

Public expenditure of India: Trend and effects

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Abstract

Budget is an investment vehicle that boosts economic growth. Government use budgeting system to plan for the growth and development over a specified period of time. In India the budget is government's most important economic and fiscal policy tool. And it is most economic event that happens every year in the country, which outlines all the economic planning of the Government of India for the subsequent year. It is not only important for the corporate but for individuals from all sections of the society. Budget translate government's policies, political commitments, and goals into decisions on how much revenue to raise, how it plans to raise it, and how to use these fund to meet the country's needs. Government budgeting is important because it enables the government to plan and manage its financial resources to support the implementation of various programs and projects that best promote the development of the country. Through budget, government can prioritize and put into action its plans, programs and policies within the constraint of its financial capability as dictated by economic actions.

Keywords: Budget, Expenditure, Capital, Revenue, Development, GDP, Employment, India.

Introduction

Budget is a financial plan for defined period, often one year and includes planned sales volumes and revenues, resource quantities, costs and expenses, asset, liabilities and cash flows. Governments, companies, organizations and families often use it as a tool to express its strategic plan of activities or events in measurable terms. It is mainly the sum of money allocated for a particular purpose and the summary of intended expenditure along with proposals. For Government, budget is an expression of public policy and reflects the balance sheet. It tells about the current state of the country's economy, mainly include: (i) financial action of the previous year, (ii) budget and revised estimate of the current year, and (iii) budget estimates for the following year.

The objective of public budget mainly consist of acceleration of the rate of economic growth, equitable distribution of income, improving living standards, stabilization of economic activity, balanced regional development, price stability; in addition to the classical objectives of defence, maintenance of law and order and the like. The budget system and its function are crucial to development and economic growth (Robert J. Barro, 1990) and the present paper analysed the trend and pattern of major components of India's public expenditure and its impact on major macroeconomic variables like GDP, Net National Disposable Income and employment. More specifically, the main objectives are: (i) to analyze the trend, pattern and composition of public expenditure of India, and (ii) to examine the impact of it on major macroeconomic variables.

Methods and Materials

The study is solely relied on secondary data collected from various volumes of RBI Bulletin, Central Budget Document in different years (2000 to 2019), Economic Survey, Central Statistical Office Publications, Indian Public Finance Statistical Year Book, and Report of Planning Commission. The period of study (1990-91 to 2018-19) is divided into three: 1990-91 to 1999-2000; 2000-01 to 2009-10; and 2010-11 to 2018-19. For analysis correlation and regression were used.

Results and Discussion

Trend and pattern of public expenditure

Size and pattern of public expenditure play a vital role in the growth process and reduce economic inequalities. Classification of Public Expenditure is important to explain the interrelationship between government sector and rest of the economy and revealed the relative size of different governmental activities in the economy (Govind Battacharya, 2013). Public expenditure make governments forced to do many activities such as redistributive, re-allocation, commercial, and stabilizing activities (Oscar Gelderblom, 2011). Recently, Governments incur expenditure in order to fulfill the distortions of market failures, regulate private activity that might harm society, provide public goods and services, and engage in production activity (Zaed, 2017).

Table 1: Total expenditure of government of India (1990-91 to 2018-19)

