

A CONTEMPORARY STUDY ON GROWTH TREND OF PUBLIC EXPENDITURE IN TAMIL NADU

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INTRODUCTION:

Public expenditure is an essential instrument of the fiscal system of a federal nation. The size and the pattern of public spending have great relevance in the growth process and the reduction of economic disparities.

In the 20th century, John Maynard Keynes advocated public expenditure's role in determining the level of income and its distribution. In developing countries, public expenditure policy accelerates economic growth, promotes employment opportunities, and plays a valuable role in reducing poverty and inequalities in income distribution.

In modern days, public expenditure has increased continuously in most countries because of the continuous expansion of state activities¹.

STATEMENT OF THE PROBLEM:

The state government's finance has been undergoing severe strains over the last few years. While the gap between expenditure responsibilities and revenue assignments has always been a concern for the backward and fiscally weaker states, the developed states enjoy buoyant revenue and manage their financial affairs².

Failures in managing the needless expenditure and reluctance to raise additional revenue in the state are the two common problems affecting the state's finance. Maintaining responsible public finance has become extremely difficult in the era of frequent elections and competitive populism practiced by different political parties for power³.

The state of Tamil Nadu has a high reputation for financial discipline and decency. The core of this study is to analyze the growth of public expenditure in Tamil Nadu during the post-reform period. Moreover, it studies the directions and performance of public spending in Tamil Nadu. Besides, this study addresses the following questions.

1. Whether the volume of the government activity expanding or not?
2. What is the impact of economic reforms on the expenditure pattern of Tamil Nadu?
3. Are there any changes in the composition of the total expenditure of Tamil Nadu?
4. Is there any relationship between state income and total Expenditure of Tamil Nadu?
5. What is the elasticity of the total expenditure of Tamil Nadu?
6. Whether the government gives more preference to revenue expenditure or capital expenditure?
7. How can the government of Tamil Nadu reduce the fiscal deficit?

OBJECTIVES

The general aim of this study is to analyze the impact of economic reforms on the expenditure pattern of Tamil Nadu. The specific objectives are

1. To examine the growth pattern of total expenditure in Tamil Nadu during the post-reform period.
2. To know the impact of economic reforms on the expenditure of the Tamil Nadu government.
3. To estimate the responsiveness of total expenditure and its Components of the national income growth during the Post-reform period.
4. To find out the relationship between state income and total expenditure of Tamil Nadu.

HYPOTHESES

1. Capital expenditure grows faster than revenue expenditure in Tamil Nadu.
2. The income elasticity of total expenditure in Tamil Nadu during the post-reform period is less than unity.

METHODOLOGY

This study is a positive and time-series study of public finance. Secondary data form the basis of this study. Data was collected on the expenditure of Tamil Nadu from 1991-1992 to 2016-17 from RBI bulletins and the RBI website.

The researcher collected population figures from the census report for 1991, 2001, and 2011. The researcher estimated population figures for individual years.

The researcher used a semi-log to estimate the Compound annual growth rate of expenditure on various heads in Tamil Nadu during the post-reform period. The functional form used to estimate the yearly compound growth rate is $Y=ab^t$.

Where,

- y- Dependent variable (Expenditure)
- t- Independent variable (time)
- 'a' and 'b' - parameters to be estimated.

The researcher has used the regression co-efficient to find the income elasticity of the state expenditure based on the exponential relationship between the dependent variable per capita expenditure and independent variable per capita state income by employing the following formula.

$$\text{Log } Y=a+b \log X$$

Where the regression co-efficient 'b' becomes the elasticity.

ANALYTICAL DISCUSSION

TOTAL EXPENDITURE IN TAMIL NADU AT THE CURRENT PRICE

Public expenditure is the government's spending on collective needs and wants such as pension, provisions, security, infrastructure, etc. The essential duty of any state is to protect, and hence the ancient government is called a watchman state or policeman state. The trend has changed; government must perform all the functions, and the role of the government has changed to a welfare state

TABLE-1
TOTAL EXPENDITURE IN TAMIL NADU AT THE CURRENT PRICE

YEAR	T.E Amount (in Crores)	PE(in Rs)
1991-92	8958.61	1603.79
1992-93	8864.90	1568.63
1993-94	9308.52	1628.26
1994-95	10314.90	1783.87
1995-96	11501.51	1966.82
1996-97	13984.53	2364.95
1997-98	16418.64	2746.18
1998-99	18850.72	3118.82
1999-2000	21372.76	3498.19

