

## Tax Revenue and Financial Deficit of Central and State Governments in India: A Study on Pre and Post Corona Pandemic Period

Dr. Sukanta Sarkar<sup>1\*</sup>

<sup>1</sup>Associate Professor, Department of Economics, Gambella University, Ethiopia.

**Corresponding Author:** Dr. Sukanta Sarkar

*Associate Professor, Department of Economics, Gambella University, Ethiopia.*

**DOI:** 10.67224/ioasdjbm.com.2024.v01i04.003

| ABSTRACT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Original Research Article                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The objective of this paper is to study the tax revenue and financial deficit of the central and state governments in India. It has found that direct and indirect tax revenues have increased since 1994-95, but direct tax has declined due to the corona pandemic. Indirect tax revenue and total tax revenue of the central government did not decline during or after the corona pandemic. The Corona pandemic negatively affected tax revenue of the state governments. Total tax revenue of state governments has increased more than 33 times in the last 28 years. Indirect tax revenue of the state government is higher than the direct tax revenue. The Corona pandemic did not affect the total receipts of the central government. Revenue receipts declined during the corona pandemic period, but recovered in post-corona pandemic period. Revenue receipts are higher than the capital receipts. Total capital receipts of the central government were increased due to the corona pandemic. Market borrowings had the highest contribution in total capital receipts, which was followed by small savings receipt, and disinvestment receipts. Gross fiscal deficit of states receipts and expenditures are increasing continuously, but gross fiscal deficit of states receipts decreased during the corona pandemic. Gross fiscal deficit, and financing of gross fiscal deficit are increased during the post-pandemic period. Gross fiscal deficit of the central government has been increasing since 1995-96. Gross fiscal deficit expenditure of the central government is higher than the gross fiscal deficit receipts. Central government collects funds from internal and external sources for financing the gross fiscal deficit. Gross fiscal deficit, gross primary deficit and revenue deficit of central and state governments were increased due to the corona pandemic. They increased during the post-pandemic period. Therefore, the central government and state government should implement policies for increasing tax revenue and reducing financial deficits.</p> <p><b>Keywords:</b> Central government, financial deficit, State government, and Tax revenue.</p> | <p><b>Article History</b></p> <p>Received: 25-09-2024</p> <p>Accepted: 30-10-2024</p> <p>Published: 07-11-2024</p>                                                                                                                                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <p><b>Copyright © 2024 The Author(s):</b> This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.</p> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                             |

### INTRODUCTION

Revenue management is the process of optimising revenues to maximise profits while minimising costs. With inadequate resources and growing demand for public services, governments must manage revenues in a way that benefits the country and the economy in the long run (Nayak,2017). Revenue management can help governments to improve fiscal stability. Another benefit of government revenue management is that it can prioritise government spending and investments (Jalan, 2019). Governments can use data analytics and modelling to forecast revenues and identify areas of growth or risk. Government revenue management requires a strong culture of accountability

and transparency (Gupta & Singh, 2016). This can be achieved through financial reporting and review processes, as well as open communication and engagement with the general public and stakeholders. Governments collect revenues to provide goods and services to the general public and businesses, and to fulfil revenues (Arjuna & Dolli, 2018).

A deficit is the amount of money that is spent in the budget exceeding the amount of money that is received. Government budget deficit is the amount of money that the government spends more than it receives (Devasia & Karunakaran, 2020). To reduce the deficit, the government will increase its income while cutting

some of its spending. Budget deficit is the amount of money that the government spends more than it receives. The government can raise revenue by raising income taxes. Investing in assets and selling them is another way to reduce income (Deshwal, 2022). The budget deficit is the difference between the government's total spending and total revenue. The first deficit is the money the government has to borrow to pay interest on previous loans. We should not forget that government borrowing includes written promissory notes (Beena & Ritika, 2023). The purpose of critical deficit analysis is to focus on the current budget deficit. In order to roughly understand the amount of borrowing based on the current income surplus, we need to calculate the primary deficit, budget deficit and interest rates (Awasthi & Nagarajan, 2020).

## OBJECTIVES

The general objective of this paper is to study the tax revenue and financial deficit of the central and state governments in India. The specific objectives of this paper are:

1. To study the direct and indirect tax revenues of the central government of India.
2. To scrutinize the direct and indirect tax revenues of state governments of India.
3. To evaluate the major components of central government receipts of India.
4. To observe the major components of state governments receipts of India.
5. To examine the major heads of capital receipts of the central government of India.
6. To study the market borrowings of the central and state governments of India.
7. To evaluate the state's gross fiscal deficit and way of financing in India.
8. To study the gross fiscal deficit of the central government and its financing in India.
9. To examine the combined deficits of central and state governments in India, and
10. To study the relation between annual growth rates of gross national income and gross fiscal deficit of the central government.

## METHODS AND MATERIALS

- (a) **Design and approach:** The present study is based on the secondary data. The data have been collected from reports of the Economic Survey 2023-24, Government of India and Handbook of Statistics on Indian Economy published by Reserve bank of India, Government of India.
- (b) **Method of analysis:** To reveal the growth of tax revenue and financial deficit of central government and state governments in India, different methods of quantitative and qualitative analysis consisting of tabulation, regression analysis and text analysis have been performed.
- (c) **Hypothesis:**  
 $H_{01}$ : There is no relationship between annual growth rates of gross national income and gross fiscal deficit of the central government.  
 $H_{1a}$ : There is a relationship between annual growth rates of gross national income and gross fiscal deficit of the central government.

## RESULTS AND DISCUSSION

Tax revenue affects a country's budget deficit, which is when the government spends more money than it spends in a fiscal year. Revenue deficit occurs when the income statement exceeds the revenue statement (Ramamurthy, 2018). Fiscal deficit represents the total amount the government has borrowed. The income statement shows the amount of credit expected in the upcoming period (Sarkar, 2010). The main cause of a trade deficit is capital expenditure. Revenue deficit occurs when actual revenue and expenditure do not match actual revenue and expenditure (Sarkar, 2017). A budget deficit is when government expenditure exceeds revenue (excluding borrowing) for a year. This indicates that the government is spending more money than it is spending. Now deficit financing is one way to control the budget deficit (Samantara. 2020). Financial deficits can be viewed as both positive and negative. It is good that unsustainable money is not a priority that the government can use to stimulate economic growth and long-term investment in the country. On the other hand, it is bad if it is too high, which can make the debt useless (Parihar & Parihar, 2024).

