Institutional Change and Politically Motivated Discretionary Transfers: Evidence From India

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August 16, 2024

Abstract

Extensive literature delves into the political use of discretionary transfers within a given set of institutions. This study focuses on such opportunistic abuse of discretionary power but within the context of institutional change. It aims to investigate the effect of institutional change on both the alignment and swing effects of discretionary transfers. The study examines the data on discretionary transfers in India from 2004 to 2021. By applying two-way fixed effect regression analysis and concentrating on recent institutional change in India—specifically, the dissolution of the Planning Commission and the establishment of NITI Aayog (National Institution for Transforming India Commission),—this study unveils a significant increase in the swing effect following the institutional change. The result affirms that the institutional change contributes to a substantial rise in politically motivated discretionary transfers allocated to states, concurrently diminishing institutional safeguards against opportunistic government.

Key-words: Intergovernmental transfers, Discretionary transfers, Alignment effect, Swing effect, Institutional change, Two-way fixed effect, India, NITI Aayog
JEL: H2, H72, H73, H77

I would like to thank Ivo Bischoff (for supervising me while writing this paper); Arye Hillman, Toke Aidt, Panu Poutvaara, Ronen Gradwohl, Michael Dorsch, Jamus Lim, Maarten Allers, Kritika Saxena, Radhika Lahiri, Ekkehard A. Köhler, Elena Seghezza, Katarina Zigova for their valuable comments at Silvaplana political economy workshop, and finally Klaus Gründler and Vivien Resek for their valuable comment during the GSEBGO presentation at the University of Kassel.

1 Introduction

In a decentralized country, it is a common phenomenon for the central government to amass more revenue while engaging in fewer expenditure activities compared to state governments. This scenario creates a vertical imbalance, prompting the central government to address it through intergovernmental transfers. These transfers fall into two categories: formula-based and discretionary. Of these, discretionary transfers stand out as a potential arena for political exploitation by the upper-tier incumbent. This contrasts with formula-based transfers, which are less prone to such political maneuvers. Theoretical models within political economy literature elucidate the political use of discretionary transfers. The overarching argument posits that if a state is either a swing state or aligned with the central incumbent, it is likely to receive higher discretionary transfers (Cox & McCubbins, 1986; Dixit & Londregan, 1996; Lindbeck & Weibull, 1987). This kind of act by the central incumbent can be termed as "opportunistic abuse of discretionary power".

This paper is based on this opportunistic abuse of discretionary power. This study argues that the alignment and the swing effects of discretionary transfers manifest as a result of the leeway created through the opportunistic misuse of discretionary power. The larger the leeway, the stronger the alignment and the swing effect of discretionary transfers will be.

The political economy literature that delves into the opportunistic abuse of discretionary power typically operates within a given set of institutions. However, our understanding remains limited regarding how institutional changes, which are likely to increase the leeway of discretionary power, affect discretionary transfers. This study seeks to fill this gap.

India is an ideal country to investigate the issue at hand for two main reasons. Firstly, the Indian fiscal system relies heavily on intergovernmental transfers. The states depend on these transfers to finance their various developmental projects. Secondly, a significant fiscal institutional change occurred in India in 2015 when the Planning Commission was replaced by NITI Aayog. This institutional shift has increased the central government's budgetary power, thus broadening the leeway of the central government. However, to date, no empirical study has been undertaken to assess whether this institutional change has indeed amplified the politically motivated discretionary transfers.

This study applies the two-way fixed effect regression method to estimate the impact of institutional change on the alignment effect and swing effect of discretionary transfers. The study focuses on discretionary transfers in Indian budget data from the years 2004-2021, covering all states and some union territories in India. This is the first empirical study that sheds light on the recent institutional change in India. The findings indicate that after institutional change, central incumbents tend to increase the size of discretionary transfers. Furthermore, swing states receive higher per capita discretionary transfers after institutional change. However, the study finds

no evidence of an increase in the alignment effect of discretionary transfers after institutional change. The findings provide evidence that the recent institutional change in India has reduced the institutional safeguards against opportunistic government amplifying the leeway of politically motivated discretionary transfers.

The paper is organized as follows: Section 2 contains a literature review. Section 3 describes the institutional background. Section 4 focuses on the main hypothesis, the data, and the variables for empirical analysis. Section 5 presents the empirical model. Section 6 presents the econometric results. Section 7 discusses the results. Section 8 concludes.

2 Literature Review

Normative theories of fiscal federalism propose a distribution of responsibilities wherein the central government assumes the majority of revenue-related tasks, while lower levels of government are entrusted with majority of expenditure functions (Musgrave & Musgrave, 1984). This arrangement empowers the central government with the authority to levy taxes and allocate resources, establishing a dependency of lower levels of government on the central entity. Consequently, the central government can engage in redistributive measures through mechanisms like tax devolution, grants, or discretionary transfers, yielding significant policy implications. These transfers play a pivotal role in mitigating regional disparities, fostering efficient resource allocation, and fortifying overall economic stability (Boadway & Shah, 2009; Oates, 1972; Rodden, 2005). Additionally, such transfers can promote good governance by enhancing accountability and transparency at the lower level of government (Bardhan, 2002; Boadway & Shah, 2009; Smoke, 2003). Therefore, the literature overwhelmingly supports intergovernmental transfers.

Intergovernmental transfers come with noteworthy side effects that merit careful consideration.[1] One crucial dimension of intergovernmental transfers lies in their potential political manipulation by the central incumbent. This study will hone in on this specific facet: the political utilization of intergovernmental transfers.

From a public choice standpoint, the central government seeks to maximize its own welfare function rather than promoting social welfare (Brennan & Buchanan, 1980). In contrast to transfers governed by specific formulas, discretionary transfers offer the central government a tool for electoral advantage. Distributing these transfers strategically to regions requiring electoral support allows the central government to make calculated moves that, instead of mitigating, may inadvertently contribute to

[1]The infusion of transferred funds may dissuade lower-level governments from adopting novel revenue-generation strategies (Bradford & Oates, 1971a, 1971b; Zhuravskaya, 2000). This financial reliance can compromise the autonomy of lower-level governments, tethering their policy decisions closely to the availability of transferred funds (Boadway & Shah, 2009). Additionally, the intricacies of the transfer system's design can introduce elements of economic inefficiency, posing challenges to optimal resource utilization (Albouy, 2012).

regional disparities. This issue has been pointed out by Rodden (2005) and Besley and Case (2003).

The literature addressing the political utilization of intergovernmental discretionary transfers is rooted in two distinct models: the "core voter model" and the "swing voter model". According to the core voter model, outlined by Cox and McCubbins (1986), incumbent politicians are inclined to direct intergovernmental discretionary transfers towards their core supporters. Conversely, the swing voter model posits that incumbent politicians are more likely to allocate additional intergovernmental discretionary transfers to swing states. This perspective is reflected in the works of Dixit and Londregan (1996, 1998) and Lindbeck and Weibull (1987). Many empirical studies have been conducted to investigate the political use of intergovernmental discretionary transfers, as predicted in the aforementioned models. These studies provide substantial evidence to support this hypothesis. For instance, Johansson (2003) finds a swing effect of intergovernmental discretionary transfers in Sweden, while Case (2001) finds a similar effect in Albania. Arulampalam et al. (2009) identify an effect for aligned-swing states in India, and Brollo and Nannicini (2012) find an alignment effect of intergovernmental discretionary transfers in Brazil. Among these studies, the research conducted by Arulampalam et al. (2009) is most closely related to this study. However, Arulampalam et al. (2009) do not address how institutional changes impact the alignment or the swing effect of discretionary transfers. This study aims to explore this gap.

