

# **Political Economy of Public Expenditure in India: Social Choice and Redistribution during Post-Reform Period**

**ABSTRACT**  
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## **Abstract**

The thesis aims at understanding and analysing the nature and dynamisms of public expenditure policy in India and redistribution of income as one of its core objectives, optimized and constrained by social choice reflected through political decisions in a democracy.

We analysed trends and patterns of budgetary allocations of centre and states on selected expenditure items during the thirty-year post-reform period. These expenditure items are selected on the basis of their higher sensitivity to redistribution. In addition these expenditure items are also highly sensitive to political outcomes in general for all contestants and particularly sensitive to the political fortunes of the incumbents.

The very first section of the thesis within chapter one, which is the introduction to the thesis, provides a general overview of the nature of the problem and some of the most notable inquiries done in this regard. The overview includes general remarks of the issue of distribution of income and its linkages to fiscal strategy of governments in general and public expenditure in particular.

Following the overview a detailed account of the context of this study is discussed under following broad themes:

The study envisages a model individual different from what we assume in theoretical economics as '*Rational Actor*' in the neo-classical tradition. The study recognises that that an individual may function as a rational actor in personal capacities while taking economic decisions in particular; however, the role of an individual is also altruistic in matters of collective issues or social issue. As social choices are aggregation of individual choices we assume a model individual in the tradition of the *Social Choice School* taking theoretical inspiration from notable social choice theorists. The issue of public expenditure as a key macroeconomic instrument and distribution of income as an integral implicative outcome of government's macroeconomic and fiscal policy

stance are analysed in a combined framework. The framework is though simple, however, non-conventional.

## Literature Review

We did a literature review first for the studies concerning a combined analysis of public expenditure, redistribution a social choice as well as the studies that are though separately done on these issue; however relevant to this study and provide an additional insight to these issue. The most noted studies in this regard are listed in the following table:

**Table-1: A Gist of the most Notable Literature Reviewed for the Study**

Study	Year	Findings
Rogoff and Sibert	1988	Role of temporary information asymmetries in explaining electoral cycles in macroeconomic policy variables. They found that voters observe taxation and government expenditure however they tend to view these variables with one period lag.
Alesina and Perotti	1994	The study states that voters cannot understand that the government faces an inter-temporal budget constraint and as a result they underestimate the future tax liabilities of debt finance expenditure programmes, that is, the voter suffers from fiscal illusion.
Sen and Vaidya	1996	Macroeconomic policy output and price for this economy find in support to pre election increase in expenditure but, no evidence could be observed for an electoral cycle in output and aggregate price behaviour.
Shailesh Jha	1999	The extent of redistribution, is determined by inequality of income distribution (positively), the type of political regime in place (democracy versus authoritarian in very broad terms), degree of political participation of the poor in the political process (positively), and the level of development. 1. Countries starting at a low level of income, which have continued to be plagued by low levels of income across time (India) have increasing levels of redistribution. The effect of an increase in redistribution in these countries is low economic growth accompanied by an improving income distribution. 2. Countries that started at a low level of income, but have moved up to the intermediate level of income across time (Taipei, China) have decreasing levels of redistribution. As redistribution decreases in these countries, economic

		growth should increase, accompanied by a worsening distribution of income.
Nourudhin	2004	The study analyzed the influence of party system on states expenditure pattern of India particularly, the ability of state government to deliver public goods, using macro economic data set from 1967-1997 as well as post election votes survey. The study argues that differences in state government expenditure are largely the result of difference in their party system. The study demonstrates that the state with two party competition provide more public goods than state with multi party competition.
Chaudhary and Das Gupta	2005	Explored the link between timing of elections to national legislative and central government's economic policies in India. In the study political variables included as dummy for election year, coalition (measuring the amount of time a coalition government was in power at the centre) and majority (measuring the proportion of seats won by ruling party). The authors find an electoral cycle in two components of revenue namely excise tax and income tax and coalition governments have no differential effects on tax policies. The authors also find evidence for electoral cycles in case of expenditure on agriculture, distribution of food grains and fertilizer subsidy and central budget deficit is higher in election years than other years. Furthermore the study finds that the coalition central governments invest more in physical infrastructure than their single party opponents.
Khemani	2007	The study shows that single party majority governments have stronger incentives for fiscal discipline than coalition governments. However in an another paper (2008) he asserted that coalition governments spent less on social sector than the single party which is in implied contradiction to the earlier proposition on fiscal discipline as a feature to single party government
Dash and Raja	2012	The study shows that formation of coalition government is one of the major driving forces for increasing public expenditure of the Indian states in the recent decades. The overall findings of the study suggest that the relationship between expenditure allocation and political determinants across the Indian states validate the proposed hypothesis even after controlling for the traditional and other unobservable determinants

Source: Author's Compilation based on Literature Review of the Study

## **Research Gap**

Many studies, including the ones that are listed above, have treated the issues of political economy, public expenditure, redistribution, inequality, and social choice in one way or another. The gap that emerges from the extant literature survey concerns the fact that no particular study has been found in Indian context which has focused on an exclusive analysis of public expenditure and its impact on redistribution with and implied/intertwined treatment to social choice in sequential inter-dependence.

