Political Budget and Electoral Cycles in India: Some New Evidence

A thesis submitted to the University of Hyderabad

in partial fulfillment of the requirements for the award of

DOCTOR OF PHILOSOPHY
IN
ECONOMICS

By
MUHAMMED SHAMEER K
Registration No. 16SEPH32

SCHOOL OF ECONOMICS

UNIVERSITY OF HYDERABAD

HYDERABAD-500046 (INDIA)

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Dedicated To,

My Parents,

My Lovable Wife, and

My Beloved Relatives and Friends

School of Economics
University of Hyderabad
Hyderabad-500046, India

DECLARATION

I, Muhammed Shameer K, hereby declare that this thesis entitled "**Political Budget and Electoral Cycles in India: Some New Evidence**" submitted by me under the guidance and supervision of Prof. S. Raja Sethu Durai of University of Hyderabad, is a *bonafide* research work, which is also free from plagiarism. I also declare that it has not been submitted previously in part or full to this University or any other University or Institution for the award of any degree or diploma. I hereby agree that my thesis can be deposited in Shodganga/INFLIBNET.

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School of Economics
University of Hyderabad, Hyderabad-500046 (India)

CERTIFICATE

This is to certify that the thesis entitled "Political Budget and Electoral Cycles in India: Some New Evidence" submitted by Mr. Muhammed Shameer K bearing registration number 16SEPH32 in partial fulfilment of the requirements for award of Doctor of Philosophy in the School of Economics is a bonafide work carried out by him under my supervision and guidance. The thesis is free from plagiarism and has not been submitted previously in part or in full to this or any other University or Institution for award of any degree or diploma.

The candidate has satisfied the UGC Regulations of publications and conference presentations before the submission of his thesis. Details are given below.

A. Publications:

1. Muhammed Shameer K and Mohammed Kasim C. (2017). "Determinants of wage rate of inter-state migrant workers in Kerala", *Labour & Development*, 24(2), 121-145.

B. Presentations in conferences:

1. Presented a paper: "Political Budget Cycles in a Developing Economy: Empirical Evidence for Fourteen Major Indian State General Elections", in Xiangjiang River Forum in Economics, Finance and Management for Young Scholars held on August 19-21, 2022, Changsha, China.
2. Presented a paper. "The Political Budget Cycles: Evidence from Indian Municipal Corporation Elections", NIPFP-IIPF International Conference on 'Papers in Public Finance' at National Institute of Public Finance and Policy (NIPFP) in collaboration with International Institute of Public Finance (IIPF), Germany, held from June 29-30, 2021, New Delhi.

Further, the student has passed the following courses towards fulfillment of coursework requirement for Ph.D. during August – December 2017.

Course Code	Course Title	Credits	Pass/Fail
EC-801	Advanced Economic Theory	4	Pass
EC-802	Social Accounting and Data Base	4	Pass
EC-803	Research Methodology	4	Pass

Signature of PhD Supervisor

S. Rajasethu Durai 25/01/2023

Prof. S. Raja Sethu Durai

PROFESSOR
SCHOOL OF ECONOMICS
UNIVERSITY OF HYDERABAD
Hyderabad-500 046. (INDIA)

25/1/23

Dean

DEAN
SCHOOL OF ECONOMICS
UNIVERSITY OF HYDERABAD
Hyderabad-500 046. (INDIA)

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Finally, I would like to add that I am alone responsible for the errors and omissions in the study and none other may be blamed for it.

Muhammed Shameer K

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Abstract

The present thesis endeavors to furnish novel evidence pertaining to the political budget and electoral cycles in India, with a specific focus on the Indian municipal corporations and state governments. Through this study, an examination will be conducted of the politically motivated spending of Indian municipal corporations and governments that are in a position of unique power, particularly in alternative states and those with weak majority states, during both election and non-election periods. Furthermore, the investigation will seek to comprehend the influence of the electoral cycle on the central and state governments' relationship regarding federal transfers, and how political factors may affect the allocation of central funding among sub-national governments. In summary, this thesis contributes to the existing body of literature on the politically motivated allocation of funds by Indian municipal corporations. Additionally, this study delves into the examination of the utilization of funds designated for specific purposes by state governments for the purpose of advancing political agendas and the underlying political motivations behind the distribution of federal transfers from the central government to state governments during election periods.

JEL Classification: E62, H72, D72, H3, H7

Key Words: Budget, Elections, Government Spending, Political Budget Cycle, Public Finance

Chapter 1

INTRODUCTION

"When you think economics, think elections; when you think elections, think economics".

- (Tufte, 1980)

1.1 Introduction

This dissertation focuses on two key areas of research in the field of political economics: the Political Budget Cycle (PBC) and the electoral cycle. It is widely acknowledged by politicians, policymakers, and academics alike that "economics shape politics." Voters who perceive politicians as responsible for their financial well-being tend to adopt a reward-and-punishment approach, expressing support for the ruling government during positive economic times and expressing dissatisfaction by voting against them during negative economic times. The phenomenon of negativity bias in the context of economic voting suggests that electorates tend to exhibit a greater proclivity towards penalizing incumbent political actors, rather than rewarding them, for the state of the economy. However, it is important to note that economic conditions do not solely impact the manner in which individuals vote, but also the likelihood of their participation in the electoral process. Specifically, during periods of economic downturn, a significant proportion of the populace's dissatisfaction towards the ruling party may be mitigated through abstention from voting. If so, there are incentives among politicians to inflate the short-term Phillips curve[1] and manipulate macroeconomic on verge of elections.

[1] The relationship between unemployment and inflation is described by the Phillips curve, a theory in economics. The curve demonstrates that these two economic indicators typically trade off: as unemployment declines, inflation tends to rise, and as unemployment rises, inflation tends to fall. Although the correlation is not always wholly negative, in general, high unemployment is linked to lower inflation whereas low unemployment is linked to greater inflation.

Considering the private motives of politicians[2], recent researches are no longer treat them as social planners. Therefore, their primary objective is to attain re-election or maintain their hold on power. This short-term, opportunistic approach leads governments to implement policies that serve their immediate interests, regardless of the long-term negative consequences for the economy (Nordhaus, 1975). These types of opportunistic policies, known as the political cycle, often have harmful effects on the economy.

The studies on politico-economic models have documented a plethora of the studies on political determinants of fiscal policy, which accentuate that the politicians in democracies have electoral and partisan incentives on their character, amount and timing of the provision of public goods[3]. That is, their ideological persuasions and the opportunistic behavior will affect the policy options. Researchers in the field agree that India is a relevant geographical area to study these perceptions as it is the largest democracy in the world with an extending electorate and rich diversity of political agents with distinguished preferences. Though there have been interesting research works on this at the national and state levels in India (Lalvani, 1999; Saez and Sinha, 2010; Sen and Vaidya, 1996; Uppal, 2011, etc.)

This dissertation comprises of five chapters that examine the politico-economic interactions within the Indian context. The initial chapter presents an overview of the topic, including significant theoretical contributions pertaining to the political budget cycles and electoral cycles in general.

[2] Politicians, akin to all individuals, possess a multiplicity of individualistic motivations that influence their conduct. Such motivations may encompass the aspiration for political influence, adherence to a specific ideology or policy, the desire to assist their constituents, or the pursuit of personal financial or professional gain like desire for power.

[3] A partisan objective refers to a purpose or objective that is closely associated with the ideology or interests of a particular political faction or organization. The term is frequently employed to characterize the actions or strategies of political figures or political entities that are propelled primarily by the objective of furthering the interests of their faction or organization.

Building upon these assumptions, a clear distinction between these models is established. The first chapter provides a succinct explanation of these models, while also contextualizing the underlying theoretical foundation of the subject matter. It should be noted that this chapter does not present an exhaustive review of the literature, but rather focuses on the most pertinent theoretical advancements in the realm of political cycles.

The subsequent chapters of this study are organized in the following manner. Chapter 2 endeavors to examine the existence of political budget cycles within Indian municipal corporations. This represents a pioneering effort to trace the political budget cycle within the Indian local government sphere. Prior studies have largely focused on the political dynamics of parliamentary or state government elections. The present study aims to investigate the re-election prospects of Indian Municipal Corporations and to comprehend the fiscal decisions made within the constraints of limited resources.

Subsequently, Chapter 3 delves into the examination of political budget cycles in the context of Indian state elections. While previous studies have primarily focused on analyzing overall spending patterns, this study utilizes data on actual current spending and its subcategories to discern the allocation of funds during the election period. This chapter adopts a novel approach by considering the impact of alternate and weak majority government on fiscal choices. The central premise of this line of inquiry is that governments tend to manipulate spending more in election years due to the uncertainty of their re-election prospects. To conduct the analysis, state governments are classified based on their continuity and majority size, which aligns with the theory posited by political scientist A. Downs (1957) that "each citizen votes for the party he believes will provide him with higher utility than any other party during the coming electoral period.

Another empirical chapter of this thesis, namely Chapter 4, addresses the electoral politics of inter-governmental transfers between central and state governments. The analysis focuses on the partisan effect (Hibbs, 1977) on the devolution of transfers and aims to uncover the political determinants of such actions. Rather than examining the traditional concepts of equity and efficiency (Musgrave, 1959; Oates, 1972; Gramlich, 1977), this study employs more recent advancements in identifying political factors influencing fund devolution. An "alignment" dummy variable is constructed to trace the political factors behind specific transfers. Hypothetically, it is posited that an aligned state will receive more funds than a non-aligned state in proximity to an election.

The conclusion chapter of this dissertation, namely chapter 5, is dedicated to the essential aspect of synthesizing the principal discoveries and contributions of the study. It presents a succinct and lucid summary of the central outcomes and deductions derived from the research, as well as potential avenues for future inquiry and practical implications. The conclusion chapter commences with an overview of the main findings and deductions, emphasizing the salient contributions of the study. It subsequently proceeds to an examination of the ramifications of the research, both in terms of its theoretical implications and its practical applications. The conclusion chapter also takes into account any limitations of the study and proffers recommendations for further research.

1.2 Objectives of the Thesis

- To examine the presence of Political Budget Cycles in the Indian Municipal Corporation elections.
- To determine the political budget cycles in the Indian States with Weak majority and Alteration governments.
- To analyse the electoral cycle in the distribution of centrally sponsored fund among state governments in India.

The chapters of this study are organized in accordance with the objectives of the research. The primary objective of this study is to explore the presence of politically induced cycles on fiscal instruments of Indian Municipal Corporations, representing a pioneering effort in this field. The research is grounded in the paradigm of new political macroeconomics. The state governments are analyzed based on their incumbency status, with a particular focus on investigating the re-election prospects of governments that have undergone a change in power or have faced close competition in elections. The third objective specifically examines the behavior of the central government in relation to state general elections, with the aim of determining through empirical research if there are any political motivations influencing the distribution of central funds among state governments in India.

1.3 Political Budget Cycles: Theoretical Underpinnings

1.3.1 Introduction

Despite the acknowledged significance of government actions on various aspects of economic activity, economists have yet to successfully integrate the considerations of both public and private decision-makers within a unified general equilibrium theory. Instead, government action is often conceptualized as an exogenous variable, shaped by political factors that fall outside the purview of economics. This perspective is an extension of the traditional belief that the private sector operates as a self-regulatory mechanism and that any government intervention beyond maintaining law and order is considered "interference" rather than a necessary component. The standard approach to analyzing policymaking, as exemplified by the methods of Tinbergen (1952) and Theil (1956), typically employs traditional optimization techniques which depict the policymaker as a "benevolent social planner" whose primary objective is to optimize social welfare (Theil, 1956). This approach views the role of government in economic policy analysis as normative and external to the economy, with the sole objective of ensuring the most favorable outcome for the economy. As a result, economic policy analysis is reduced to a technical problem of maximizing welfare subject to constraints.

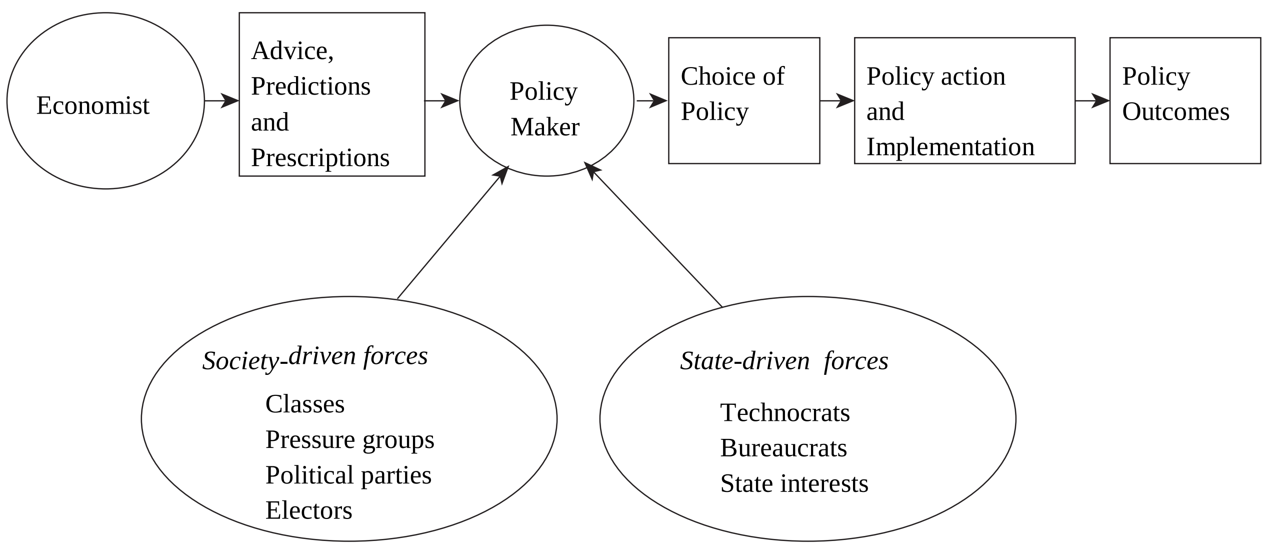
The formulation and implementation of policies is a vital task that is carried out by policy makers. They are responsible for establishing the goals and objectives of a policy, identifying the most appropriate course of action to achieve these goals, and implementing the necessary measures to put the policy into effect. The process of policy making is complex and multifaceted, comprising various stages such as research and analysis, consultation, decision-making, and implementation.

In the realm of government, policy makers encompass a diverse group of individuals, including politicians, bureaucrats, and other government officials, who are responsible for creating and implementing policies that have a broad impact on society. They are responsible for making decisions on a wide range of issues, including healthcare, education, taxes, and economic development. Policy makers in government utilize research and analysis, as well as input from stakeholders, to develop policies that are effective, efficient, and responsive to the needs of the population. In addition to this, policy makers employ various techniques and methods such as cost-benefit analysis, decision trees, game theory, and other techniques to make decisions.

The traditional model of the policymaking process describes the role of economists as providing expert advice, forecasts, and proposals based on sound economic analysis to those in charge of developing policies. It is believed that politicians with the authority to make decisions will utilize this information to address significant economic problems in an efficient manner. The top section of Figure 1.1 illustrates the path of prevalent policymaking, in which policymakers will automatically come up with prognosis actions to maximise social welfare by following the guidance provided by the experts in economics. A new perspective in Political economy accentuates the influence of powerful social and state-centered forces in policy formulation. The actions and decisions of individuals and institutions within a society are shaped by both societal and state-based forces. Societal forces refer to the norms, values, beliefs, and expectations held by members of a particular community that shape their behavior. These forces can be influenced by cultural, religious, or ideological factors, and may vary across different societies. State-based forces, on the other hand, refer to the laws, policies, and institutions established and maintained by the government that shape the behavior of individuals and institutions within a society. These forces can include regulations, laws, and policies that govern economic, political, and social interactions, and may be influenced by the specific political and legal systems in place within a society.

Social tranquility becomes the prime motive of policymakers to satisfy the fragmented and heterogeneous societies and meeting their needs results in a situation in which policymakers are not just focusing on the growth perspective alone. The role of government as a social planner to maximise the welfare of an economy is a questionable position in economic theory. The public choice theory developed the theoretical arguments on the interaction of politics and economics, which explains the private interests of a government to the mainstream. What drives an incumbent to bring certain choices of policies? Are widely discussed under the purview of these politico-economic models by researchers for more than four decades. The government's political influence on economic policies has been a fascinating field for researchers from economics and politics.

Figure 1.1: Traditional View of Policy Making



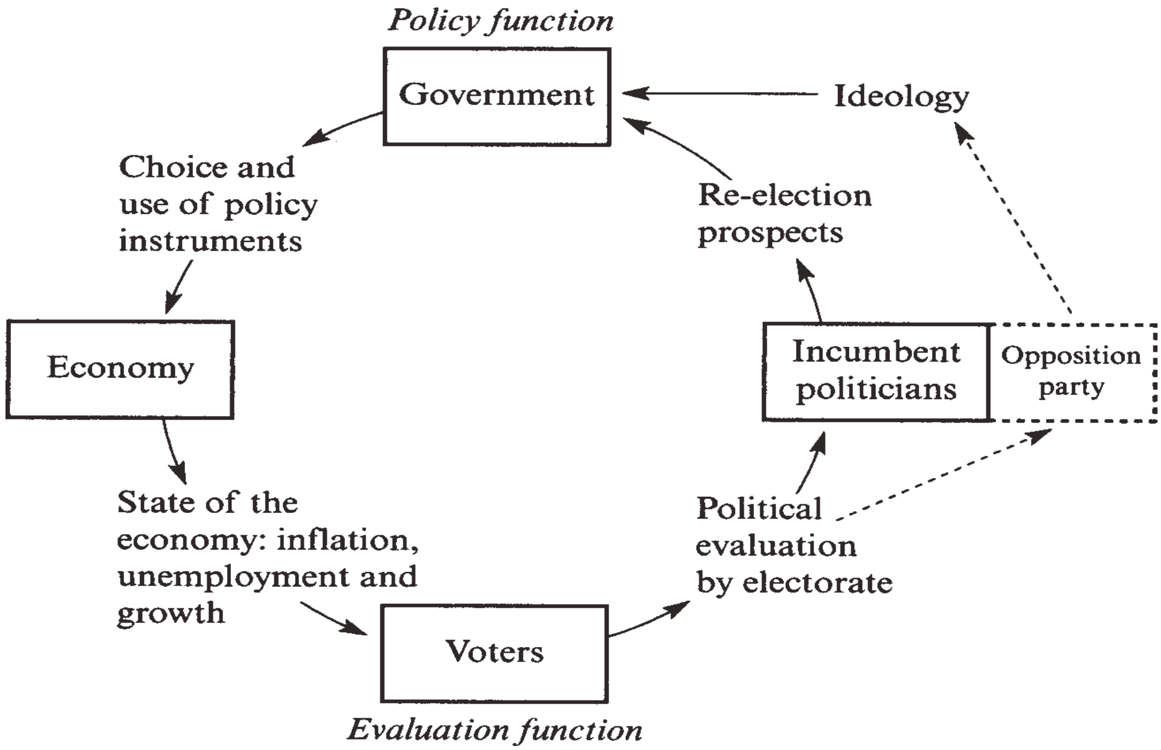
Source: Meier (1995)

1.4 The Politico-Economic Models

The driving forces behind a government's actions and their implementation of policies ultimately shape the result of political-economic interactions. However, it remains to be determined whether governments truly aim to maximize social welfare despite the existence of models for achieving it. This fundamental question serves as the basis for analyzing political-economic models within the framework of public choice theory. Historically, economic theorists have viewed government as a hindrance rather than a fundamental aspect of economic activity (Downs, 1957)

According to Downs (1957), the government is composed of individuals who strive to attain positions of authority for the purpose of obtaining personal benefits such as income, prestige, and power. This "Downsian" view is modelled to see the political parties in a democracy who formulate policies for vote purposes and not for any preconceived purposes. The self-interested behaviour of a government should be considered to the traditional Keynesian view of circular flow models. The course of new macroeconomics starts to deal with the inclusion of private motives of the politicians, who are treated on their electoral perspective.