This study is concerned about such institutional changes for two main reasons. Firstly, institutional configuration[2] plays a vital role in regulative and distributive policies (Baudner & Bull, 2013; Charron, 2016). Secondly, there is some literature that argues institutional change, particularly in financial and governmental sectors, has a profound impact on the distribution and exercise of discretionary power. North (1990), in his seminal work on institutions and performance, emphasizes how evolving rules and norms can shift the balance of power and decision-making authority. This shift often leaves room for discretionary power to be exercised in ways that can either contribute to efficient outcomes or lead to opportunistic abuse. Acemoglu and Robinson (2012) explore how political and economic institutions evolve and how these changes can lead to differing levels of prosperity and corruption, particularly focusing on the role of inclusive versus extractive institutions. These studies collectively highlight a nuanced picture: while institutional change is often necessary for progress and adaptation to new challenges, it inherently carries risks of abuse, especially when checks and balances are inadequate or when transparency is limited.

This research endeavors to bridge the political economy literature of discretionary transfers to the seminal work of North (1990) and Acemoglu and Robinson (2012). According to the argument of North (1990) and Acemoglu and Robinson (2012), institutional change broadens leeway for discretionary power. This study tests whether this leeway increases the political use of discretionary transfers. As of my last knowl-

[2]such as formal and informal institutional rules, regional autonomy, and quality of government.

edge update, there is a dearth of empirical investigations into this specific issue. This paper seeks to contribute to the field by addressing and filling this gap in the existing literature.

This study concentrates on the recent institutional change in India, notably the transition from the Planning Commission to the establishment of NITI Aayog. This institutional change has amplified the central government's budgetary power (For more details, refer to Section 3). As a result, the leeway of central government has been broadened. Thus, the recent institutional change in India is a perfect testing ground for this study. This study will investigate whether this broadened leeway results in an increase in the political utilization of discretionary transfers.

3 Institutional Background

3.1 Political Structure in India

India's political structure can be classified into two levels: central and state. The central level comprises two houses of parliament, namely Lok Sabha (lower house) and Rajya Sabha (upper house). Members of Lok Sabha are directly elected by the people of India and hold more power than the members of the Rajya Sabha (see sections- 3.1.1 & 3.1.4). On the other hand, Rajya Sabha members are mostly selected by the legislature of the states and union territories and hold less power compared to Lok Sabha (see sections- 3.1.3 & 3.1.4). Among the two levels of political structure (namely central and state government), the central parliament of India (mainly the lower house or Lok Sabha) holds more power than the state legislative assembly (or Vidhan Sabha) in a direct and indirect way (see section 3.1.4).

India has a total of 28 states and 8 union territories. Each state has its own assembly, known as Vidhan Sabha. However, only two union territories - The National Capital Territory of Delhi and the Union Territory of Puducherry have their own Vidhan Sabha. The remaining union territories are governed by a governor appointed by the president of India, and do not have any state assembly. The Election Commission of India (ECI) is responsible for conducting free and fair elections at both the national and state levels, according to Article 324 of the Indian constitution.

3.1.1 Central Parliament- Lower House or Lok Sabha

The Lok Sabha consists of 545 constituencies, out of which 543 members in 543 constituencies are elected through direct election, and the remaining 2 members are selected by the President from the Anglo-Indian community. To conduct the election in these 543 constituencies, the country is divided into 543 areas, ensuring an almost equal distribution of voters in each area or constituency. The Election Commission of India (ECI), an independent and autonomous authority, is responsible for the entire electoral process. Political parties declare their candidates for each constituency, and

the party that wins more than 50 percent of the constituencies is allowed to form the central government. In the Indian political system, if no single party holds more than a 50% share of constituencies, political parties are allowed to form a coalition to create a government. In most cases, multiple parties form a coalition to participate in the election. Over the past two decades, two major coalitions, the National Democratic Alliance (NDA) led by the Bharatiya Janata Party (BJP) and the United Progressive Alliance (UPA) led by the Indian National Congress (INC), have actively participated in the Lok Sabha election. The Lok Sabha election is held every five years, and once the election results are declared, the President invites the winning party (if a single party wins more than 50% of constituencies) or coalition (if a coalition wins more than 50% of constituencies) to form the government.

This study focuses on the time period between 2004 and 2021, which includes four Lok Sabha elections held in 2004, 2009, 2014, and 2019. During this period, the Indian National Congress (INC)-led United Progressive Alliance (UPA) emerged as the winner in 2004 and 2009. Whereas, the Bharatiya Janata Party (BJP)-led National Democratic Alliance (NDA) won in 2014 and 2019.

3.1.2 State Assembly or Vidhan Sabha

28 states and 2 union territories of India have their own Vidhan Sabha.[3] The number of constituencies in Vidhan Sabha varies in each state and is based on the size of the population. For example, West Bengal has 294 constituencies, while Tripura has 60. Just like Lok Sabha, political parties in Vidhan Sabha can form a government if they win more than 50% of the constituencies. Parties can also make alliances with other parties to reach this threshold. Vidhan Sabha elections take place every 5 years, and it is important to note that in most cases, Lok Sabha and Vidhan Sabha elections do not take place on the same date. However, certain states such as Andhra Pradesh, Arunachal Pradesh, Odisha, and Sikkim hold both state and central elections concurrently. In 2019, four states conducted both elections concurrently, and in 2014 it was 8 states. Most of the states where both elections take place concurrently are small states.

3.1.3 Central Parliament- Upper House or Rajya Sabha

The Rajya Sabha is comprised of 250 members, who are not directly elected by the people of India. Out of these members, 238 are elected by the Vidhan Sabha, which consists of members of the Vidhan Sabha or MLAs[4]. The remaining 12 members are appointed by the President of India based on their contributions to art, literature, science, and social services. Each Rajya Sabha member is elected for a term of 6

[3]The remaining six union territories do not have any Vidhan Sabhas and are administered directly by an Administrator appointed by the President of India. Consequently, this analysis will exclude these territories from the analysis.

[4]Member of the Legislative Assembly.

years. Since the Rajya Sabha members are elected by the MLAs in Vidhan Sabha, the party or coalition that holds a majority in Lok Sabha may not necessarily have a majority in Rajya Sabha. For example, following the victory in the 2019 Lok Sabha election, the Bharatiya Janata Party (BJP)-led National Democratic Alliance (NDA) held a majority in the Lok Sabha with 353 seats out of 543. However, they only held 99 seats out of 250 in the Rajya Sabha.

3.1.4 Why Lok Sabha Is so powerful?

The Lok Sabha holds more power than the Rajya Sabha and Vidhan Sabha. It has more power horizontally compared to Rajya Sabha, and vertically compared to Vidhan Sabha. For instance, in the case of a money bill [5], Rajya Sabha has very little influence. Once the money bill is passed in Lok Sabha, Rajya Sabha can only make recommendations, which Lok Sabha can either reject or accept. In the case of passing a law, both Lok Sabha and Rajya Sabha must reach a consensus. In case of a conflict between the two houses, members from both houses gather in a session and vote. Since Lok Sabha has more than twice the number of members as compared to Rajya Sabha, it is highly likely that the party in power or coalition in Lok Sabha can easily pass the law.

When comparing Lok Sabha and Vidhan Sabha, it becomes apparent that Vidhan Sabha is highly dependent on Lok Sabha for receiving tax devolution, loans, conditional and non-conditional grants. In critical situations, the Prime Minister of India, who is the main leader of Lok Sabha, has the constitutional right to request the state governor (appointed by the president) to dissolve a Vidhan Sabha.

3.2 Center-State Transfer in India

The central government of India generates the majority of its revenue from various taxes such as corporation tax, income tax, wealth tax, customs, union excise duties, service tax, GST[6], and tax of union territories. On the other hand, the state government's primary revenue source is the taxes on income, taxes on property and capital transactions, and taxes on commodities and services. The state governments, however, undertake a lot of expenditure activities compared to their revenue. As a result, the states require a substantial amount of transfer from the central government. This is why fiscal transfer plays a crucial role in the Indian economy and politics (For more details, refer to Appendix Figure A3).

India has multiple channels of fiscal transfer. Among them, one is tax devolution, which is done based on a formula. Other prominent channels are the Finance Commission (FC), the Planning Commission (abolished in 2014), and central ministries. The distribution of funds determined by the Finance Commission is based

[5]Bills related to taxation, public expenditure etc.