Year	Revenue expenditure		Capital expenditure		Total expenditure	
	(percent)	(Rs. Crore)	(percent)	(Rs. Crore)	(percent)	(Rs. Crore)
1990-91	72.91	73552	27.09	27327	100	100879
1991-92	76.26	82291	23.74	25612	100	107903
1992-93	75.66	92690	24.34	29826	100	122516
1993-94	76.58	108500	23.42	33190	100	141690
1994-95	79.12	122346	20.88	32294	100	154640
1995-96	80.20	139716	19.80	34503	100	174219
1996-97	82.14	158810	17.86	34533	100	193343
1997-98	86.68	179998	13.32	27667	100	207665
1998-99	86.28	216417	13.72	34416	100	250833
1999-00	85.99	248869	14.01	40531	100	289400
Average	81.64	142319	18.36	31990	100	174309
2000-01	88.81	277975	11.19	35036	100	313011
2001-02	87.06	301775	12.94	44838	100	346613
2002-03	92.61	340093	7.39	27133	100	367226
2003-04	100.89	363045	-0.89	-3207	100	359838
2004-05	95.15	383031	4.85	19536	100	402567
2005-06	88.66	440303	11.34	56310	100	496613
2006-07	91.04	514313	8.96	50620	100	564933
2007-08	84.57	593659	15.43	108327	100	701986
2008-09	90.37	790594	9.63	84238	100	874832
2009-10	89.37	905472	10.63	107719	100	1013191
Average	90.24	491026	9.76	53055	100	544081
2010-11	87.22	1036061	12.78	151837	100	1187898
2011-12	89.04	1145956	10.96	141042	100	1286998
2012-13	88.82	1237754	11.18	155822	100	1393576
2013-14	88.63	1366171	11.37	175295	100	1541466
2014-15	88.61	1457882	11.39	187460	100	1645342
2015-16	85.87	1537761	14.13	253022	100	1790783
2016-17	85.59	1690584	14.41	284610	100	1975194
2017-18	87.72	1878833	12.28	263140	100	2141973
2018-19	86.71	2007399	13.29	307714	100	2315113
Average	87.43	1484267	12.57	213327	100	1697593

Source: Computed from the various issues of Indian Public Finance Statistics

Revenue vs capital expenditure

Table 1 presents the amount of revenue expenditure, capital expenditure and total expenditure and the percentage share of revenue expenditure and capital expenditure in the total budget expenditure. The total expenditure in 1990-91 was Rs. 100879 crore, increased to Rs. 313011 crore in 2000-01, to Rs. 1187898 in 2010-11 and went up to Rs. 2315113 crore in 2018-2019, registering a 23 fold increase over the reference period. It is also revealed that share of revenue expenditure in 1990-91 is 72.91 percent increased to 86.71 percent in 2018-19 and capital expenditure share was continuously falling (figure 1). The rise in share of revenue expenditure shows a concrete shape to the new design of development by revamping public expenditure policy in the direction of more employment generation programmes, rural development, increased subsidy and a hike of expenditure on items like defence, interest payment and grants and loans to States (Murugan, 2013).

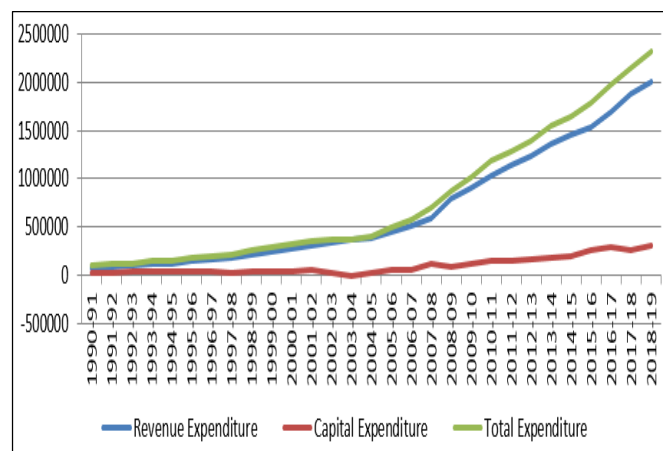


Fig. 1: Trend of total expenditure of government of India (1990-91 to 2018-19)

Source: Indian public finance statistics

Composition of developmental and non-developmental expenditure

Developmental expenditure incurred on education, medical care, public health and family welfare, labour and

employment, agriculture, cooperation, transport and communication, and other miscellaneous services has shown in conjunction with economic plans (Brown and Howard, 2002). Non-developmental expenditure on the other hand is those items of expenditure of the government, which does not directly help in economic development of the country. Cost of tax collection, cost of audit, printing notes, internal law and order, expenditure on defence and interest payment, pension to retired government employees, non-

developmental assistance to states and so on are also included in this category. In 1990-91 total expenditure is Rs. 100879 crore; out of which 34 percent is used for developmental purpose and 49 percent for non-developmental activities. The average expenditure of developmental activities during 1990-91 to 1999-2000 is 30.34 percent, while 58.38 percent of total expenditure has gone to the non-developmental activities.