YEAR	T.E Amount (in Crores)	PE(in Rs)
2000-01	23299.32	3773.09
2001-02	23334.88	3739.20
2002-03	27315.24	4309.80
2003-04	28860.84	4484.80
2004-05	33718.84	5161.63
2005-06	36063.23	5439.47
2006-07	44217.34	6572.87
2007-08	50437.24	7390.53
2008-09	62694.56	9057.41
2009-10	67947.94	9680.24
2010-11	85352.57	11993.50
2011-12	100173.69	13886.20
2012-13	111635.12	15268.99
2013-14	126997.74	17142.03
2014-15	146630.98	19532.75
2015-16	159987.81	21039.01
2016-17	173904.75	22579.90
CAGR	13.43	11.96

Note: T.E- Total Expenditure, PE – Per capita expenditure.

CAGR – Compound annual Growth Rate.

Source: Amount at Current Price – RBI Bulletins and RBI website.

The researcher computed PE and CAGR.

Table – 1 shows the total expenditure in Tamil Nadu; the absolute amount has increased from Rs.8958.61 crores in 1991-92 to Rs.173904.75 crores in 2016-17 at the compound annual growth rate of 13.43 per cent. The per capita amount has increased from Rs.1603.79 in 1991-92 to Rs.22579.90 in 2016-17 at the compound annual growth rate of 11.96 percent.

It implies that the total expenditure in Tamil Nadu has rapidly increased because of the high growth rate of population, urbanization, rise in the price level, etc.

TOTAL REVENUE EXPENDITURE IN TAMIL NADU AT THE CURRENT PRICE

Revenue expenditure is the part of government expenditure that does not result in the creation of assets. In other words, revenue expenditures are routine recurring, and periodical with no enduring value beyond the financial incurred.

TABLE-2
REVENUE EXPENDITURE IN TAMIL NADU AT THE CURRENT PRICE

YEAR	R.E Amount(in Crores)	P.E(in Rs)	% to T.E
1991-92	8679.52	1553.83	96.88

YEAR	R.E Amount(in Crores)	P.E(in Rs)	% to T.E
1992-93	8542.53	1511.59	96.36
1993-94	8758.00	1531.97	94.09
1994-95	9634.95	1666.28	93.41
1995-96	10910.57	1865.76	94.86
1996-97	13064.89	2209.43	93.42
1997-98	14950.85	2500.68	91.06
1998-99	17697.40	2928.00	93.88
1999-2000	20727.83	3392.63	96.98
YEAR	R.E Amount(in Crores)	P.E(in Rs)	% to T.E
2000-01	21752.44	3522.59	93.36
2001-02	21556.97	3454.31	92.38
2002-03	25687.70	4053.01	94.04
2003-04	25270.94	3926.95	87.56
2004-05	29154.87	4462.99	86.46
2005-06	32008.67	4827.91	88.76
2006-07	38264.97	5688.06	86.54
2007-08	42975.01	6297.09	85.20
2008-09	53590.26	7742.12	85.48
2009-10	59375.35	8458.94	87.38
2010-11	72916.30	10245.99	85.43
2011-12	83838.04	11621.74	83.69
2012-13	97067.44	13276.49	86.95
2013-14	109824.67	14824.02	86.48
2014-15	128828.00	17161.21	87.86
2015-16	140993.23	18541.15	88.13
2016-17	153195.26	19890.97	88.09
CAGR	12.86	11.40	

Note: R.E- Revenue Expenditure, P.E – Per capita expenditure, T.E- Total Expenditure, CAGR – Compound annual growth rate.

Source: Amount at Current Price – RBI Bulletins and RBI website.

The Researcher computed % to TE, PE and CAGR.

Table: 2 reveals that total revenue expenditure in Tami Nadu has increased from Rs.8679.52 crores in 1991-92 to Rs.153195.26crores in 2016-17 at a compound annual growth rate

of 12.86 percent. The per capita amount has increased from Rs.1553.83 in 1991-92 to Rs.19890.97 in 2016-17 at a compound annual growth rate of 11.40 percent. In 1991-92 revenue expenditure as a proportion of total expenditure asserted 96.88 per cent of total expenditure, and it decreased to 88.09 per cent in 2016-17.

It implies that the proportion of revenue expenditure to total expenditure has declined because of the rising level of capital expenditure.

CAPITAL EXPENDITURE IN TAMIL NADU AT THE CURRENT PRICE

Capital expenditure is the money spent by the government on the development of machinery, equipment, building, health facilities, education, etc. It also includes the government's expenditure on acquiring fixed assets like land and investment that gives profits or dividends.