[6]Goods and Services Tax.

on a formula, which means that it is not discretionary. Additionally, the Finance Commission can recommend grants to specific states if they require assistance. The Planning Commission also transferred revenue under the "State Plan Scheme", which was also accomplished through a formula. Finally, central ministries decide on substantial amount of transfers, which are done through "Centrally Sponsored Schemes" (CSS) and "Central Plan Schemes" (CPS). These schemes include programs such as the "Mahatma Gandhi National Rural Employment Guarantee Program", which provides 100 days of employment for rural people willing to do unskilled work, the "Umbrella Scheme for Development of Schedule Castes", which focuses on developing the schedule castes, the "Swachh Bharat Mission", which is aimed at improving solid waste management, and the "Ayushman Bharat - Pradhan Mantri Jan Arogya Yojna (PMJAY)", a health assurance scheme for poor and vulnerable families. When distributing CSS and CPS funds, the central government has the freedom to favor politically important states. Therefore, this study will focus only on these two types of discretionary transfers (following Arulampalam et al. (2009)).

3.3 Institutional Change in 2015

Jawaharlal Nehru, India's first Prime Minister, established the Planning Commission in 1950. However, in January 2015, the Commission was replaced by a think tank called NITI Aayog. A detailed description of these two institutions and their differences are given below.

3.3.1 Planning Commission

Composition of the Planning Commission during its existence included[7]:

i. Ex-Officio Chairman: The Prime Minister served as the Chairperson by virtue of office.

ii. Deputy Chairman: This individual, appointed by the central cabinet, held a pivotal role as the functional head. Possessing authority comparable to a cabinet minister, the Deputy Chairman's key responsibility was formulating the five-year plans[8].

iii. Full-Time Members: They are members from various states, union territories, and experts across diverse fields, held the rank of a Minister of State. They provided valuable insights and recommendations to the commission, particularly focusing on the needs and priorities of their respective areas. They were appointed by central cabinet.

iv. Ex-Officio Members: This category included selected cabinet ministers who, by virtue of their positions, automatically became members of the Planning

[7]For a more comprehensive overview, visit the website: http://164.100.161.239/index_oldpc.php

[8]It is a centralized economic planning system.

Commission. Their perspectives enriched the commission's discussions and decision-making processes.

v. Member-Secretary: Typically a senior Indian Administrative Service (IAS) officer.

The Planning Commission prepared a draft of a five-year plan regarding the development goals and allocation of resources for the country. The draft included specific policies to combat poverty and increase economic growth. This draft was created by the efforts of the aforementioned administration of the Planning Commission. Once the draft was ready, it was sent to the National Development Council (NDC) for final approval. This was the process they followed to prepare their plan. According to this plan, each state received a certain amount of transfer under the "State Plan Scheme". This is a formula-based transfer as mentioned earlier (in Section 3.2).

3.3.2 NITI Aayog

The composition of NITI Aayog includes[9]:

i. Chairperson: The Prime Minister of India serves as the ex-officio Chairperson.

ii. Vice Chairperson: Appointed by the Prime Minister and supports the Chairperson in various capacities.

iii. CEO (Chief Executive Officer): The CEO is the functional head of the NITI Aayog and appointed by Prime Minister.

iv. Full-Time Members: They are experts and specialists in different fields and contribute to the formulation of policies and development strategies. Full members are appointed by Prime Minister.

vi. Ex-Officio Members: Some cabinet ministers to provide insights from their respective ministries.

vii. Special Invitees: Experts, practitioners, and specialists for specific consultations or advice. They are nominated by the Prime Minister.

viii. Regional Councils: To enhance cooperative federalism and foster better communication between the central government and the states. The regional council comprises the chief minister of each state and the governor of union territories.

The NITI Aayog plays the role of a dynamic think tank. It serves as an advisory body to the central government by conducting research. Notably, NITI Aayog is distinct from budgetary decisions. That's why it cannot decide on any transfers from the center to the states, unlike the Planning Commission.

[9]For a more comprehensive overview, visit the website: https://www.niti.gov.in/annual-reports

3.3.3 Difference Between the Planning Commission and NITI Aayog

Aspect	NITI Aayog	Planning Commission
Establishment Year	2015	1950
Role	Policy think tank and advisory body to the central government	Centralized planning agency
State Participation	Embraces enhanced state participation, includes representatives from all states, including chief ministers	Limited state participation
Socio-Economic Context	Aligned with India's transition to a free-market economy	Originated in a centrally planned economy
Budgetary Authority	**No direct involvement in budgetary decisions**	**Had authority over crucial intergovernmental transfers ("State Plan Scheme")**
Adaptability	More dynamic and adaptive to evolving challenges	Rigid structure with fixed plans
Focus	Long-term strategic planning, policy advice, and implementation support	Five-Year Plans and allocation of resources
Sectoral Focus	Broad focus including health, education, agriculture, and infrastructure	Primarily economic and social development sectors

As indicated in the table above, the Planning Commission had the authority to make intergovernmental transfers under "State Plan Scheme", where NITI Aayog does not have such power. That's why it is considered less powerful than the planning commission despite having other structural improvements. At the same time, after the establishment of NITI Aayog, the fiscal power (intergovernmental transfers) once held by the Planning Commission was transferred to the central government. Thus, the institutional change results in an increase in the volume of the budget directly controlled by the central government. This raises pertinent questions about whether the central government is leveraging this for opportunistic gains. This is the focal point of this study. This study will concentrate on this quantitative aspects of institutional change, specifically the augmentation in budget volume under the direct control of central incumbents.[10]

[10]Additionally, it is crucial to acknowledge the qualitative aspect stemming from structural variances between the two institutions (as can be seen in the table above). However, this study is not going to explore that part.

4 Main Hypothesis and Data

As discussed in section 3.3, there has been a noticeable transfer of fiscal authority from the Planning Commission to the central government, which has led to a significant increase in the budget directly controlled by the central government. Thus, the central government's leeway has been broadened. Returning to the initial argument, which posits, "The larger the leeway, the stronger the alignment and the swing effect of discretionary transfers will be" this study hypothesizes:

Hypothesis 1:

The institutional change will increase the size of the alignment effect of discretionary transfers.

Hypothesis 2:

The institutional change will increase the size of the swing effect of discretionary transfers.

The data has been collected from different secondary sources. [11] In some cases, missing data were filled in via internet search. This resulted in a panel data set for 28 states and 2 union territories from 2004-2021.

4.1 Dependent Variable

This study employs per capita discretionary transfer data, comprising per capita Central Sponsored Scheme (CSS) and Centrally Planned Scheme (CPS) transfers in India, as the dependent variable in the empirical analysis. Descriptive statistics for discretionary transfers are outlined in Table 1, while Figure 1 illustrates their annual distribution. Notably, the annual distribution reveals a discernible uptick in the growth rate since 2015, coinciding with the period following the institutional change. In the empirical analysis, this study uses the log-transformed values of discretionary transfers.

4.2 Explanatory Variables

Among the explanatory variables, the *Alignment* variable is created by focusing on the incumbent political parties at both the central and state levels. For instance, if the primary incumbent political party in state s forms an alignment with the

[11] There are multiple secondary data sources such as the website of the reserve bank of India, the website of the Indian finance ministry, the website of the state statistic office, and India's largest election database- "IndiaVotes". The website of the reserve bank of India contains data on discretionary transfers from the central government to the state governments. It is possible to get data from 2004-2021 for all states. From the "IndiaVotes" it is possible to get data on the results of the different Lok Sabha and Vidhan Sabha elections in India. The control variables such as *Population*, *Per capita GDP*, *Per capita state's share in central tax* have been collected from the website of the reserve bank of India and the website of the state statistic offices. Data on the ideologies of various political parties has been gathered from their official websites.

central incumbent or the primary incumbent political party in state s is directly the incumbent at the center for a substantial part of year t, then state s is classified as aligned and assigned the value 1.

Concerning the *Swing* variable, if the winning margin in a Vidhan Sabha election in a state is less than or equal to 5%, then the state is considered as a swing state for all the years until the subsequent Vidhan Sabha election, and the variable *Swing* is assigned the value 1.