Figure 1.2: A Politico-Economic Model



Source: Frey and Schneider, 1978

The traditional view on the politico-economic system has been modified by Frey and Schneider (1978) and can be illustrated in figure 1.2 with the involvement of private motives of incumbent parties in the system. The self-interest of a politician can be evaluated once the government is formed; until there exists a 'principal-agent problem'[4]. The agent (political party in power) possesses their choices that may or may not be in the interests of the imperfectly informed principal (voters). A politician holds the ideological or office-motivated re-election prospectus strategies or

[4] The principal-agent problem, referred also as agency problem, is a fundamental economic theory that describes the challenge that emerges when one entity (the "principal") entrusts another entity (the "agent") to act on its behalf. This problem occurs due to the misalignment of goals and incentives between the principal and the agent, which can result in the agent's actions not being in the best interest of the principal. This misalignment can generate inefficiencies and suboptimal outcomes as the agent may give priority to its own interests over those of the principal.

maybe both. On the other hand, a voter cast their votes with regard to the ability of the incumbent to achieve desirable economic goals like low inflation, more employment generations and rapid growth of the economy. So the period of an election has a crucial role in considering the future of a government in power or the opposition party to power. It is more likely to manipulate the economy on the verge of an election, and the incumbent prefers a buoyant economy.

The idea of the "*Political Budget Cycle (PBC)"* arises from the notion that the engagement of a government in a consumption binge, including a tax cut or increased transfers or distorted spending towards certain visible funds, increases the proximity of re-election. Regardless of the ideology in which a political party believes, they tend to convince voters with certain manipulation as the election arrives to signal their competence. The models are demarcated based on the assumptions held for the economic agents, both the government and voters. Nobel laureate William Nordhaus (1975) was the first to portray the opportunist behaviour of incumbents in the main course of politico-economic models. Significant theoretical contributions in the politico-economic models have two distinct phases, and they can be classified as Pre and Post rational Expectation models.

1.4.1 Pre-Rational Expectation Models

The politico-economic models were stimulated after the groundbreaking contribution of Nordhaus (1975), known as the "*Political Business Cycle*", with office-motivated[5] incumbents and voters with naïve expectations. He exploited the short-term Phillips curve and found government

[5] The office-motivated politician perspective highlights the importance of self-interest in politics and proposes that politicians are primarily motivated by their desire to hold public office, rather than by their objective to achieve specific policy goals or to represent the interests of their constituents.

manipulates the economy for political profit. The significant assumptions he holds for the theoretical experiment are as follows:

- The economy is characterised by the Phillips Curve[6]

$$Y_t = \overline{Y} + \gamma(\pi_t - \pi_t^e) \qquad (1.1)$$

In this equation (1.1) Y_t denotes output level during period t; $\overline{Y}$ is the equilibrium output level; π_t and π_t^e represents the actual inflation rate and expected inflation rate for period t respectively, and γ is a positive constant. It is hypothesized that the voting population is uniformly composed and holds aggregate inflation and unemployment as determinants within their decision-making processes, with a predilection for minimal inflation and unemployment. Policy-makers are posited to have comprehensive understanding of the voters' preferences, while having no specific inclination towards inflation and unemployment.

- Inflation Expectations are adaptive

$$\pi_t^e = \pi_{t-1} + \lambda(\pi_{t-1}^e - \pi_{t-1}); \;\; 0 < \lambda < 1 \qquad (1.2)$$

The process of forming expectations of inflation is characterized by adaptivity, which indicates that agents base their expectations of future inflation on their past experiences and observations rather than a comprehensive evaluation of all relevant information. In equation 1.2 the inflation expectation made by voters or the economic agents are based on the past behaviour for t-1 periods. This backward-looking behavior in the assessment of future inflation, results in the formation of expectations that are derived from past experiences, rather than a thorough analysis of the current and future economic conditions.

[6] The graph, which bears the eponym of economist A.W. Phillips (1958) was initially identified by him as depicting the inverse correlation between unemployment and inflation.

- Inflation rate is controlled by the policymakers

Policies aimed at modifying aggregate demand through the alteration of government spending and taxation can be implemented to achieve specific economic objectives. Specifically, expansionary fiscal and monetary policies, such as increasing government spending or reducing taxes, can stimulate economic growth and promote full employment. Conversely, contractionary fiscal and monetary policies, such as decreasing government spending or increasing taxes, can be implemented to curb inflation and moderate economic growth.

- "Office" motivated politicians, and they have no ideological or "Partisan" objectives

Politicians who prioritize personal benefits such as income, prestige, and power over ideological or partisan objectives are referred to as "office motivated" politicians. These politicians may not have a strong adherence to a particular political ideology or party affiliation, and their primary motivation is driven by personal gain.

- Voters are myopic[7], that is, in the sense of decaying memory and retrospective voting behaviour.

The political decisions made by voters are frequently shaped by the previous record of incumbent politicians in their management of the economy during their term of office. This type of retrospective voting behavior not only is restricted to past performance but also demonstrates myopia, characterized by a high discount rate on past economic performance and a lack of foresight. This implies that voters tend to place more weight on short-term economic performance, rather than evaluating long-term prospects or future plans.

- Election timing is exogenously fixed.

[7] The phenomenon of myopia among voters pertains to their proclivity to prioritize immediate advantages or benefits over evaluating the ramifications that may transpire in the long-term. This can result in choices that are not conducive to the welfare of the community or society at large. Such behavior can be exemplified through political campaign pledges or policies that may have short-term positive outcomes but may have detrimental effects in the long run.

With the above mentioned assumptions, Nordhaus (1975) considered every political party follows the same policy with a short-run stimulus in the economy, which is explained through a Phillips curve. He concluded that the economy would witness a pre-electoral increase in output and employment generation at the cost of the increased price level. The model also reveals that the post-election period of recession with contractionary policies reduces inflation at the expense of a higher unemployment level. The agents (voters) are retrospective in the voting pattern and backwards-looking.

In scholarly literature, partisan objectives are frequently examined within the framework of political science and public policy studies. They are often regarded as a potential source of bias within the policy formulation process, as politicians may place priority on the interests of their political faction or organization over those of the general public. Furthermore, the existence of partisan objectives may result in a lack of inter-party or inter-organizational cooperation, leading to a stagnation in the policy-making process. It is also noteworthy that the term "partisan objective" does not always possess a negative connotation. In certain contexts, it may also refer to a goal or objective that is shared and consistent with the principles and values of a specific political faction or organization.

According to Hibbs (1977), political ideology leads to the choice of economic policies. This "*Partisan Theory*" differs from the former in the sense of ideology-based politicians and voters who were aware of these partisan differences. Hibbs argued that Democrats (or the leftist party in general) formulate policies to lower unemployment with a higher price level than Republicans (or right-wing party). Hibbs examined highly consolidated data regarding the relationship between unemployment and inflation outcomes, in correlation to the political ideologies of governments across 12 West European and North American nations, has revealed a pattern of a low unemployment-high inflation configuration in countries that are regularly governed by Left-leaning parties and a high unemployment-low inflation configuration in political systems where center and right-leaning parties hold a prevalent position. These major contributions are criticised by the rational expectation revolution, in which they criticised that these are heavily based on the short-term Phillips curve. Hibbs proposed an alternative framework by relaxing the assumptions on the behavior of incumbent politicians and voters, replacing them with more realistic and nuanced perspectives.

- Different political parties have their own "*ideological*" or "*partisan*" view of policymaking.

In a political system, the phenomenon of partisan perspectives on policy formulation pertains to the notion that political factions or organizations hold unique perspectives and inclinations regarding the manner in which various policy matters are addressed and decisions are made. This can take on various forms, such as dissimilar party platforms and stances on various issues or divergent methodologies in policy-making and decision-making. Hibbs argues that Left-wing governments formulate policies to lower Unemployment (U) on the cost of higher Inflation (π) than the right-wing government. Let us consider these ideological preferences in terms of differences in loss function (Cost function) explained by Alesina (1987) The equations of loss functions of Left-wing and Right-wing parties on unemployment (U) and Inflation (π) are as follows[8]:

$$C_R = \frac{(U_R - U_R^*)^2}{2} + \phi_R \frac{(\pi_t - \pi_R^*)^2}{2} \qquad (1.3)$$

[8]According to Hibbs, the ruling party will implement policies that align with its ideological orientation, and these policies will exert a significant influence on the economy.

$$C_L = \frac{(U_L - U_L^*)^2}{2} + \phi_L \frac{(\pi_t - \pi_L^*)^2}{2} \qquad (1.4)$$

The loss (cost) function in terms of the Right-wing ideology based party is termed C_R, and for the Leftist ideology based party denoted as C_L. In equation 1.3, U_{R^*} and π_R^* represent the targeted unemployment and inflation rates for a right-wing party. The relative weight ϕ_R captures the difference of inflation from its targeted level $\pi_t - \pi_R^*$ relative to the unemployment from its targeted rate $(U_R - U_R^*)$. Equation 1.4 follows the same definitional pattern for the case of the Left-wing party as expressed by equation C_L.

'Hibbsian' ideological differences can be summoned up as,

$$U_L^* \leq U_R^*$$

$$\pi_L^* \geq \pi_R^*$$

$$\phi_L \leq \phi_R$$

Hibbs proposed an alternative framework that rejected the notion that political parties are primarily driven by the desire for personal benefits such as income, prestige, and power, instead of ideological or partisan objectives. He emphasized the role of ideological differences in shaping the political-economic interactions. He stated that political parties possess distinct ideologies which they promote and implement, and these ideologies influence their interactions with the economy. According to Hibbs, political parties with varying ideologies hold different perspectives on issues such as taxation, government spending, and regulation, resulting in different policies that have distinct effects on the economy. He concluded that the politico-economic interactions are not determined by the office-motivated behavior of political parties but by the ideological distinctions between them. Thus, comprehending the ideological differences between political parties is crucial for analyzing and forecasting their economic policies and their impact on the economy.

- Agents (or voters) possess knowledge regarding the differing ideologies of political parties as well as the policies that they each advocate for.

The partisan or ideological distinction between parties is known to the voters, and they prefer one over the other on the basis of the incumbent's offerings. Voters have a general understanding of the distinctions between political parties in terms of their partisan or ideological leanings, however, their preferences for one party over the other are often influenced by the policies and offerings of the incumbent party. This type of voting behavior is referred to as retrospective voting, where voters base their decisions on their evaluation of the incumbent party's performance in office, as opposed to their predictions for future performance. Voters tend to make their choice based on the incumbent party's track record of fulfilling their campaign promises, addressing issues that are important to them and their overall management of the economy, hence, the partisan or ideological distinction between parties becomes a secondary factor in their decision-making and the emphasis is mainly on the incumbent party's performance and offerings. So Hibbs introduced the partisan differences between parties and the choice before voters to choose according to the policy offerings.

1.4.2 Post-Rational Expectation Models

The rational behaviour of economic agents questioned the pre-rational expectation models. By the middle of the 1970s, the models with adaptive expectation behaviour of economic agents were heavily criticised with the arrival of the Rational Expectation Revolution[9]. The theory of rational expectations plays a significant role in numerous macroeconomic models and is commonly utilized

[9] The theory of rational expectations, which posits that individuals and firms make decisions based on their best predictions of future economic conditions, was first introduced by economist Robert Lucas in the 1970s. Lucas proposed that individuals and firms are rational agents who make decisions based on the best available information. He also asserted that, as individuals and firms are aware of the government's past policies and future plans, the government's ability to influence the economy through its policies is limited.

to evaluate monetary and fiscal policies. It posits that individuals and firms possess access to the same information as policymakers and make decisions based on their most accurate predictions of future economic conditions. This concept implies that policymakers are unable to surprise the market with their policies, and that changes in economic policies will be foreseen by market participants, thereby reducing the efficiency of monetary and fiscal policies. In the mid-eighties, Cukierman and Meltzer (1986), Rogoff (1987), and Rogoff and Sibert (1988) added rationality to the "*office motivated*" incumbents and brought forth the *"Rational Political Business Cycle"*. Unlike Nordhaus, the rational political business theories argue that the capacity to offer good governance in the form of more public goods with a given amount of tax revenue will generate a political cycle on policy instruments than on outcomes. Some of the assumptions held by the Nordhaus-type model are substituted with the following with regard to the incorporation of the rationality behaviour of voters.

- Inflation expectations are rational, not adaptive

$$\pi_t^e = (\pi_t / I_{t-1}) \qquad (1.5)$$

The concept of rational inflation expectations refers to the idea that individuals and firms make rational decisions when forming their expectations of future inflation. These expectations are based on a comprehensive examination of all pertinent information, including historical data, economic theories, and current economic conditions. The theory of rational expectations posits that individuals and firms have access to all relevant information and use it to make accurate predictions about future inflation.

The term I_{t-1} in equation (1.5) holds all the relevant information acquired except the level of competence which is signaled by the incumbent to persuade voters. There exist asymmetric information regarding the *"competence"* level of the incumbents, and the voters cast their votes with the knowledge acquired at $(t-1)$ periods (i.e.I_{t-1}).

Assumption on the forward-looking behaviour of voters is also incorporated to the system as they use all available information.

- Voters make political choices based on rational behaviour and choose the candidates who deliver the highest utility.

Rogoff and Sibert (19880 articulate the presence of short-lived political cycles on the policy instruments. The word *"competence*[10]*"* is defined by Rogoff (1987) as the ability of the incumbent to produce policies with minimal waste in the budget process. The electorate's access to comprehensive information on policymakers' "*competence*", which is defined as the proficiency in providing public goods and transfers in an efficient manner, is limited. Since voters are inclined to prefer politicians who exhibit competence, they tend to portray themselves as such prior to elections. This is accomplished through the implementation of highly conspicuous budget actions, such as augmenting personal transfers, establishing new public services or goods, reducing taxes or prices of public services, and may include monetary financing, resulting in a monetary cycle. Nonetheless, this strategy is effective only if voters do not possess adequate information to evaluate the ramifications of these policies, thus it is executed immediately before elections to prevent counter-productive outcomes. The short-term manipulation of fiscal policy instruments hit the early Nordhaus (1975) type of inflation-unemployment trade-off.

The "*office motivated"* incumbents face a rational voter is a game-theoretic approach in which voters possess imperfect information on the competence of the incumbents. The incumbent knows

[10] The concept of competence is established in order to account for the political cycle, taking into account the rational behavior of economic actors. The definition of competence will be further elucidated in the following section.

more about their ability to reduce the wastage in budget allocation than the voter does. Rogoff (1987) and Rogoff and Sibert (1988) substitute voters' irrationality with the information asymmetry between voters and incumbents to theories it as a budgetary problem rather than an unemployment/inflation trade-off. Alesina (1987) put forth "*Rational Partisan Theory,*" stating a post-electoral cycle through uncontingent wage adjustment or labour contracts that deviates the real economic activity from its natural rate and its effect based on ideological differences of the party in power. He incorporated the partisan differences between political parties and rational voters in the model.

$$Y_t = [\pi_t - W_t] + NY_t, \, and \; \beta > 0 \qquad (1.6)$$

In equation (1.6), Y_t refers to the level of output growth to capture the party's ideological effect on the economy without considering capital accumulation. The output growth (Y) is influenced by the natural rate of output growth (NY_t) and the difference between the current inflation (π_t) and the nominal wage rate (W_t). Alesina (1987; 1988) wrote on the sluggishness in wage contracts W_t and which set to the expected current inflation rate $(\pi^e{}_t)$ as given by equation (1.7)

$$W_t = \pi_t^e \qquad (1.7)$$

Recall the equation (1.5) to denote the rational expectation on inflation anticipation. The rational partisan model of political cycles, unlike the former Nordhaus (1975) or Hibbs (1977) model, considers the rational behaviour of economic agents who collect up to $t-1$ periods.

$$\pi_t^e = E(\pi_t / I_{t-1})$$

Asymmetric information[11] on the inflation surprise that incumbent offer will give temporary deviation in real economic activity through the uncontingent wage contracts during their term in

[11] Asymmetric information, defined as the phenomenon in which one party involved in an economic transaction possesses a disproportionate amount of information in comparison to the other, can have significant ramifications for the stability of economic activity.

the office. Specifically, in regard to inflation surprises proffered by incumbent officials, this asymmetry can engender temporary deviations in real economic activity. This is due to the widespread utilization of non-contingent wage contracts, agreements between employers and employees that do not take into account prospective economic conditions, during the tenure of incumbent officials. Consequently, when unanticipated inflation occurs, these contracts may not effectively adjust for the alterations in economic conditions, resulting in fluctuations in real economic activity. This underscores the necessity of contemplating the potential impact of asymmetric information on economic stability, particularly in regards to the actions of incumbent officials.

$$Y_t = \lambda(\pi_t^e - \pi_t) + NY_t \qquad (1.8)$$

The Business Cycle Theory of Rational Partisanship accentuates the post-election cycle as the new government comes to power and a change in policy regime. The primary theoretical classification that explains politico-economic models of business cycles is given in Table 1.1, as described by Alesina (1988)[12]. As we mentioned the assumptions laid down for voters and politicians, the major contribution to the literature of early politico-economic models can be expressed as follows:

[12] The above mentioned models of Political Business Cycle can be explained on the assumptions put forth for the incumbents and voters. See Table 1.1

Table 1.1: Models of Political Business Cycles

	Premises about Voters and Economic Actors	
Premises about Politicians	*Non-Rational Behaviour & Non-Rational Expectation*	*Rational Behaviour & Rational Expectation*
"Office Motivated" Politicians	Nordhaus (1975)	Cukierman - Meltzer (1986) Rogoff (1987) Rogoff - Sibert (1988)
"Partisan" Politicians	Hibbs (1977)	Alesina (1987)

1.5 Visibility and Targetability Approaches[13]

Government spending that is noticeable or easily recognizable by the public and are transferred for immediate effect, such as social welfare programs, including unemployment benefits or income assistance, and programs, education, and healthcare, is referred to as visible public expenditures. These types of expenditures are typically more visible because they involve the swift impact on society that are easily observable by the public. On the other hand, targetable public expenditures refer to government spending that is directed at specific groups or geographical areas within the population. These types of expenditures may be targeted and which are characterised as big projects such as new roads, bridges, and public buildings. Both visible and targetable public expenditures

[13] The literature on Political Budget Cycles (PBCs) has distinguished between "visibility" and "targetability" approaches from an electoral perspective. This distinction is made on the basis of the concentration of funds towards current and capital spending by a government in proximity to an election.

can have important impacts on the well-being and prosperity of a society. Visible public expenditures can improve the quality of life for all members of a community by providing access to essential goods and services, while targetable public expenditures can address specific requirements that some demographic segments confront.

The composition of fund concentration exhibits two important approaches to the politico-economic models. The fiscal choice of politicians at power creates visible and targetable cycles with regards to concentration of fund towards current or capital spending. Rogoff (1990) pointed out an issue of "visibility hypothesis" in which government concentrate its action more on current spending than on capital spending as election appears[14]. Shifting resources to a more visible item like pensions, social security and subsidy, etc. on verge of election is a trump card to please voters. Empirical support to the "visibility" approach is done by, Akhmedov and Zhuravskaya (2004); Katsimi and Sarantides (2012) and Vergne (2009). They feels current spending has more political value during an election as it is intrinsically more visible than capital expenditure.

On the other hand, as opposite to visibility approach, the concentration of budget resources to capital spending from current spending is called a "targetability" hypothesis. Here most of funds are allocated to the activities like construction of schools, hospitals, roads, bridges, etc. This type of budget composition is put forth by Drazen and Eslava (2010), Khemani (2003), and Schuknecht (2000). The idea behind this approach that the capital spending is used as a main tool to target special interest group and focus certain geographical area. These are more of long-term projects which yield voter's attention.

[14] The idea behind this notion of "visibility" argument over current spending is that they are more immediately visible than capital spending.

Chapter 2

THE POLITICAL BUDGET CYCLE: EVIDENCE FROM INDIAN MUNICIPAL CORPORATION ELECTIONS

2.1 Introduction

The question of political action of incumbents for re-election prospects has received much attention from researchers for the last four decades. In 1975, William Nordhaus (1975)[15] was the first to propose an analytical framework in which he argued that governments often prioritize private motives and political gain over their role as social planners. Politicians, like anyone else, have their self-interests and profit motives. Theoretically speaking, the political budget cycle states the incumbent party's manipulative action to retain power with fiscal profligacy on the verge of elections.