**Table 1: Direct and Indirect Tax Revenues of Central Government**

| Year    | Direct | Indirect | Total  | Year    | Direct  | Indirect | Total   |
|---------|--------|----------|--------|---------|---------|----------|---------|
| 1994-95 | 26966  | 65328    | 92294  | 2010-11 | 445994  | 343178   | 789172  |
| 1996-97 | 38891  | 89871    | 128762 | 2011-12 | 493947  | 391232   | 885178  |
| 1997-98 | 48274  | 90946    | 139220 | 2012-13 | 558658  | 474767   | 1033425 |
| 1999-00 | 57958  | 113794   | 171752 | 2013-14 | 638542  | 495541   | 1134083 |
| 2001-02 | 69197  | 117177   | 186374 | 2014-15 | 695744  | 545680   | 1241424 |
| 2002-03 | 83085  | 131581   | 214666 | 2015-16 | 741945  | 708013   | 1449958 |
| 2003-04 | 105090 | 147658   | 252748 | 2016-17 | 849713  | 866109   | 1715822 |
| 2004-05 | 132847 | 170546   | 303393 | 2017-18 | 1002037 | 913456   | 1915494 |
| 2005-06 | 165249 | 199398   | 364647 | 2018-19 | 1136615 | 942050   | 2078665 |
| 2006-07 | 230249 | 241263   | 471512 | 2019-20 | 1049549 | 958030   | 2007579 |
| 2007-08 | 312243 | 279104   | 591347 | 2020-21 | 944875  | 1076407  | 2021282 |
| 2008-09 | 333854 | 269645   | 603499 | 2021-22 | 1250000 | 1259929  | 2509929 |

| Year    | Direct | Indirect | Total  | Year    | Direct  | Indirect | Total   |
|---------|--------|----------|--------|---------|---------|----------|---------|
| 2009-10 | 377487 | 243881   | 621368 | 2022-23 | 1420000 | 1331420  | 2751420 |

Source: <https://www.rbi.org.in/scripts/PublicationsView.aspx?id=21912>, Note: in crores INR.

Table 1 discussed the direct and indirect tax revenues of the central government of India. Direct and indirect tax revenues have been increasing since 1994-95, but direct tax revenue was declined in 2020-21 due to the corona pandemic. Indirect tax revenue and total tax revenue of the central government did not decline during or after the corona pandemic. Direct tax revenue was 26966 crores in 1994-95, and 11.36 lakhs crores in 2018-19. It declined during the corona pandemic. Direct tax revenue was 10.49 lakhs crores in 2019-20 and 9.44 lakhs crores in 2020-21, but was increased in 2021-22, and reached 12.50 lakhs crores in 2021-22. Indirect tax revenue was 65328 crores in 1994-95 and was 8.42 lakhs in 2018-19., and finally reached 13.31 lakhs in 2022-23. Total tax revenue of the central Government was 92294 crores in 1994-95, and 20.78 lakhs in 2018-19 and finally 27.51 lakhs in 2022-23. Therefore, it has found that total tax revenue of central government was increase continue during pre and post corona pandemic period. Total revenue of the central government has increased more

than 29 times in the last 28 years. Direct tax revenue of the central government is generally higher than the indirect tax revenue. There is decent growth of tax revenues of the Central Government in the post-corona pandemic period.

Direct taxes are taxes levied on the income or wealth of individuals and organisations. Taxes such as income and business taxes fall under the category of direct taxes. Direct taxes ensure that taxation is fair and that people earn more income (Singh *et. al.*, 2017). Direct taxes are also useful in controlling inflation because changes in prices help control supply and demand in the economy. Indirect taxes are taxes levied on the consumption of goods and services. Indirect taxes are taxes paid on goods for which a service fee is paid by consumers. They do not charge fees to individuals or companies. Government officials find it easy to pay taxes directly as it is paid directly and saves a lot of time and effort (Sarkar *et. al.*, 2024).

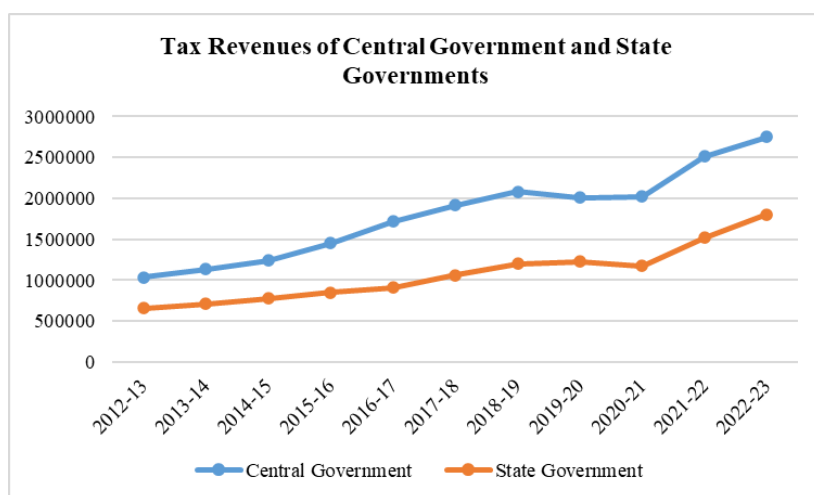
**Table 2: Direct and Indirect Tax Revenues of State Governments**

| Year    | Direct | Indirect | Total  | Year    | Direct | Indirect | Total   |
|---------|--------|----------|--------|---------|--------|----------|---------|
| 1994-95 | 6902   | 47090    | 53992  | 2010-11 | 62725  | 398170   | 460895  |
| 1996-97 | 8288   | 60255    | 68543  | 2011-12 | 77299  | 480274   | 557573  |
| 1997-98 | 6352   | 68800    | 75152  | 2012-13 | 92568  | 561966   | 654534  |
| 1999-00 | 12979  | 86813    | 99792  | 2013-14 | 88231  | 624231   | 712462  |
| 2001-02 | 15679  | 106894   | 122573 | 2014-15 | 107696 | 671609   | 779305  |
| 2002-03 | 17217  | 120135   | 137352 | 2015-16 | 88176  | 758967   | 847143  |
| 2003-04 | 20213  | 135138   | 155351 | 2016-17 | 109914 | 796409   | 906325  |
| 2004-05 | 23981  | 158001   | 181982 | 2017-18 | 119152 | 943488   | 1062640 |
| 2005-06 | 30179  | 181768   | 211947 | 2018-19 | 109468 | 1090814  | 1200282 |
| 2006-07 | 38829  | 213682   | 252511 | 2019-20 | 166654 | 1057348  | 1224002 |
| 2007-08 | 43446  | 242703   | 286149 | 2020-21 | 169931 | 1002177  | 1172108 |
| 2008-09 | 44132  | 278673   | 322805 | 2021-22 | 164088 | 1352469  | 1516557 |
| 2009-10 | 47387  | 315856   | 363243 | 2022-23 | 222678 | 1577173  | 1799851 |

Source: <https://www.rbi.org.in/scripts/PublicationsView.aspx?id=21912>, Note: in crores INR.