TABLE -3
CAPITAL EXPENDITURE IN TAMIL NADU AT THE CURRENT PRICE

YEAR	C.E Amount(in Crores)	P.E(in Rs)	% to T.E
1991-92	279.09	49.96	3.12
1992-93	322.37	57.04	3.64
1993-94	550.52	96.30	5.91
1994-95	679.95	117.59	6.59
1995-96	590.94	101.05	5.14
1996-97	919.64	155.52	6.58
1997-98	1467.79	245.50	8.94
1998-99	1153.32	190.81	6.12
1999-2000	644.93	105.56	3.02
2000-01	1546.88	250.50	6.64
2001-02	1777.91	284.89	7.62
2002-03	1627.54	256.79	5.96
2003-04	3589.90	557.85	12.44
2004-05	4563.97	698.65	13.54
2005-06	4054.56	611.55	11.24
2006-07	5952.37	884.81	13.46
2007-08	7462.23	1093.43	14.80
2008-09	9104.30	1315.29	14.52
YEAR	C.E Amount(in Crores)	P.E(in Rs)	% to T.E
2009-10	8572.59	1221.30	12.62
2010-11	12436.27	1747.51	14.57
2011-12	16335.65	2264.47	16.31
2012-13	14567.68	1992.51	13.05
2013-14	17173.07	2318.00	13.52
2014-15	17802.98	2371.54	12.14
2015-16	18994.58	2497.86	11.87

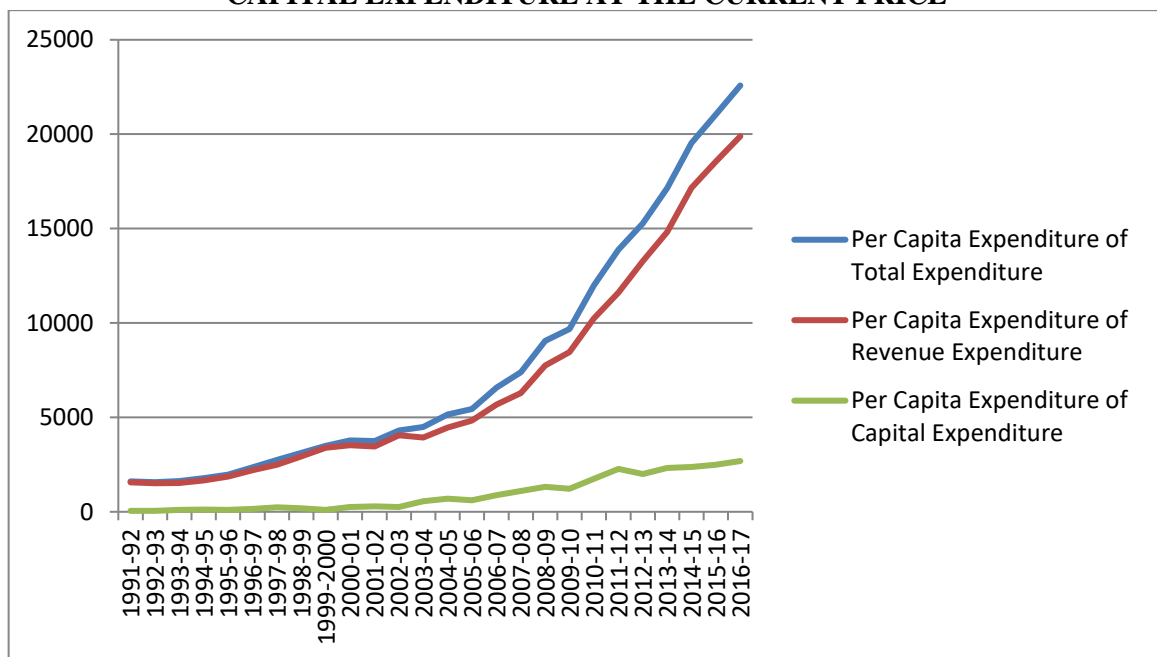
YEAR	C.E Amount(in Crores)	P.E(in Rs)	% to T.E
2016-17	20709.49	2688.93	11.91
CAGR	19.72	18.18	

Note: C.E- Capital Expenditure, P.E- Per capita expenditure, T.E-Total Expenditure, CAGR – Compound annual growth rate.

Source: Amount at Current Price – RBI Bulletins and RBI website. The researcher computed PE,% to TE, and GAGR.