Table 2: Developmental and non-developmental expenditure

Year	Developmental		Non-developmental		Others	Total expenditure
	(percent)	(Rs. Crore)	(percent)	(Rs. Crore)	(percent)	(Rs. Crore)
1990-91	34.26	34566	48.55	48979	17.18	100879
1991-92	33.41	36049	52.55	56707	14.04	107903
1992-93	31.97	39173	56.77	69547	11.26	122516
1993-94	29.16	41315	57.41	81350	13.43	141690
1994-95	31.39	48546	56.25	86992	12.35	154640
1995-96	27.41	47761	59.33	103361	13.26	174219
1996-97	27.37	52924	59.35	114743	13.28	193343
1997-98	30.05	62413	63.57	132013	6.38	207665
1998-99	28.76	72141	66.06	165688	5.18	250833
1999-00	29.63	85754	63.94	185051	6.43	289400
Average	30.34	52064	58.38	104443	11.28	174309
2000-01	29.35	91884	63.86	199886	6.79	313011
2001-02	29.29	101531	62.76	217524	7.95	346613
2002-03	32.12	117970	65.76	241488	2.12	367226
2003-04	37.37	134483	70.27	252849	-7.64	359838
2004-05	35.52	143010	69.79	280934	-5.31	402567
2005-06	35.23	174952	59.57	295823	5.20	496613
2006-07	38.78	219086	57.72	326065	3.50	564933
2007-08	43.35	304293	52.70	369942	3.95	701986
2008-09	43.79	383107	52.32	457718	3.89	874832
2009-10	40.85	413851	55.53	562609	3.63	1013191
Average	36.57	208417	61.03	320484	2.41	544081
2010-11	44.20	525019	52.21	620199	3.59	1187898
2011-12	45.14	580897	51.32	660551	3.54	1286998
2012-13	43.23	602503	53.13	740380	3.64	1393576
2013-14	41.40	638124	54.69	842986	3.92	1541466
2014-15	37.57	618215	57.65	948547	4.78	1645342
2015-16	35.45	634783	60.95	1091479	3.60	1790783
2016-17	35.21	695560	57.88	1143168	6.91	1975194
Average	40.31	613586	55.40	620199	4.28	1545894

Source: Computed from handbook of statistics on Indian economy, RBI, 2016-17

During 2000-01 to 2009-10, the average share of developmental expenditure increased to 36.57 percent and non-developmental expenditure to 61.03 percent. During third phase there is again a reversal (Table 2 and Fig. 2).

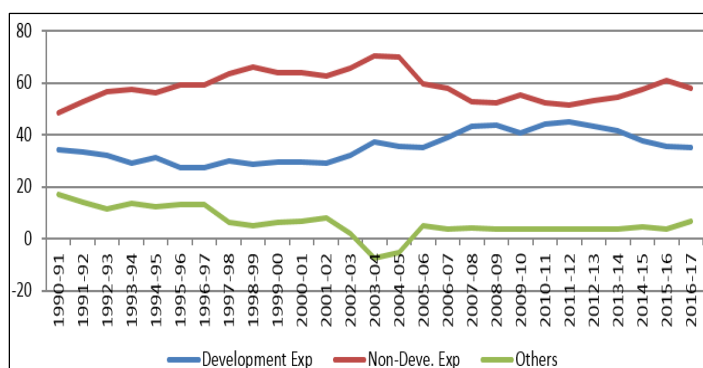


Fig. 2: Composition of developmental and non-developmental expenditure

Source: Handbook of statistics on Indian economy, RBI

Major components of total capital expenditure

During 1990-91 to 1999-2000, the share of total capital expenditure to finance loans and advances amount averaging 43.85 percent, while, the average share of non-developmental expenditure was 33.05 percent and developmental expenditure 23.09 percent of total capital expenditure.