Table 2 discussed the direct and indirect tax revenues of State Governments in India. It has found that total tax revenue of state governments was declined 2020-21 due to the corona pandemic. Direct tax revenue of state governments was 6902 crores in 1994-95 and was 1.09 lakhs crores in 2018-19 and finally 2.22 lakhs crores in 2022-23. Indirect tax revenue of state governments was 47090 crores in 1994-95 and was 1.09 lakhs crores in 2018-19. It was declined to 1.05 crores in 2019-20 and further declined in 2020-21 and reached 1.002 lakhs crores. Finally, it was 15.77 lakhs crores in 2022-23. Total tax revenues of State Governments were 53.99

thousand crores in 1994-95 and were 12.24 lakhs crores in 2019-20. It declined in 2020-21 and reached 11.72 lakhs crores due to the corona pandemic. Finally, it reached 17.99 lakhs in 2022-23. Therefore, the corona pandemic negatively affected tax revenue of the state governments. Total tax revenue of state governments has increased more than 33 times in the last 28 years. Indirect tax revenue of the state government is higher than the direct tax revenue. There is fast recovery of tax revenues of the Central Government in the post-corona pandemic period.



**Figure 1: Trend of tax revenue of Central Government and State Governments**

The above figure 1 shows that tax revenue of central government and state governments have increased since 2012-13, but declined during 2019-21 due to the corona pandemic. There is steady growth of

tax revenues during the post-pandemic period. Tax receipts of the central government are higher than the tax receipts of state governments.

**Table 3: Major Components of Central Government Receipts**

| Year    | Revenue Receipts | Capital Receipts | Total Receipts | Year    | Revenue Receipts | Capital Receipts | Total Receipts |
|---------|------------------|------------------|----------------|---------|------------------|------------------|----------------|
| 1994-95 | 91083            | 68695            | 159778         | 2010-11 | 788471           | 402428           | 1190899        |
| 1996-97 | 126279           | 61544            | 187823         | 2011-12 | 751437           | 568918           | 1320355        |
| 1997-98 | 133886           | 99077            | 232963         | 2012-13 | 879232           | 582152           | 1461383        |
| 1999-00 | 181482           | 115707           | 297189         | 2013-14 | 1014724          | 563894           | 1578618        |
| 2001-02 | 201306           | 162500           | 363806         | 2014-15 | 1101381          | 484448           | 1585829        |
| 2002-03 | 230834           | 180531           | 411365         | 2015-16 | 1195025          | 582579           | 1777604        |
| 2003-04 | 263813           | 211333           | 475146         | 2016-17 | 1374203          | 609886           | 1984089        |
| 2004-05 | 305991           | 200391           | 506382         | 2017-18 | 1435233          | 702650           | 2137883        |
| 2005-06 | 347077           | 179549           | 526626         | 2018-19 | 1552916          | 763518           | 2316434        |
| 2006-07 | 434387           | 144482           | 578869         | 2019-20 | 1684059          | 997301           | 2681360        |
| 2007-08 | 541864           | 197978           | 739842         | 2020-21 | 1633920          | 1883105          | 3517024        |
| 2008-09 | 540259           | 299863           | 840122         | 2021-22 | 2169905          | 1621353          | 3791258        |
| 2009-10 | 572811           | 453063           | 1025874        | 2023-24 | 2632281          | 1882603          | 4514884        |

**Source:** <https://www.rbi.org.in/scripts/PublicationsView.aspx?id=21899>, Note: in crores INR.

Table 3 represented the major components of central government receipts. It has found that revenue and capital receipts have increased since 1996-97. Revenue receipts of the central government was 91083 crores in 1994-95 and was 16.84 lakhs crores in 2019-20. It declined in 2020-21 due to the corona pandemic and reached 16.33 lakhs crores. Finally, it was 26.32 lakhs in 2023-24. Capital receipts of the central government was 61.54 thousand crores in 1996-97 and 99.73 thousand crores in 2019-20 and finally reached 18.82 lakhs crores in 2023-24. Total receipts of the central government were 1.59 lakhs crores in 1994-95 and 23.16 lakhs crores in 2018-19 and finally reached 45.14 lakhs crores in 2023-24. Therefore, the corona pandemic did not affect the total receipts of the central government. Revenue receipts declined during the corona pandemic period, but

recovered in post-corona pandemic period is noticeable. Revenue receipts are higher than the capital receipts. Total receipts of the central government were increased more than 28 times during 1994-95 to 2023-24.

Revenue is the amount of money a business earns from its daily operations. These are recurring in nature and directly affect the profit and loss of the business. Therefore, revenue needs to be disclosed in the profit and loss of a company or organisation. Capital gains are profits that create liabilities or reduce financial assets (Tagat, 2019). They are also referred to as income. Capital gains can be debt-free or debt-enhancing. Loans from the public, foreign governments and the Reserve Bank of India constitute a significant portion of capital gains (Srinivasulu & Kumar, 2022).

**Table 4: Major Components of State Governments Receipts**

| Year    | Revenue Receipts | Tax Receipts | Share in Central Taxes | Non-tax Receipts | Capital Receipts | Total Receipts |
|---------|------------------|--------------|------------------------|------------------|------------------|----------------|
| 1994-95 | 120303           | 78832        | 24885                  | 41472            | 43190            | 163493         |
| 2000-01 | 232509           | 164314       | 50734                  | 68195            | 109705           | 342214         |
| 2003-04 | 309187           | 221117       | 67080                  | 88074            | 205641           | 514828         |
| 2006-07 | 530556           | 372841       | 120293                 | 157714           | 143049           | 673605         |
| 2010-11 | 935347           | 680198       | 219489                 | 255149           | 238228           | 1173575        |
| 2014-15 | 1591583          | 1117113      | 337835                 | 474471           | 416482           | 2008065        |
| 2015-16 | 1832885          | 1353336      | 506191                 | 479549           | 557960           | 2390845        |
| 2016-17 | 2046401          | 1520773      | 607861                 | 525628           | 675383           | 2721784        |
| 2017-18 | 2321241          | 1735646      | 605186                 | 585596           | 619924           | 2941166        |
| 2018-19 | 2620353          | 1961739      | 746894                 | 658614           | 698644           | 3318998        |
| 2019-20 | 2670138          | 1874679      | 650687                 | 795458           | 1153115          | 3823252        |
| 2020-21 | 2586622          | 1767105      | 595227                 | 819517           | 1147488          | 3734110        |
| 2021-22 | 3352863          | 2261342      | 740118                 | 1091521          | 1157599          | 4510462        |
| 2022-23 | 3856878          | 2616501      | 829312                 | 1240378          | 1213269          | 5070147        |