The etiquette of government as a social planner in public choice theory is permeated into the politico-economic models with varying assumptions on the behavior of economic agents, i.e., government and voters. These models assumed "myopic" and "rational" voters with "office motivated" and "ideological" incumbents and the manipulation of policy instruments and outcomes. Most of the studies were initially carried out for the advanced industrialized economies, and later on, less developed countries were also part of it. The recent studies are much concentrated on a temporary fiscal boost to captivate voters termed the "Political Budget Cycles" [Tufte (1978)

[15] The concept of PBCs (Political Budget Cycles) was first proposed by Akerman (1947) who observed a correlation between four-year presidential election cycles in the United States and short-term economic cycles, but did not provide a clear explanation for the causal relationship. Downs (1957) also discussed the idea of political influences on economic cycles, which served as the basis for Nordhaus's (1975) research on how incumbent politicians may manipulate economic cycles in order to remain in power.

and Rogoff (1987)] and electoral cycles with varying factors during the election period. The decentralization of government power allows us to study the sub-national level interaction of politics and economics.

Nordhaus type of politico-economic models[16] deals with the manipulative actions of office motivated incumbents to retain power. It is necessary to answer the question of a political cycle in a world of rational economic agents. The phenomenon of Political Budget Cycles (PBCs) has emerged in the past decade as a result of temporary information asymmetry between the government and voters in a context where both parties are rational. Information asymmetry can give the government an advantage to appear as a competent player [Rogoff and Sibert, 1988; Rogoff, 1990].

This competency meant the ability of policymakers to keep inflation relatively low with a low unemployment rate. Rogoff (1990) pointed out an issue of the "visibility" hypothesis, in which government concentrates its action more on current spending than on capital spending as election appears. Shifting resources to a more visible item like pensions, social security, subsidy, etc., on the verge of election is a trump card to please voters. Empirical support to this hypothesis is carried out by Akhmedov and Zhuravskaya (2004); Katsimi and Sarantides (2012) and Vergne (2009).

On the other hand, in contrast to the visibility approach, the concentration of budget resources to capital spending from current spending is called a "targetability" hypothesis. Most of the funds are

[16] These models represent the canonical "political business cycle" as a result of political manipulations in the pre-election period. In contrast, the partisan cycle models of Hibbs (1977) and Alesina (1987) deals with the manipulation in the post-election period.

allocated to building schools, hospitals, roads, bridges, etc. This type of budget composition and spending is put forth by Drazen and Eslava (2010), Khemani (2003), and Schuknecht (2000). The idea behind this approach is that capital spending is used as the primary tool to target special interest groups and focus on specific geographical areas. Recently, elections to legislative and executive bodies of Japan found a pre-electoral increase in capital spending weigh larger than total spending in both cases (Fukumoto, et.al, 2020).

This research undertakes a critical examination of these hypotheses within the ambit of Municipal Corporations (MC) in India, which have implemented a plethora of welfare and development programs for the urban disadvantaged population including the Swarna Jayanti Shahari Rozgar Yojana (SJSRY), the Valmiki Ambedkar Awas Yojana (VAMBAY), the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) and other programs and grants that are specifically aimed at the economically deprived segment[17]. The Indian municipal corporations have a mandate to furnish a plethora of welfare programs to their inhabitants. These programs are devised to ameliorate various social and economic challenges and enhance the overall well-being of citizens. The welfare programs of Indian municipal corporations are directed towards improving the standard of living and addressing the social and economic difficulties faced by the citizens. Through an analysis of the allocation of funds towards these welfare schemes during mayoral elections, this study endeavors to verify the visibility hypothesis in the Indian scenario.

[17] The schemes mentioned above are mostly centrally (or central-state) sponsored schemes under the specific grants section of Municipal Corporations (MCs). But the welfare fund we discuss here includes all these schemes along with own programs like malaria eradication, family welfare programs, financial assistance to specially challenged people, nutritious noon meal scheme in schools, etc., which differs from one MC to another and from time to time.

Furthermore, Indian municipal infrastructure has been plagued by a long-standing tendency of under-investment, which hinders the potential for the country's growth and prosperity (HPEC, 2011). In recent years, municipal corporations in India have encountered a formidable challenge in terms of capital expenditure due to insufficiencies in funding. A study conducted by the High Powered Expert Committee (HPEC) has revealed that Indian municipal infrastructure has been characterized by a persistent under-investment for several decades, which has hindered the nation's potential for growth and prosperity. The report accentuated that Indian MCs have been grappling with a deficiency of financial resources, which has precluded them from investing in long-term infrastructure projects. The central focus of our political cycle analysis is to examine how Indian municipal corporations approach public infrastructure provision. The allocation of funds towards the construction of roads, flyovers, and bridges in the lead up to elections serves as a clear indication of the targetability hypothesis.

This study examines these hypotheses by analyzing the funds allocated towards welfare and infrastructure programs as elections approach. The examination of the allocation of funds towards these two expenditure heads will confirm the incumbent's visible and targetable strategies. Instead of solely examining either welfare or infrastructure funds, this study takes a comprehensive approach by considering the intersection of these two major expenditure categories in order to fully understand the outcome.

The Political Budget Cycle (PBC) theory deals with the increased spending or decreased revenue collection or the combination of both on the verge of an election by the incumbent government to retain office. Empirical verification of this theory at sub-national local governments is scarce and limited in the literature. These sub-national local governments are more prominent in population and budget for a vastly populated country like India. This study considers 34 most populated Municipal Corporations in India to examine PBC theory and find strong evidence of politically motivated cycles on the budgets' expenditure and revenue front. Notably, the more visible expenditure on welfare schemes shows increased spending during an election period. On the revenue side, it also indicates supportive results to PBC theory. Indian Municipal Corporations are creating "Welfare" and "Infrastructure" cycles during the election period to gain political profit and are validating the "Visibility" and "Targetability" hypotheses described in the literature. This study is the first attempt to trace the presence of the political budget cycle at the sub-national local governments in India.

The rest of the chapter is organised as follows. Section 2.2 briefly explains the theoretical models of PBCs with a brief review of relevant literature, while Section 2.3 discusses the background and the institutional structure of municipal corporations in India. Section 2.4 provides the data description and empirical methodology adopted in this study, and the results are discussed in Section 2.5. Finally, section 2.6 concludes with some policy implications.

2.2 Literature

The economic theorists in classical premise have considered the government's actions as a social planner to achieve social welfare and treated them as exogenous in general equilibrium theory. The connection between politics and the economy has become a subject of intense academic research, leading to a greater understanding of the motivations of governments beyond their role as simple social planners. Anthony Downs (1957) stated that-"in a democracy, the government always acts so as to maximize the number of votes it will receive. In effect, it is an entrepreneur selling policies for votes instead of products for money."

Knowing the local politics and policies tweaked to achieve electoral goals is crucial as a consequence, the local political budget cycle received much attention in recent years. Coelho et.al (2006) studied all mainland Portuguese municipalities. They found evidence of increases in local employment generation through pre-election expenditure during the mayoral election. Further, Veiga and Veiga (2007) revealed that the economic condition at the local level is improved by increased expenditure during mayoral elections in Portugal. Benito et.al (2013) aims to determine the relationship between the timing of elections and municipal spending on culture in the Spanish Region of Murcia from 1995 to 2008. The results suggest that mayors engage in strategic behavior, rising cultural spending in the year of the election and decreasing it immediately after the election. The study also examines whether the electoral cycle in cultural spending is influenced by the mayor's political clout, readiness to seek for re-election, and the competitiveness of the election. The findings indicate that when mayors expect close elections, the size of the political budget cycle is larger. Guo (2009) found that the local Chinese politicians manipulate fiscal policies to gain a higher political position in their cadre system. Chortareas et.al (2016) studied to determine whether political budget cycles persist in Greek municipalities. This study establish solid proof of pre-election manipulation through higher spending and excessive borrowing by building a new dataset from primary sources. They find that the opportunistic behaviour is present in local government finances using a dynamic panel data technique. Even after adjusting for variables like mayors standing for reelection, their political affiliation with the central government, and lengthy tenure in office, the findings hold true.

Bracco (2018) shows that, prior to elections, Italian mayors are less likely to issue traffic tickets and also have a lower rate of collecting fines that have been issued. This indicates that tax collection, beyond simply setting tax policy, can be manipulated to influence election outcomes.

Rocha et.al (2018) shows the results imply that mayors with more education and experience devote less of the budget to people and current costs, reflecting an emphasis on upholding sound fiscal position. Furthermore, mayors with greater education seem to be better at negotiating discretionary transfers. However, the data revealed that the educational levels of men and women elected in close elections varied, making it impossible to precisely determine the impact of gender on fiscal variables. Baskaran et.al (2016) suggest that fiscal institutions that produce soft budget limits, where incumbents and logical voters anticipate that the costs of manipulations on verge of election will be largely reimbursed later by the central government, may be the root cause of political budget cycles. Vicente et.al (2013) examined whether there is an electoral cycle in overall spending in municipalities with a lack of financial transparency. Their findings support this claim, however cities with high degrees of transparency do not display this pattern. Furthermore, they discover that both low-transparency and high-transparency municipalities have identical capital spending and tax cycle amplitudes.

Instead of looking for cycles on expenditure, some studies focused on the revenue part of the government, mainly on reduced tax for electoral gain. Laopodis et.al (2016) researched at how changes in government in Greece, specifically when two political parties take turns in office, affect the country's budget deficit. To do this, the study introduces a new variable for tax evasion in Greece and examines the relationship between changes in government and the budget deficit, both during and outside of election years. The results show that there is a significant and ongoing connection between these two factors, regardless of the political ideologies of the parties involved. The research also finds that tax evasion and the practice of two parties alternating in office contribute significantly to fluctuations in the Greek government budget deficit, accounting for about half of the variation in it over the time period studied. In addition, the study finds that economic growth in Greece has a lasting impact on reducing budget deficit fluctuations. Likewise, Foremny and Riedel (2014) studied if the timing of elections affects the way tax policy is decided. The study uses data from the German sub-national business tax, which is set by German municipalities, and takes advantage of the fact that the dates for local council elections vary across German states. This allows the researchers to separate the effects of the election periods from other patterns. The results suggest that there is a political cycle in tax policy, as local business tax rates tend to be lower in the election year and the year before the election, but higher in the year following the election. This trend remains consistent even when considering various sensitivity checks.

This study contributes to the literature by examining the political budget cycle theories for India's third-tier urban local government. To the best of our knowledge, this research explores this particular field of study for the first time.

2.3 Municipal Corporations in India

The financial health and stability of a municipal corporation, often referred to as its fiscal position, is determined by the relationship between its revenues and expenses, as well as its assets and liabilities. A municipal corporation with a robust fiscal position is able to fulfill its financial commitments and invest in infrastructure and services for the benefit of its citizens. The sources of revenue for a municipal corporation can include property taxes, fees and charges for services, grants and subsidies from the state and central government, and investments. Expenses may include employee salaries and wages, maintenance and repair of infrastructure, and operational costs such as electricity and fuel. In India, the fiscal position of municipal corporations can vary significantly depending on the size and location of the city, as well as the level of development and economic activity. Some municipal corporations may have strong fiscal positions due to a strong tax base and a diverse range of revenue sources, while others may face challenges due to a weak tax base and limited revenue sources.

The historical background of Indian municipal governance traced back to 1687 in which Madras received its municipal character. Lord Ripon, Father of Local Self-Government, introduced a resolution in 1882 to replace the autocratic administration system with democratic forms of local administration bodies. The constitutional foundations of urban local self-government came into force with the 74th Constitutional Amendment Act (CAA), 1992, which finds a place in Schedule IX-A of the Indian constitution[18]. The 74th Constitutional Amendment Act (CAA) defined the responsibilities of Urban Local Bodies (ULBs), required the formation of ward committees where city population is 300,000 or more, ordained periodic elections for municipalities [Article 243(K)], and provided for the devolution of funds and operations to ULBs as recommended by the State Finance Commissions (Basu, 2015). Further, Article 243 (Q) prescribes the formation of urban local self-government institution and its categorization as follows:

a) Transitional urban areas, i.e., an area transformed into urban from a rural area, have a Nagar Panchayaths

b) Municipal Councils for smaller urban areas, and

c) Municipal Corporations for larger urban areas.

This study is focused on the larger urban municipalities, i.e., Municipal Corporations. The smaller municipalities, namely Municipal Council and Nagar Panchayaths, have lessor fiscal autonomy against the Municipal Corporations in India. Again in terms of Total Own Revenue, Municipal

[18] The constitutional foundation to the urban local self-government came into force with the Part IX-A of the Indian Constitution, whereas such institutions are existed all over India before having their constitutional validity.

Corporations contribute nearly 80 percent, and the remaining are generated by Municipal Councils and Nagar Panchayaths (Ahluwalia et al., 2019). As the third tier of Indian federalism, urban local bodies have a minimal fiscal position than the Central and State governments. State Finance Commissions (SFCs) are institutions that review urban local bodies' financial situations, prescribe devolution of funds, and by law, ULBs cannot have a budget deficit. Mohanty et al. (2007) analyzed the revenue and expenditures of 35 major Municipal Corporations (MCs) and found that most of the MCs are generating a revenue surplus, and inter-governmental transfers fill the gap in the provision of expenditure.

Elections to the municipalities are conducted by the State Election Commissions, appointed under Article 243(K), and usually took place quinquennially. In accordance with the recommendations of the Eleventh Finance Commission and guidelines issued by the Ministry of Finance, Government of India, the Comptroller and Auditor General of India (CAG) authenticated a Task Force in 2001 to adopt budget and accounting frames for urban local governments in India. A paper titled "Report on Accounting and Budget Formats for Urban Local Governments" was thereafter published by the CAG Task Force. In 2004, the Ministry of Urban Development of the Government of India developed the National Municipal Accounts Manual (NMAM) based on this report. The NMAM offers a thorough set of instructions for guaranteeing that municipal financial transactions are reported completely, precisely, and on time. It also describes how to create accurate and pertinent financial reports.

2.4 Data and Methodology

2.4.1 Data

A panel of 34 most populated municipal corporations (list in Appendix with election dates), as per Census 2011, from each states are selected for the current study. It is an unbalanced panel data from 2005 through 2019. The fiscal variables used in this study were compiled from the budget data provided by official websites of respective municipal corporations[19]. Data on district wise population projections are taken from the Population Division, Department of Economic and Social Affairs, United Nations. According to Political Business Cycle theory, one should expect an increase in spending or a decrease in revenue or composition of both as the election appears. For analysis, we took budget variables, namely (i) Capital expenditure, (ii) Revenue Expenditure, (iii) Capital receipts, (iv) Revenue Receipts, and (v) Tax Revenue.

Capital expenditure refers to money spent on constructing physical assets such as roads, highways, and dams, purchasing land or buildings, and purchasing machinery and equipment, thus indicating public investment.

Revenue expenditure indicates purchases of goods and services for immediate consumption and can be conveniently targeted particular groups of people, then ruling parties can use them to boost their vote bank. It includes the fund for maintaining public works, administrative expenses, provision of grants and subsidies, etc. It is anticipated to see an increase in revenue expenditures

[19] Municipal corporations from Chhattisgarh, Jammu Kashmir, Manipur, Sikkim and Uttarakhand are not incorporated in data due to non-availability. Some of the most populated urban bodies are providing budgets in native languages are also limiting our data collection. The list of municipal corporations included in this study is shown in Table A in Appendix.

as the election appears and a reduction in post-election years if the incumbent manipulates it for electoral gain.

Capital receipts cover the specific grants and contributions from Members of Legislative Assembly (MLA) and Members of Parliament (MP) funds, recommended funds from State Finance Commissions (SFCs), and Central share. These transfers are a major resource for Municipal Corporations in India for their functioning and fulfillment of projects ahead. The State Finance Commissions that design the devolution formula for local government transfers use different criteria in different states. The support from SFCs on the devolution of shares to Municipal Corporations is appalling and limits their capacity to implement programs on time (ADB, 2020).
Revenue receipts consist of their own tax revenue sources, grants, loans, and other income sources generated regularly. It includes property tax, advertisement tax, professional tax, entertainment tax, etc. Municipal Corporations have greater autonomy in their revenue receipts accounts and are susceptible to manipulation for electoral gain. Unlike central or state budget provisions, which are scrutinized and discussed widely in the media, people are not very aware of the local bodies' budgetary allocations. So instead of taking budget allocation, we took actual values of each budget instrument under study.

We also consider the funds allotted to construct roads and bridges clubbed together as "Infrastructure Funds" to capture targeted spending. Grants, Program expenses, and Welfare schemes are taken as "Welfare Funds" to capture the visible spending of incumbents to benefit the voters. The welfare account consists of providing funds for various programs like the upliftment of the urban poor, women, physically challenged people, transgender and old age schemes, etc. comes as a sub-head under the capital expenditure of Municipal Corporations.

Data on the election dates and years are compiled from the respective State Election Commission official websites. It is customary to speak of elections in terms of the calendar year. Our policy variables are available for fiscal years, and it is necessary to slot each of the elections considered into the appropriate fiscal year (details in Appendix).

2.4.2 Methodology

A methodological framework is adopted from Brender and Drazen (2005) for the initial analysis of the political budget cycle. Basic models of political budget cycles are of the following form:

$$\boldsymbol{f}_{i,t} = \boldsymbol{f}_{i,t-1} + \boldsymbol{\beta}_1 \boldsymbol{ELECT}_{i,t} + \sum \boldsymbol{c}' \boldsymbol{x}_{i,t} + \boldsymbol{\mu}_i + \boldsymbol{\varepsilon}_{i.t} \qquad (1)$$

In the equation (1) expressed above, term fi,t is a fiscal variable in municipal corporation i in year t; control variables are constituted in vector as xi,t, ELECt is the dummy variable of our interest, it capture pre-electoral effects, and it takes value 1 in an election year and 0 otherwise, and μi is a municipal corporation fixed effect. In order to determine the proximity of a prospective political cycle, we plan to give the coefficient of the electoral variable's result with the tables. For estimation, the following logarithmic form is taken into account.

$$\log(\boldsymbol{f}_{i,t}) = \log(\boldsymbol{f}_{i,t-1}) + \boldsymbol{\beta}_1 \boldsymbol{ELECT}_{i,t} + \sum \mathbf{c}' \log(\boldsymbol{x}_{i,t}) + \boldsymbol{\mu}_i + \boldsymbol{\varepsilon}_{i,t} \qquad (2)$$

All the variables used, including State Gross Domestic Product (GSDP), the population in municipal corporations, and transfers as control variables, are in logarithmic form. Transfers are the sum of transfers from both the Central and State share. The inclusion of lagged regressand and the municipal corporation-specific effects makes bias in the estimation of the Ordinary Least

Squares. Fixed-Effects (FE) estimators can cease the corporation-specific effect. But there is bias brought about by using lagged dependent variables. We adopt the Generalized Method of Moments (GMM)[20], which developed for dynamic panel data by Arellano and Bond (1991) to avoid these problems. GMM estimator is used for estimation because it regulates the imperceptible municipal corporation-specific effects and the bias caused by the lagged fiscal variable of our interest. In GMM the relevance of model is assessed by the Sargan test of over identifying restrictions, where The null hypothesis (Ho) for the test states that the assumptions about the validity of the over identifying restrictions are reasonable and that the p value is greater than 5% (0.05), implying that all of the instruments used are reasonable, in general indicates, we accept the Ho, that is all instruments are reasonable.

The Hansen-Juselius test, when employed within the context of the Generalized Method of Moments (GMM), serves as a method of evaluating over-identifying restrictions in GMM models. The GMM technique is a versatile method of estimation that can be utilized to estimate a plethora of models, such as those involving dynamic models with lagged endogenous variables and models that exhibit sample selection bias. The null hypothesis of the Hansen-Juselius test asserts that all over-identifying restrictions in a GMM model are fulfilled. In other words, it examines the validity of the specified parameters of the model. The test statistic is derived from the dissimilarity between the GMM estimator and the least squares estimator and the test asymptotically follows a chi-squared distribution. It is noteworthy to mention that alternative methods for evaluating over-

[20] One of the paramount benefits of the Generalized Method of Moments (GMM) is its ability to estimate models in which there are endogenous variables and unobserved heterogeneity. This is achieved through the utilization of instrumental variables, which are independent variables that have a correlation with the endogenous variables, but are not associated with the unobserved heterogeneity.

identifying restrictions, such as the Sargan test or the Anderson-Rubin test, exist, and it is essential to choose the appropriate test based on the characteristics of the model and data.