Table 3: Non-developmental and developmental expenditure in capital expenditure (As percent of Total)

Year	Non-developmental expenditure	Developmental expenditure	Loans and advances	Total capital expenditure
1990-91	19.63	29.36	51.01	100
1991-92	27.15	27.17	45.68	100
1992-93	42.61	24.06	33.33	100
1993-94	38.89	18.14	42.97	100
1994-95	21.87	24.28	53.85	100
1995-96	32.88	15.51	51.62	100
1996-97	26.72	14.38	58.90	100
1997-98	36.02	27.32	36.66	100
1998-99	48.92	23.14	27.94	100
1999-00	35.90	27.56	36.53	100
<i>Average</i>	<i>33.05</i>	<i>23.09</i>	<i>43.85</i>	<i>100</i>
2000-01	40.58	31.84	27.58	100
2001-02	39.82	27.47	32.71	100
2002-03	64.55	46.43	-10.98	100
2003-04	-628.94	-471.47	1200.41	100
2004-05	179.24	92.21	-171.45	100
2005-06	63.53	35.25	1.23	100
2006-07	72.48	44.65	-17.13	100
2007-08	38.60	60.12	1.28	100
2008-09	56.24	35.75	8.01	100
2009-10	57.91	35.56	6.53	100
<i>Average</i>	<i>-1.6</i>	<i>-6.22</i>	<i>107.82</i>	<i>100</i>
2010-11	52.58	40.07	7.35	100
2011-12	55.93	42.95	1.12	100
2012-13	54.43	42.08	3.49	100
2013-14	50.88	45.44	3.68	100
2014-15	50.00	41.80	8.20	100
2015-16	53.34	43.91	2.75	100
2016-17	40.80	51.91	7.29	100
<i>Average</i>	<i>51.12</i>	<i>44.02</i>	<i>3.39</i>	<i>100</i>

Source: Computed from handbook of statistics on Indian economy, RBI, 2016-17.

In 1999-2000 to 2009-10, the capital expenditure exceeded the capital receipts; whereas, after 2010-11, there is a sharp decline in the share of loans and advances (Table 3).

Major components of total revenue expenditure

Total revenue expenditure is also classified as non-developmental, developmental and statutory grants to States/UTs. The figures in table 3 show that there is a constant change in these three major components during 1990-91 to 2016-17. It is observed that the major portion of the total revenue expenditure is used for non-developmental activities (Table 4).

Table 4: Non-developmental/developmental expenditure in total revenue expenditure (as percent of total revenue expenditure)

Year	Non –developmental expenditure	Developmental expenditure	Statutory grants to state	Total revenue expenditure
1990-91	59.30	36.09	4.61	100
1991-92	60.46	35.35	4.19	100
1992-93	61.32	34.52	4.16	100
1993-94	63.08	32.53	4.39	100
1994-95	65.33	33.27	1.40	100
1995-96	65.86	30.36	3.78	100
1996-97	66.44	30.20	3.36	100
1997-98	67.81	30.47	1.72	100
1998-99	68.78	29.65	1.57	100
1999-00	68.51	29.97	1.52	100

<i>Average</i>	64.69	32.24	3.07	100
2000-01	66.79	29.04	4.17	100
2001-02	66.16	29.56	4.27	100
2002-03	65.86	30.98	3.16	100
2003-04	64.09	32.88	3.03	100
2004-05	64.20	32.63	3.16	100
2005-06	59.06	35.23	5.71	100
2006-07	56.26	38.20	5.53	100
2007-08	55.27	40.29	4.44	100
2008-09	51.90	44.65	3.45	100
2009-10	55.24	41.48	3.28	100
<i>Average</i>	60.49	35.49	4.02	100
2010-11	52.16	44.80	3.04	100
2011-12	50.76	45.40	3.84	100
2012-13	52.96	43.38	3.66	100
2013-14	55.18	40.88	3.95	100
2014-15	58.63	37.03	4.34	100
2015-16	61.09	33.27	5.64	100
2016-17	60.85	33.30	5.85	100
<i>Average</i>	55.95	39.72	4.33	100

Source: Computed from handbook of statistics on Indian economy, RBI, 2016-17

Table 5 displays the distribution of non-developmental expenditure. The major share of non-developmental expenditure is used to finance mainly for two components, that is, interest payment for internal and external debt and to meet the defence expenditure. During the second phase, the average share of this expenditure was reduced and these reductions resulted in an increase in the share of other non-developmental activities (Pamela Gomez, 2005). During the third phase, the average share of the cost of interest payment and defense expenditure fall at a small percentage.