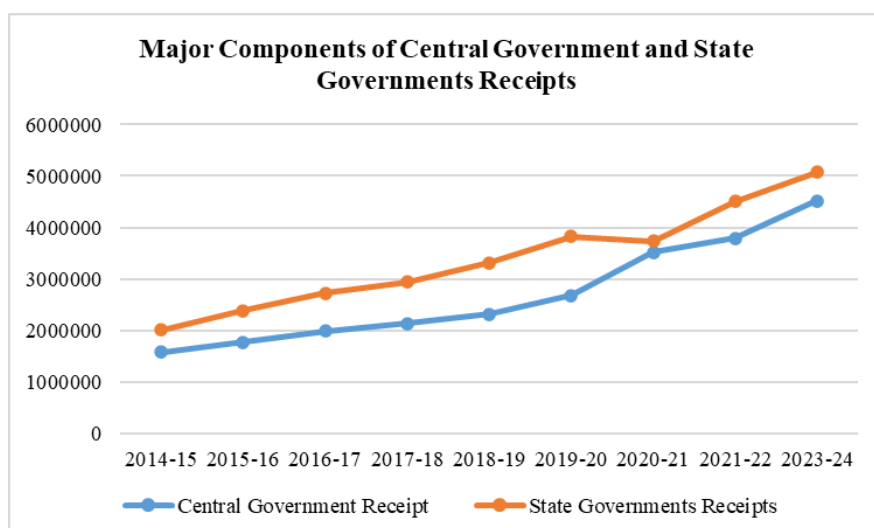
**Source:** <https://www.rbi.org.in/scripts/PublicationsView.aspx?id=21906>, Note: in crores INR.

Table 4 discussed the major components of State Governments receipts. It has found that major components of state governments receipts were affected due to the corona pandemic. Revenue receipts of state governments was 1.20 lakhs crores in 1994-95 and 2.67 lakhs crores in 2019-20, It was declined in 2020-21 due to corona pandemic and reached 2.58 lakhs crores. Finally, it reached 3.85 lakhs crores in 2022-23. Revenue receipts increased more than 32 times during 1994-95 to 2022-23. Tax receipts of state governments was 78832 crores in 1994-95 and 18.74 lakhs crores in 2019-20, It was declined in 2020-21 due to corona pandemic and reached 17.67 lakhs crores. Finally, it reached 26.16 lakhs crores in 2022-23. Tax receipts increased more than 33 times during 1994-95 to 2022-23. Share in central taxes of state governments was 24885 crores in 1994-95 and 7.46 lakhs crores in 2018-19. It declined in 2020-21 due to the corona pandemic and reached 5.95 lakhs crores. Finally, it reached 8.29 lakhs crores in 2022-23. State share in central taxes was increased more than 33 times during 1994-95 to 2022-23.

Non-tax receipts of state governments were 41472 crores in 1994-95 and 6.58 lakhs crores in 2018-19, and reached 12.4 lakhs crores in 2022-23. Non-tax receipts were increased more than 29 times during 1994-95 to 2022-23. Capital receipts of state governments was 43190 crores in 1994-95 and 11.53 lakhs crores in 2019-20. It declined in 2020-21 due to the corona pandemic and reached 11.47 lakhs crores. Finally, it reached 12.13 lakhs crores in 2022-23. Capital receipts increased more than 33 times during 1994-95 to 2022-23. Total receipts

of state governments were 1.63 crores in 1994-95 and 38.23 lakhs crores in 2019-20. It declined in 2020-21 due to the corona pandemic and reached 37.34 lakhs crores. Finally, it reached 50.7 lakhs crores in 2022-23. Total receipts were increased more than 31 times during 1994-95 to 2022-23. Therefore, there are negative effects of the corona pandemic on total receipts of state governments.

Taxes are amounts that must be paid to the government by individuals or businesses without any direct benefit in return. The total of the revenues from taxes and all other government duties is called tax revenue. They come from direct taxes or direct taxes. Tax revenue is the amount of money the government collects from taxes. Taxation is a major source of government revenue. Revenue can come from individuals, the public sector, businesses, resource use, and/or foreign aid. Non-tax revenue refers to revenue that the government receives from non-tax sources. These are not revenues from public taxes. Examples of non-taxable revenue include revenues from government projects. These costs may range from administrative fees, licensing fees, and charges for the use of commercial products and public services. Central sales tax is a tax imposed on sales that occur during interstate trade and commerce within a country. Basically, it is a tax that people have to pay on goods sold by a state enterprise. The central government levies income tax (excluding agricultural income tax that may be levied by the state government), customs duty, central excise duty, and special excise duty (Thayyib *et. al.*, 2024).



**Figure 2: Major components of central government and state governments receipts.**

Figure 2 shows that total receipts of central and state governments are increasing constantly, but declined during 2020-21 due to the corona pandemic. Total

receipts of state governments are higher than the total receipt of the central government.

**Table 5: Major Heads of Capital Receipts of the Central Government**

| Year    | Market borrowings (net) | Small savings | Provident funds | Recovery of loans | Disinvestment receipts | External loans (net) | Total capital receipts |
|---------|-------------------------|---------------|-----------------|-------------------|------------------------|----------------------|------------------------|
| 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 | 473968                  | 240000        | 11635           | 18316             | 50304                  | 8682                 | 997301                 |
| 2020-21 | 1032907                 | 483733        | 18514           | 19729             | 37897                  | 70180                | 1883105                |
| 2021-22 | 704097                  | 551269        | 10317           | 24737             | 13627                  | 36147                | 1621353                |
| 2022-23 | 1108183                 | 438919        | 20000           | 23500             | 50000                  | 23874                | 1842061                |
| 2023-24 | 1180911                 | 471317        | 20000           | 23000             | 51000                  | 22118                | 1882603                |