The variable *NITIdummy* signifies the institutional change. NITI Aayog started its official operations in 2015, marking the replacement of the Planning Commission. Accordingly, *NITIdummy* is coded as 0 for the year 2014 or earlier and 1 for the year 2015 or later.

4.3 Control Variables

This study controls for the *Population*, *Per capita GDP*, *State's per capita share in central tax*, and *Ideology*. Apart from *Ideology*, all these variables are continuous and log-transformed in the empirical part. *Ideology* takes value 1 to indicate right-wing government.[12]

4.4 Descriptive

It is crucial to highlight that the per capita discretionary transfer and per capita state's share in central tax data are initially in nominal form. To ensure a fair comparison across different years, these values are converted to present values. The entirety of the data is in Indian currency, specifically the Indian rupee, where the exchange rate is set at approximately 80 Indian rupees to 1 USD in 2023.

Table 1 provides descriptive statistics for the full sample, large state's sample, and small state's sample. The empirical analysis in this study centers on the large state sample due to the notable heterogeneity among Indian states in terms of population and territory. States with smaller populations and fewer constituencies in Lok Sabha elections are often less politically significant, while states with larger populations and more constituencies hold greater political weight. For instance, Uttar Pradesh has a total population of 241 million with 80 Lok Sabha constituencies, whereas Tripura, with a total population of 4 million, has only 2 constituencies. The distribution of Lok Sabha constituencies underscores that electoral competition is predominantly concentrated in 17 large states, contributing a total of 492 constituencies out of the 543 in Lok Sabha. Winning the majority of constituencies in these 17 states enables a political party to easily form the central government. Figures 2 and 3 present maps of India, showcasing all its states (Figure 2) and categorizing them into large and small states (Figure 3). These maps highlight that, despite the exclusion of small states, the

[12]In the empirical part, these variables are labeled as *log population*, *log per capita GDP*, *log per capita state's share in central tax*, and *Ideology*.

larger ones still constitute a substantial portion of India's electoral landscape (refer to Figure 3).[13]

5 Empirical Strategy

This study implements the following two way fixed effect model to estimate the alignment effect of discretionary transfer after the institutional change:

$$\begin{aligned} Discretionary\_transfers_{it} = \beta_0 + \beta_1\ Alignment_{it} + \beta_2\ Swing_{it} \\ + \beta_3\ Alignment_{it} * NITIdummy_{it} + \beta_s\ Controls_{it} \\ + \alpha_i + \gamma_t + \epsilon_{it}. \end{aligned} \quad (1)$$

The variable $Discretionary\_transfer_{it}$ represents the log-transformed per capita discretionary transfer to state i at time t. α_i and γ_t represent the unobserved state and time-specific effects. $Alignment_{it}$ takes values 1 to represent aligned states at time t and $Swing_{it}$ takes value 1 to represent swing states at time t. The focus of this study is on the interaction term $Alignment_{it} * NITIdummy_{it}$. $Control_{it}$ refers to the vector of different control variables, such as *log population*, *log per capita GDP*, *log per capita state's share in central tax*, and *Ideology*.

In specification 1, this study only considers the interaction between $Alignment_{it} * NITIdummy_{it}$. But to estimate the swing effect of discretionary transfer after the institutional change, the following specification is estimated:

$$\begin{aligned} Discretionary\_transfers_{it} = \beta_0 + \beta_1\ Alignment_{it} + \beta_2\ Swing_{it} \\ + \beta_3\ Swing_{it} * NITIdummy_{it} + \beta_s\ Controls_{it} \\ + \alpha_i + \gamma_t + \epsilon_{it}. \end{aligned} \quad (2)$$

Just like specification 1, the main focus of this study will be the interaction term $Swing_{it} * NITIdummy_{it}$ in specification 2.

In the next step, to assess the consistency of the results, both interaction terms are considered in a single model and the following specification is estimated:

$$\begin{aligned} Discretionary\_transfers_{it} = \beta_0 + \beta_1\ Alignment_{it} + \beta_2\ Swing_{it} \\ + \beta_3\ Swing_{it} * NITIdummy_{it} + \beta_4\ Alignment_{it} * \\ NITIdummy_{it} + \beta_s\ Controls_{it} + \alpha_i + \gamma_t + \epsilon_{it}. \end{aligned} \quad (3)$$

Finally, this study considers the two way fixed effect regression approach of Arulampalam et al. (2009), which shows that states with aligned-swing tendencies receive greater discretionary transfers. This study employs the same approach and estimates

[13] In the empirical part, the sample of 17 large states is labeled as "large state's sample", whereas the sample of remaining states and 2 union territories is labeled as "small state's sample".

the following specification:

$$Discretionary\_transfers_{it} = \beta_0 + \beta_1\ Alignment_{it} + \beta_2\ Swing_{it} + \beta_3\ Alignment_{it} * Swing_{it} * NITIdummy_{it} + \beta_s\ Controls_{it} + \alpha_i + \gamma_t + \epsilon_{it}. \quad (4)$$

All four specifications are estimated with a special focus on the large state's sample.

6 Empirical Results

6.1 Main Results

Following the institutional change, states witness an improvement in the percentage of discretionary transfers within their revenue budgets (see Appendix Table A1). From the composition of the central budget in Table 2, it is seen that before the institutional change, discretionary transfers made up only 3.17 percent of the total expenditure budget of the central government, whereas, after the institutional change, this percentage increases to 6.99. So, it is evident that the central government is using its broadened leeway to increase discretionary transfers. However, the main focus of this study is to determine whether it is using its broadened leeway to increase the alignment or swing effect of the discretionary transfers. That's why in the next step, this study will focus on regression analysis.

The findings from the regression analysis are presented in Tables 3-7. Table 3 represents the estimated result for 17 large states, while Table 5 shows the results for the small state's sample, excluding the larger ones. Table 4 showcases the estimated results for large states following the Arulampalam et al. (2009) approach.

This study specifically focuses on a sample of large states, as elucidated in section 4. In column 1 of Table 3, only the *Alignment* and *Swing* variables, along with the control variables, are included. Column 2 introduces the interaction between *Swing* and *NITIdummy*. In column 3, the interaction shifts to *Alignment* and *NITIdummy*. Finally, column 4 incorporates both interaction terms—namely, *Swing*NITIdummy* and *Alignment*NITIdummy*—along with the *Alignment* and *Swing* variables.

Based on the findings presented in Table 3, no significant effect of *Alignment *NITIdummy* is evident. However, the table does reveal a significant swing effect after the institutional change. According to the estimated effect, swing states receive approximately 78.7 percent higher per capita discretionary transfer after the institutional change, and this effect is statistical significant at the 5% level. This observed effect remains consistent in columns 2 and 4 as well.

Crucially, it's essential to highlight that the impact of *Swing*NITIdummy* is primarily driven by the 17 larger states (refer to Table 3, 5, and appendix Table A2). This aligns with the logical expectation, given that these larger states wield significant influence in Lok Sabha elections. As smaller states, and union territories contribute

a smaller percentage of Lok Sabha constituencies, central incumbents may not prioritize them as heavily to gain political advantage. Consequently, after the institutional change, no alignment effect or swing effect is observed for these states, as evidenced in Tables 5.