Table 5: Distribution of non-developmental expenditure (as percent of total non-developmental expenditure)

Year	Interest payment	Defence service (net)	Others	Non-developmental expenditure
1990-91	43.89	31.50	24.61	100
1991-92	46.90	28.83	24.27	100
1992-93	44.68	25.28	30.04	100
1993-94	45.16	26.85	27.98	100
1994-95	50.65	26.72	22.63	100
1995-96	48.42	25.98	25.60	100
1996-97	51.84	25.71	22.45	100
1997-98	49.72	26.72	23.56	100
1998-99	47.01	24.08	28.92	100
1999-00	48.77	25.44	25.79	100
<i>Average</i>	47.70	26.71	25.59	100
2000-01	49.69	24.83	25.49	100
2001-02	49.40	24.95	25.65	100
2002-03	48.78	23.05	28.17	100
2003-04	49.08	23.76	27.17	100
2004-05	45.18	27.00	27.82	100
2005-06	44.83	27.23	27.94	100
2006-07	46.09	26.22	27.69	100
2007-08	46.23	24.78	28.99	100
2008-09	41.99	24.95	33.05	100
2009-10	37.88	25.20	36.92	100
<i>Average</i>	45.91	25.20	28.89	100
2010-11	37.73	24.85	37.42	100
2011-12	41.35	25.87	32.77	100
2012-13	42.30	24.55	33.15	100
2013-14	44.40	24.14	31.46	100
2014-15	42.43	23.06	34.52	100
2015-16	40.46	20.70	38.84	100
2016-17	42.26	21.69	36.05	100
2017-18	45.06	22.61	32.33	100
<i>Average</i>	42.00	23.43	34.57	100

Source: Computed on the basis of handbook of statistics on Indian economy, RBI, 2016-17

Table 6: Shows the division of development expenditure over the period of analysis. The expenditure on economic services tends a continuous increase in its share out of the total developmental expenditure

Year	Economic services	Social services	Others	Developmental exp.
1990-91	41.93	5.58	52.49	100
1991-92	39.93	6.02	54.06	100
1992-93	46.47	7.10	46.43	100
1993-94	38.05	6.67	55.29	100
1994-95	40.94	7.09	51.97	100
1995-96	64.36	14.06	21.58	100
1996-97	39.46	10.25	50.29	100
1997-98	39.86	10.67	49.46	100
1998-99	39.62	10.68	49.71	100
1999-00	47.20	13.33	39.47	100
Average	43.78	9.15	47.07	100
2000-01	51.46	12.68	35.85	100
2001-02	50.62	9.49	39.89	100
2002-03	56.36	11.95	31.69	100
2003-04	55.30	12.21	32.49	100
2004-05	53.51	13.91	32.57	100
2005-06	58.09	16.70	25.21	100
2006-07	55.83	17.11	27.05	100
2007-08	53.11	18.93	27.96	100
2008-09	57.96	19.05	22.99	100
2009-10	57.63	19.43	22.94	100
Average	54.99	15.15	22.94	100
2010-11	60.70	18.77	20.53	100
2011-12	61.95	16.11	21.94	100
2012-13	61.72	16.08	22.20	100
2013-14	60.98	17.19	21.83	100
2014-15	56.50	7.62	35.88	100
2015-16	59.31	10.95	29.74	100
2016-17	66.62	11.01	22.37	100
2017-18	65.97	11.56	22.47	100
Average	61.72	13.66	24.62	100

Source: Computed from handbook of statistics on Indian economy, RBI, 2016-17

Public expenditure and its effect on macro-economic variables

The effects of public expenditure on some selected macro-economic variables like Gross Domestic Product, Net national disposable income and Employment is attempted to check the impact of public expenditure on real variables (Table 7).

Table 7: Macroeconomic indicators

Year	public expenditure (Rs. in Crore)	GDP at factor cost/ current price (Rs. in Crore)	Net national disposable income (Rs. in Crore)	Employment (in Crore)
1990-91	105298	531813	529728	2.674
1991-92	111414	613528	608553	2.706
1992-93	122618	703723	699988	2.718
1993-94	141853	817961	812932	2.738
1994-95	160739	955385	961175	2.753
1995-96	178275	1118586	1122767	2.794
1996-97	201007	1301788	1320315	2.825
1997-98	232053	1447613	1455686	2.817
1998-99	279340	1668739	1667911	2.811
1999-00	298053	1858205	1874359	2.796
2000-01	325592	2000743	2006599	2.779
2001-02	362310	2175260	2180291	2.72
2002-03	413248	2343864	2352685	2.7
2003-04	471203	2625819	2647805	2.645
2004-05	498252	2971464	2991914	2.646
2005-06	505738	3390503	3412097	2.7
2006-07	583387	3953276	3977351	2.727
2007-08	712671	4582086	4649383	2.755
2008-09	883956	5303567	5235152	2.818
2009-10	1024487	6108903	6027141	2.871
2010-11	1197328	7248860	7184090	2.9
2011-12	1304365	8391691	8357898	2.958
2012-13	1410372	9388876	9116426	2.89