**Source:** <https://www.rbi.org.in/scripts/PublicationsView.aspx?id=21900>, Note: in crores INR.

Table 5 depicted major heads of capital receipts of the Central Government. It has found that total capital receipts were suddenly increased in 2020-21 due to the corona pandemic. Net market borrowings was 5.07 lakhs crores in 2012-13 and 4.73 lakhs crores in 2019-20, but was reached 10.32 lakhs crores in 2020-21 due to the corona pandemic, and finally was 11.8 lakhs crores in 2023-24. Small savings receipt was 8626 crores in 2012-13 and 1.25 lakhs crores in 2018-19. It unexpectedly reached 4.83 lakhs crores in 2020-21 due to the corona pandemic. Provident funds receipt was 9753 crores in 2013-14 and was 11635 in 2019-20. It was increased in 2020-21 and reached 18514 crores in 2021-22. It was finally 20000 in 2023-24. Recovery of loans by the central government was 12497 crores in 2013-14 and 23000 crores in 2023-24. Disinvestment receipts were 25890 crores in 2012-13 and 51000 crores in 2023-24. Net external loans was 7201 crores in 2012-13 and was

8682 crores in 2019-20. It was unexpectedly increased to 70180 crores in 2020-21 due to the corona pandemic. Total capital receipts of the central government were 5.82 lakhs crores in 2012-13 and 9.97 lakhs crores in 2019-20. It was raised 18.83 lakhs crores in 2020-21 due to the corona pandemic. Therefore, total capital receipts of the central government were increased due to the corona pandemic. Market borrowings had the highest contribution in total capital receipts, which was followed by small savings receipt, and disinvestment receipts.

Small Savings Schemes are financial instruments administered by the central government to encourage households to increase their savings. This small savings scheme is similar to a savings bank account. Through this savings scheme, a person can earn income from his savings once a month by investing for more than five years. Provident fund is an investment

fund provided by employers and employees as a long-term savings fund to support the retirement of employees. Income: Volunteers. A health insurance fund is a retirement savings plan to which employees contribute a portion of their salary. Credit recovery refers to measures taken by banks or financial institutions to recover bad loans. This process is initiated when the borrower fails to make payments as per the terms agreed in the loan agreement. The credit recovery process usually begins when the borrower fails to make repayments for a long period of time, which results in the lender declaring the borrower as non-compliant/non-compliant. When the loan is not legal, the lender

evaluates the situation to determine the appropriate course of action. Disinvestment refers to the sale or disposal of assets, usually central and state-owned public institutions, projects or other assets by the government. Investment income is the income that the government receives from the sale of assets in the public sector. They are considered capital gains because they reduce the government's assets. External debt is money that a country borrows from non-resident lenders such as the government, financial institutions or international financial institutions. This loan is the country's obligation to repay in the future and can be a combination of short-term and long-term liabilities.

**Table 6: Market Borrowings of the Central and State Governments**

| Year    | Centre |        | State  |        | Year    | Centre  |         | State  |        |
|---------|--------|--------|--------|--------|---------|---------|---------|--------|--------|
|         | Gross  | Net    | Gross  | Net    |         | Gross   | Net     | Gross  | Net    |
| 1993-94 | 50388  | 28526  | 4145   | 3638   | 2012-13 | 688471  | 507473  | 177279 | 146651 |
| 1995-96 | 40509  | 26790  | 6274   | 5931   | 2013-14 | 700456  | 474976  | 196663 | 164585 |
| 1997-98 | 59637  | 40494  | 7749   | 7193   | 2014-15 | 741201  | 465449  | 240842 | 207458 |
| 1999-00 | 99630  | 73077  | 13706  | 12405  | 2015-16 | 739033  | 445466  | 294560 | 259369 |
| 2001-02 | 133801 | 92302  | 18707  | 17261  | 2016-17 | 724526  | 396690  | 381979 | 342651 |
| 2003-04 | 147636 | 88816  | 50521  | 46376  | 2017-18 | 747685  | 465569  | 419100 | 340281 |
| 2007-08 | 188205 | 109504 | 67779  | 56224  | 2018-19 | 779896  | 471948  | 478323 | 348643 |
| 2008-09 | 318550 | 242317 | 118138 | 103766 | 2019-20 | 927670  | 482746  | 634521 | 487454 |
| 2009-10 | 492497 | 394358 | 131122 | 114883 | 2020-21 | 1828564 | 1383683 | 798816 | 651777 |
| 2010-11 | 479482 | 326399 | 104039 | 88398  | 2021-22 | 1535178 | 812659  | 701626 | 492483 |
| 2011-12 | 600382 | 484319 | 158632 | 136643 | 2022-23 | 1866284 | 1145748 | 758392 | 518829 |

**Source:** <https://www.rbi.org.in/scripts/PublicationsView.aspx?id=21914>, Note: in crores INR.

Table 6 discussed the market borrowings of the Central and State Governments. It has found that gross and net market borrowings of the Central and State Governments increased in the post-pandemic period. Gross and net market borrowings of the Central government were respectively 50388 crores and 28526 crores in 1993-94 and 9.27 lakhs crores and 4.82 lakhs crores in 2019-20. It was increased respectively 18.28 lakhs crores and 13.83 lakhs crores in 2020-21. Therefore, gross and net market borrowings of the central government were increased more than two and three times between 2019-20 to 2020-21. Gross and net market borrowings of the Central government were respectively 4145 crores and 3638 crores in 1993-94 and 6.34 lakhs crores and 4.87 lakhs crores in 2019-20. It was increased respectively 7.98 lakhs crores and 6.51 lakhs crores in 2020-21. Therefore, gross and net market borrowings of centre and state governments increased

between 2019-20 to 2020-21 due to the corona pandemic.

Business loans are a way for the government to raise money from businesses. The government plans to use the credit market to close the income gap and for other purposes. The federal government sets a budget for loans to the states at the beginning of the fiscal year. The government then agrees that the states will increase open market lending and seek credit approval from central financial institutions. The business credit facility includes dated certificates and 364-day Treasury bills. Net borrowing is the amount of money the government borrows in a year. These accounts represent the amount of money the government has available for revenue or capital expenditure. All loans for a year, plus loans that are repaid on previous loans.