In the subsequent phase, this study explores the interaction between $Alignment * Swing * NITIdummy$ to assess whether there is any preferential treatment toward aligned-swing states following the institutional change (see Table 4). However, no statistical evidence is found to support this hypothesis, indicating that the observed effect is solely present for swing states in general.[14]

6.2 Bifurcating the Dataset

In the next step of the analysis, this study involves bifurcating the dataset into two segments—one encompassing data from before the institutional change (up to 2014) and the other covering data from after the institutional change (from 2015 onwards). This assessment aims to determine whether the observed effect in the previous section is merely an amplification of an existing swing effect (indicating that the swing effect previously existed but has increased in intensity) or if it represents a new phenomenon within the Indian federal system (suggesting that the swing effect only emerged after the institutional change). Upon bifurcating the dataset, it is observed that prior to 2014, there is no evidence of an alignment effect or swing effect on discretionary transfers. However, starting from 2015, it becomes evident that *Swing* variable is statistically significant at a 1% significance level (see Table 6).[15]

6.3 Regional Bias

In the final stage, this study acknowledges the potential for a favorable shift in regional priorities by the leaders of newly established institutions, specifically NITI Aayog, in contrast to those of predecessor bodies, as leeway has been broadened. To investigate this, this study focuses on the region of origin of the top figures of both institutions while they were working for their respective institutions. This study considers the ex-officio chairman and deputy chairman as the top figures for the Planning Commission

[14]This study also examines the robustness of the main results shown in Tables 3 and 4. To ensure the robustness of the results, this study excludes two states, Andhra Pradesh and Telangana. This is because Telangana was created in 2014 as a result of the split from Andhra Pradesh. Consequently, there are no observations for Telangana before 2014. Additionally, due to this split, both Andhra Pradesh and Telangana experienced unique circumstances that did not apply to other states. Therefore, excluding these two states from the sample of large states is an appropriate way to ensure the robustness of the main results. The estimated results of the robustness check are presented in Tables A3 and A4 in the appendix. These results are qualitatively similar but quantitatively slightly different, thereby confirming the robustness of the main findings.

[15]The robustness check for this result is provided in Table A5 of the appendix.

and the chairperson, vice-chairperson, and CEO of NITI Aayog as top figures. [16] The findings reveal that, following the institutional change, there is no noticeable impact on the regional priorities set by top figures of NITI Aayog (see Table 7).[17]

7 Discussion

The regression analyses presented above yield evidence that subsequent to the institutional change, there is a significant increase in the swing effect of discretionary transfers by central incumbent political parties, particularly notable in the case of Bharatiya Janata Party (BJP)-led National Democratic Alliance (NDA), which has held power since the institutional change. However, there is no corresponding increase in the alignment effect of discretionary transfers.

While the results align partially with the hypothesis of this study, specifically for swing states, the findings are somewhat surprising. This is noteworthy because previous literature, particularly studies investigating the political use of discretionary transfers in India, such as Arulampalam et al. (2009), have not reported either alignment or swing effects. Their research identifies effects only in the case of aligned-swing states. In contrast, this study presents a distinct and significant increase in discretionary transfers for swing states due to the institutional change.

The findings also present a contradiction, or in some instances, a partial contradiction to other previous research within the Indian context. For instance, the study by Ahmad (2021) identifies a swing effect in discretionary transfers only during election years and an alignment effect during non-election years[18], the study by Nayak and Satpathy (2021)[19] and Khemani (2007)[20] find an alignment effect in discretionary transfers.

Additionally, this study examines the regional priorities of top figures within these institutions. Previous research on discretionary transfers in India has largely overlooked this aspect (Ahmad, 2021; Arulampalam et al., 2009; Khemani, 2007; Nayak & Satpathy, 2021), despite its consideration in studies within other countries' contexts (Carozzi & Repetto, 2016; Gonschorek, 2021; Gonschorek et al., 2018)[21] [22]. However, no increase in regional biases has been observed following the institutional change.

[16] While these individuals do not have direct authority over discretionary transfers, their close collaboration with the central government positions them well to potentially influence the allocation of additional discretionary funds to their regions of origin.

[17] The robustness check for this result is provided in Table A6 of the appendix.

[18] Based on data spanning from the fiscal years 1980-81 to 2012-13.

[19] Based on data spanning from 2001 to 2014. The study uses only fixed effect regression (not two-way fixed effect regression) and includes all states in the analysis.

[20] Based on data spanning from 1972 to 1995.

[21] Carozzi and Repetto (2016) study in the context of Italy, while Gonschorek (2021) and Gonschorek et al. (2018) study in the context of Indonesia.

[22] The transfer considered by Carozzi and Repetto (2016) is partially discretionary.

In total, based on the regression output and the preceding discussion, it is evident that the central incumbents are taking advantage of this institutional change to benefit swing states by providing more discretionary transfers while discriminating against non-swing states. This indicates that institutional change creates larger leeway and facilitates the provision of additional politically motivated discretionary funds to the states, thereby reducing the institutional safeguards against opportunistic government.

8 Conclusion

The primary objective of this study is to examine the the effect institutional change on the opportunistic abuse of discretionary power. The investigation involves analyzing Indian budget data spanning from 2004 to 2021. An essential benchmark for institutional change is the recent dissolution of the Planning Commission and the establishment of NITI Aayog in 2015. The findings unequivocally reveal a noteworthy shift in the disbursement of politically motivated funds to states following the alteration in fiscal institutions. Specifically, swing states witness a substantial increase in discretionary transfers post the institutional change. Remarkably, this shift in fiscal architecture introduces a novel phenomenon—the emergence of a swing effect in the Indian context, a dynamic not discernible prior to the institutional change. This study thus presents evidence that the leeway created through institutional change indeed amplifies the capacity to provide discretionary transfers imbued with political intent.

The primary constraint of this study lies in its limited sample size, a consequence of its exclusive focus on the state level. Regrettably, the inherent nature of the research question restricts the possibility of augmenting the number of observations. Nonetheless, future investigations might explore the concept of vertical fiscal affinity at the local level, presenting a promising avenue for expanding and refining our understanding in this domain.

Overall, this study makes a valuable contribution to the existing literature on the opportunistic behavior of incumbent political parties. Nevertheless, numerous unexplored avenues remain in this field. A prospective research trajectory involves investigating how incumbent political parties exert influence across local, state, and national elections through discretionary transfers. This line of inquiry could enhance our comprehension of how these transfers are strategically wielded for opportunistic gains. Additionally, future research endeavors might delve into assessing the efficiency losses stemming from such opportunistic behavior, and aiming to identify measures to mitigate political influence. Collectively, exploring these research questions would advance our understanding of how political parties wield their power for self-interest and inform strategies to curb such behavior in the future.

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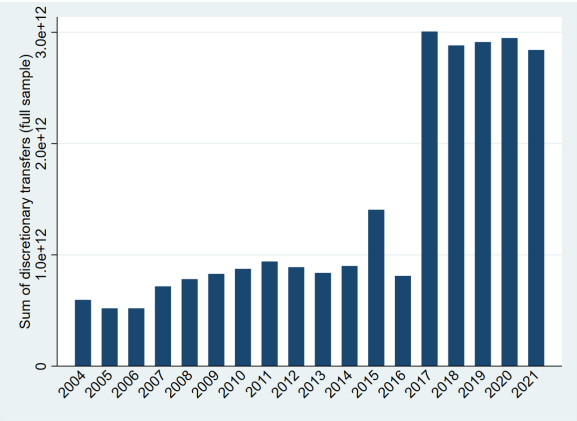
10 Tables and Graphs

Figure 1: Yearly total amount of discretionary transfers to the states (in Indian rupees)



Note:
The average amount is 3.15 times higher in the time period 2015-2021 compared to 2004-2014.