2.5 Empirical Results

We estimate each variable of interest separately, and the baseline results show political budget cycles in the fiscal outcomes of Indian municipal corporations. Tables 2.1 and 2.2 present the GMM regression results for each variable under study. We observe a significantly positive effect of elections on capital expenditure, revenue expenditure, and expenditures on welfare and infrastructure funds. The GMM estimation regulates for unobserved municipal corporation-specific effects and problem caused by the inclusion of lagged fiscal policy indicator in each model. We provide the Hansen-J test for over identifying restrictions, in which the null hypothesis is that instruments are jointly uncorrelated with the residuals. The Hansen-Juselius test is commonly employed in empirical economic research for evaluating the assumptions made in dynamic panel data models, and to confirm that the estimates from GMM models are robust and dependable.

On average, results show an increase in capital expenditure, revenue expenditure, welfare fund, and infrastructure fund allocations are 0.14, 0.023, 0.50, and 3.29 percentage points in an election year than non-election years (Table 2.1). The excessive fund utilization in welfare schemes on the verge of election is clear-cut evidence of the incumbent's "visibility" approach to earning votes. It is also evident from the results that incumbents can also divert their funds to some specific pockets as a matter of targetable spending, like constructing roads and bridges (Infrastructure funds). Overall, the GMM results on expenditure heads prove the presence of politically motivated expenditure in terms of both "visibility" and "targetable" nature. The actual amount spent on the capital and revenue heads reveals political Budget Cycles (PBCs) in Indian Municipal Corporation elections.

So Indian municipal corporations posits creating "Welfare" and "Infrastructure" cycles for reelection benefits.

Political Budget Cycles can also be analyzed through the revenue side with its declining characteristics. The estimation results from the revenue heads of capital receipts, revenue receipts, and tax revenue are presented in Table 2.2. The results show a significant decrease in revenues during elections. This study provides supportive evidence to show a 5.95 and 0.083 percentage points decline in revenue receipts and tax revenue collection of Indian Municipal Corporations, respectively. The negative coefficients of revenue receipts and tax revenue show incumbents' party's manipulative action to retain power by reducing it during election years. In the case of Capital receipts, we have a 9.89 percentage point as its coefficient value, the result is not significant as well. The situation of weak intergovernmental disbursement of funds to the local level is a long debated issue. As explained in data section, Capital Receipts of the Indian municipal corporation involves the funds from upper layers of the governments. The control is not under the purview of Municipal Corporation and an increase in the same during election will resemble the support of top layer government on the municipal elections.

Table 2.1: Political Budget Cycle in Expenditures

Variable	Capital Expenditure	Revenue Expenditure	Welfare Fund	Infrastructure Fund
Log(Lagged Dependent variable)	0.743*** (29.75)	0.998*** (61.47)	0.873 *** (15.19)	0.077*** (7.80)
ELECT	0.147*** (8.86)	0.023*** (2.90)	0.503*** (9.80)	3.292*** (2.65)
LOG(GSDP)	0.037*** (4.16)	0.005 (0.91)	0.013 (1.27)	0.085*** (5.85)
LOG(POPULATION)	0.146*** (5.56)	0.032** (1.97)	0.095 (1.26)	0.005 (0.043)
LOG(TRANSFERS)	0.153*** (4.13)	0.013 (1.56)	0.047 (1.52)	0.026 (0.47)
Hansen J-Statistic	8.635	0.781	7.271	0.825
Hansen J-Statistic (Pr.)	0.195	0.677	0.296	0.935
Instrument rank	11	7	11	9
No.of Observations	251	251	251	251
R-squared	0.949	0.993	0.908	0.533
Adjusted R-squared	0.948	0.9923	0.906	0.524
S.E. of regression	0.517	0.223	1.049	1.564
Durbin-Watson stat	2.070	2.134	2.551	2.287

Notes: * Level of significance at 10%. ** Level of significance at 5%. *** Level of significance at 1%.
Elect – Election dummy which takes value 1 in the election year and 0 otherwise
t values are shown in the parentheses

Table 2.2: Political Budget Cycle in Receipts

Variable	Capital Receipts	Revenue Receipts	Tax Revenue
Log(Lagged Dependent variable)	0.263*** (5.593)	0.992*** (6.742)	0.613*** (6.190)
ELECT	9.899 (0.842)	-5.950** (-2.237)	-0.083* (-1.745)
LOG(GSDP)	0.173** (2.413)	0.126 (1.493)	0.236** (2.498)
LOG(POPULATION)	-0.350 (-1.156)	-0.272 (-1.323)	-1.309** (-2.526)
LOG(TRANSFERS)	-0.216 (-1.330)	0.013 (0.134)	0.258*** (2.949)
Hansen J-Statistic	0.985	3.869	3.428
Hansen J Statistic (Pr.)	0.320	0.144	0.180
Instrument rank	6	7	7
No.of Observations	251	251	251
R-squared	0.616	0.852	0.917
Adjusted R-squared	0.521	0.829	0.915
SE of regression	4.139	2.510	1.323
Durbin-Watson stat	2.256	2.257	1.473

Notes: * Significance level at 10%. ** Significance level at 5%. *** Significance level at 1%.
Elect – Election dummy which takes value 1 in the election year and 0 otherwise
t values are reported in the parentheses.

2.5.1 Robustness Checks

The Anderson-Hsiao (1981) and Difference-GMM estimate methods possess a distinct advantage in that they are less susceptible to the phenomenon of "too many instruments," as identified by Roodman (2008). This issue, characterized by the weakening and decreased accuracy of Hansen-J statistics as the number of instruments increases, can result in a rejection of joint instrument validity. Furthermore, the simple within fixed effects estimator, which does not utilize instruments, is not impacted by this issue. However, it should be noted that this estimator is biased, but it possesses stability for large T, thereby potentially making it a viable option for consideration. The Arellano-Bond method utilizes differencing of the regressors as a technique and applies the Generalized Method of Moments (GMM) as introduced by Hansen (1982) which is commonly known as the difference GMM. Even though the Hansen-J and autocorrelation tests are effective, the use of lagged dependent variables as instruments may not be valid when there is autocorrelation of second or higher order in the error term. The Arellano-Bond test is a method for identifying the existence of serial correlation in panel data. It was first introduced by Arellano and Bond in 1991 and is commonly used in econometrics for evaluating the correlation between errors in panel data regression models. It is based on the Generalized Method of Moments (GMM) estimation technique. Following Table 2.3 and 2.4 provides the results from Difference GMM results.

Table 2.3: Difference GMM results for PBC in Expenditure

Variable	Capital Expenditure	Revenue Expenditure	Welfare Fund	Infrastructure Fund
Log(Lagged Dependent variable)	0.309*** (3.377)	0.333*** (3.524)	0.220** (2.486)	0.438*** (92.303)
ELECT	0.040*** (1.392)	0.676*** (3.017)	0.038*** (2.755)	0.333*** (4.620)
LOG(GSDP)	0.131 (0.845)	0.132 (0.129)	0.148* (1.789)	0.071*** (13.299
LOG(POPULATION)	0.535 (1.397)	0.095 (0.389)	0.264 (1.541)	0.138*** (14.263)
LOG(TRANSFERS)	0.012 (0.905)	-0.004 (-0.389)	0.015 (1.770)	0.002*** (10.046)
Hansen J-Statistic	78.984	66.877	96.556	29.013
Hansen J-Statistic (Pr.)	0.354	0.736	0.532	0.310
Instrument rank	8	8	6	7
No.of Observations	252	252	252	252
S.E. of regression	0.127	0.132	0.075	0.047
Arellano-Bond Serial Correlation	AR(1) 0.000 AR(2) 0.549	AR(1) 0.000 AR(2) 0.653	AR(1) 0.000 AR(2) 0.055	AR(1) 0.010 AR(2) 0.921

Notes: * Significance level at 10%. ** Significance level at 5%. *** Significance level at 1%.
Elect – Election dummy which takes value 1 in the election year and 0 otherwise
t values are reported in the parentheses

Table 2.4: Difference GMM results for PBC in Receipts

Variable	Capital Receipts	Revenue Receipts	Tax Revenue
Log(Lagged Dependent variable)	0.357*** (31.135)	0.249*** (15.937	0.085*** (26.122)
ELECT	-0.002 (-0.272)	-0.024*** (-3.206)	-0.079*** (7.027)
LOG(GSDP)	0.193*** (6.784)	0.188*** (6.536)	0.531*** (8.254)
LOG(POPULATION)	0.625*** (6.145)	0.206*** (2.865)	1.052*** (5.545)
LOG(TRANSFERS)	0.034*** (7.573)	-0.037*** (-11.513)	0.064*** (5.815)
Hansen J-Statistic	25.294	30.228	27.892
Hansen J-Statistic (Pr.)	0.502	0.258	0.363
Instrument rank	8	8	8
No.of Observations	252	252	252
S.E. of regression	0.151	0.142	0.453
Arellano-Bond Serial Correlation	AR(1) 0.000 AR(2) 0.788	AR(1) 0.000 AR(2) 0.878	AR(1) 0.000 AR(2) 0.497

Notes: * Significance level at 10%. ** Significance level at 5%. *** Significance level at 1%.
Elect – Election dummy which takes value 1 in the election year and 0 otherwise
t values are reported in the parentheses.

2.6 Conclusion and Policy Implications

Politico-economic model researchers have extensively studied the use of budget manipulation for political gain by national and state governments before elections. The attempts to explore, theoretically or empirically, the political option of local governments subject to the political budget cycles are in their puberty. Using data from Indian Municipal Corporations, this study intend to contribute to the literature by providing empirical evidence that politically motivated spending by these corporations when they are statutorily not allowed to have deficits in the budget. More specifically, visible and targetable spending has significantly risen during the election years. These results are consistent with the targetability hypothesis (Drazen and Eslava, 2010) and the visibility hypothesis (Rogoff, 1990). Indian Municipal Corporations create "Welfare" and "Infrastructure" cycles to gain voters' attention and manipulate the expenditure instruments for electoral gains.

The private motive actions of incumbents in and around election time distort spending, and revenues for electoral purposes are the very essence of the political budget cycle hypothesis. This study intends to explore the evidence of politically motivated distortions in Indian local government budgets. The strategy followed by incumbents to approach an election cannot be pronounced as guilty of being an opportunist. We convey the message of applying politico-economic models in the local government budget to which public choice and political cycle theories articulate. Instead of looking upon the cyclical movement of fiscal deficit on the verge of an election, we analyzed major expenditure and receipts heads to capture the focused and visible compositions of budgets.

Our study reveals the manipulative actions of Municipal Corporation for re-election prospectus. These findings imply that strict vigilance over the accounts of Local bodies will curtail their efforts entitled to political profit. Improper maintenance of accounts makes it difficult to monitor Indian Urban Local bodies (Ahluwalia et al., 2019). So we suggest a standardized accounting system that is timely and audited. A transparent fiscal autonomy for revenue accumulation positions and a strict monitoring system over their budget makes Indian Municipal Corporations capable of bringing development strategies in time. To ensure the smooth operation of local governments, the transfer of funds from higher levels of government in the form of grants should be conducted in a transparent and timely manner. The questions on whether political alignment between different layers of government affects the devolution of inter-governmental transfers? As well as quantifying Political Budget Cycles of different levels of government when there is a coincidence of elections for all these in the same year forms the scope for further research.

Chapter 3

ELECTIONS AND INDIAN STATE BUDGETS: THE POLITICAL BUDGET CYCLE HYPOTHESIS

3.1 Introduction

In India, the financial management of each state's government and its affairs is referred to as public finance at the state level. This includes collecting and using revenue and providing public goods and services within the state. Each state has its own government that is responsible for managing its public finances and ensuring that they are used effectively to meet the needs of its citizens. The state governments generate revenue through taxes, fees, and charges and may also borrow money. They use this revenue to fund various public goods and services, such as education, healthcare, infrastructure, and social welfare programs. The finance departments of the state governments manage the state's finances and aim to use them effectively for the benefit of the state's citizens. In India, the annual financial statement, commonly referred to as the state budget, is presented by the finance minister of each individual state government. This budget encompasses projected revenues and expenses for the impending fiscal year, as well as proposals for investments in infrastructure and public welfare initiatives. The state budget must be approved by the legislative assembly before it can be implemented. This budget serves as a vital instrument for the government to distribute resources and establish priorities for the advancement of the state. The state budget is also closely monitored by the business and investment community as a reflection of the state's economic stability and potential for growth in the future.

In recent years, there have been significant changes to the public finance systems of the various states in India, with an emphasis on improving transparency, accountability, and efficiency. The state governments have implemented various reforms, such as the Fiscal Responsibility and Budget Management Act (FRBM Act)[21], to improve the financial management of their public finances. Recently, the issue of public spending efficiency has attracted the attention of policy makers and researchers around the world. Evaluating the efficiency of public spending is becoming increasingly important in India as well, as the demand for results-based budgeting grows. There is much reflection about the efficacy of political markets. Primarily by (Becker 1983; Peltzman, 1976; G. Stigler, 1971; G.J. Stigler, 1972; Wittman, 1989) competition in political markets is as efficient as competition in economic markets. . According to scholars in this field of study, fight for political status among competitors, and competition between different interest groups, makes the chosen policy the most efficient. Opposing schools, however, argue that political markets are intrinsically feeble and that competition among actors leads to excessive commercial activity (Hillman, 1991; McCormick et.al., 1984).

The idea of political budget cycle arises from these debates on the incentivized actions on budget for election and win. The early politico-economic models deals with the short-term manipulation on the aggregate expenditure on the verge of Presidential and Parliamentary election periods (Brender and Drazen, 2004; Drazen, 2001; Hanusch and Keefer, 2014; Shi and Svensson, 2006). Most of the studies are dealt with the excessive fund concentration on overall capital or current

[21] The FRBM Act is a law in India that was established to promote responsible financial management, decrease the fiscal deficit, and set a goal for the national government's fiscal deficit and the Union and state governments' debt-to-GDP ratio. The Act was approved by the Indian Parliament in 2003 and implemented on July 5, 2004. However, some economists have criticized the Act, claiming that it limits the government's ability to implement countercyclical fiscal policies during economic downturns.

account spending and very less are concerned about to where the funds are actually allocated[22]. Indian states have been experiencing a long history of democratic elections[23]. This is identified as a laboratory to see the actions of politicians to seek for re-election and their incentive to manipulate budgetary instruments.

This chapter examine the public policy choices of politicians in India, the largest democracy in the world, which offers a stable electoral politics at sub-national level. This paper attempt to study the fiscal profligacy of 21 Indian state governments for re-election prospectus. We also considered the choices of political spending when an alternate and states with weak majority comes to power. Notably, the concentration of funds towards current account expenditure- especially on its development and social service funding- during an election period exhibits the visible spending. The fiscal composition of weak majority and alternative states are heavily upon current account spending as election appears, especially to its visible items, as a token of payment for electoral win. The choice of capital expenditure and non-development funds are made during non-election period. On the revenue side, we cannot find a supportive results to establish Political Budget Cycle theory.

Why is efficiency reasoning of governmental spending gaining attention in India? Regional differences in the degree of economic growth and human development between states in India are well recognized. Public policy is, in fact, focused on reducing such deviations. Given the issues of public policy of Indian states, the behaviour of politicians who runs the government seeking for some other objectives are to be explained. The choices of policies taken by an incumbent may

[22] The early political budget cycle theorists dealt with the overall composition of expenditure rather dig into the sub-heads of spending to understand path of allocation of funds.

[23] The Constitution of India entrusts the Board of Elections with oversight, supervision and control over the entire process of conducting elections for each state's legislative and Parliament, as well as the offices of the President and Vice President of India.

changes from the nature of government in power. Under the political budget cycle theory debates, the more powerful the government (or a government forms with majority size) they less tend to manipulate fiscal policies. Close electoral competition will also prompt incumbent to incentivize policies for re-election prospectus. We are here intend to contribute the choice of policy instruments which are used by Indian states who faces weak majority and alteration in power as election appears[24].

3.2 Literature

The literatures on Political Budget Cycle varies in accordance with approach made by researcher on the nature of government and their policy choices along with the demands of voters. Saez (2016) is asking which policy variables explain differences in Indian sub-national expenditures associated to debt interest payments. Ideology – may play role in determining the level of interest payments on subnational bonds in India. An important finding is that during years when state legislative elections are held in India, there is a significant increase in spending on debt. Empirical analysis suggests that the state government is manipulating the fiscal cycle in the pre-election period by expanding transfers to Social Security, even as it refrains from increasing deficits and spending (or rather, because of it) is shown in case of German sub-national level (Schneider, 2010). Political mandates to accomplish a list of pre-election pledges help curb plethoric spending, but some spending items are a better indicator of the current government's contribution to voters (whom having diminishing memory). The predictable time pattern test for the budget subcomponent uses capital expenditure as a budget item, with a larger visible spillover effect, with effect from 54-year data set for 14 states in India (Ferris and Dash, 2019)

[24] The definition of Alternation and Weak Majority types of government is explained in section 3.3. Data and Methodology.

The Political Business Cycle gradually transmuted into the Political Budget Cycle in the early 1990s by the empirical literature. In literature, weak co-movement of real economic variables led studies to give considerable attention to the fiscal policy instruments[25]. Drazen (2001) found monetary surprises as an unconventional tool for political profit and insisting on a fiscal choice. Shi and Svensson (2006) studied this relation between fiscal policy from a panel of democratic countries and elections. They found, on average, an increase in government fiscal deficit at a par of 1% of GDP in election years. Brenden and Drazen (2004) investigated new and old democracies and argued that the political fiscal cycles would appear more in the case of newer democracies in which voters are inexperienced with electoral politics than established democratic countries. Hanusch and Keefer (2014) extended this to more democratic countries on political credibility and found a similar result. Most of the literature is concentrated on the application of PBC in democratic countries. Shmuel (2020) hypothesized and empirically demonstrated its application to autocratic governments too. He found that the political cycle is weakest in strong autocratic and democratic countries, while it is strongest in lesser autocratic and democratic countries.

Further, many studies found evidence for Political Budget Cycles. Block (2002) studied on African nations, which investigates whether political business cycles exist in developing democracies. In a panel of African countries, the study discovers evidence of deliberate shifts in monetary and fiscal policy timed with elections. These findings are consistent with the hypothesis that rational opportunistic behaviour causes political business cycles. If recurrent elections in Africa result in reversals of fiscal and monetary policy advancements, this may also lead to conflicts between

[25] Early politico-economic interactions are explained with the effect on policy outcomes like inflation, growth and unemployment. Recently literatures are concentrated on the policy instruments of fiscal variables and the position of fiscal deficit.

political and economic transformation. Blomberg and Hess (1998) comes up with a macroeconomic model that incorporates components of real and political business cycle models is presented. The model aims to explain two observable phenomena: that economic growth tends to be stronger under Democratic presidents and that economic growth appears to be better in the second period of the terms of presidents who share the same political party. To do this, the model adds political leaders with various taxing inclinations and degrees of competence to a common actual business cycle tax model. Sieg and Batool (2012) examines whether the time of elections has an impact on Pakistan's unemployment, inflation, budget deficit, and real GDP growth. The research, which spans the years 1973 through 2009, makes the following conclusions: (1) prior to elections, unemployment is typically lower, and it rises afterward, presumably as a result of political employment initiatives. (2) Prior to elections, inflation typically declines, possibly as a consequence of price stabilisation. (3) Election years see a rise in the budget deficit, which is financed by borrowing from the central bank and the banking industry. (4) Prior to and following elections, real GDP growth and government investment growth drop, possibly as a result of ineffective resource allocation. Sen and Vaidya (1996), Lalvani (1999), Saez and Sinha (2010), and Uppal (2011) found evidence for political budget cycles in India[26]. Sen and Vaidya (1996) investigates the applicability of political business cycle theories to the Indian economy. The budget deficit and its monetization rise in the years leading up to elections, the authors show, despite the absence of an electoral cycle in output. Elections have little impact on the general level of prices, however there is some evidence that the cost of produced goods rises before elections. Lalvani (1999) argued that Indian politics is often turbulent due to governments not completing their full terms. This can have a negative impact on

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[26] Indian cases have heavily explored the situations in and around National (or Parliamentary) and State-level elections. The unavailability of proper budget data in a single repository makes it a difficult task for researchers to study the third-tier of federal set-up, i.e. Local Governments on Political Budget Cycle theory.

the efficiency of resource allocation in India, a developing economy. The cost of often conducted elections can include both outward costs, such as administrative and campaign expenses, as well as hidden costs incurred by politicians as they seek to gain support from diverse constituencies during election years. This study analyses the actions of incumbent politicians during election years in order to evaluate the idea of political budget cycles. Saez and Sinha (2010) looks at the political decisions made in India, a sizable, long-standing democracy with striking subnational variety. Analyses are done on public spending on everything from irrigation and farming to education and health services. Unexpected results, such as the importance of political considerations and election schedule in subnational governments and the surge in education spending caused by party politics, are addressed by the influence of economic and political uncertainty over policymakers' decisions. Uppal (2011) examines how variations in the composition of legislative bodies in Indian states between 1980 and 2000 affected the amount and allocation of public spending. It reveals that the ineffective distribution of government resources results from repeated shifts in political control brought about by elections. More specifically, increased turnover is linked to a bigger government and a shift in government expenditure from investment to consumption. Fiscal policy and turnover have a complicated relationship because while the effect on investment spending diminishes with turnover, the effect on consumption expenditure grows. From a micro-level study, Bojar (2017) identified that individuals' propensity to vote for the ruling government, on average, tends to increase with pre-electoral deficits. This fiscal profligacy need not impress voters who are vigilant to the actions of the government in power. Khemani (2010) found an electoral cycle on road infrastructure rather than overall fiscal spending in Indian state elections.