**Table 7: States Gross Fiscal Deficit and Way of Financing**

| Year    | GFD Receipts | GFD Expenditure | Gross Fiscal Deficit | Financing of Gross Fiscal Deficit |                   |                  |        |
|---------|--------------|-----------------|----------------------|-----------------------------------|-------------------|------------------|--------|
|         |              |                 |                      | Loans from Central Government     | Market Borrowings | Special security | Others |
| 1999-00 | 202927       | 293026          | 90098                | 12178                             | 12664             | 26416            | 38840  |
| 2003-04 | 309187       | 429816          | 120631               | 13940                             | 47286             | 18003            | 41402  |
| 2010-11 | 936588       | 1098050         | 161461               | 710                               | 88776             | 38626            | 33349  |
| 2012-13 | 1252125      | 1447595         | 195470               | 1730                              | 146249            | -173             | 47665  |
| 2014-15 | 1592729      | 1919920         | 327191               | 963                               | 206441            | 24000            | 95768  |

| Year    | GFD Receipts | GFD Expenditure | Gross Fiscal Deficit | Financing of Gross Fiscal Deficit |                   |                  |        |
|---------|--------------|-----------------|----------------------|-----------------------------------|-------------------|------------------|--------|
|         |              |                 |                      | Loans from Central Government     | Market Borrowings | Special security | Others |
| 2015-16 | 1834019      | 2254690         | 420670               | 1039                              | 258367            | 27097            | 134167 |
| 2016-17 | 2046780      | 2581112         | 534332               | 5229                              | 351672            | -31985           | 209416 |
| 2017-18 | 2321416      | 2731910         | 410494               | 4634                              | 344616            | -32444           | 93688  |
| 2018-19 | 2621247      | 3084017         | 462770               | 8604                              | 373111            | -33574           | 114630 |
| 2019-20 | 2670412      | 3195122         | 524710               | 10939                             | 497410            | -32260           | 48621  |
| 2020-21 | 2596769      | 3401343         | 804574               | 135578                            | 663105            | -31177           | 37068  |
| 2021-22 | 3359611      | 4242946         | 883335               | 143923                            | 601289            | -30003           | 168126 |
| 2022-23 | 3862868      | 4745678         | 882811               | 75218                             | 689788            | -31392           | 149196 |

Source: <https://www.rbi.org.in/scripts/PublicationsView.aspx?id=21909>, Note- in crores INR.

Table 7 discussed the status of the state's gross fiscal deficit and its financing. It has found that gross fiscal deficit of states receipts and expenditure are increasing continuously, but gross fiscal deficit of states receipts decreased during 2020-21 due to the corona pandemic. Gross fiscal deficit of the state government has increased since 1999-2000. Market borrowings and loans from the central government contributed more in financing of gross fiscal deficit. Gross fiscal deficit of state governments was 90.09 thousand crores in 1999-2000, 4.62 lakhs crores in 2018-19, and finally 8.82 lakhs crores in 2022-23. Gross fiscal deficit of receipts of states was 2.02 lakhs crores in 1999-2000, and 26.70 lakhs

crores in 2019-20. It declined in 2020-21 due to the corona pandemic and reached 25.96 lakhs crores and finally 38.62 lakhs crores in 2022-23. Gross fiscal deficit of expenditure of state governments was 2.93 lakhs crores in 1999-2000, and was 30.84 lakhs crores in 2018-19 and finally reached 47.45 lakhs crores. State governments collected the highest amount of loans from the central government and market during the corona pandemic for managing financial deficit. Therefore, we have concluded from the above analysis that gross fiscal deficit, and financing of Gross Fiscal Deficit are increased during the post-pandemic period.

**Table 8: Gross fiscal deficit of Central Government and its financing**

| Year    | GFD Expenditure | GFD receipt | Gross fiscal deficit | Financing of GFD |                   |                  |                            |         |
|---------|-----------------|-------------|----------------------|------------------|-------------------|------------------|----------------------------|---------|
|         |                 |             |                      | External         | Internal Finance  |                  |                            |         |
|         |                 |             |                      |                  | Market Borrowings | Other Borrowings | Draw down of cash balances | Total   |
| 1995-96 | 171770          | 111527      | 60243                | 318              | 34001             | 16117            | 9807                       | 59925   |
| 1997-98 | 223735          | 134798      | 88937                | 1091             | 32499             | 56257            | -910                       | 87846   |
| 1999-00 | 287922          | 183206      | 104716               | 1180             | 62076             | 40597            | 864                        | 103537  |
| 2001-02 | 345907          | 204952      | 140955               | 5601             | 90812             | 46038            | -1496                      | 135354  |
| 2003-04 | 404038          | 280765      | 123273               | -13488           | 88870             | 51833            | -3942                      | 136761  |
| 2005-06 | 495093          | 348658      | 146435               | 7472             | 106241            | 53610            | -20888                     | 138963  |
| 2007-08 | 707571          | 580659      | 126912               | 9315             | 130600            | 14168            | -27171                     | 117597  |
| 2009-10 | 1015874         | 597392      | 418482               | 11038            | 394371            | 14460            | -1386                      | 407444  |
| 2011-12 | 1285515         | 769525      | 515990               | 12448            | 484111            | 35421            | -15990                     | 503542  |
| 2013-14 | 1546950         | 1044092     | 502858               | 7292             | 475626            | 39111            | -19171                     | 495566  |
| 2015-16 | 1769948         | 1237157     | 532791               | 12748            | 414931            | 91942            | 13170                      | 520043  |
| 2017-18 | 2126340         | 1535278     | 591062               | 7931             | 450728            | 128312           | 4091                       | 583131  |
| 2019-20 | 2668014         | 1734363     | 933651               | 8682             | 473968            | 446030           | 4971                       | 924969  |
| 2020-21 | 3490108         | 1671817     | 1818291              | 70180            | 1032907           | 722392           | -7188                      | 1748111 |
| 2021-22 | 3769064         | 2184544     | 1584521              | 36147            | 704097            | 841734           | 2543                       | 1548374 |
| 2022-23 | 4166996         | 2429241     | 1737755              | 37124            | 1108260           | 593994           | -1622                      | 1700631 |
| 2023-24 | 4464485         | 2729713     | 1734773              | 24832            | 1180456           | 556136           | -26651                     | 1709941 |

Source: <https://rbidocs.rbi.org.in/>, Note- in crores INR.

Table 8 discussed the gross fiscal deficit of the central government and its financing. It has found that the gross fiscal deficit of the central government is increasing since 1995-96. Gross fiscal deficit expenditure of the central government is higher than the gross fiscal deficit receipts. Gross fiscal deficit of the central government was 60.24 thousand crores in 1995-

96 and was 9.33 lakhs crores in 2019-20. It was suddenly increased in 2020-21 due to the corona pandemic and reached 18.18 lakhs crores. GFD expenditure of the central government was 1.71 lakh crores in 1995-96 and was 26.80 lakhs crores in 2019-20. It was unexpectedly increased in 2020-21 and reached 34.9 lakhs crores. GFD receipts of central government was 1.11 lakh crores in

1995-96 and was 17.34 lakhs crores in 2019-20. It declined in 2020-21 due to the corona pandemic and reached 16.71 lakhs crores. Central government collects funds from internal and external sources for financing the gross fiscal deficit.