It is observed that there is a great deal of lack of a discussion on the philosophical position of redistributive aspects from the ethical positions of both the individual and the society. In addition, these studies also lack, considerably, in providing a useful account of the technical aspects (technological and institutional, both, the issues are explained in greater details in the relevant section of chapter-2 under 2.1.1), governing the redistributive mechanism for a sustainable macroeconomic framework.

The other important research gap which comes forward is that many studies which have worked on the issue of social choice in relation to government's expenditure policy have primarily used election data; however, no such study is found which has incorporated a primary survey for extracting the social choice on selected/relevant variables.

There is no such study found that has tried to converge three logically consistent theoretical arguments and their quantitative proxies for an analysis which are prevalent invariably in economy and particularly in economies which are under democratic rule, that includes social choice, public expenditure, and redistribution.

In context to the specific framework of the organisation of political economy across the major part of the world which is led by democratic polity based on elections as the instruments of collective decision making, there is serious dearth of literature concerning economic enquiry through democratic polity and elections on a particular real setting while keeping in view the position of social choice theories with reference to their highly unrealistic assumptions that are lying at a far distance to real life structures and procedures of democratic polity and the technicalities of the electoral process (the issue is dealt in detail in chapter-5).

The data on distribution of income is concerning as there are no efforts to create any database or survey or census that collects personal income data. Most of the studies related to problem of redistribution are done by measuring consumption inequality based on NSS-CES. However, data on income distribution is prepared by World

Inequality Lab by using pre-tax income of taxpayers in India based on slab-wise income tax return statistics published by Income Tax Department, though this data has significant limitations as the assessed income is often a small proportion of total national income (discussed in detail in section 4.2.1).

## **Objectives**

1. To analyze trends and patterns of various components of public expenditure with high redistribution sensitivity.
2. To understand and analyze empirical trends of income inequality in India.
3. To find out possible changes in redistribution sensitivity of public expenditure over the period.
4. To locate some empirical relationship between social choices reflected through electoral preferences and public expenditure.
5. To find out the relative difference in Social choice when information asymmetry is minimized vis-à-vis the case when asymmetry prevails.
6. To examine relative efficacy of public choice and social choice theoretic framework with regards to redistribution.
7. To ascertain whether non-economic e.g. social cultural factors affect social choice and political outcomes.
8. To locate other policy measures and factors that affect redistribution, positively or negatively.

## **Hypotheses**

1. Redistribution-centric public expenditure (RCPE) in India shows no significant increase during the post reform period.
2. There is relative decline in the redistribution effectiveness of public expenditure policy during the post-reform period.
3. Public expenditure policy position during the post reform period shows deviation from social choice.
4. There exists a difference in social choice when information asymmetry is minimized
5. Non-economic factors affect redistributive sensitivity of social choice.

## **Data and Methodology**

### ***Secondary Data***

The present study uses data on direct budgetary allocations taken from various budget documents, Budget Division, Ministry of Finance; the data on GDP at constant prices is taken from Central Statistical Office, Ministry of Statistics and Programme Implementation, Government of India; cross-country data on public expenditure to GDP ratio has been taken from the IMF Data Portal; the data on Distributional National Income Statistics; expressed in terms of proportional share of National Income for a fixed portion of population, is taken from World Inequality Database run by World Inequality Lab. The data on state government budgets is taken from the RBI data on State Finances: A Study of Budgets which provides time series data on budgetary allocations. With regard to secondary data on electoral social choice on previous elections is taken from the Election Commission India. The variables, utilised in the analysis, and sources to these are listed below, (a detailed account of sources of secondary data is provided in Appendix-1.8.1).