On the other hand, some studies provide evidence against this theory and offer an alternative view. Schultz (1995) criticized government transfer payments for votes and found this action dampens reputation and loses votes to the incumbent. Shelton (2014) also found similar weak fiscal electioneering for strong parties with a majoritarian electoral system. An endogenous election period could create political surfing than an electoral cycle, in which politicians can call for an election when they are economically and politically looking good (Chowdhury, 1993). The argument here is that politicians look for positive economic cycles and place the elections to gain more politically. Instead of looking for cycles on expenditure, some studies focused on the revenue part of the government, mainly on tax revenue. Prichard (2014) for elections in selected developing countries and David and Formanova (2016) for the Czech Republic found no evidence on the tax rate and collection provision on electoral cycles, while a study in Greece by Laopodis et.al (2016) found some evidence for tax evasion led electoral cycle.

3.3 Data and Methodology

3.3.1 Data

The data on economic, political and demographic variables are collected from different sources. All fiscal variables are collected from the respective State Finance Ministry official accounts and the various reports on 'State Finances- A study of Budgets' by the Reserve Bank of India (RBI)[27]. Both the expenditure and receipts heads are taken for analysis to capture the effects of elections on Indian state budgetary provisions. In order to understand the more focus area of state fiscal choice, we dig into the specific heads of current account spending of Indian states. The present study conducts a comprehensive examination of a panel of 21 Indian states over a period of 30 years,

[27] The Reserve Bank's annual publication, 'State Finances: A Study of Budgets' contribute data and reasoning on state government budgets in India.

commencing in 1990 and ending in 2019[28]. The selection of these 21 states was based on a variety of factors including demographic characteristics, economic conditions and geographical diversity, to provide a broad-based analysis of the research subject. The chosen time frame is considered appropriate as it encompasses significant economic and political developments that have taken place in India, enabling examination of trends and patterns in the data. The research will provide an in-depth examination of the panel of states over the specified time period, and the collected data will be analyzed to derive meaningful conclusions and insights.

The political variables are collected and calculated on the basis of the data compiled from the Statistical Reports of General Election to State Legislative Assembly, Election Commission of India. Which includes the timing of election and the type of incumbents- swing government and alter government. We have collected and classified data on basis of these political variables to analyse the politico-economic interaction of Indian states. We have introduced the interaction of states with weak majority and alternation government to the timing of election and their fiscal behaviour. We have controlled variables- Per Capita State Gross Domestic Product, the grants and loans from the upper layer of government (i.e. Central grants and loans), the economic backwardness of states under study and the demographic variable state population. A brief description of all variables are given below:

[28] The study omits several Indian states from its examination, as a result of the unavailability of data. This exclusion is also in line with their formation after the sample period. The excluded states are: Chhattisgarh, Jammu and Kashmir, Jharkhand, Mizoram, Nagaland, Sikkim, Telengana and Uttarakhand.

i. Economic Variables

Revenue Expenditure- The costs a government incurs to sustain its regular operations and offer services to its inhabitants are referred to as revenue expenditures. Revenue spending is an essential component of every government's budget and financial planning because it ensures that the government has the resources required to function well and offer its citizens the services they require. So this expenditure can easily be focused to certain populations, ruling parties can use them to boost their vote bank.

Capital Expenditure- Capital expenditure, commonly referred to as "capital spending," describes the money that a government puts aside for the purchase, augmentation, or upkeep of tangible assets including buildings, infrastructure, and machinery. This kind of investment is frequently seen as essential to a nation's or region's continued growth and development because it is typically done with the goal of delivering long-term benefits. Since capital expenditures necessitate the up-front commitment of substantial sums of money and may not immediately provide returns, they can have a considerable impact on the overall financial health of a government. In other words, immediate visibility of this expenditure category is not to be expected. Hence, from the politicians' point of view incurring capital expenses is not a very attractive proposition in pre- election and election year.

Own Tax Revenue- The revenue generated by Indian state governments is derived from a multifarious array of sources, which encompass levies on commodities and services, taxes on real estate, and taxes on vehicles. Some of the principal sources of revenue for state governments in India include sales tax, value-added tax (VAT), and excise duty. Furthermore, state governments also collect revenue through taxes on professions, trades, callings, and employments, as well as taxes on various utilities such as electricity and water. This accounts for the state's own tax revenue in which they hold the complete autonomy. Taxes on income, Taxes on Property and capital transactions, taxes on commodities and services and SGST are taken into consideration.

Own Non-Tax Revenue- The term "non-tax revenue" refers to the funds generated by the government from sources that are distinct from taxation. These revenues can play a crucial role in augmenting government income and diversifying its revenue sources. However, non-tax revenues are often characterized by a higher degree of volatility and unpredictability in comparison to tax revenues, which can make the budgeting and planning process more arduous for governments. These sources of non-tax revenues can include revenues generated from government-owned businesses, fines, fees, and the disposition of government assets. This receipts head includes all the states' own non-tax revenue.

The economic variables explained above will give the overall picture of fund concentration on verge of Indian state general elections. In order to find the path of fund allocation, we intend to dig into the sub-heads of current spending (or revenue expenditure) account. That will give us the intention of incumbents and their tactics to face elections. We have taken following expenditure with regard to trace the political spending of Indian states and their re-election prospectus. The sub-heads of current spending categorized in its nature spending, namely, as development and non-development expenditures. From development expenditure, we again dig into the social services and economic services to capture the actual path of election induced spending on Indian state governments.

Development and Non- Development Expenditure:

These expenditure categories are those that have a greater element of discretion involved and hence are more susceptible to manipulation in and around elections. Developmental expenditures on revenue account are crucial vote getters for the incumbent party as these expenditures are extremely visible and also its benefactors are easily identified.

Non-development expenditure involves the expenses for organs of state, fiscal services, administrative services, etc. which are not a prominent tool for manipulation to retain power. So the term "non-development funds" refers to the funds allocated by Indian state governments that are not earmarked for particular development initiatives or schemes. These funds encompass, yet are not restricted to, allocations for administrative expenses, contingency funds, and funds allocated for other various purposes.

Social Services and Economic Services:

Social services involves the expenditure for education, medical and public health, family welfare, social security and welfare, urban development, etc. which are expected to be spend more on election period by the incumbent to please the voters.

Economic services are the expenditure on crop husbandry, animal husbandry, power and petroleum, tourism and industry, etc. which are more of a kind of targetable to those specific group of people.

ii. Political Variables

Election Year Dummy- a financial year considered to be an election year if election was held in the second half of the current year or in the first half of coming year. If it is an election year it denotes 1, otherwise 0.

Alternate Government- If the government comes in power is an alternate to the previous state government, we denote it as 1 for referring it as an alternate government. If the same party won the successive state election, we denote it as 0 to refer as non-alternate government.

Weak Majority- We define a state as having a weak majority if the ruling party won the most seats in the last election by a slim margin over the next-best party (which received the highest proportion of votes in last election). For governments currently in power, this variable is crucial because it presents a chance to win over swing voters by allocating more monies to readily accessible sovereign wealth funds. We use a dummy variable to reflect this and give states with weak majority governments in a given fiscal year a value of 1, otherwise a value of 0.

iii. Control variables

a. Per Capita State GDP
b. Grants and Loans from Central Government
c. Agricultural share in the Gross State Domestic Product: This variable is utilized as a measure of both the backwardness of a state and the structure of its economy. It is quantified as the proportion of the primary sector in the Gross Domestic Product (GDP) of the state.
d. Demographic Variable- Population.

3.3.2 Methodology

We have employed the panel model to observe the effect of election, periods of changes in government in power (or alteration of government) and the effect of a government who are formed with weak majority size. We are also interested in considering the effect of election in the state governments who experienced alteration in government in power and governments who faces close competition and formed with weak majority. The specification of our panel model are as follows:

$$\mathbf{log}\left(\boldsymbol{f}_{\boldsymbol{i,t}}\right) = \mathbf{log}\left(\boldsymbol{f}_{\boldsymbol{i,t-1}}\right) + \boldsymbol{\beta}_{\mathbf{1}}\boldsymbol{Election}_{\boldsymbol{i,t}} + \boldsymbol{\beta}_{\mathbf{2}}\boldsymbol{Alternate}_{\boldsymbol{i,t}} + \boldsymbol{\beta}_{\mathbf{3}}\boldsymbol{Weak\ Majority}_{\boldsymbol{i,t}} + \sum \mathbf{c}'\mathbf{log}\left(\boldsymbol{x}_{\boldsymbol{i,t}}\right) + \boldsymbol{\mu}_{\boldsymbol{i}} + \boldsymbol{\varepsilon}_{\boldsymbol{i,t}} \quad (1)$$

$$\mathbf{log}\left(\boldsymbol{f}_{\boldsymbol{i,t}}\right) = \mathbf{log}\left(\boldsymbol{f}_{\boldsymbol{i,t-1}}\right) + \boldsymbol{\beta}_{\mathbf{1}}\left(\boldsymbol{Election}_{\boldsymbol{i,t}} * \boldsymbol{Alternate}_{\boldsymbol{i,t}}\right) + \boldsymbol{\beta}_{\mathbf{2}}\left(\left(\boldsymbol{Non\ Election}_{\boldsymbol{i,t}}\right) * \boldsymbol{Alternate}_{\boldsymbol{i,t}}\right) + \sum \mathbf{c}'\mathbf{log}\left(\boldsymbol{x}_{\boldsymbol{i,t}}\right) + \boldsymbol{\mu}_{\boldsymbol{i}} + \boldsymbol{\varepsilon}_{\boldsymbol{i,t}} \quad (2)$$

$$\mathbf{log}\left(\boldsymbol{f}_{\boldsymbol{i,t}}\right) = \mathbf{log}\left(\boldsymbol{f}_{\boldsymbol{i,t-1}}\right) + \boldsymbol{\beta}_{\mathbf{1}}\left(\boldsymbol{Election}_{\boldsymbol{i,t}} * \boldsymbol{Weak\ Majority}_{\boldsymbol{i,t}}\right) + \boldsymbol{\beta}_{\mathbf{2}}\left(\left(\boldsymbol{Non\ Election}_{\boldsymbol{i,t}}\right) * \boldsymbol{Weak\ Majority}_{\boldsymbol{i,t}}\right) + \sum \mathbf{c}'\mathbf{log}\left(\boldsymbol{x}_{\boldsymbol{i,t}}\right) + \boldsymbol{\mu}_{\boldsymbol{i}} + \boldsymbol{\varepsilon}_{\boldsymbol{i,t}} \quad (3)$$

Where $f_{i,t}$ is a fiscal variable of our interest which are listed above for Indian states *i* in year *t*; $x_{i,t}$ is an array of control variables, Coefficient of *Election* dummy is our interest, it measures election year effects, and that dummy takes value 1 in an election year and 0 otherwise, *Alternate* stands for alternate government in power, takes value 1 for alternate party in power, 0 otherwise; *Weak Majority* stands for a state in which the government comes in power with a small margin of victory in previous state general election and it takes value 1 for swing and 0 otherwise; and μ_i is a State fixed effect. We shall display the electoral variable's coefficient in the tables to show whether a prospective political cycle exists.

(Election* Alternate) gives the picture of electoral motives of an Alternative government in power. ((Non-Election)* Alternate) stands for the fiscal composition of Alternate government during nonelection years. (Election*Weak Majority) captures the effect of election of Weak Majority states on re-election motive. ((Non-Election)*Weak Majority) stands for to the operation of Weak Majority states on non-election years.

We have used the dynamic panel model for the analysis for capturing the effect of elections on Indian State budgetary allocations. To check the significant variation in coefficient, we produced results which are consistent in the Fixed Effects (FEM). Hausman test is applied for the selection of appropriate model for each model explained above. Panel fixed effect models are used to analyze data from a panel or longitudinal study, where the same subjects are observed over multiple time periods. These models have the advantage of being able to control for unobserved variables that remain constant over time. The fixed effects included in the model for each individual or group in the panel help to account for time-invariant differences among the subjects. In general, panel fixed effect models are an effective way to analyze data from panel or longitudinal studies and can give more accurate and reliable estimates of the relationships between variables.

3.4 Empirical Results

We estimate each variable of interest separately, and the baseline results show political budget cycles in the fiscal outcomes of Indian State General Elections. All the tables present the results of Panel Fixed Effects regression for each variable under study. We observe a significantly positive effect of elections on revenue expenditure, and more visible expenditures heads of current account expenditure like development expenditure and social services funds. The more effect of election period on the current expenditure than of alter and weak majority states captures the politically motivated spending of Indian politicians. The excessive fund utilization in social services on the verge of election is clear-cut evidence of the incumbent's "*visibility*" approach to earning votes. Incumbents can also divert their funds to some specific pockets as a matter of targetable spending, like constructing roads and bridges (Infrastructure), which is provided on non-election years. Overall, the results on expenditure heads prove the presence of politically motivated spending stylized by “*visibility*” approach in action. Political Budget Cycles can also be analyzed through the revenue collection with declining characteristics of it. The estimation results from the revenue heads of own tax revenue, Non-tax revenue are not giving significant results to validate the presence of Political Budget Cycle.

The political variables (Election, Alter and Weak Majority) separately captures the effect of its term on each fiscal indicators from the above mentioned equation (1). During election season, we may see a decrease in capital expenditure and an increase in current spending. This is often due to the emphasis on visible spending, with little consideration for targetable spending as an alternative. As visible spending is confirmed, we investigate the current spending to determine where these funds are being concentrated and to discover which spending is a "trump card" in terms of financial resources. Table (3.2) analyzes current spending specifically and finds that development expenditure tends to be higher during election periods. In contrast, non-development expenditure, which includes expenses for the running of the organs of state have a decreased fund allocation. Since it is not a pleasing fund, incumbents shifts it towards development expenditure to earn votes.

The overall effect of election, alter and weak majority periods of Indian states are expressing the ostensible presence of electoral motive spending (Table 3.1). Apropos to the visible approach of incumbents, the fund allocation under current account is more helpful to understand the channel of their interaction with voters. Table 3.2 accentuate the more and more of visible fund allocation towards social services as election approaches.

With respect to the revenue aspect of the matter, our examination did not uncover any discernible cyclical pattern that corresponds to the political budget cycle. In other words, our analysis did not reveal any evidence to suggest that there is a correlation between the political cycle and fluctuations in revenue. This may indicate that the revenue collection process is relatively insulated from political considerations, or that any potential impact of the political budget cycle on revenue is offset by other factors. However, it is important to note that this conclusion is based on the specific dataset and methodology utilized in our analysis, and further research may yield different results.

Table 3.1: Effect of Election, Alter and Weak majority Periods on major fiscal variables of State Governments

Variables	Own Tax Revenue	Non Tax Revenue	Capital Expenditure	Revenue Expenditure
	FEM	FEM	FEM	FEM
Election	-0.002 (-0.235)	-0.008 (-0.221)	-0.197** (-2.133)	0.012** (2.382)
Alter	-0.005 (-1.231)	-0.006* (-1.751)	-0.094 (-1.00)	0.008 (1.630)
Weak Majority	0.001 (0.280)	0.001 (0.500)	0.117 (1.479)	-0.003 (-0.756)
Log(Per Capita SDP)	0.035*** (2.709)	0.083 (1.960)	0.137 (0.514)	0.066** (2.483)
Log(Grants& Loans)	-0.009** (-1.897)	-0.019*** (-3.199)	0.207*** (3.593)	0.103*** (8.027)
Share of Primary Sector in SDP	-0.008 (-0.580)	-0.000 (-0.048)	-0.223 (-1.566)	0.022 (1.272)
Cross Section Chi Square	131.011***	83.751***	29.863***	86.768***
No.of Observations	630	630	630	630
Adjusted R^2	0.914	0.766	0.728	0.478
D-W Statistic	1.946	2.05	2.182	1.823
S.E. of regression	0.045	0.036	0.921	0.052

Notes: * Level of significance at 10%. ** Level of significance at 5%. *** Level of significance at 1%.
t values are shown in the parentheses.

Inclusion of political variables such as the case of an Alternate and Weak majority state confronting a general election gives us the specific picture of the sub-national politics. Table 3.3 to 3.6 provides the election and non-election fiscal composition of Indian States who are formed under an alternate or a weak majority government in power. The power retaining mechanism of these type of governments are also pointing to a skewed fund allocation to visible items from the targetable items. The provision of non-visible or targetable funds are allocated and spend during non-election periods. The political strategies of Alter and Weak Majority governments are similar when it comes to expenditure. Both governments prioritize social security expenditure, such as education, medical and public health, family welfare, social security and welfare, and urban development. They increase spending on development expenditure in order to win elections. Capital expenditure funds, which are used for large projects, are typically allocated during non-election periods and are reduced when states are close to general elections.

An interesting aspect of our analysis is the observation that both weak majority and alternate forms of government increase their spending on capital expenditure during non-election years. This suggests that capital spending is not utilized as a strategy to gain votes during election seasons. Instead, it appears that these forms of government allocate funds towards capital expenditure during non-election periods of their term. This implies that capital spending is not viewed as a tool to be used primarily for political gain, but rather as a means of addressing long-term development needs. The fact that such allocation is done during non-election years is a sign that these forms of government are more inclined to focus on long-term development on one side, but also short-term political gains on verge of elections.

The utilization of development expenditure as a means of garnering political support and votes is a contentious subject within the realm of politics, as it raises moral concerns regarding the motivations behind such spending and the risk of corruption. The allocation and management of public funds for development projects in this manner can also result in a lack of transparency and accountability, as well as insufficient oversight to ensure that the funds are being directed towards their intended purpose. The findings of our study reveal that the primary motivation behind the allocation of development expenditure by Indian state governments is to gain political support and votes, rather than addressing the needs and well-being of society.

Table 3.7 to 3.12 provides the consistency checks in which we intend to run the model through Fully Modified OLS and Panel Corrected Standard Error (PCSE) method. Our results are consistent to capture the presence of Political Budget Cycles (PBCs) in Indian state governments during the general elections state assemblies.

