171030 | 70926 | 118238 | 11298 | 106940 | 37462 | 712671 |
| 2008-09 | 793798 | 73305 | 192204 | 129708 | 90158 | 14107 | 76051 | 40918 | 883956 |
| 2009-10 | 911809 | 90669 | 213093 | 141351 | 112678 | 15647 | 97031 | 51112 | 1024487 |
| 2010-11 | 1040723 | 92061 | 234022 | 173420 | 156605 | 24985 | 131619 | 62056 | 1197328 |
| 2011-12 | 1145785 | 103011 | 273150 | 217941 | 158580 | 20737 | 137843 | 67902 | 1304365 |
| 2012-13 | 1243514 | 111277 | 313170 | 257079 | 166858 | 20800 | 146058 | 70499 | 1410372 |
| 2013-14 | 1371772 | 124374 | 374254 | 254632 | 187675 | 19198 | 168478 | 79125 | 1559447 |
| 2014-15 | 1466992 | 136807 | 402444 | 258258 | 196681 | 29218 | 167463 | 81887 | 1663673 |
| 2015-16 | 1537761 | 145937 | 441659 | 264106 | 253022 | 26337 | 226685 | 79958 | 1790783 |
| 2016-17 | 1690584 | 165410 | 480714 | 234809 | 284610 | 36810 | 247800 | 86371 | 1975194 |
| 2017-18 | 1878833 | 186127 | 528952 | 224455 | 263140 | 18027 | 245113 | 90445 | 2141973 |
| 2018-19 | 2007399 | 195572 | 582648 | 222954 | 307714 | 28221 | 279492 | 95231 | 2315113 |
| 2019-20 | 2349645 | 205902 | 625105 | 263557 | 348907 | 27331 | 321576 | 110394 | 2698552 |
| 2020-21 | 2630145 | 209319 | 708203 | 262109 | 412085 | 31763 | 380322 | 113734 | 3042230 |

Table 5: Major Heads of Expenditure of Government of India from 1991-92 to 2020-2021(₹ Crore)

Source: Budget documents of the Government of India, as given in RBI websites and accessed on 26.12.2020.



Chart 2 shows the total capital receipts and total expenditure of the Government of India from 1991-92 to 2020-2021. The gap between total capital receipts and total expenditure are widening between them from 2006-07 onwards and the total expenditure moves away far more than total capital receipts. This is not a good sign revenue and expenditure management in our country. It is all the more worse during the Covid-19 periods. The Karl Pearson correlation coefficient between them is 0.986 which highly significant at one percent level (Table 6).

| Table 6: Correlations between Total capital receipts and total expenditure of the | | | | | | | | |
|---|------------------------|---------------|-------------|--|--|--|--|--|
| Government of India from 1991-92 to 2020-2021 | | | | | | | | |
| | | Total capital | Total | | | | | |
| | | receipts | expenditure | | | | | |
| Pearson Correlation | Total capital receipts | 1.000 | .986 | | | | | |
| | Total expenditure | .986 | 1.000 | | | | | |
| Sig. (1-tailed) | Total capital receipts | • | .000 | | | | | |
| | Total expenditure | .000 | | | | | | |
| Ν | Total capital receipts | 30 | 30 | | | | | |
| | Total expenditure | 30 | 30 | | | | | |