Figure 2: Map of all states and union territories

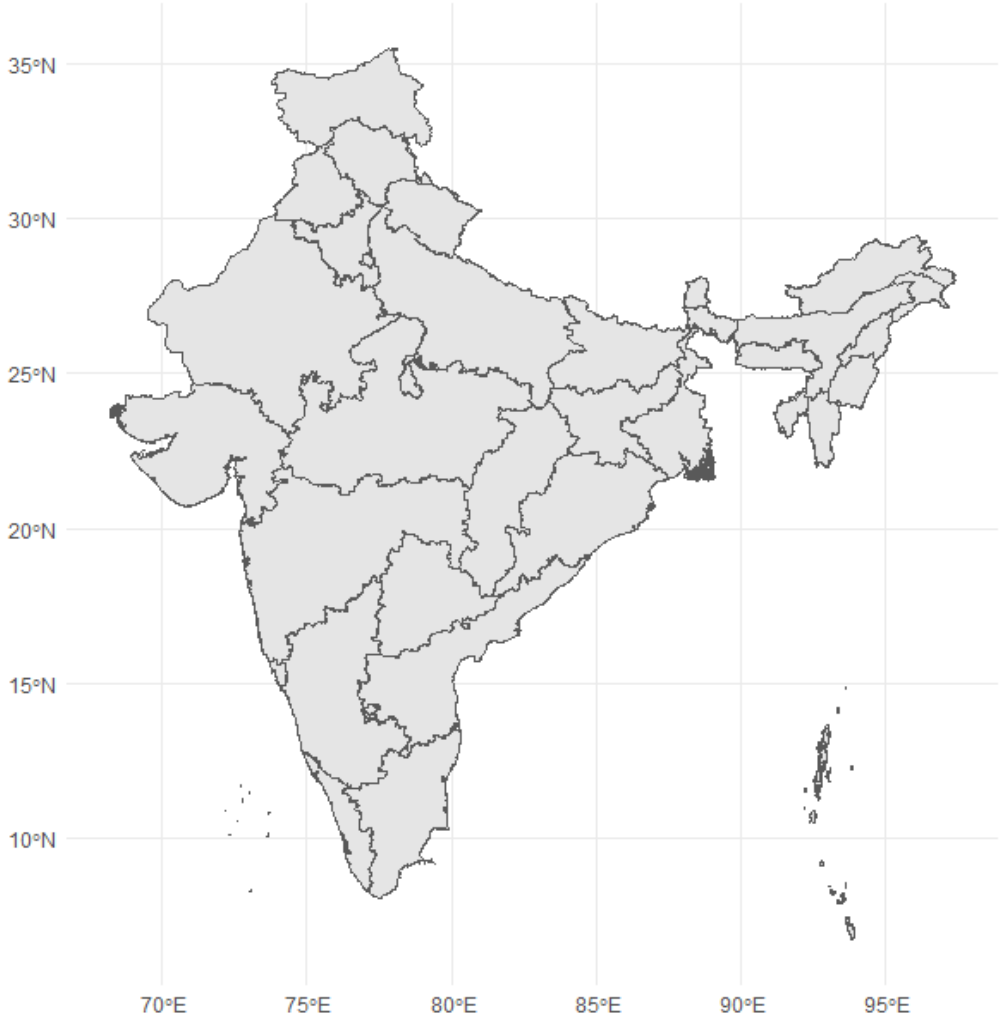


Figure 3: Map of states and unions territories divided into large and small groups (the purple color represents large states)

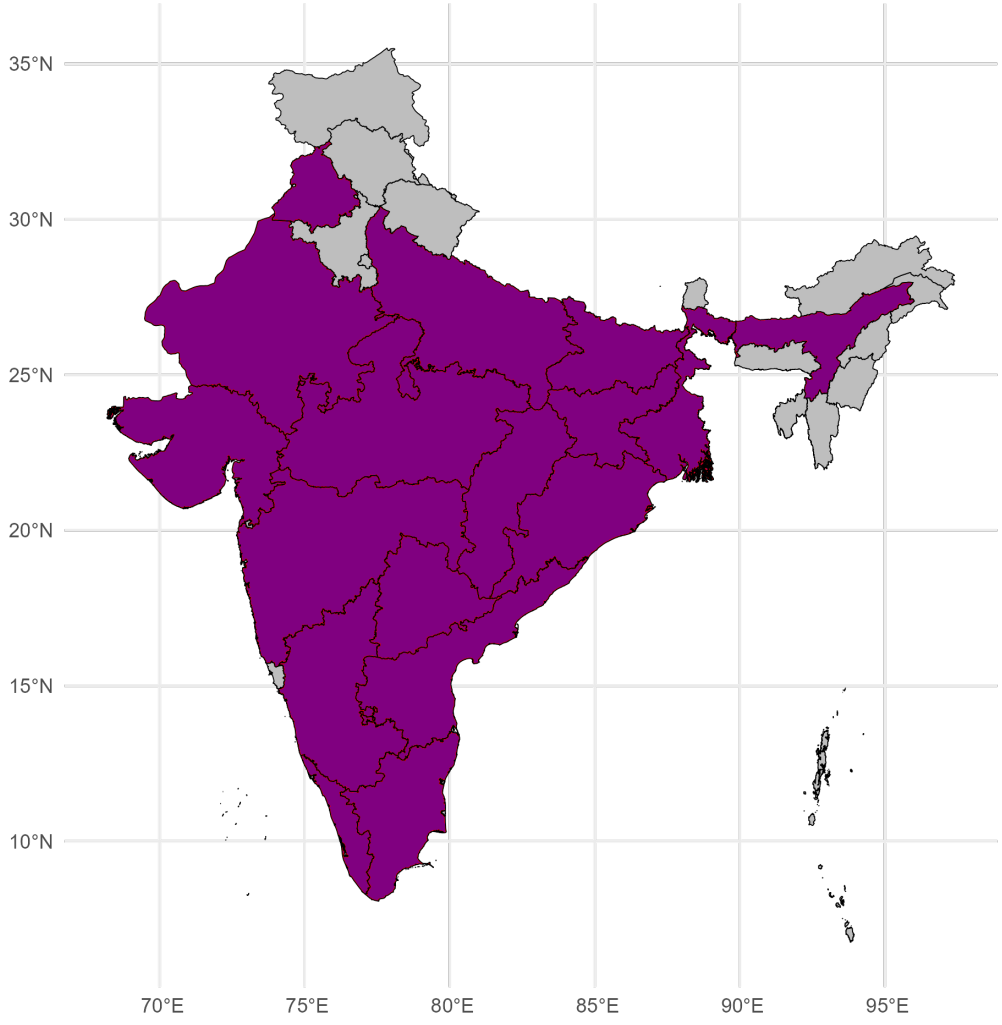


Table 1: Descriptive Statistics

	Obs	Mean	Std. Dev.	Min	Max
Full sample					
log per capita discretionary transfers	522	14.03	1.32	6.75	17.05
Alignment	548	0.49	0.50	0.00	1.00
Swing	547	0.39	0.49	0.00	1.00
NITIdummy	558	0.39	0.49	0.00	1.00
log gdp per capita	557	18.21	0.59	16.48	19.69
log population	558	9.70	1.63	6.33	12.37
log state's share in central tax	547	1.46	5.52	-19.24	6.66
Ideology	529	0.37	0.48	0.00	1.00
Large state's sample					
log per capita discretionary transfers	291	13.50	1.07	7.92	15.53
Alignment	296	0.42	0.49	0.00	1.00
Swing	295	0.43	0.50	0.00	1.00
NITIdummy	306	0.39	0.49	0.00	1.00
log gdp per capita	305	18.04	0.55	16.48	19.08
log population	306	10.96	0.57	10.01	12.37
log state's share in central tax	296	2.46	2.48	-19.24	4.57
Ideology	296	0.42	0.49	0.00	1.00
Small state's sample					
log per capita discretionary transfers	231	14.69	1.31	6.75	17.05
Alignment	252	0.58	0.49	0.00	1.00
Swing	252	0.34	0.48	0.00	1.00
NITIdummy	252	0.39	0.49	0.00	1.00
log gdp per capita	252	18.41	0.58	17.32	19.69
log population	252	8.17	1.11	6.33	10.31
log state's share in central tax	251	0.27	7.53	-19.07	6.66
Ideology	233	0.31	0.46	0.00	1.00

Table 2: Discretionary transfers in relation to the total amount of grants and central government's total expenditure (in percentage).