Table 3.2: Effect of Election, Alter and Weak majority Periods on Current Account Spending of State Governments

Variables	Development Expenditure	Non-Development Expenditure	Social Services	Economic Services
	FEM	FEM	FEM	FEM
Election	0.015** (2.453)	-0.002* (-1.734)	0.003* (1.694)	0.002 (0.857)
Alter	0.004 (0.926)	-0.001 (-1.007)	0.002 (0.960)	0.003 (1.141)
Weak Majority	0.004 (1.268)	-0.000 (-0.058)	0.001 (0.052)	-0.005** (-1.987)
Log(Per Capita SDP)	0.011 (0.941)	0.008** (2.794)	0.020*** (2.592)	-0.013 (-1.545)
Log(Grants& Loans)	0.005 (1.219)	-0.007*** (-5.151)	0.001 (0.318)	0.007** (2.115)
Share of Primary Sector in SDP	0.033** (2.421)	-0.004 (0.291)	0.005 (0.620)	0.018* (1.898)
Cross Section Chi Square	54.861***	62.529***	77.202***	69.930***
No.of Observations	630	630	630	630
Adjusted R^2	0.550	0.925	0.752	0.639
D-W Statistic	2.277	2.022	2.160	2.035
S.E. of regression	0.044	1.017	0.023	0.031

Notes: * Level of significance at 10%. ** Level of significance at 5%. *** Level of significance at 1%
t values are shown in the parentheses.

Table 3.3: Effect of Election and non-election periods on major fiscal variables of Alternative State Governments

Variables	Own Tax Revenue	Non-Tax revenue	Capital Expenditure	Revenue Expenditure
	FEM	FEM	FEM	FEM
Election*Alter	-0.003 (-0.480)	-0.005 (-0.947)	-0.122* (-1.809)	0.024*** (2.738)
(Non-Election)*Alter	-0.006 (-1.303)	-0.005 (-1.320)	0.004 (0.086)	0.011* (1.774)
Log(Per Capita SDP)	0.035*** (2.767)	0.004 (0.383)	0.034 (0.241)	0.004 (0.257)
Log(Grants& Loans)	-0.009* (-1.907)	-0.008** (-2.082)	0.108* (1.710)	0.012* (1.856)
Share of Primary Sector in SDP	-0.008 (-0.566)	0.005 (0.464)	-0.162 (-1.152)	0.034* (1.783)
Cross Section Chi Square	130.757***	81.276***	12.904**	49.206***
Adjusted R^2	0.914	0.763	0.803	0.297
No.of Observations	630	630	630	630
D-W Statistic	1.944	2.043	1.976	1.808
S.E. of regression	0.045	0.036	0.916	0.061

Notes: $*$ Level of significance at 10%. $**$ Level of significance at 5%. $***$ Level of significance at 1%.
t values are shown in the parentheses.

Table 3.4: Effect of Election and non-election periods on Current Account Spending of Alternative State Governments

Variables	Development Expenditure	Non-Development Expenditure	Social Services	Economic Services
	FEM	FEM	FEM	FEM
Election*Alter	0.019*** (3.125)	-0.006 (-1.404)	0.008** (2.372)	0.008* (1.825)
(Non-Election)*Alter	-0.000 (-0.060)	-0.001 (-0.445)	0.001 (0.638)	0.001 (0.550)
Log(Per Capita SDP)	0.009 (0.755)	0.010 (1.088)	0.019** (2.437)	-0.016* (-1.814)
Log(Grants& Loans)	0.005 (1.260)	-0.006* (-1.919)	0.001 (0.432)	0.007** (2.189)
Share of Primary Sector in SDP	0.030** (2.227)	0.003 (0.380)	0.005 (0.692)	0.016* (1.668)
Cross Section Chi Square	53.579***	63.903***	75.978***	67.300***
Adjusted R^2	0.580	0.750	0.753	0.638
No.of Observations	630	630	630	630
D-W Statistic	2.175	2.245	2.163	2.053
S.E. of regression	0.042	0.032	0.023	0.031

Notes: * Level of significance at 10%. ** Level of significance at 5%. *** Level of significance at 1%.
t values are shown in the parentheses.

Table 3.5: Effect of Election and non-election periods on major fiscal variables of Weak Majority State Governments

Variables	Own Tax Revenue	Non-Tax revenue	Capital Expenditure	Revenue Expenditure
	FEM	FEM	FEM	FEM
Election*Weak majority	0.001** (2.233)	-0.001 (-0.138)	-0.029** (-1.968)	0.002 (0.355)
(Non-Election)*Weak majority	0.001 (1.018)	0.001 (-0.427)	0.060*** (6.074)	-0.007* (-1.859)
Log(Per Capita SDP)	0.038*** (11.124)	0.006 (-0.532)	0.001 (0.552)	0.004 (0.326)
Log(Grants& Loans)	-0.009*** (-9.042)	-0.018*** (-3.042)	0.056*** (5.719)	0.001 (0.145)
Share of Primary Sector in SDP	-0.005* (-1.914)	0.002 (0.021)	-0.065** (-2.525)	0.014 (0.988)
Cross Section Chi Square	129.576***	77.507***	15.951**	54.099***
Adjusted R^2	0.985	0.765	0.786	0.321
No.of Observations	630	630	630	630
D-W Statistic	2.020	2.051	2.049	1.817
S.E. of regression	1.019	0.036	0.961	0.053

Notes: * Level of significance at 10%. ** Level of significance at 5%. *** Level of significance at 1%.
t values are shown in the parentheses.

Table 3.6: Effect of Election and non-election periods on Current Account Spending of Weak majority State Governments

Variables	Development Expenditure	Non-Development Expenditure	Social Services	Economic Services
	FEM	FEM	FEM	FEM
Election*Weak majority	0.005 (0.936)	-0.003* (-1.897)	0.002* (1.847)	-0.004*** (-3.207)
(Non-Election)*Weak majority	-0.007* (-1.832)	0.000 (0.790)	-0.001 (-1.149)	-0.004*** (-4.672)
Log(Per Capita SDP)	0.012 (0.985)	0.008*** (2.670)	0.021*** (6.233)	-0.014*** (-3.782)
Log(Grants& Loans)	0.005 (1.105)	-0.006*** (-4.977)	0.002 (0.223)	0.004*** (2.867)
Share of Primary Sector in SDP	0.033** (2.435)	0.003 (0.917)	0.015*** (3.951)	0.013*** (3.835)
Cross Section Chi Square	88.237***	63.690***	77.653***	68.581***
Adjusted R^2	0.575	0.922	0.922	0.867
No.of Observations	630	630	630	630
D-W Statistic	2.172	2.025	2.090	2.015
S.E. of regression	0.042	1.018	1.018	1.018

Notes: * Level of significance at 10%. ** Level of significance at 5%. *** Level of significance at 1%.
t values are shown in the parentheses.

3.4.1 Robustness Checks

We present the findings from a replication of the basic models using estimation methods other than the Ordinary Least Squares (OLS) fixed effect model. We replicate the results with The Fully modified least squares (FM-OLS) and Panel Corrected Standard Error (PCSE) method. FM-OLS regression method, was first introduced in the work by Phillips and Hansen (1990) to obtain the optimal estimates of cointegrating regressions. The method adjusts the least squares approach to take into account the impacts of serial correlation and endogeneity of the regressors which arise from the presence of a cointegrating relationship. Time-series-cross-section (TSCS) data comprises repeated observations over a certain period of time for a set of units such as states or nations. These types of data are commonly used in applied studies in the social sciences, particularly in comparative political science research. These data often exhibit non-spherical errors due to contemporaneous correlation across units and unit-level heteroskedasticity. When linear models are applied to TSCS data, it is typical to use non-spherical error structures to improve inference and estimation efficiency through the use of feasible generalized least squares (FGLS) estimators, as suggested by Parks (1967) and popularized by Kmenta (1986). Beck and Katz (1995) proposed using ordinary least squares (OLS) and proposed a sandwich-type estimator of the covariance matrix of the estimated parameters, called panel-corrected standard errors (PCSE), which is robust to the possibility of non-spherical errors. Although the PCSE covariance estimator has some similarities to heteroskedasticity-consistent (HC) estimators (such as, Huber 1967; White, 1980; MacKinnon and White, 1985) these estimators do not take into account the known TSCS structure of the data.

Table 3.7: Robustness checks on effect of Election, Alter and Weak Majority on Major Fiscal Variables of Indian State Governments

Variables	Own Tax Revenue		Non Tax Revenue		Capital Expenditure		Revenue Expenditure	
	FMOLS	PCSE	FMOLS	PCSE	FMOLS	PCSE	FMOLS	PCSE
Election	0.004* (1.747)	0.001* (1.706)	0.006 (0.272)	0.001* (1.818)	-0.236*** (-3.970)	-0.130*** (-9.541)	0.008* (1.894)	0.009*** (6.205)
Alter	0.001 (0.745)	-0.004*** (-5.429)	-0.005 (-0.322)	-0.005*** (-5.305)	-0.110*** (-3.912)	-0.085*** (-7.302)	0.008** (2.385)	0.008*** (4.611)
Weak Majority	0.003* (1.679)	0.001** (2.083)	0.002 (1.227)	0.000 (0.302)	0.155*** (5.737)	0.053*** (4.122)	-0.008** (-2.508)	-0.006*** (-4.036)
Log(Per Capita SDP)	0.002 (0.300)	0.036*** (10.357)	0.002* (1.938)	0.002 (0.097)	0.147*** (25.263)	0.095* (1.760)	0.009*** (4.023)	0.002 (0.430)
Log(Grants& Loans)	-0.002 (-0.314)	-0.009*** (-7.549)	-0.001** (-1.992)	-0.007*** (-5.740)	0.170*** (11.131)	0.095*** (6.194)	0.003*** (2.656)	0.007*** (3.758)
Share of Primary Sector in SDP	-0.004 (-0.213)	-0.005* (-1.813)	0.0002 (0.162)	0.002 (0.730)	-0.450*** (-43.690)	-0.296*** (-6.436)	0.005 (1.594)	0.028*** (3.926)
No.of Observations	630	630	630	630	630	630	630	630
Adjusted R^2	0.880	0.987	0.743	0.900	0.709	0.777	0.109	0.881
D-W Statistic		2.043		2.009		2.087		1.974
S.E. of regression	0.050	1.018	0.039	1.019	0.946	0.973	0.065	1.00

Notes: * Level of significance at 10%. ** Level of significance at 5%. *** Level of significance at 1%.
t values are shown in the parentheses.

Table 3.8: Robustness checks on effect of Election, Alter and Weak Majority on Current Account Spending of Indian State Governments

Variables	Development Expenditure		Non Development Expenditure		Social Services		Economic Services	
	FMOLS	PCSE	FMOLS	PCSE	FMOLS	PCSE	FMOLS	PCSE
Election	0.012*** (2.931)	0.008*** (4.897)	-0.004** (-2.299)	-0.002* (-1.687)	0.029* (1.704)	0.001 (1.556)	0.003* (1.703)	0.001 (1.494)
Alter	-0.001 (-0.571)	0.003* (1.820)	0.001 (1.174)	-0.001 (-0.994)	0.002 (0.979)	0.001 (1.605)	0.001 (0.837)	0.003*** (3.849)
Weak Majority	-0.002 (-0.582)	-0.005*** (-4.033)	-0.001 (-0.937)	-0.001 (-0.572)	0.000 (0.313)	-0.000 (-0.137)	-0.006 (-0.435)	-0.004*** (-5.051)
Log(Per Capita SDP)	0.002 (1.452)	0.002 (0.485)	0.001* (1.905)	0.008*** (2.721)	0.051*** (3.889)	0.021*** (6.318)	0.002*** (3.491)	-0.014*** (-3.665)
Log(Grants& Loans)	0.002 (0.913)	0.005** (2.470)	-0.001 (-1.568)	-0.007*** (-5.100)	0.001 (0.526)	-5.90E-05 (-0.040)	-0.000 (-1.180)	0.004*** (2.851)
Share of Primary Sector in SDP	-0.001 (-0.601)	0.023*** (3.611)	0.006*** (3.960)	0.004** (1.985)	-0.002 (-0.219)	0.014*** (3.768)	-0.000 (-0.627)	0.012*** (3.377)
No.of Observations	630	630	630	630	630	630	630	630
Adjusted R^2	0.539	0.697	0.680	0.925	0.708	0.922	0.550	0.886
D-W Statistic		2.065		2.022		2.106		2.007
S.E. of regression	0.044	1.015	0.035	1.017	0.024	1.019	0.031	1.017

Notes: * Level of significance at 10%. ** Level of significance at 5%. *** Level of significance at 1%.
t values are shown in the parentheses

Table 3.9: Robustness checks on effect of Election and Non-election periods on Major Fiscal Variables of Alter State Governments

Variables	Own Tax Revenue		Non Tax Revenue		Capital Expenditure		Revenue Expenditure	
	FMOLS	PCSE	FMOLS	PCSE	FMOLS	PCSE	FMOLS	PCSE
Election*Alter	-0.007 (-1.355)	-0.002** (2.156)	-0.005 (-0.108)	-0.004*** (-2.972)	-0.210* (-1.860)	-0.220*** (-17.798)	0.021** (2.291)	0.020*** (8.317)
Non-Election*Alter	0.006 (0.172)	0.005*** (5.968)	-0.005 (-0.157)	-0.005*** (-5.204)	-0.008 (-0.111)	-0.049*** (-6.757)	0.011* (1.791)	0.006*** (3.688)
Log(Per Capita SDP)	0.005 (0.329)	0.036*** (10.478)	0.002 (1.434)	0.000 (0.182)	0.103 (0.464)	0.082* (1.806)	0.007 (0387)	0.002 (0.538)
Log(Grants& Loans)	-0.001 (-0.157)	-0.008*** (-7.203)	-0.001 (-1.361)	-0.007*** (-5.825)	0.036 (0.405)	0.110*** (10.308)	0.015** (2.161)	0.009*** (4.913)
Share of Primary Sector in SDP	-0.003 (-0.106)	-0.004*** (-1.404)	0.0002 (0.108)	0.002 (0.688)	-0.324 (-1.172)	-0.305*** (-9.874)	0.053** (2.312)	0.027*** (4.923)
No.of Observations	630	630	630	630	630	630	630	630
Adjusted R^2	0.880	0.988	0.743	0.899	0.697	0.835	0.281	0.873
D-W Statistic		2.032		2.004		2.046		1.968
S.E. of regression	0.050	1.019	0.039	1.019	0.965	0.997	0.063	1.011

Notes: $*$ Level of significance at 10%. $**$ Level of significance at 5%. $***$ Level of significance at 1%.
t values are shown in the parentheses.

Table 3.10: Robustness checks on effect of Election and Non-election periods on Current Account Spending of Alter State Governments

Variables	Development Expenditure		Non Development Expenditure		Social Services		Economic Services	
	FMOLS	PCSE	FMOLS	PCSE	FMOLS	PCSE	FMOLS	PCSE
Election*Alter	0.013** (2.486)	0.016*** (6.487)	-0.005* (-1.680)	-0.003* (-1.806)	0.006* (1.653)	0.005*** (3.670)	0.007* (1.695)	0.006*** (3.877)
Non-Election*Alter	-0.006* (-1.823)	-0.001 (-0.935)	0.000 (0.070)	-0.000 (-0.417)	-0.006 (-0.232)	-0.001 (-0.695)	0.000 (1.400)	0.002** (2.126)
Log(Per Capita SDP)	0.002 (1.466)	0.000 (0.098)	0.0124** (2.130)	0.008*** (2.666)	0.013* (1.769)	0.022*** (6.727)	0.014* (1.662)	0.015*** (3.924)
Log(Grants& Loans)	0.001 (0.861)	0.005*** (2.391)	-0.003 (-1.171)	-0.007*** (5.075)	0.000 (0.050)	0.000 (0.232)	0.005* (1.732)	0.003** (2.185)
Share of Primary Sector in SDP	-0.001 (-0.447)	0.018*** (2.930)	0.017** (2.092)	0.003 (0.910)	0.013 (1.488)	0.014*** (3.827)	0.002 (0.275)	0.008** (2.258)
No.of Observations	630	630	630	630	630	630	630	630
Adjusted R^2	0.541	0.690	0.699	0.921	0.692	0.928	0.593	0.903
D-W Statistic		2.047		2.024		2.087		2.015
S.E. of regression	0.044	1.015	0.034	1.016	0.026	1.022	0.029	1.103

Notes: * Level of significance at 10%. ** Level of significance at 5%. *** Level of significance at 1%.
t values are shown in the parentheses.

Table 3.11: Robustness checks on effect of Election and Non-election periods on Major Fiscal Variables of Weak Majority State Governments

Variables	Own Tax Revenue		Non Tax Revenue		Capital Expenditure		Revenue Expenditure	
	FMOLS	PCSE	FMOLS	PCSE	FMOLS	PCSE	FMOLS	PCSE
Election*Weak Majority	-0.005 (-0.213)	0.001 (1.346)	0.002 (0.048)	-0.007 (-0.507)	-0.031 (0.962)	-0.008 (-0.571)	0.069** (6.005)	0.002 (0.888)
Non-Election*Weak Majority	-0.028* (1.890)	0.003 (0.481)	0.0106 (0.375)	0.002 (0.314)	0.084*** (3.879)	0.084*** (8.312)	0.007 (0.985)	-0.005*** (3.006)
Log(Per Capita SDP)	0.003*** (12.206)	0.004*** (2.785)	0.017*** (3.227)	0.001 (0.459)	0.032*** (8.351)	0.131*** (3.529)	0.020*** (6.535)	0.001 (0.087)
Log(Grants& Loans)	0.001*** (3.027)	0.001* (1.691)	0.004 (0.394)	0.007*** (5.857)	0.086 (7.692)	0.101*** (8.129)	0.004*** (7.641)	0.001 (1.253)
Share of Primary Sector in SDP	-0.001*** (-3.650)	-0.002 (-0.180)	0.007 (0.827)	0.002 (0.753)	-0.117 (-4.528)	-0.313*** (-9.718)	0.013*** (3.641)	-0.009** (-2.523)
No.of Observations	630	630	630	630	630	630	630	630
Adjusted R^2	0.874	0.977	0.755	0.892	0.714	0.780	0.269	0.494
D-W Statistic		2.125		1.994		2.025		2.009
S.E. of regression	0.054	0.999	0.037	1.019	0.946	0.984	0.070	1.001

Notes: * Level of significance at 10%. ** Level of significance at 5%. *** Level of significance at 1%.
t values are shown in the parentheses.

Table 3.12: Robustness checks on effect of Election and Non-election periods on Current Account Spending of Weak Majority State Governments

Variables	Development Expenditure		Non Development Expenditure		Social Services		Economic Services	
	FMOLS	PCSE	FMOLS	PCSE	FMOLS	PCSE	FMOLS	PCSE
Election*Weak Majority	0.001 (0.293)	0.001 (0.548)	-0.006* (-1.687)	-0.003* (1.863)	0.013*** (2.999)	0.002* (1.812)	-0.006* (-1.702)	-0.004*** (-3.171)
Non-Election*Weak Majority	-0.006* (-1.855)	-0.007*** (-4.893)	0.000 (0.110)	0.008 (0.777)	-0.021* (-1.787)	-0.001 (-1.127)	0.003 (1.519)	-0.004*** (-4.621)
Log(Per Capita SDP)	0.113*** (4.844)	0.002 (0.354)	0.0107 (1.388)	0.008*** (2.608)	0.000 (1.631)	0.021*** (6.110)	0.012 (1.579)	0.014*** (3.744)
Log(Grants& Loans)	0.011* (1.908)	0.007** (2.483)	-0.004 (-1.556)	0.006*** (4.912)	0.004*** (6.764)	0.000 (0.2190	0.006** (2.260)	0.004*** (2.837)
Share of Primary Sector in SDP	-0.031 (-1.515)	-0.024*** (3.899)	0.006 (0.808)	0.003 (0.903)	0.001*** (-2.828)	0.015*** (3.872)	0.001 (1.347)	0.0137*** (3.793)
No.of Observations	630	630	630	630	630	630	630	630
Adjusted R^2	0.615	0.705	0.739	0.922	0.446	0.922	0.663	0.867
D-W Statistic		2.046		2.025		2.090		2.015
S.E. of regression	0.040	1.014	0.033	1.018	0.034	1.018	0.028	1.018

Notes: * Level of significance at 10%. ** Level of significance at 5%. *** Level of significance at 1%.
t values are shown in the parentheses.

3.5 Conclusions

Using data from the Indian State Budgets, we intend to contribute the presence of politically motivated spending of incumbents for election prospectus. The expenditure part of Indian States are significantly validating the presence of Political Budget Cycle (PBC). These results are consistent with the "visibility theory" (Rogoff, 1990) and the spending component of the traditional explanation Tufte (1980). As elections draw near, state governments typically shift budgetary funds from capital expenditures (such as building infrastructure like roads, bridges, and flyovers) to current expenditures (such as social security, subsidies, and maintenance works). This is so that voters can more easily identify current spending and get a more accurate picture of how well the incumbent is. We observe a significantly positive effect of elections on revenue expenditure side of accounts on both alter and weak majority states. Which suggests that the incumbents shift the composition of spending on verge of election from capital spending to current spending. Therefore, it appears that during election seasons, incumbents favour using broad-based spending over specified focus spending.