Table: 3 conveys that the total capital expenditure of Tamil Nadu in terms of the absolute amount has increased from Rs.279.09 crores in 1991-92 to Rs.20709.49 crores in 2016-17 at the compound annual growth rate of 19.72 per cent. The per capita capital expenditure has increased from Rs.49.96 in 1991-92 to Rs.2688.93 in 2016-17 at a compound annual growth rate of 18.18 per cent. The share of capital expenditure has increased from 3.12per cent in 1991-92 to 11.91per cent in2016-17.

FIGURE – 1
TOTAL EXPENDITURE, REVENUE EXPENDITURE AND CAPITAL EXPENDITURE AT THE CURRENT PRICE



Source: Table 1, 2, 3.

TESTING OF FIRST HYPOTHESIS

Hypothesis: capital expenditure grows faster than revenue expenditure.

IN TERMS OF ABSOLUTE AMOUNT

The compound annual growth rate of revenue expenditure: is 12.86 per cent. The compound annual growth rate of capital expenditure: is 19.72 per cent.

IN TERMS OF PER CAPITA AMOUNT

The compound annual growth rate of revenue expenditure: is 11.40 per cent. The compound annual growth rate of capital expenditure: is 18.18 per cent.

In both terms, the compound annual growth rate of capital expenditure is more significant than revenue expenditure. Hence our first hypothesis, "capital expenditure grows faster than revenue expenditure," is proved here.

**TABLE -4
TOTAL EXPENDITURE AS A PERCENTAGE OF STATE INCOME**

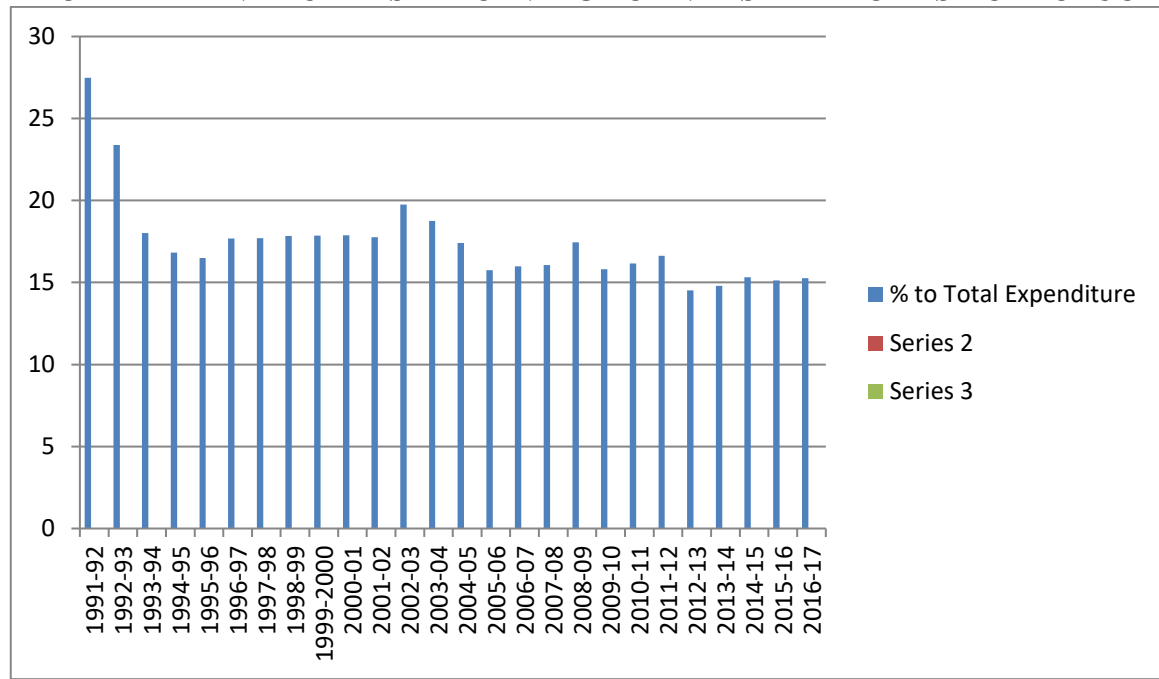
YEAR	T.E(in crores)	NSDP(in crores)	% to NSDP
1991-92	8958.61	32584	27.49
1992-93	8864.90	37922	23.38
1993-94	9308.52	51643	18.02
1994-95	10314.90	61276	16.83
1995-96	11501.51	69720	16.50
1996-97	13984.53	79118	17.68
1997-98	16418.64	92689	17.71
1998-99	18850.72	105728	17.83
1999-2000	21372.76	119704	17.85
2000-01	23299.32	130413	17.87
2001-02	23334.88	131392	17.76
2002-03	27315.24	138253	19.76
2003-04	28860.84	153874	18.76
2004-05	33718.84	193645	17.41
2005-06	36063.23	228846	15.76
2006-07	44217.34	276711	15.98
2007-08	50437.24	313812	16.07
2008-09	62694.56	359391	17.44
2009-10	67947.94	430013	15.80
2010-11	85352.57	527912	16.17
2011-12	100173.69	602851	16.62
2012-13	111635.12	768295	14.53
2013-14	126997.74	858870	14.79
2014-15	146630.98	957350	15.32
2015-16	159987.81	1057084	15.13
2016-17	173904.75	1139790	15.26