	Mean	Std. Dev.	Min	Max
After institutional change: Time period 2015-2021				
Percentage of discretionary transfers (compared to total grants)	38.02	14.30	15.77	54.04
Percentage of discretionary transfers (compared to total central expenditure)	6.96	2.73	2.84	10.24
Percentage of total grants (compared to total central expenditure)	18.24	1.06	16.41	19.90
Before institutional change: Time period 2004-2014				
Percentage of discretionary transfers (compared to total grants)	21.85	2.26	17.21	25.52
Percentage of discretionary transfers (compared to total central expenditure)	3.17	0.31	2.36	3.52
Percentage of total grants (compared to total central expenditure)	14.60	1.84	11.41	18.62

Table 3: Two way Fixed effect regression for *log per capita discretionary transfers* (large state's sample)

	(1)	(2)	(3)	(4)
Swing	0.422***	0.118	0.423***	0.110
	(0.129)	(0.118)	(0.135)	(0.128)
Alignment	-0.114	-0.149	-0.101	-0.059
	(0.153)	(0.148)	(0.188)	(0.185)
Swing*NITIdummy		0.743**		0.787**
		(0.301)		(0.347)
Alignment*NITIdummy			-0.032	-0.230
			(0.283)	(0.342)
Constant	21.51	19.85	20.57	13.10
	(39.06)	(41.10)	(34.42)	(37.45)
Controls	Yes	Yes	Yes	Yes
N	288	288	288	288
Adjusted R^2	0.403	0.424	0.401	0.424

Note: Dependent variable- *log per capita discretionary transfers*. All models include the following control variables: *log population*, *log per capita gdp*, *log per capita state's share in central tax*, and *Ideology*. Standard errors clustered at the state level in parentheses.
* p<0.1, ** p<0.05, *** p<0.01

Table 4: Two way Fixed effect regression for *log per capita discretionary transfers* (large state's sample with interaction between 3 dummies)

	(1)	(2)	(3)	(4)
Swing	0.422***	0.118	0.273*	0.112
	(0.129)	(0.120)	(0.143)	(0.129)
Alignment	-0.114	-0.100	-0.093	-0.053
	(0.153)	(0.177)	(0.187)	(0.185)
Swing*NITIdummy		0.992**		0.961**
		(0.443)		(0.419)
Alignment*Swing*NITIdummy		-0.376	0.597	-0.286
		(0.499)	(0.482)	(0.606)
Alignment*NITIdummy			-0.291	-0.149
			(0.445)	(0.410)
Constant	21.51	22.17	8.52	17.22
	(39.06)	(40.12)	(30.94)	(33.78)
Controls	Yes	Yes	Yes	Yes
N	288	288	288	288
Adjusted R^2	0.403	0.424	0.408	0.423

Note: Dependent variable- *log per capita discretionary transfers*. All models include the following control variables: *log population*, *log per capita gdp*, *log per capita state's share in central tax*, and *Ideology*. Standard errors clustered at the state level in parentheses.
* p < 0.1, ** p < 0.05, *** p < 0.01

Table 5: Two way Fixed effect regression for *log per capita discretionary transfers* (small state's sample)

	(1)	(2)	(3)	(4)
Swing	-0.118	-0.188	-0.113	-0.179
	(0.136)	(0.224)	(0.138)	(0.227)
Alignment	0.318	0.311	0.383**	0.371**
	(0.186)	(0.197)	(0.149)	(0.169)
Swing*NITIdummy		0.176		0.165
		(0.458)		(0.457)
Alignment*NITIdummy			-0.182	-0.166
			(0.294)	(0.289)
Constant	21.00	18.52	20.89	18.58
	(16.30)	(13.55)	(16.26)	(13.59)
Controls	Yes	Yes	Yes	Yes
N	212	212	212	212
Adjusted R^2	0.296	0.293	0.293	0.290

Note: Dependent variable- *log per capita discretionary transfers*. All models include the following control variables: *log population*, *log per capita gdp*, *log per capita state's share in central tax*, and *Ideology*. Standard errors clustered at the state level in parentheses.
* p < 0.1, ** p < 0.05, *** p < 0.01

Table 6: Two way Fixed effect regression for *log per capita discretionary transfers* (splitting the large state sample into two: 2014 and before- Column 1, 2015 and onward- Column 2)

	(1)	(2)
Swing	0.091	1.062***
	(0.131)	(0.291)
Alignment	0.014	-0.055
	(0.262)	(0.221)
Constant	-7.458	-158.4
	(39.82)	(127.4)
Controls	Yes	Yes
N	171	117
Adjusted R^2	0.201	0.511

Note: Dependent variable- *log per capita discretionary transfers*. All models include the following control variables: *log population*, *log per capita gdp*, *log per capita state's share in central tax*, and *Ideology*. Standard errors clustered at the state level in parentheses.
* p < 0.1, ** p < 0.05, *** p < 0.01

Table 7: Two way Fixed effect regression for *log per capita discretionary transfers* (to assess regional bias)

	(Full sample)	(Large states)	(Small states)
Region_of_origin*NITIdummy	-0.154	-0.542	0.753
	(0.469)	(0.65)	(0.505)
Constant	14.17	-4.03	20.61
	(12.10)	(49.08)	(15.85)
Controls	Yes	Yes	Yes
N	501	289	212
Adjusted R^2	0.334	0.386	0.287

Note: Dependent variable- *log per capita discretionary transfers*. All models include the following control variables: *log population*, *log per capita gdp*, *log per capita state's share in central tax*, and *Ideology*. Standard errors clustered at the state level in parentheses.
* p < 0.1, ** p < 0.05, *** p < 0.01

11 Appendices

Figure A1: Yearly total amount of discretionary transfers to large states

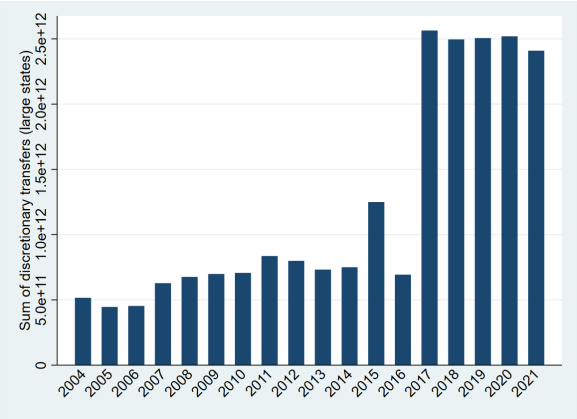


Figure A2: Yearly total amount of discretionary transfers to small states

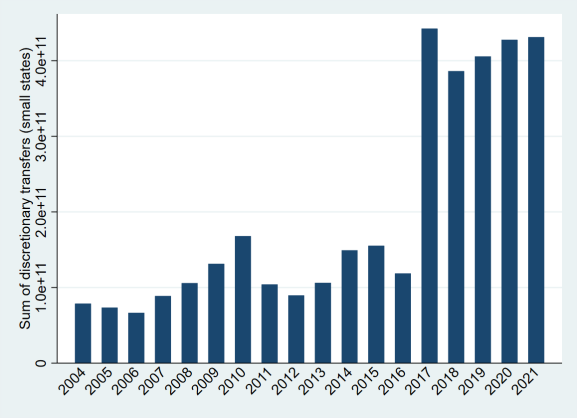
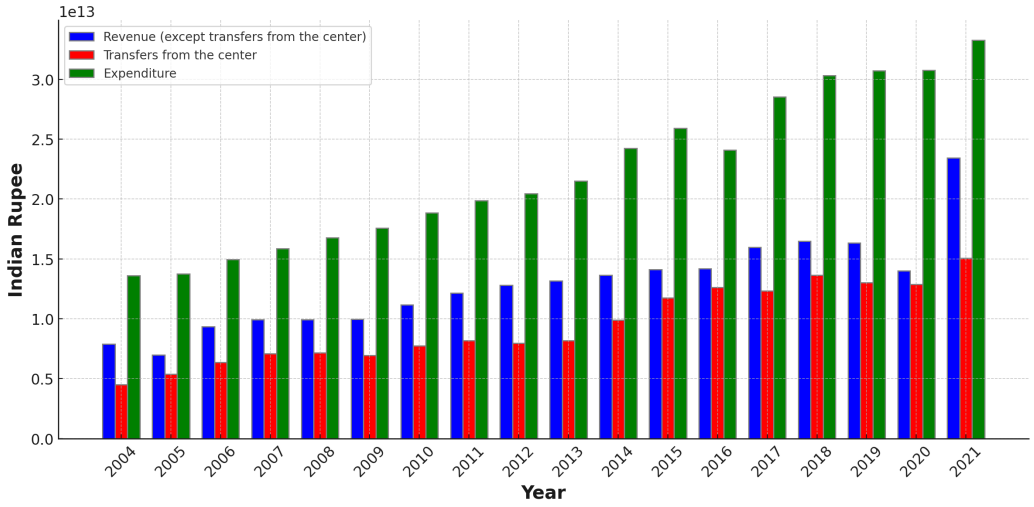


Figure A3: Time series of Revenue, Transfer and Expenditure



Note: The graph illustrates revenue receipts (excluding transfers from the center), transfers from the center to states (including all types of transfers such as tax devolution, grants, discretionary transfers, etc.), and finally, revenue expenditure. All values are inflation-adjusted.