Our analysis reveals a significantly positive correlation between elections and revenue expenditure on both states with alternate and weak majority forms of government. This suggests that incumbent governments tend to shift the composition of spending in the lead-up to elections from capital spending to current spending. This implies that during election seasons, incumbents prefer to allocate funds towards broad-based spending rather than specified focus spending. This excessive utilization of funds in social sector expenditure in the lead-up to elections is a clear indication of incumbents' "visibility" approach, in which they aim to gain votes through conspicuous spending in this area. Therefore, it appears that Indian states are utilizing social sector spending primarily for political gain rather than addressing genuine socio-economic needs.

The allocation and utilization of development funds by state governments in India is a crucial component in advancing economic and social progress within the country. The utilization of development expenditure for the purpose of gaining political support and votes is a contentious topic within the realm of politics. This practice raises ethical concerns about the motivations behind such spending and the potential for corruption. The allocation and management of public funds for development projects in this manner can also result in a lack of transparency and accountability, as well as insufficient oversight to ensure that the funds are being directed towards their intended purpose. In this context, our study has found that Indian state governments primarily use development expenditure as a means of securing political support and votes, rather than addressing the needs and well-being of the society. This implies that the allocation of such funds may not always be guided by clear principles such as transparency, accountability, and the fair distribution of resources. The use of development expenditure as a tool for political gain can also lead to mismanagement, waste, and even fraud, which can have a negative impact on the overall development of the region.

Our study has shown that regardless of the government in place, be it an alternate form of governance or one with a weak majority, comparable tactics are employed when approaching elections. One striking feature of these tactics is the focus on utilizing funds that are visible and can be used as a means to gain political support and votes. Conversely, funds that are less attractive or cannot be used as a means for vote winning are usually allocated during non-election years. These funds may not have an immediate visible impact on society and are not used as campaign tools during elections.

Chapter 4

ELECTORAL POLITICS OF CENTER-STATE RELATION IN INDIA

"In politics we will have equality and in social and economic life we will have inequality. These conflicts demanded attention: fail to do so, and those denied will blow up the structure of political democracy"

- Dr. B R Ambedkar (1949)

4.1 Introduction

India is considered as a Quasi-Federal nation, which is not mentioned as a federation in the Constitution of India, even though all the features of a fiscal federal country endowed in the system[29]. While the central government in a quasi-federal system has more power and authority than in a federal one, regional or subnational governments still have some jurisdiction over certain matters. High levels of regional autonomy are common in quasi-federal systems, although the central government still has the power to meddle in local matters and make national-level decisions. Fiscal federalism is visible in the country with its demarcation in the fiscal autonomy to the elected Central government (or Union government) and to the sub-national government (or State government). The constitutionally enlisted fiscal powers of Central and State governments[30] discerns that the top layer government (or Central government) have vested with the power of revenue collection. Whereas, the state governments have the functional obligations to wield the

[29] This tag for India was suggested by Wheare in 1963 and is based on provisions in the Indian Constitution that allow the national government to exert emergency powers over state governments in the event of financial emergencies (as outlined in Article 360) or instability (as outlined in Article 356). These powers have never been used in the case of financial emergencies, but have been invoked on several occasions in the case of instability.
[30]The Seventh Schedule of the Indian Constitution divides powers between the national government (also known as the center or List I), the state governments (List II), and powers that are shared between the national and state governments (List III). These lists demarcated the subjects over which the fiscal powers assigned exclusively to each.

welfare society in action. So this disproportionately larger obligation on the shoulder of state governments needed proper financial support from the top layer government.

In India, the national and state governments have unique roles and powers when it comes to public finance. The Indian Constitution separates the financial powers of the government between the central and state governments in a federal system. The central government has the exclusive authority to impose certain taxes, such as customs duties, central excise duties, and service tax. It also has the power to borrow money on behalf of the country and issue currency. The central government manages the overall public finances of the country and can distribute resources to the states. Meanwhile, state governments can levy certain taxes, such as stamp duties, land revenue, and taxes on professions, trades, and callings. They can also borrow money, with certain limits. The state governments are responsible for managing the finances of their respective states and can allocate resources within their states. Both the central and state governments have a role in distributing tax revenues. The central government can levy certain taxes and give a portion of the revenues to the state governments, while the state governments can levy certain taxes and keep the revenues for themselves. In short, the central and state governments in India have distinct financial powers and responsibilities and both play a role in managing public finances in the country.

The drafters of Indian constitution are well conscious about the situation in which this incommensurate fiscal responsibilities towards the state governments. They give birth to the constitutionally formed Finance Commission (FC) and non-constitutional body called Planning

Commission (PC) to recommend the financial resource distribution[31]. From this point of view, the decisive role of intergovernmental transfer arises and which is used as a negotiable tool to this fiscal federal system.

In India, more revenue sources are equipped with the Union government than its obligations to meet. On contrary, state governments have to discharge their functional responsibilities with limited source of income. This creates a vertical imbalance in the fiscal federal system of India. This fiscal imbalance constitutes the significance of the role of Finance Commission and Planning Commission to some extent. Rangarajan and Srivastava (2011) also contend that the political and social pressures of the time are reflected in the uneven distribution of revenue-raising and spending commitments between national and sub-national governments that was established by the constitutional arrangements at the time of India's independence. In this context, the Administrative Reforms Commission (1968) noted that, "the exact correspondence of resources and functions is not possible to secure in any federal situation, however in India the balance is tilted rather heavily in favor of the center, and the outstanding feature of financial relationship between the center and states is that the former is always the giver and the latter the receiver. The favorable positions given to the center in regards to financial resources reflect the strong-center theme running through the constitution, and many feel that this has been an important factor in maintaining the unity of the country."

The centralization of revenue sources generates this Vertical Fiscal Imbalance (VFI) and the state governments have to reap the benefit in accordance with the recommendations put forth by FCs

[31]In accordance with Article 280 (1) of the Indian Constitution, the Finance Commission (FC) must be established at intervals of five years or before the period the President of the nation specifies for operation in order to endorse the financial transmission from the Central government to the state governments.
Planning Commission is a non-constitutional body which is formed to frame suitable policies for economic upliftment with course of Five Year Plans.

time to time. The VFI will deteriorate, if all layers of government have their own fiscal power to generate revenue to discharge their functional responsibilities (Srinivasan and SRS Durai, 2022). We have experienced the formula based transfer of resources from Center to sub-national levels under various schemes. In her analysis, Indira Rajaraman (2007) posits three primary arguments. Her first argument states that the inadequate expenditure on health and education in India is symptomatic of the shortcomings of the country's fiscal arrangements, particularly the lack of political certainty in regards to the amount of center-state transfers and the overall borrowing limit imposed by the central government. Secondly, she contends that Indian politicians have erred by imposing the same deficit target on all states, regardless of their initial deficit position or potential for growth. Lastly, Rajaraman asserts that India necessitates an improved forum for the discussion of center-state relations and the fiscal framework, as there is currently no effective means for states to voice their concerns.

What determinants should be considered for these inter-governmental transfers has been a prominent problem in the federal systems. The conventional arguments on fiscal federalism based on the effectiveness and equitable standards (Musgrave, 1959; Oates, 1972; Gramlich, 1977). Recent literatures reveal the presence of political factors to such inter-governmental transfers to the sub-national jurisdiction (Cox and MuCubbins, 1986). Instead of looking on the pure equity and efficiency arguments on fiscal federalism, modern theorist debate over the issue of political determinants of inter-governmental transfers and relations. The political factor stationed with the re-election motives of upper body on the lower level governments through increased transfers which skewed towards the regions with same party affiliation (or partisan basis). Every FCs provides the recommended level of transfers, but it is not confined to it alone. There are diversified routes for this transfers including the recommendations from PCs[32] and Central government's discretionary grant pools.

The central government's discretion in allocating funds plays a crucial role in how resources are distributed across the country. While the central government may have the power to allocate funds based on factors such as need, population, or economic conditions, its discretion in doing so can lead to an uneven distribution of resources, with certain states or regions receiving a disproportionate share of funds. This is often referred to as "favouritism" or "clientelism" where funds are allocated to states or regions that are politically aligned with or supportive of the central government[33]. This can result in an unfair distribution of resources and neglect of certain regions. In addition, the discretion exercised by the central government in allocating funds can also lead to a lack of transparency, accountability and oversight in the use of public funds, resulting in mismanagement, waste, and even fraud which can negatively impact the development of the region. Therefore, it is crucial to ensure that the central government's discretion in allocating funds is guided by principles of transparency, accountability and fairness to prevent negative impacts and to ensure that funds are used for their intended purpose of promoting development.

This chapter conducts an empirical investigation to determine whether political motivations are at play in India's sub-national governments' transmission of central funding. It is interesting to see through the lens of electoral politics behind certain transfers and which will capture the electoral

[32] The role of Planning Commission comes to an end at Aug 15, 2014 with the remarkable announcement from the Prime Minister (Narendra Modi) and replaced with National Institution for Transforming India (NITI Aayog).

[33] The phenomenon of "favouritism" or "clientelism" refers to the act of extending preferential treatment or benefits to select individuals or groups, often as a quid pro quo for political support or loyalty. Within the context of development fund allocation, this translates to the central government allocating funds to specific states or regions based on their political alignment or support, rather than utilizing objective criteria such as need or other relevant factors

motives of the centre-state relationships in Indian federal setup. This question of politically motivated transfers arises from the fact that in a federal setup, a state government is more rely on the transfers from the center to impart their fiscal obligation to the people. The funds which are transferred to the sub-national level have an impact on its vertical imbalance correction on one hand and electoral motives on the other.

4.2 Literature

Political parties can attract voters with rival ideologies if the transfer packages they offer are high enough to balance ideological conflicts. This approach has two identifiable strands. There are studies based on a public choice model that demonstrate how the ruling party's electoral concerns induce transfers from the top to the bottom of government. The first theoretical model in this body of literature was provided by Cox and MuCubbins (1986). In this model, the local voters are divided into three distinct groups (supportive voters, swing voters, and dissenters), with risk-averse politicians prioritizing loyal voters (supportive selectors); Regions with strong supporters receive disproportionately high funding from the central government. Politicians from different parties represent areas where it is difficult to stake credit or deliver a partisan message. Individual lawmakers will try to allocate their money in ways that boost the recognition they and their parties receive. A strategy to maximize the credit acknowledged by political parties or central incumbents is to direct funds to areas dominated by loyal voters. This hypothesis is validated with some researches, notably there found a positive correlation between Roosevelt's vote share and state spending, consistent with this proposition (Anderson and Tollison, 1991; Couch and Illi, 1998).

The other aspect is on studies with swing voters. Election or decision-making outcomes are greatly influenced by the swing vote. It is cast by people or groups who have not formally allied themselves with a certain political party or viewpoint, and as a result, their vote is unreliable. Swing votes can be crucial in deciding the outcome of an election, especially if the candidates are closely matched. Swing votes can also determine the outcome of a vote on a bill or resolution in a legislative body like a parliament or congress. The political environment as a whole, voter turnout, and campaign message are all variables that might affect swing votes. In order to win elections, political parties and politicians frequently work to gain the support of swing voters.

Another theoretical version on this strand became supplied through Lindbeck and Weibull (1993), in which they indicates that the incumbent can favour swing electorate-who do are longer constantly vote for the same party all through elections. Politicians' tries to maximise their votes in goal areas with swing electorate due to the fact in these regions are facing close excessive competitiveness in an electoral contest marginal utility of public funding is likewise better. Beyond those electoral results, partisan relation among top and lower-tier governments may have an effect on the quantity of finances acquired by the lower-tier authorities. If government at top tier is different in ideology of the party at lower-tier, the top tier (granter authorities) might not be capable of declare a whole lot political credit (and at instances no credit at all) for the better devolution toward a constituent unit. In one of these scenario of no credit leakage (i.e., due to incomplete statistics public isn't capable of increase goodwill approximately granter authorities), granter authorities reveals it extra worthwhile to devolve better transfers toward political devices ruled through same party members. As empirical aid for this hypothesis, Larcinese et.al (2006) find the country that celebration alignment among the president and country governors extensively have an impact on finances allocation amongst states.

Wallis (1987) and Wright (1974) employed a theoretical framework to demonstrate that states that exhibit high electoral volatility during presidential elections receive greater levels of federal support. This finding aligns with the idea that the President may attempt to target swing voters. Additional support for this hypothesis is provided by Dahlberg and Johansson (2002), who revealed that Swedish regions that are considered swing in national elections receive a higher proportion of a specific transfer program. The swing voter hypothesis is also supported by numerous other empirical studies, including those by Bungey Grossman and Kenyon (1991), Dixit and Londregan (1996), Case (2001) Stromberg (2002) Johansson (2003), and Veiga and Pinho (2007). In their study, Veiga and Pinho (2007) examine the influence of political factors on the distribution of intergovernmental grants in Portugal as the country transitioned from a newly established to a well-established democracy. Utilizing a comprehensive and previously unexamined dataset, the authors demonstrate that political variables play a significant role in shaping the grant allocation system, with their impact altering over time. Specifically, the authors posit that while instances of tactical manipulation in the distribution of grants among municipalities appear to be more prevalent during the early stages of democracy, opportunistic effects are more prevalent in more recent years. This phenomenon is attributed to shifts in the political climate and a lack of awareness among the electorate regarding intergovernmental grants. Diaz-Cayeros, Megaloni, and Weingast (2006) offer an alternative perspective on the alignment hypothesis, which posits that in certain situations, the incumbent political party may have incentives to utilize mechanisms of punishment and reward to retain electoral support. They argue that in such cases, lower-tier units that have defected in previous elections and supported the opposing party, are punished through reduced transfers. This viewpoint is in contrast to the swing voter models proposed by Lindbeck and Weibull (1987).

There are many studies conducted all around the world about this distributional politics and inter-governmental relations. Using a unique data set collected from a random sample of Ghanaian schools, a test for the "sponsorship" hypothesis that central government funds are directed to districts that backing the ruling party. This study found evidence of sponsorship targeted at counties, the level of government to which state budgets are allocated (Miguel and Zaidi, 2003). In order to gain/maintain influence over Indian states with big swing voters, relatively higher per capita transfers are channeled towards them in election years and disproportionately to core states in non-election years as a strategy of central incumbent to earn votes (Ahmad, 2021). In their research, Duchateau and Aguirre (2010) demonstrated that the alignment of political parties plays a substantial role in determining how budget fund is allocated in Brazil. Banful (2011) shows the importance of political alignment in propaganda distribution. He points out that resource allocation in young African democracies is strongly determined by the nature of the beneficiary group's political relationships with the higher levels of government. While we are considering the voluntary payments from central government to its lower level, the National Calamity and Contingency Fund (NCCF) of India is a voluntary federal grant that supports local government disaster relief battle. There is evidence that voluntary intergovernmental transfers contribute to the distributional policies of countries with coalition governments. Coalition formateur(s) use these transfers to design or hold divided coalitions. Using NCCF data of India from 1997 to 2013 for his 23 states in India to test quota policies. His results show no evidence that the NCCF contributes to distributive politics (Kumar, 2016).

Mesquita (2010) supplements the idea of distributive politics and postulates that the distributive condition has been an important feature of Indian coalitions and argues that it provides the foundation for the coalition formation among political parties that have at least partially incongruous goals. Rao and Singh (2005) believe that political influence is most evident in deliberate transfers to sub-national governments in India. Biswas and Marjit (2002) considered two most important central disbursement, letters of intent and industrial licenses, are skewed towards the states with same political affiliation. They argue that this later created the regional disparities in the form of better industrial spaces for states who are benefited with those. Arulampalam et. Al (2009) extended the political affiliation to the inter-governmental transfers to the swing and aligned states. They found that a sate who are both aligned and having a swing government receives 16 percentage more funds than its counterparts as election appears. Khemani (2003) all use data on explicit discretionary transfers to confirm the existence of distributive politics in India. Rodden and Wilkinson (2004) found that the states in which pivotal coalition forming parties are based, gains disproportionately large transfers.

Johansson (2003) tested the theoretical model proposed by Lindbeck and Weibull (1993) on considering a panel of 255 Swedish municipalities from 1981 to 1995. The model suggests that groups with a larger number of swing voters will receive larger grants than other groups. To test this hypothesis, the paper proposes and employs a new method for estimating the number of swing voters. The results of the analysis support the hypothesis that intergovernmental grants are used to influence voting behavior.

The alignment of political parties can have a significant impact on the direction and policies of a government, as well as the distribution of power within a political system. When analyzing the political landscape of a country or region, it is important to consider how parties align themselves with each other and how this may affect decision-making and policy outcomes. We intend to extend this partisan politics and politics behind the central transfers to Indian states in this chapter. The special attention is given to the alignment of state government with the party (or coalition) at center and the transfer of fund which are exclusively under the discretionary power of the government at center. We also look into the election period of non-aligned states with the aligned states to separate its effects and politics behind the devolution.

4.3 Data and Methodology

4.3.1 Data

Indian state governments get funds from the Union (or Central) government in a variety of ways, including discretionary grants. These transfers are provided in order to meet the financial requirements of the states as well as to support the implementation of various development and welfare programs at the state level. Discretionary grants are financial assistance provided by the Union Government to state governments through Centrally Sponsored Schemes (CSSs), Central Schemes (CSs), and Special Plan Schemes. These grants are not mandatory and are given at the discretion of the Union Government. They are often employed to aid in particular programmes or projects that support the objectives and priorities of the Union Government. This study focused on the political picture behind the discretionary grants of Union government to the state governments. We have taken the sum of transfers under the Central Schemes (CSs) and the Centrally Sponsored Schemes (CSSs) as discretionary transfers. These funds are distributed to the sub-national levels and are purely under the control of the Union government. Since these transfers are not guided by any pre-designed formula or criteria and central ministries have larger discretion in deciding about the quantum of devolution, we have chosen these transfers for separate analysis. Besides checking for the influence of individual political factors, we have also examined various interaction effects. We have used the panel of 21 Indian states for the period covers 1991 to 2019. The pivotal part of this study is to find the political determinants of inter-state transfers apart from the conventional idea of fiscal federalism. The variables taken for the purpose of analyzing the political impact on inter-governmental transfer and we classified them on the basis of its nature into economic, political variables as follows:

i. Economic Variables

Discretionary Grants: Defined as the total grants received by state governments on account of Centrally Sponsored Schemes (CSSs), Central Schemes (CSs) and Special Plan Schemes from the Union Government.

Gross State Domestic Product (GSDP): We have taken log of GSDP as control variable.

Share of Primary Sector: Inclusion of this variable to indicate the structure of the economy and backwardness of state in particular. It is taken as the share of primary sector in the GSDP.

ii. Political Variables

Alignment Dummy: If the ruling party at the national level (or the leading coalition party in a coalition government) is the same as the ruling party (or leading coalition party in a coalition government) at the state level, we say that the state is aligned with the party at the national level. In any given financial year, a state that is aligned with the party at the national level will have a dummy variable of "1," while a non-aligned state will have a dummy variable of "0."

Assembly Election Dummy: If elections for state assembly (or also known as Vidhan Sabha) are expected to be commenced during a financial year there is high possibility that Union government may provide their discretionary funds towards politically aligned states. We consider a financial year to be an election year if either election was held in latter half of that year or in the first half of next year.