- i) *From Central Government Budget Documents & RBI Statistics on State Finances*

#### Expenditure on Subsidies:

1. Food Subsidy
2. Fertilizer Subsidy
3. Fuel Subsidy
4. Other subsidies

#### Expenditure on Social Services (Total of Plan and Non-Plan Expenditure)

1. Education, Sports, Youth Affairs
2. Health and Family Welfare
3. Water Supply, sanitation and Housing
4. Information and Broadcasting
5. Welfare of SCs/STs and Backward Classes
6. Labour and Employment
7. Social Welfare and Nutrition
8. Other Social Services

Three major expenditure items from ‘Expenditure on Economic Services’ are selected due to their relatively high distribution sensitivity and mass impact namely;

1. Agriculture & Allied Activities
2. Rural Development
3. Irrigation & Flood Control

ii) *From IMF, World Inequality Database, Election Commission of India, BSE - PSU and DIPAM*

1. Government expenditure to GDP ratio
2. Distributional National Accounts
3. Pre-tax Income Gini Coefficients
4. Voter Turnout, Vote Share and Seat share of the Party Coalition in the Government

### ***Primary Data***

A primary data is conducted for the study from 8 districts of Uttar Pradesh namely Agra, Bareilly, Gorakhpur, Jhansi, Lucknow, Meerut, Prayagraj and Varanasi, selecting the respondents on the basis of occupational homogeneity and diversity. The survey was done selecting 60 respondents from one district Selection of sample units (respondents) is done on the basis of economic division or on occupational division. They belong to Politico-economic division of political interest groups that have a lesser electoral relevance than the Socio-economic division of political interest groups). The rationale for choosing the respondents on the basis of occupational division is due to extreme complexity of social division mainly on the caste and cultural affinity which prevails in the society. Thus, selecting the respondents on the basis of social homogeneity could not be viable for the present analysis. Following categories of respondents were included while extracting the overall social choice.

**Table-2: Weight assigned to various respondent categories  
(Sample composition within the single District)**

<b>S No.</b>	<b>Respondent Category</b>	<b>Weight out of 60 (Number of Individual Respondents)</b>	<b>Weight in %</b>
1	Farmers	20	33.33
2	Small Traders	8	13.3
3	Casual Workers	10	16.6

4	Blue Collar Workers	4	6.67
5	Formal Sector White Collar Workers (Private Employees and Professionals)	4	6.67
6	Permanent Salaried Employees (Govt Employees)	4	6.67
7	Educated Unemployed Youth	10	16.67

Source: Author's compilation based on Survey Plan

The primary survey is pre-dominantly intended to extract various asymmetries that cause a deviation between stated policy objectives and real economic outcomes. The other objective is to identify the factors that are causing various asymmetries along the twin role of the citizen, one as a rational actor and the other as an altruistic individual. The economic rationality is examined through questions on the economic aspects represented to the respondents through various aspects of public expenditure and other questions pertaining to economic aspects of individual life. The altruistic aspects of the same respondent are examined by asking questions on various socially and politically relevant issues.

### ***Methodological Scheme***

To verify various hypotheses and sub-hypotheses within the logical standings required to prove the central hypothetical theme of the research, the analysis of secondary as well as primary data by utilising most relevant statistical techniques. The major methodological specifications are as under:

1. For empirical analysis of public expenditure and its various components, proportional ratios, average annual values, average decadal values, year-on Year growth rate, and CAGR is calculated for drawing inferences.
2. The analysis relating to a combined empirical view of public expenditure and distribution of income, correlation coefficient is calculated between various selected components and measures of Redistribution Centric Public Expenditure (RCPE) and Distributional National Accounts (DINA). In addition, Gini-coefficient, Lorenz Curve, and Palma Ratio are calculated to show empirical trends of income inequality in India for the relevant period. Distributional National Accounts are also analysed in per capita terms
3. Annual average values relating to variables of electoral social choice, Primary Deficit and Disinvestment Proceeds are calculated for policy positioning and for analysing empirical trends.

4. Finally, the trends and patterns of variables representing a combined functional view is presented in graphical manner by using the values of all the variables in percentage form including the values of Gini coefficients, scaled to percentage level.

In addition to the methodological scheme a separate section of econometric treatment of economic policy and theory is discussed in detail for a specific understanding of partial equilibrium based modeling for policy analysis particularly when policy variable affect each other however do not show a theoretical significance in the sense of the Granger Causality. The unconventional methodological treatment is better explained in context to the model individual, the case of value judgement as an integral aspect of redistribution and social choice; public expenditure cannot remain isolated from value judgement as it originates from a sovereign consciousness which is the collective consciousness in case of a democratic government.