Note: TE-Total Expenditure
 NSDP-Net State Domestic Product
 Source: TE- RBI Bulletins and RBI website
 NSDP- Handbook of statistics on the Indian economy.
 The researcher computed % to NSDP.

Table: 4 presents that the proportion of total expenditure to state income (net state domestic product) has decreased from 27.49 per cent in 1991-92 to 15.26 percent in 2016-17. The share of total expenditure in state income decreased during the study period. Hence Wagner's hypothesis public expenditure rises faster than national output is disproved here. The main objective of

economic reform in India is to reduce government expenditure. So the government of Tamil Nadu has reduced its expenditure in the post-reform period. According to Tulasidhar, “a hefty cut in the deficit of India during the reform was achieved primarily by expenditure compression.”⁴

FIGURE 2
TOTAL EXPENDITURE AS PERCENTAGE OF NET STATE DOMESTIC PRODUCT



ELASTICITY OF EXPENDITURE IN TAMIL NADU FROM 1991- 92 TO 2016-17

The income elasticity of public expenditure is the percentage by which government expenditure grows if national income increases by one percent.

TABLE: 6
ELASTICITY OF EXPENDITURE IN TAMIL NADU FROM 1991-92 TO 2016-17

S.No.	Expenditures	Elasticity
1	Total expenditure(Revenue +Capital)	0.88
2	Revenue Expenditure	0.85
3	Developmental Expenditure	0.79
4	Expenditure on Social & Community services	0.87
5	Expenditure on Education	0.82
6	Expenditure on Medical & Public Health	0.65
7	Expenditure on Economic Service	0.67

S.No.	Expenditures	Elasticity
8	Expenditure on Agriculture & Allied Activities	0.58
9	Expenditure on Industry & Mineral	0.69
10	Expenditure on Transport and Communication	0.61
11	Expenditure on Energy	2.26
12	Non-developmental Expenditure	0.92
13	Expenditure on Debt Servicing and Interest Payments	0.90
14	Expenditure on Interest Payment	0.85
15	Expenditure on the collection of Taxes & Duties	0.61
16	Expenditure on Administrative Services	0.72
17	Expenditure on capital	1.22

Source: The researcher computed the elasticity.

Table-6 reveals that a one per cent increase in per capita income led to a 0.88 per cent increase in per capita total expenditure during the post-reform period. The responsiveness of per capita revenue expenditure to state per capita income was 0.85 per cent. The elasticity of expenditure on energy was 2.26 per cent; the highest among all the expenditures during the study period is capital expenditure, where the elasticity of expenditure was 1.22. The elasticity of expenditure was less in the agriculture and allied sector during the post-reform period, and it was 0.56.

TESTING OF SECOND HYPOTHESIS

Hypothesis: The income elasticity of total expenditure is less than unity.

As per Table 6, the income elasticity of total expenditure is 0.88. Hence the second hypothesis, "income elasticity of total expenditure is less than unity," is proved here.

CONCLUSION

Thus, from this study, one could infer that the total and per capita expenditure has increased. Comparing capital expenditure with revenue expenditure, one could find that the rise of capital expenditure is rapid and higher than the revenue expenditure. The contribution of the Tamil Nadu government's expenditure has a drop in national income, which disproves Wagner's hypothesis. Out of all the spending, only capital expenditures stand greater than unity, whereas all the spending remains less than unity. Also, one could understand the strategy of the Tamil Nadu government to reduce the fiscal deficit. It is evident that to bring down the fiscal deficit, the government of Tamil Nadu reduces the expenditure on economic services like expenditure on agriculture.

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