| Year | GFD | GFD | Gross | Financing of GFD | | | | | |
|---------|----------|-------------|---------|------------------|------------------|------------|----------|---------|--|
| | receipts | expenditure | fiscal | External | Internal finance | | | | |
| | | | deficit | finance | Market | Other | Draw | Total | |
| | | | (3-2) | | borrowings | borrowings | down of | (6+7+8) | |
| | | | | | | | cash | | |
| | | | | | | | balances | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| 1991-92 | 69069 | 105394 | 36325 | 5421 | 7510 | 16539 | 6855 | 30904 | |
| 1992-93 | 76089 | 116262 | 40173 | 5319 | 3676 | 18866 | 12312 | 34854 | |
| 1993-94 | 75405 | 135662 | 60257 | 5074 | 28928 | 15295 | 10960 | 55183 | |
| 1994-95 | 96691 | 154394 | 57703 | 3582 | 20326 | 32834 | 961 | 54121 | |
| 1995-96 | 111527 | 171770 | 60243 | 318 | 34001 | 16117 | 9807 | 59925 | |
| 1996-97 | 126734 | 193468 | 66733 | 2987 | 19093 | 31469 | 13184 | 63746 | |
| 1997-98 | 134798 | 223735 | 88937 | 1091 | 32499 | 56257 | -910 | 87846 | |
| 1998-99 | 155359 | 268707 | 113349 | 1920 | 68988 | 42650 | -209 | 111429 | |
| 1999-00 | 183206 | 287922 | 104716 | 1180 | 62076 | 40597 | 864 | 103537 | |
| 2000-01 | 194730 | 313546 | 118816 | 7505 | 73431 | 39077 | -1197 | 111311 | |
| 2001-02 | 204952 | 345907 | 140955 | 5601 | 90812 | 46038 | -1496 | 135354 | |
| 2002-03 | 233985 | 379057 | 145072 | -11934 | 104126 | 50997 | 1883 | 157006 | |
| 2003-04 | 280765 | 404038 | 123273 | -13488 | 88870 | 51833 | -3942 | 136761 | |
| 2004-05 | 310415 | 436209 | 125794 | 14753 | 50940 | 61562 | -1461 | 111041 | |
| 2005-06 | 348658 | 495093 | 146435 | 7472 | 106241 | 53610 | -20888 | 138963 | |
| 2006-07 | 434921 | 577494 | 142573 | 8472 | 114801 | 14782 | 4517 | 134101 | |
| 2007-08 | 580659 | 707571 | 126912 | 9315 | 130600 | 14168 | -27171 | 117597 | |
| 2008-09 | 540825 | 877817 | 336992 | 11015 | 246975 | 35168 | 43834 | 325977 | |
| 2009-10 | 597392 | 1015874 | 418482 | 11038 | 394371 | 14460 | -1386 | 407444 | |
| 2010-11 | 811317 | 1184908 | 373591 | 23556 | 326399 | 17206 | 6430 | 350035 | |
| 2011-12 | 769525 | 1285515 | 515990 | 12448 | 484111 | 35421 | -15990 | 503542 | |
| 2012-13 | 905122 | 1395312 | 490190 | 7201 | 507445 | 26556 | -51012 | 482989 | |
| 2013-14 | 1044092 | 1546950 | 502858 | 7292 | 475626 | 39111 | -19171 | 495566 | |
| 2014-15 | 1139209 | 1649935 | 510725 | 12933 | 457617 | -37485 | 77752 | 497884 | |
| 2015-16 | 1237157 | 1769948 | 532791 | 12748 | 414931 | 91942 | 13170 | 520043 | |
| 2016-17 | 1421946 | 1957564 | 535618 | 17997 | 338149 | 188368 | -8895 | 517622 | |
| 2017-18 | 1535278 | 2126340 | 591062 | 7931 | 450728 | 128312 | 4091 | 583131 | |
| 2018-19 | 1647642 | 2297060 | 649418 | 5519 | 422735 | 222485 | -1321 | 643899 | |
| 2019-20 | 1915100 | 2681948 | 766846 | 4933 | 473972 | 287941 | 0 | 761913 | |
| 2020-21 | 2230926 | 3027263 | 796337 | 4622 | 544870 | 299849 | -53003 | 791715 | |

Table 7: Gross Fiscal Deficit and Financing of Government of India from 1991-92 to 2020-2021(₹ Crore)

Source: Budget documents of the Government of India, as given in RBI websites and accessed on 26.12.2020.

Table 7 portrays the Gross Fiscal Deficit and Financing of Government of India from 1991-92 to 2020-2021 which shows that the GFD receipts has increased by 3229.996 percent, GFD expenditure increased by 2872.33 percent and it has increased the Gross Fiscal Deficit by 2192.26 percent over the post reform periods. The Karl Pearson correlation coefficient between GFD receipt and GFD expenditure is 0.997052 and R² value is 0.8792.

Simple regression results between GFD expenditure (y) on GFD receipt is given in the following Table 8. This result is as given below:

y=46649.31+1.377X(1)

GFD receipts

1.377041

0.020025

This explains that one rupee on GFD receipt increases the GFD expenditure by Rs.1.377. Further, even if GFD receipt is zero the GFD expenditure will be Rs.46,649.31 and the F value is highly significant.

| Table 8: SUMMA | ARY OUTPUT | _ | | | | | |
|----------------|--------------|----------|----------|----------|--------------|----------|----------|
| Regression | Statistics | _ | | | | | |
| Multiple R | 0.997052 | | | | | | |
| R Square | 0.994113 | | | | | | |
| Adjusted R | | | | | | | |
| Square | 0.993903 | | | | | | |
| Standard Error | 66116.55 | | | | | | |
| Observations | 30 | _ | | | | | |
| ANOVA | | | | | | _ | |
| | | | | | Significance | - | |
| | df | SS | MS | F | F | - | |
| Regression | 1 | 2.07E+13 | 2.07E+13 | 4728.589 | 8.99E-33 | | |
| Residual | 28 | 1.22E+11 | 4.37E+09 | | | | |
| Total | 29 | 2.08E+13 | | | | | |
| | | | | | | | |
| | | Standard | | | | Upper | Lower |
| | Coefficients | Error | t Stat | P-value | Lower 95% | 95% | 95.0% |
| Intercept | 46649.31 | 17709.97 | 2.634071 | 0.013587 | 10372.09 | 82926.53 | 10372.09 |

68.76474

8.99E-33

1.336021

1.418062

1.336021

Upper

95.0%

82926.53

1.418062



Multiple regression (step wise in the same order as given in the equation) of the following form has been used to test the relationship among GFD, external finance, market borrowing, other borrowings and draw down of cash balances.