2013-14	1559447	10472807	10293581	2.90
2014-15	1663673	10527674	11358915	2.87
2015-16	1790783	11369493	12489965	2.81
2016-17	1975194	12308193	13793611	2.86

Source: Computed from handbook of statistics on Indian economy, RBI, 2016-17

The percentage contribution of public expenditure to GDP is increasing over time. In 1990-91 its contribution is only 6.8 percent and it shift to 17.7 percent in 2016-17 (Table 8).

Table 8: Expenditure as a percentage of GDP

Year	Revenue expenditure	Capital expenditure	Total expenditure
1990-91	4.9	1.84	6.8
1991-92	5.5	1.70	7.2
1992-93	5.8	1.88	7.7
1993-94	6.5	2.00	8.5
1994-95	6.9	1.82	8.7
1995-96	7.3	1.81	9.1
1996-97	7.7	1.68	9.4
1997-98	8.4	1.30	9.7
1998-99	9.6	1.52	11.1
1999-00	10.1	1.64	11.7
Average	7.3	1.72	9.0
2000-01	10.9	1.37	12.2
2001-02	11.2	1.67	12.9
2002-03	12.2	0.97	13.2
2003-04	12.1	-0.11	12.0
2004-05	11.8	0.60	12.4
2005-06	12.4	1.59	14.0
2006-07	13.3	1.31	14.6
2007-08	14.0	2.55	16.5
2008-09	17.9	1.91	19.8
2009-10	18.9	2.25	21.1
Average	13.5	1.41	14.9
2010-11	19.6	2.87	22.5
2011-12	20.3	2.50	22.8
2012-13	13.4	1.69	15.1
2013-14	13.9	1.79	15.7
2014-15	13.8	1.78	15.6
2015-16	13.5	2.22	15.7
2016-17	13.9	2.33	16.2
Average	15.5	2.17	17.7

Source: Computed from handbook of statistics on Indian economy, RBI, 2016-17

The effect of public expenditure on GDP, Net National Disposable Income and employment using regression equation and correlation were worked out and the result is shown in Table 9.

Table 9: Effects of public expenditure on some selected macro-economic variables

Public expenditure and GDP					
Model	R	R Square	Adjusted R Square	Std. Error	Durbin-Watson statistic
1	.994*	.988	.988	262323.49300	.899
Public Expenditure and Net National Disposable Income					
1	.997*	.994	.994	304514.82402	.482
Public Expenditure and Employment					
1	.672*	.452	.434	.137	.075

* Significant at 0.01 level

Source: RBI data

Conclusion

The average percentage share of revenue expenditure during 2009-10 to 2018-19 periods was 87 percent, and only 13 percent is used for capital expenditure. So, the size of capital expenditure should be raised to the maximum level to boost the growth process of India. Steps should be taken for reducing defence expenditure and interest burden, as these two complements takes away 75 percent of the non-developmental expenditure. Government also would use more internal debt sources for meeting expenditure over revenue. Government would also execute more developmental expenditure for economic activities to ensure more growth and development and social spending are also equally distributed and it also used for reducing inequalities. To reduce the fiscal deficit to 3 percent of GDP in accordance with the FRBM act gives governments more freedom for its fiscal action. Future budget would take into account as per head revenue, expenditure, and debt both in terms real and nominal because it provide more realistic picture about government spending. At the same time, try to increase per head revenue and expenditure and reduce per head liability and burden. Most of the macro economic variables are highly correlated with public expenditure and revenue. So, the government would be ready to consider the budget seriously and prepare and present it systematically without much ambiguity and political gimmick, for the good of the nation.

Source of Funding

None.

Conflicts of Interest

None.

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