Fund collected from internal finance is higher than the external source of finance. External source of finance was 318 crores in 1995-96 and was 8682 crores in 2019-20. External fund amount was unexpectedly

increased in 2020-21 due to the corona pandemic and was 70.18 thousand crores. Total funds collected from internal sources was 59.92 thousand crores in 1995-96 and was 9.24 lakh crores in 2019-20. It was suddenly increased in 2020-21 due to the corona pandemic and reached 17.48 lakh crores. Share of market borrowings is higher than the other sources in internal finance. From the above analysis we can conclude that the Gross fiscal deficit of the central government increased rapidly during the post-corona pandemic period.

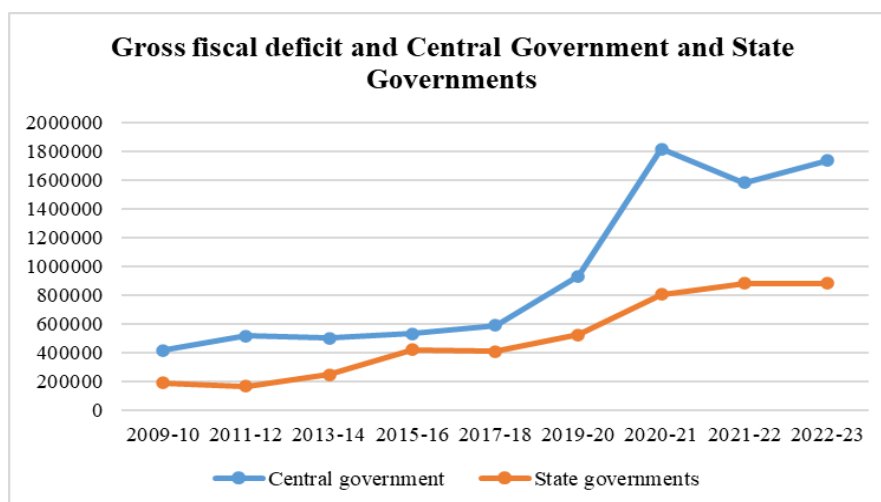
**Table 9: Combined Deficits of Central and State Governments**

| Year    | GFD    | GPD    | RD     | Year    | GFD     | GPD     | RD      |
|---------|--------|--------|--------|---------|---------|---------|---------|
| 1994-95 | 71639  | 19313  | 37185  | 2011-12 | 684966  | 284963  | 370388  |
| 1996-97 | 87244  | 17156  | 48768  | 2012-13 | 684395  | 230090  | 343960  |
| 1997-98 | 110743 | 32466  | 62782  | 2013-14 | 749711  | 215480  | 367611  |
| 1999-00 | 184826 | 74375  | 121393 | 2014-15 | 836563  | 252020  | 411224  |
| 2001-02 | 226425 | 84039  | 159350 | 2015-16 | 952410  | 304320  | 348118  |
| 2002-03 | 234987 | 75927  | 162990 | 2016-17 | 1064704 | 340256  | 356872  |
| 2003-04 | 234501 | 56928  | 159408 | 2017-18 | 997097  | 182341  | 462440  |
| 2005-06 | 239560 | 35583  | 99312  | 2018-19 | 1102729 | 208209  | 472256  |
| 2006-07 | 219128 | -11703 | 55366  | 2019-20 | 1449230 | 493430  | 788040  |
| 2007-08 | 199110 | -59675 | 9626   | 2020-21 | 2600335 | 1539733 | 1820823 |
| 2009-10 | 604668 | 290098 | 370015 | 2021-22 | 2441333 | 1197229 | 1304199 |
| 2010-11 | 534032 | 185471 | 249200 | 2022-23 | 2420614 | 1011685 | 1074228 |

**Source:** <https://www.rbi.org.in/scripts/PublicationsView.aspx?id=21910>, Note: in crores INR., GFD= Gross fiscal deficit, GPD = Gross primary deficit, and RD = Revenue deficit.

Table 9 depicted the combined deficits of central and state governments in India. It has found that gross fiscal deficit, gross primary deficit and revenue deficit of central and state governments were increased due to the corona pandemic. Gross fiscal deficit was 71.63 thousand crores in 1994-95 and was 14.49 lakhs crores in 2019-20. It was suddenly increased in 2020-21 due to the corona pandemic and was 26 lakhs crores. Gross primary deficit was 19.31 thousand crores in 1994-95 and was 4.93 lakhs crores in 2019-20. It was unexpectedly increased in 2020-21 due to the corona

pandemic and was 15.39 lakhs crores. So, gross primary deposit was increased more than three times during the period. Revenue deficit was 37.18 thousand crores in 1994-95 and was 7.88 lakhs crores in 2019-20. It was unexpectedly increased in 2020-21 due to the corona pandemic and was 18.20 lakhs crores. So, the revenue deficit increased more than two times during the period. Therefore, from the above analysis we can conclude that gross fiscal deficit, gross primary deficit and revenue deficit of central and state governments were increased during the post-pandemic period.



**Figure-3: Compare between gross fiscal deficit of central and state governments**

Figure-3 discussed the pre and post corona pandemic period gross fiscal deficit of central and state

governments in India. It has found that the gross fiscal deficit of central and state governments suddenly

increased due to the corona pandemic. Gross fiscal deficit of central and state governments has increased in the post-corona pandemic period.

**Table 10: Relationship between Annual Growth Rates of Gross National Income and Gross fiscal deficit of central government**

| Year    | Annual Growth Rates of GNI | Gross fiscal deficit |
|---------|----------------------------|----------------------|
| 2001-02 | 8.4                        | 140955               |
| 2003-04 | 12.0                       | 123273               |
| 2005-06 | 14.0                       | 146435               |
| 2007-08 | 15.6                       | 126912               |
| 2009-10 | 15.5                       | 418482               |
| 2011-12 | 14.7                       | 515990               |
| 2013-14 | 12.9                       | 502858               |
| 2015-16 | 10.5                       | 532791               |
| 2017-18 | 11.1                       | 591062               |
| 2019-20 | 6.5                        | 933651               |
| 2020-21 | -1.6                       | 1818291              |
| 2021-22 | 19.1                       | 1584521              |
| 2022-23 | 14.0                       | 1737755              |
| 2023-24 | 9.5                        | 1734773              |

**Source:** Source: Economic Survey 2023-24 Statistical Appendix, pp.4-6. Note: Annual Growth Rates of GNI in percentage and Gross fiscal deficit in INR crores.