$$\begin{split} Y &= a + b_1 x_1 + b_2 x_2 + b_3 x_{3+} b_4 x_4 \\ Where \\ Y &= GFD \\ a &= constant \\ x_1 &= external finance \\ x_2 &= market borrowing \\ x_3 &= other borrowings \\ x_4 &= draw down of cash balances \\ b_1, b_2, b_3 and b_4 are coefficients. \\ The results of the regression coefficients are given in the following Table 9. \end{split}$$

| Table 9: Multiple regression Coefficients ^a among GFD | | | | | | | | |
|--|---------------------------|--------------|------------|--------------|-----------|------|--|--|
| Model | | Unstanda | ardized | Standardized | t | Sig. | | |
| | | Coeffic | cients | Coefficients | | | | |
| | | В | Std. Error | Beta | | | | |
| 1 | (Constant) | 214155.544 | 55912.079 | | 3.830 | .001 | | |
| | External finance | 11.838 | 5.781 | .361 | 2.048 | .050 | | |
| 2 | (Constant) | 32255.265 | 19778.402 | | 1.631 | .115 | | |
| | External finance | 911 | 1.876 | 028 | 486 | .631 | | |
| | Market borrowings | 1.206 | .071 | .973 | 17.007 | .000 | | |
| 3 | (Constant) | 5576.064 | 6922.270 | | .806 | .428 | | |
| | External finance | 1.437 | .653 | .044 | 2.199 | .037 | | |
| | Market borrowings | .991 | .028 | .799 | 35.214 | .000 | | |
| | Other borrowings | .901 | .062 | .302 | 14.529 | .000 | | |
| 4 | (Constant) | 1.703 | 3.708 | | .459 | .650 | | |
| | External finance | 1.000 | .000 | .030 | 2868.666 | .000 | | |
| | Market borrowings | 1.000 | .000 | .807 | 67043.573 | .000 | | |
| | Other borrowings | 1.000 | .000 | .335 | 29088.312 | .000 | | |
| | Draw down of cash | 1.000 | .000 | .098 | 9638.331 | .000 | | |
| | balances | | | | | | | |
| a. Dep | endent Variable: Gross fi | scal deficit | | | | | | |

The step wise multiple regression analysis results between GFD and financing of GFD variables like external finance and internal finance (market borrowings, other borrowings and draw down of cash balances) is given in Table 9. Highly influencing parameter is external finance on GFD which comes in Model 1 and the result is as given below:

Y=214155.54+11.838 x₁.....(2)

The regression coefficients of model one for external finance is 11.838 which explains that one rupee increase in external finance will increase the GFD by Rs.11.84. Therefore, financing the GFD through external finance must be dropped in accordance the policy formulation as enshrined in our New Economic Policy. In model three, the regression coefficients of the external finance is 1.437, market borrowing is 0.991, for other borrowings is 1.206 and for draw down of cash balances is 0.901.

CONCLUSION

In India, the tax net revenue has increased by 3267.31 percent, non-tax revenue by 2412.24 percent, revenue receipt by 3030.62 percent, capital receipt by 2788.38 percent and total receipt by 2960.30 percent from 1991 to 2021. The capital receipts from 1991-92 to 2020-2021 shows that the net market borrowings increased by 6001.704 percent, recovery of loans by 248.58 percent, disinvestment receipts by 6867.23 percent, and total capital receipts by 2788.38 percent from 1991-92 to 2020-2021, but net external loans declined by 85.63 percent during the same periods. The revenue expenditure increased by 3196.11 percent, capital expenditure increased by 1415.03 percent, and total expenditure increased by 2730.56 percent from 1991-92 to 2020.2021.

Revenue receipts and revenue expenditure are recurring expenses of the government. The total expenditure in 2021-22, is expected Rs 34,83,236 crore, which is one percent more than the revised estimate of 2020-21 and it has increased at an annual rate of 14 percent over 2019-20. The interest payments is Rs 8,09,701 crore in 2021-22, which is 17 percent higher than the revised estimate of 2020-21. In 2021-22, the total expenditure on subsidies is estimated to be Rs 3,69,899 crore, an annual increase of 19 percent over 2019-20. The total expenditure on subsidies is estimated to be Rs 3,69,899 crore in 2021-22 with an annual increase of 19 percent over 2019-20. This is largely due to a higher allocation to food subsidy (Rs 2,42,836 crore in 2021-22 with a 49 percent annual increase as compared to 2019-20), followed by fertiliser subsidy (Rs 79,530 crore in 2021-22 which is one percent annual decrease as compared to 2019-20), petroleum subsidy (40 percent decrease from 2019-20 to 2021-22) and so on. The gap between total capital receipts and total expenditure are widening from 2006-07 onwards. The total expenditure moves away far more than total capital receipts and it is very bad due to the Covid-19. The commendable economic growth achieved by the Indian economy during the reform periods has been slowed down by the unexpected attack of Covid-19. The economic situation is worsened by the consequent waves of the pandemic and entire gamut of Government machinery is put into action only to contain the spread of the killer virus with huge recovery packages.

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