4.3.2 Methodology

We try to demonstrate the model to understand how the partisan effect proceed the discretionary central transfer in Indian scenario. The same party rule in the central and state governments will tend to skew this transfer towards the benefit of aligned regions. We developed the aligned dummy to capture certain partisan effect (Singh and Rao, 2006). Hypothetically, the election year in an aligned state will receive more discretionary funds from the center as a token of price for their party politics and fulfilling the guaranteed responsibilities on verge of state elections. The cross dependence of the alignment dummy and election dummy will capture the effect of increased transfers on the election period of an aligned state. Likewise, the cross dependence of non-alignment and election dummies constitute for the effect of reduced transfers on election years in a non-partisan state. The model comprises of both economic and political variables to get the whole picture of economic and political determinants behind the centrally transferred discretionary funds. The following model is adopted from Ahmad (2021) to find the proposed results.

$$\boldsymbol{log(DG_{i,t}) \; = log(DG_{i,t-1}) \; + \; \beta_1(Election_{i,t}{*}Alignment_{i,t})+}$$

$$\boldsymbol{\beta_2((Non\ Alignment_{i,t}){*}Election_{i,t})+\sum c'\ log\ (x_{i,t}) \; + \; \mu_i + \; \varepsilon_{i,t}}$$

In which, $DG_{i,t}$ denotes the expenditure on Discretionary Grants from Centre to the state government i at period t; $x_{i,t}$ is a vector of control variables; *Election* is an electoral dummy which is meant to capture pre-electoral effects and it equals 1 in an election year and 0 otherwise; *Alignment* is a political variable and denotes with dummy as 1 if the state government is aligned to the incumbent at center and 0 otherwise; μ_i is a state fixed effect. We have taken logs of State Gross

Domestic Product (GSDP), State population and share of primary sector in State GDP (SHSP) as control variables.

In this model the coefficient β_1 will produce the result of the level of discretionary funds towards the aligned states who are facing a general state election. If this value shows a positive sign, the analysis shows the increased funds towards state with same political ideology and holds for a partisan effect in central transferring. Similarly, the coefficient $\beta_2$will capture the effect of election in non-aligned state for the discretionary funds from the central government.

4.4 Empirical Results

In order to influence public policy and win elections, political parties compete and clash, which is referred to as party politics. As parties require funds to finance their campaigns and advertise their platforms, funding is crucial to this process. Parties frequently rely on donations from individuals, groups, and companies to finance their operations, and there can be disagreements over the sums and origins of these gifts. In the model, the key independent variable is political alignment. Building on the research of Singh and Rao (2006), we included a dummy variable to examine the role of politics in the discretionary transfer of funds from the Indian central government to state governments. In the econometric specification, besides population, State Gross Domestic Product (GSDP) and share of primary sector in GSDP, we included Alignment and Election as explanatory variables. Both the political factors turned out to be significant along with the population of state and SHSP were significant at 1 per cent level of significance.

Table 4.1 demonstrates that the results of the model suggest that Indian state general elections are supported by discretionary transfers from the central government. This support is largely influenced by party politics and the election period, with states aligned with the central government's party receiving more financial support during election periods. The model also shows a partisan effect, with states facing a general election experiencing a 0.133 percentage point increase in discretionary transfers. In contrast, states with a different political ideology from the central government tend to receive less funding from the center. This suggests that discretionary transfers are primarily used to finance elections for states aligned with the central government's party.

4.4.1 Robustness Test

The Two-stage Linear Regression (2SLS) is a technique for determining the parameters of a linear regression model when there are correlated explanatory variables. This method, also known as two-stage least squares, involves using the endogenous variables as predictors to forecast their own values. The Two-stage Least Squares (2SLS) approach is a variation of the standard Ordinary Least Squares (OLS) method that is employed when the errors of the dependent variable have correlation with the independent variables. These predicted values are then employed as instruments in the second stage, where they are utilized as explanatory variables in a regression of the dependent variable on both endogenous and exogenous variables. A primary benefit of 2SLS is that it can yield consistent and efficient estimates of the model's parameters, even in the presence of correlated explanatory variables. Additionally, it is relatively easy to apply and widely employed in practice.

The Two-stage Least Squares (2SLS) approach is versatile in its application as it can be used with both cross-sectional and time-series data, as well as a variety of models such as linear and non-linear. Table 4.2 provides the results on the 2SLS method on our study and which also consistently validate the point we are raised. The Alignment coefficient provides positive significant coefficient value capturing the electoral effect on the discretionary transfer from central government to the Indian state governments during the general state election periods.

Table 4.1: Electoral Cycle on Discretionary grant transfer to Aligned and Non-Aligned States

Variables	Discretionary Central Grants
	FEM
Log(central Sponsored -1)	0.256*** (7.990)
Election * Alignment	0.133*** (10.933)
Election * (Non-Alignment)	-0.115*** (-7.563)
Log(GSDP)	0.885*** (13.726)
Log(Population)	0.521*** (5.724)
Share of Primary Sector in SDP	-0.438*** (-9.519)
Cross Section Chi Square	98.039***
No.of Observations	630
Adjusted R-squared	0.972
D-W Statistic	1.979
S.E. of regression	1.011

Notes: * Significance level at 10%. ** Significance level at 5%. *** Significance level at 1%.
t values are shown in the parentheses.

Table 4.2: Two Stage Least Square Results on Discretionary Grant Transfers

Variables	Discretionary Central Grants
	2SLS
Log(central Sponsored -1)	0.265*** (7.312)
Election * Alignment	0.278*** (3.775)
Election * (Non-Alignment)	-0.291*** (-3.941)
Log(GSDP)	0.911*** (9.789)
Log(Population)	0.477*** (2.605)
Share of Primary Sector in SDP	-0.363*** (-4.038)
F statistic **Prob F statistic**	293.695 0.000
No.of Observations	630
Adjusted R-squared	0.946
D-W Statistic	1.954
S.E. of regression	0.961

Notes: * Significance level at 10%. ** Significance level at 5%. *** Significance level at 1%.
t values are shown in the parentheses.

The foregoing findings have the implication that transfers advantage the Indian states that are allied with the party in power at the central disproportionately. This gives the non-aligned state governments a cue to join together in order to gain greater funding in exchange for favours in their upcoming general elections. The alignment, which has unmistakably led to increasing transfer, is the political force driving the transfer. Economic indicators such as state GDP per capita and population showed a positive, considerable transfer flow to the states. The present empirical evidence aligns with the theoretical framework posited by Cox and MuCubbins (1986), which contends that coalition structures remain stable due to increased investment in core support groups. This sentiment is echoed in Holden's (1973) assertion that the distribution of patronage adheres to the principles of "maintaining current holdings" and "attending to one's own interests."

The intriguing finding is that states with a higher share of the primary sector—or, to put it another way, states with generally worse economic conditions—were actually experiencing a reduction in transfer payments. It most likely provides solutions to India's ongoing and rising regional imbalances. The economic variables like population and state GSDP found a positive significant transfer flow to the states. The fascinating result is that the states with more share in primary sector (or per say, states with relatively poorer economic conditions) were actually facing a transfer fall. This finding may provide insight into the ongoing issue of regional imbalances in India. The principle of horizontal equity requires addressing disparities among regions, particularly for states that are relatively poor. Therefore, it is imperative that special attention is given to these states in order to ensure a fair distribution of resources and opportunities. This is essential for the amelioration of regional imbalances and to promote a more equitable society.

4.5 Conclusions

The central government provides funds to the states using a number of different methods, including grants, loans, and other types of financial aid. Depending on the intended use and nature of the funds, different terms and conditions may follow, and there could be oversight and reporting obligations. Funds are distributed to state governments by the central government of India for a number of reasons, such as infrastructure development, social welfare initiatives, and capacity building. These transfers are essential for supporting the provision of public services and fostering state-level economic development. The prevailing wisdom is that the state governments which are ruled by the same political party as that ruling at the Center, enjoy a higher level of federal transfers. We demonstrate that there exists incentive effect of federal transfer complementing such partisan effects through same party alignment. Centrally sponsored schemes are financial assistance programs provided by the Union Government to the states. These funds are often directed towards states that are holding general elections and are aligned with the party or coalition in power at the center. The current empirical research supports the theoretical model proposed by Cox and MuCubbins (1986) that suggests the stability of coalition structures can be attributed to a greater investment in core support groups. This finding is consistent with the idea that by strengthening the relationships and loyalty within these central groups, the coalition as a whole becomes more cohesive and resilient to external pressures and internal conflicts. Furthermore, this theory posits that the allocation of resources towards the core support groups serves as a means of maintaining the stability and longevity of the coalition.

On the other hand, states that are not aligned with the center may experience reduced fund transfer during election times. This might be interpreted as a tactic used by the Union Government to subtly push non-aligned nations to band together in order to get larger transfers. It is noteworthy that the economic condition of a state is not the sole determinant of the allocation of central transfers. These transfers, which are often provided by the Union Government, are frequently distributed based on discretionary rather than formulaic criteria. This implies that the allocation of resources may not be directly linked to the economic needs of the state, and other factors such as political considerations and the relative bargaining power of the state may also play a role in the distribution of these transfers. The current finding may provide insight into the ongoing problem of regional disparities in India. The concept of horizontal equity, which posits that individuals in comparable circumstances should be treated equitably, demands addressing the variations among regions. This is particularly important for states that are relatively impoverished, as they are more likely to confront socio-economic disadvantages. Consequently, it is crucial that specific attention and targeted interventions are directed towards these states to foster a more just distribution of resources and opportunities. This can aid in diminishing the gap between relatively poor states and more developed states, and contribute to the general advancement of the country.

Chapter 5

SUMMARY AND CONCLUSION

5.1 Introduction

Economists have always been interested in the relationship between the economy and the political system because politics can affect economic policy and, as a result, economic performance. In the last 25 years, the study of how politics and macroeconomics interact has become a significant area of research, leading to the creation of a field called "the new political macroeconomics." This field combines macroeconomics, social choice theory, and game theory, and uses advanced economic analysis techniques to examine important public policy issues. The political budget cycle refers to the idea that governments may manipulate their budget decisions in order to gain political advantage, particularly in the run-up to elections. This can involve increasing spending on popular programs or cutting taxes in order to stimulate the economy and improve the government's chances of being re-elected.

Critics of the concept argue that it is difficult to identify clear evidence of political budget cycles, as it is difficult to disentangle the effects of budget decisions from other factors that may affect economic performance. Some research has suggested that political budget cycles may exist, but that their impact is likely to be small compared to other factors such as technological change and international economic conditions. It is worth noting that the manipulation of budget decisions for political purposes can also have negative consequences, such as creating fiscal imbalances or leading to increased government debt. As such, it is generally considered to be important for governments to pursue sound fiscal policies that are based on long-term considerations rather than short-term political goals.

In this context, the present thesis, we tries to portray “some new evidence of political budget and electoral cycles in India” with regard to the issue of Indian municipal corporations and state governments. Numerous studies in the Indian context have examined the deceptive tactics used by Indian politicians in state and parliamentary elections to gain electorally. From this point of view, we considered the issue of the municipal corporations, the highest level of urban local self-government in India, which are represented by the candidates chosen in municipal corporation elections. State regulations mandate that these elections be held on a regular basis to choose a mayor and council members to represent each municipality's ward. Our aim is to add to the existing research on the political budget cycle from the perspective of local self-government in India.

The second objective of this thesis is to examine the politically motivated spending of governments that are in a unique position of power, specifically those in alternative states and those with weak majority states, during both election and non-election periods. Previous research on the topic has generally focused on the relationship between electoral politics and the fiscal policy choices of Indian state governments without considering the way in which government is formed. So it is intriguing to look upon the weak majority government that controls a legislative body with a slim majority, in our instance the state governments of India and also the alteration in power.

Our third objective is based on the electoral cycle on the central and state governments’ relation on its federal transfers. There is mounting evidence that, in addition to issues of fairness and efficiency, decisions about the allocation of central money among sub-national governments are also impacted by political reasons. Several studies in various nations have identified a variety of political factors that, depending on a country's political and fiscal systems, may have an impact on the distribution of transfers to sub-national governments. This study intends to use empirical analysis to investigate this issue in relation to India.

5.2 Analytical Framework

The analytical framework of this study is centered on understanding the politico-economic interaction of Indian national and subnational governments. The first objective model is used in this study include municipal corporation fixed effects. However, it is known that the standard fixed effects estimator can produce biased results when the model includes a lagged dependent variable. While the bias disappears in large panels with a high number of observations ($T > 30$), our panel only includes data from about 15 years. According to simulation evidence presented by Judson and Owen (1999), the System-GMM estimator is a suitable choice for such samples (as also supported by Blundell and Bond (2000). Therefore, we use the System-GMM estimate as our primary estimator.

For our second and third objectives we used Panel Fixed Effect models for the analysis purpose. In the third and fourth chapters, we are analysing panel data for Panel fixed effect models are used to analyze data from a panel or longitudinal study, where the same subjects are observed over multiple time periods. These models have the advantage of being able to control for unobserved variables that remain constant over time. The fixed effects included in the model for each individual or group in the panel help to account for time-invariant differences among the subjects.

In general, panel fixed effect models are an effective way to analyze data from panel or longitudinal studies and can give more accurate and reliable estimates of the relationships between variables.

5.3 Major Findings

Theoretical or empirical attempts to investigate the political choice of local governments subject to political budget cycles are in their adolescent stages. This study aims to contribute to the literature by presenting empirical evidence that politically driven spending by Indian Municipal Corporations-even though they are legally prohibited from having budget deficits—has occurred using budget data from 34 Indian Municipal Corporations. More notably, during election years, expenditure that is visible and targetable has increased dramatically. The targetability hypothesis and the visibility hypothesis (Drazen and Eslava, 2010) are supported by these findings (Rogoff, 1990). The "Welfare" and "Infrastructure" cycles are created by Indian municipal corporations to grab voters' attention and manipulate the funding mechanisms for political advantage. The purpose of this study is to examine whether there is evidence of political manipulation in the budgets of local governments in India. We do not accuse incumbent leaders of being opportunistic in their election strategy. Instead, we use politico-economic models, based on public choice and political cycle theories, to analyze the local government budget. Rather than just looking at the cyclical movement of the fiscal deficit close to an election, we studied the major expenditure and receipts categories to understand the overall composition of the budget. Our research shows that the Municipal Corporation engages in manipulative tactics to improve its chances of re-election.

We are using data from the Indian State Budgets to examine the possibility of incumbent politicians using government spending for their own electoral gain. Our findings suggest that the expenditure patterns of Indian States support the existence of the Political Budget Cycle (PBC), which is consistent with the classic hypothesis proposed by Tufte (1978) and the "visibility hypothesis" proposed by Rogoff (1990). We see that, as elections approach, state governments tend to shift their budget resources from capital expenditure (such as infrastructure projects like roads, schools, and water plants) to current expenditure (such as social security, subsidies, and wages). This is likely because current expenditure is more visible to voters and can be used to signal the incumbent's competence. We also find a significant positive effect of elections on revenue expenditure in both alter and swing states, indicating that politicians tend to shift the composition of their pre-election spending towards current expenditure rather than capital expenditure, and towards broad-based rather than targeted spending. The high level of social sector spending on the eve of elections is particularly noteworthy, as it suggests that incumbent politicians may be using this type of spending specifically for political gain. Overall, our results suggest that Indian States may be using social sector spending for political purposes.

We specifically find that states that are holding general elections and are allied with the party or coalition in power at the centre receive higher cash from the Union Government through centrally sponsored initiatives. Contrarily, states that are not centered may experience a decrease in fund transfers during election seasons. This might be seen as a strategy by the Union government to get non-aligned governments to cooperate in order to get higher transfers. It is important to note that the distribution of central payments is frequently left up to the Union Government's discretion and is not always influenced by the economic health of a state.

This thesis contributed to the existing literature especially on tracing the presence of political budget cycle at Indian Municipal Corporation for the first time. The role of successive state government who are come to power alternatively and governments who formed under weak majority intend to please voters with populist policies. This intuitive intentions led to the study on political budget cycle of Indian state governments who are alternate and weak majority in and around elections. We also examined the electoral cycle in the discretionary fund transfers from the central government to states that are aligned and non-aligned with the ruling party. While many previous studies have focused solely on the effects of elections on aligned states, we also included an analysis of the effects of elections on fund transfers to non-aligned states.

5.4 Policy Implications

The following points are listed as the policy implications derived from the thesis:

a. Transparent fiscal autonomy and strict budget monitoring can help Indian Municipal Corporations effectively implement development strategies. To support the smooth functioning of local governments, it is important that the devolution of funds from upper levels of government be transparent and timely. This can be achieved through the use of grants and other forms of financial assistance.

b. A strict vigilance over the accounts of Indian state governments will curtail their efforts entitled to political profit. A law should be intended to provide a framework for the state governments to achieve and maintain fiscal discipline and reduce fiscal deficits over time. There should be a strict ceiling for the limit of fiscal deficit be occurred during election periods.

c. To reduce the risk of political manipulation, we recommend strengthening the constitutional framework for fiscal transfers through the constitutional body Finance Commission (FC) and limiting the use of other forms of devolution. Transfers made through the FC are less susceptible to political maneuvering compared to other channels.

d. The budgetary manipulation is used by government to impress the voters for the short-term political profit. The continuous monitoring of fiscal position of any form government will make people vigilante and can tackle the manipulative actions. Proper academic and public domain discussion and researches should be focused on election induced spending. This will curtail the sluggishness in fiscal policy for short-term political goals.

5.5 Limitations of the study

As with all analytical exercises, current research has limitations, both in terms of methodology and data. Improper maintenance of accounts makes it difficult to monitor Indian Urban Local bodies (Ahluwalia et al., 2019). The lack of a standardized, timely, and audited accounting system makes it difficult to collect reliable data. The creation of dummy for the alignment in a largest democratic country like India is a huge task. There are chances of second way of support from regional parties to the upper layer of government. Swinging the ideological affiliation from one period to another should be properly handled. Due to this nature, we simply consider the same party affiliation in the model for capturing the partisan effect.

5.6 Scope for Future Research

There are various approaches that can be taken to study the politico-economic interactions. The possible extension of this model into the Gram Panchayaths and Municipal councils. Study on whether political induced spending exist in Gram Panchayaths will contribute the ground reality of Indian rural picture. Secondly, it is important to consider the consequences of manipulation by politicians who may be seeking re-election or gaining power. While it is easy to focus on the immediate policy benefits of such policies, it is also important to consider the long-term implications for political systems and society as a whole. Analyzing election results and the outcome of political decisions allows us to better understand the impact of short-term political spending and manipulation.

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Appendices

Table A: Election year and Financial year

Name of the Municipal Corporation	Dates for Elections	Financial Year Recorded as Election Year
Agartala	9th Dec 2015	2015-16
Ahmedabad	10 Oct 2010 22nd Nov 2015	2010-11 2015-16
Aizawl	26th Nov 2015	2015-16
Bengaluru	04th Apr 2010 22 Aug 2015	2010-11 2015-16
Bhopal	31st Jan 2015	2014-15
Bhubaneswar	8th Jan 2014	2013-14
Chandigarh	17th Dec 2011 18th Dec 2016	2010-11 2016-17
Coimbatore	Sep 2014	2014-15
Cuttack	Feb 2014	2013-14
Faridabad	Jan 2017	2016-17
Gaya	21st May 2017	2017-18
Greater Chennai	17th & 19th Oct 2011 19th Oct 2016	2011-12 2016-17
Greater Hyderabad	Dec 2009 06th Feb 2016	2009-10 2015-16
Greater Mumbai	16th Feb 2012 21st Feb 2017	2011-12 2016-17
Greater Visakhapatnam	30th March 2014	2013-14
Gurgaon	23rd Sep 2017	2017-18
Guwahati	June 2013 June 2018	2013-14 2018-19

Hubli Dharwad	March 2013 Sep 2018	2012-13 2017-18
Jaipur	23rd Nov 2009 22nd Nov 2014 Nov 2019	2009-10 2014-15 2019-20
Jamshedpur	March 2018	2017-18
Kanpur	July 2012 22nd Nov 2017	2012-13 2017-18
Kochi	Nov 2015	2015-16
Kolkata	30th May 2010 18th April 2015	2010-11 2015-16
Lucknow	26th Nov 2017	2017-18
Ludhiana	24th Feb 2018	2017-18
North Delhi	23rd Apr 2017	2017-18
Panaji	13th March 2011 06th March 2016	2010-11 2015-16
Patna	04th June 2017	2017-18
Pune	Feb 2017	2016-17
Ranchi	08th April 2013 16th April 2018	2013-14 2018-19
Shimla	27th May 2012 16th June 2017	2012-13 2017-18
Vijayawada	May 2014	2014-15
Warangal	March 2016	2015-16
Thiruvananthapuram	23rd Oct 2010 6th Nov 2015	2010-11 2015-16

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