**Table 10 (a): Summary Output**

| <i>Regression Statistics</i> |             |
|------------------------------|-------------|
| Multiple R                   | 0.297168232 |
| R Square                     | 0.088308958 |
| Adjusted R Square            | 0.012334705 |
| Standard Error               | 4.98278727  |
| Observations                 | 14          |

**Source:** calculated by author.

**Table 10 (b): ANOVA Analysis**

|            | <i>df</i> | <i>SS</i>   | <i>MS</i>   | <i>F</i>    | <i>Significance F</i> |
|------------|-----------|-------------|-------------|-------------|-----------------------|
| Regression | 1         | 28.85911517 | 28.85911517 | 1.162353744 | 0.302173395           |
| Residual   | 12        | 297.9380277 | 24.82816897 |             |                       |
| Total      | 13        | 326.7971429 |             |             |                       |

**Source:** calculated by author.

|                      | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> |
|----------------------|---------------------|-----------------------|---------------|----------------|
| Intercept            | 13.35136063         | 2.110806605           | 6.325241069   | 3.80184E-05    |
| Gross fiscal deficit | -2.26619E-06        | 2.10197E-06           | -1.078125106  | 0.302173395    |

**Source:** calculated by author.

The table 10-a shows that R square is found to be 0.088308958, showing, that the degree of relation between the independent variable X, i.e. Gross fiscal deficit, and the dependent variable Y, i.e. Annual Growth Rates of GNI are weak. Table 10-b shows that p value (0.3021) is higher than critical value at 5% level of significance ( $p > 0.05$ ), therefore we will accept the null hypothesis-1. So, it is concluded that there is no relation between annual growth rates of gross national income and gross fiscal deficit of the central government.

## CONCLUSION

Total tax revenue of the central government continued to increase during pre and post corona pandemic periods. Total revenue of the central

government has increased more than 29 times in the last 28 years. Direct tax revenue of the central government is generally higher than the indirect tax revenue. There is decent growth of tax revenues of the Central Government in the post-corona pandemic period. The Corona pandemic negatively affected tax revenue of the state governments. Total tax revenue of state governments has increased more than 33 times in the last 28 years. Indirect tax revenue of the state government is higher than the direct tax revenue. There is fast recovery of tax revenues of the Central Government in the post-corona pandemic period. The Corona pandemic did not affect the total receipts of the central government. Revenue receipts declined during the corona pandemic period, but recovered in post-corona pandemic period is noticeable.

Revenue receipts are higher than the capital receipts. Total receipts of the central government were increased more than 28 times during 1994-95 to 2023-24. There are negative effects of the corona pandemic on total receipts of state governments.

Total capital receipts of the central government were increased due to the corona pandemic. Market borrowings had the highest contribution in total capital receipts, which was followed by small savings receipt, and disinvestment receipts. Gross fiscal deficit, and financing of gross fiscal deficit are increased during the post-pandemic period. Gross fiscal deficit of the central government has been increasing since 1995-96. Gross fiscal deficit expenditure of the central government is higher than the gross fiscal deficit receipts. Central government collects funds from internal and external sources for financing the gross fiscal deficit. Gross fiscal deficit, gross primary deficit and revenue deficit of central and state governments were increased during the post-pandemic period. There is no relation between annual growth rates of gross national income and gross fiscal deficit of the central government. There is no relation between annual growth rates of gross national income and gross fiscal deficit of the central government.

## REFERENCES

- Arjuna E. and Dolli, M. (2018). Trends and patterns of Karnataka indirect tax before GST. *International Journal of Marketing and Technology*. 8 (7). 12-14.
- Arjuna E. and Dolli, M. (2019). Trends and Pattern of Tax and Non-Tax Revenue Analysis in Karnataka. *Journal of Emerging Technologies and Innovative Research*. 6 (1). 2098-2099.
- Awasthi, R. and Nagarajan, M. (2020). Property Taxation in India: Issues Impacting Revenue. Performance and Suggestions for Reform. Discussion paper, 5, 2-3.
- Beena P L, and Ritika J. (2023). Composition of non-tax revenue in Kerala- Identifying potential sources of resource mobilization. *Kerala Economy*. 4 (4), 11-12.
- Deshwal, K. (2022). Taxation and economic growth in India. *Journal of Emerging Technologies and Innovative Research*. 9 (11). 157-158.
- Devasia M D. and Karunakaran, N. (2020). Public revenue in India: Trend and effect. *Journal of Management Research and Analysis*, 7 (4). 171-172.
- Gupta, S., and Singh, K. (2016). Fiscal Deficit and its Trends in India. *International Journal of Business and Management Invention*. 5 (11). 63-64.
- Jalan, G. K. (2019). Impact of income tax on the revenue of government of India. *International Journal of Creative Research Thoughts*. 7 (1). 843-844.
- Nayak, A. (2017). A Study of Trends and Patterns of Foreign Direct Investment in India. *International Journal of Innovative Science and Research Technology*. 2 (7). 487-488.
- Parihar, B. S. and Parihar, A. S. (2024). Trends and Implications: Analysis of Collection of Direct Tax from Financial Year 2017-18 to 2022-23. *International Journal of Multidisciplinary Research and Explorer*. 4 (1). 38-39.
- Ramamurthy, S. (2018). Indian Tax Revenue - An Analysis. *International Journal of Economics*. 6 (4). 28-29.
- Samantara. R. (2020). Tax system in India: origin, structure and issues. *International Journal in Management and Social Science*. 8 (12). 48-49.
- Sarkar, S. (2010). The Parallel Economy in India: Causes, Impacts and Government Initiatives, *In Economic Journal of Development Issues 11 & 12* (1-2).124-125.
- Sarkar, S. (2017). Foreign Aid in Nepal: Importance, Trends and Government Initiatives. *Economic Journal of Nepal*, 40 (1-4). 44-52.
- Sarkar, S., Chaudhury, S. K., Rath, S., and Pattnaik, L. P. (2024). Contemporary Issues and Challenges of Institutional Finance in Bihar: An In-depth Study, *International Journal of Innovative Science and Research Technology*. 9 (9). 355-356.
- Singh, A.K., Shrivastav, R. K., and Gupta, L. (2017). An Analysis of Trends and Patterns of Income Tax in India. *VISION Journal of Indian Taxation*, 4 (1), 40-41.
- Srinivasulu, V. and Kumar, P. (2022). Study on collection of revenue from income tax in India. *Anveshana's International Journal of Research in Regional Studies, Law, Social Sciences, Journalism and Management Practices*. 7 (12). 93-94.
- Tagat, A. (2019). The Taxman Cometh: Behavioural Approaches to Improving Tax Compliance in India. *Journal of Behavioural Economics for Policy*, 3 (1). 12-13.
- Thayyib, P. V., Thorakkattle, M. N., Usmani, F., Yahya, A., and Najib H.S. (2023). Forecasting Indian Goods and Services Tax revenue using TBATS, ETS, Neural Networks, and hybrid time series models. *Cogent Economics & Finance*. 11 (2). 12-13.