### **Findings of the Study**

The main results from chapter-3 which concerns empirical analysis of trends and patters of public expenditure in India during post-reform period are as follows:

1. Expenditure on social services, mainly consisting of health and education services, is contributed more by states spending continuously averaging at 52.1 % of total states expenditure which is 8.3 % of GDP as against the centre's expenditure social services at an average rate of 1.3% of GDP during the period. The expenditure on economic services tilts more towards the centre.
2. CAGR for General Government Redistribution-Centric Expenditure at 5.9 % is slightly below that CAGR for real GDP at 6.0 %. Thus, though total general government expenditure (centre and states combined) grew less than GDP growth, however redistribution-centric expenditure grew more than the real GDP growth rate.
3. The CAGR for General Government Redistribution-centric expenditure is 5.9 % and is higher than the CAGR for TCRCE at 5.2 % and lower than the CAGR for all states combined at 6.2 %.
4. Redistribution-centric expenditure shows no significant increase during the post reform period as GGRCE declined from 12.5 % of GDP in 1990-91 to 12.2 %

in 2019-20 with an average ranging between these two levels at 11.8 %. This also allows us to accept the null hypothesis.

Chapter-4 dealt with empirical trends of income inequality and redistribution-centric public expenditure analysed in previous chapter. The key findings are:

1. In terms of broad understanding about the long-run trends of distribution of income the conclusions from chapter-4 suggest that income inequality has sharply increased during the post-reform period under the general limitations of the pre-tax Distributional National Accounts data.
2. With regard to the hypotheses taken in the chapter, we conclude that in terms long-run empirical trends public expenditure in context to fiscal stance at large during the post-reform period reflected through public expenditure on redistribution-centric budgetary heads shows a stagnancy and neutrality. This stagnancy and neutrality is more visible when we analyse the case in context to empirical trends of pre-reform period.

In chapter-5 we analysed as to how different governments align to public policy in context to public choice and social choice theoretic framework. We analysed in this regard electoral data in the post 1991 period for various governments taking vote share (% of total polled votes) and seat share in the Lok Sabha (% of total seats) . The trends of public expenditure and disinvestment proceeds were taken as possible indicators of defining policy position of different governments. We analysed the nature and a possible extent of social choice regarding public expenditure and policy allegiance through a primary survey. The key findings are summarized as under:

1. The governments that took forward a market based policy stance received low support of electorate both in terms of vote share (% of total polled votes) and seat share (% of Total seats).
2. The governments that had policy stance tilting towards a state driven strategy utilising non-market instruments received higher level of social sanction in terms of vote share and seat share in the Lok Sabha elections during the post reform period.
3. No strong empirical evidences emerged regarding the relative efficacy of public choice theoretic framework and social choice theoretic framework in context to redistribution in some direct sense; rather these evidences are reflected through public expenditure in terms of volume of primary deficit and allegiance to disinvestment policy.

4. We found that governments pre-dominantly falling towards public choice school of thought show somewhat greater allegiance to disinvestment policy.
1. The deviation that exists between the social choice and public policy stance is due to distortions created by non-economic factors (which have a moral, ethical and philosophical sensitivity attached with these) that affect social choices of individuals.
2. These non-economic factors include transparency and sanctity of electoral process and fairness of press at institutional level and allegiance to caste, community and religion while taking decisions about electoral choices at the individual level.
3. In context to objectives and hypotheses relating the chapter we find that non-economic factors affect redistributive outcomes.
4. We found that social choice is consistent with adequate public provision for public goods particularly merit goods.

### **Limitations of the Study**

The limitations of the study chiefly relate to the quality of data on redistribution of income in terms of its coverage of the real economy. The WID data has limitations as these are based on the tax-assessed income only. We have discussed the issue in detail in relevant sections in chapter-4.

The other limitation emerges from a lack of a theoretical relationship between public expenditure figures and indicators of distribution of income or income inequality in the sense of a Granger-Causality.

Both these issues were kept in view and a rationalised approach was adopted to keep the scope of the analysis according to the intrinsic explanatory capacity of data.

### **Policy Implications**

1. On the basis of the findings of the study we are of the view that government should focus on increasing social spending particularly towards merit goods as often advocated among experts in the policy circles.

2. We view that governments and many policy experts often are critical to rising revenue expenditure need a review in context to the stage of development of the economy and the corresponding level of development of physical infrastructure as a rational indicator of required expenditure on capital account. It is recommended that if adequate investment is already in place towards the physical infrastructure then an adequate focus on social spending is both desirable and rational form socio-economic policy stand.
3. We find FRBM legislation in context to India's low public expenditure in comparison to Advanced Economies and BRICS economies to be an issue of review as one of a stipulation of the act require fiscal deficit to brought down to below 3 %.; and in view of the fact that interest payments of government are already above 3 % on average thus, in case of strict adherence to FRBM stipulations would result in negative primary deficit which means, that net government spending to be negative.