Table A1: Percentage of discretionary transfers in relation to state's total revenue.

State	Before institutional change				After institutional change				Change
	Mean	St. dev.	Min	Max	Mean	St. dev.	Min	Max	
AnP[23]	2.27	0.72	0.43	2.93	7.40	3.81	0.00	10.40	5.13
ArP[24]	6.48	3.03	3.71	14.38	6.92	6.42	1.79	18.08	0.44
ASSAM	4.88	1.92	0.08	7.13	11.70	7.75	1.39	17.37	6.82
BIHAR	3.48	1.05	0.97	4.50	7.24	4.24	1.64	10.40	3.76
CHHATTISGARH	4.04	1.03	1.98	5.61	7.14	4.86	0.76	13.06	3.10
DELHI	0.62	0.48	0.00	1.74	2.27	0.66	1.28	3.11	1.65
GOA	5.42	9.69	0.00	25.07	1.88	0.52	1.35	2.74	-3.54
GUJARAT	1.65	0.44	0.66	2.37	3.58	2.18	0.55	5.78	1.93
HARYANA	2.25	1.27	0.80	5.66	2.01	1.27	0.33	3.03	-0.24
HP[25]	2.95	1.68	0.00	6.71	10.06	1.72	7.36	12.53	7.11
JHARKHAND	4.31	2.40	0.00	7.96	7.71	5.44	0.99	14.57	3.40
KARNATAKA	2.15	0.88	0.00	3.06	3.45	2.56	0.19	6.10	1.30
KERALA	2.08	0.99	1.49	4.79	3.09	0.51	2.65	3.96	1.01
MAHARASHTRA	2.34	1.30	1.43	5.91	4.33	0.67	3.29	5.08	1.99
MANIPUR	6.49	1.53	4.42	9.14	15.12	9.63	2.83	24.55	8.63
MEGHALAYA	5.18	1.04	3.77	6.62	13.50	8.67	0.00	21.34	8.32
MIZORAM	7.02	2.41	3.48	10.65	11.98	4.59	5.70	17.93	4.96
MP[26]	4.49	0.65	3.31	5.42	3.56	5.03	0.01	10.12	-0.93
NAGALAND	7.09	3.84	4.02	17.29	6.58	8.92	0.00	19.49	-0.51
ODISHA	3.70	1.36	0.15	5.37	7.38	5.63	0.07	12.76	3.68
PUDUCHERRY	0.32	0.80	0.00	2.54	3.22	1.37	2.04	12.76	2.90
PUNJAB	1.49	0.80	0.04	2.54	2.66	1.46	0.85	4.42	1.17
RAJASTHAN	3.42	1.55	0.16	5.53	5.19	4.08	0.06	9.87	1.77
SIKKIM	5.28	2.18	3.96	11.35	12.55	3.17	8.16	15.98	7.27
TAMIL NADU	1.67	0.36	0.78	1.96	4.14	2.47	0.81	6.27	2.47
TELANGANAU	—	—	—	—	2.83	2.03	0.00	4.96	—
TRIPURA	4.48	1.94	0.00	6.81	10.07	6.61	0.00	15.33	5.59
UTTAR PRADESH	4.08	1.63	2.36	7.90	8.93	3.06	6.74	14.98	4.85
UTTARAKHAND	2.64	1.59	1.56	6.98	9.70	4.84	0.00	13.17	7.06
WEST BENGAL	2.95	1.07	0.29	4.49	5.89	4.15	0.09	9.19	2.94

Note: The light cyan color indicates the large states.

[23] ANDHRA PRADESH
[24] ARUNACHAL PRADESH
[25] HIMACHAL PRADESH
[26] MADHYA PRADESH

Table A2: Two way Fixed effect regression for *log per capita discretionary transfers* (full sample)

	(1)	(2)	(3)	(4)
Swing	0.148	-0.041	0.151	-0.039
	(0.110)	(0.109)	(0.113)	(0.109)
Alignment	-0.028	-0.060	-0.009	-0.021
	(0.136)	(0.140)	(0.146)	(0.143)
Swing*NITIdummy		0.473*		0.481*
		(0.279)		(0.283)
Alignment*NITIdummy			-0.045	-0.096
			(0.199)	(0.197)
Constant	15.71	13.01	15.39	12.28
	(11.81)	(11.48)	(11.39)	(11.21)
Controls	Yes	Yes	Yes	Yes
N	500	500	500	500
Adjusted R^2	0.336	0.344	0.335	0.343

Note: Dependent variable- *log per capita discretionary transfers*. All models include the following control variables: *log population*, *log per capita gdp*, *log per capita state's share in central tax*, and *Ideology*. Standard errors clustered at the state level in parentheses.
* p<0.1, ** p<0.05, *** p<0.01

Table A3: Two way Fixed effect regression for *log per capita discretionary transfers* (large states's sample excluding Andhra Pradesh and Telangana)

	(1)	(2)	(3)	(4)
Swing	0.459***	0.163	0.460***	0.153
	(0.134)	(0.127)	(0.138)	(0.144)
Alignment	-0.108	-0.119	-0.094	-0.046
	(0.158)	(0.146)	(0.194)	(0.187)
Swing*NITIdummy		0.684**		0.720*
		(0.300)		(0.347)
Alignment*NITIdummy			-0.039	-0.199
			(0.320)	(0.365)
Constant	29.93	35.38	28.08	26.25
	(44.35)	(46.27)	(39.92)	(42.43)
Controls	Yes	Yes	Yes	Yes
N	265	265	265	265
Adjusted R^2	0.383	0.398	0.380	0.397

Note: Dependent variable- *log per capita discretionary transfers*. All models include the following control variables: *log population*, *log per capita gdp*, *log per capita state's share in central tax*, and *Ideology*. Standard errors clustered at the state level in parentheses.
* p < 0.1, ** p < 0.05, *** p < 0.01

Table A4: Two way Fixed effect regression for *log per capita discretionary transfers* (large state's sample excluding Andhra Pradesh and Telangana with interaction between 3 dummies)

	(1)	(2)	(3)	(4)
Swing	0.459***	0.160	0.344*	0.156
	(0.134)	(0.130)	(0.161)	(0.142)
Alignment	-0.108	-0.056	-0.088	-0.036
	(0.158)	(0.173)	(0.191)	(0.188)
Swing*NITIdummy		0.982*		0.965**
		(0.460)		(0.437)
Alignment*Swing*NITIdummy		-0.458	0.442	-0.411
		(0.505)	(0.476)	(0.616)
Alignment*NITIdummy			-0.232	-0.075
			(0.469)	(0.429)
Constant	29.93	40.40	16.43	36.47
	(44.35)	(45.00)	(34.00)	(36.36)
Controls	Yes	Yes	Yes	Yes
N	265	265	265	265
Adjusted R^2	0.383	0.399	0.382	0.397

Note: Dependent variable- *log per capita discretionary transfers*. All models include the following control variables: *log population*, *log per capita gdp*, *log per capita state's share in central tax*, and *Ideology*. Standard errors clustered at the state level in parentheses.
* p < 0.1, ** p < 0.05, *** p < 0.01

Table A5: Two way Fixed effect regression for *log per capita discretionary transfers* (splitting the large state sample into two: 2014 and before- Column 1, 2015 and onward- Column 2 and excluding Andhra Pradesh and Telangana)

	(1)	(2)
Swing	0.097	1.070***
	(0.161)	(0.281)
Alignment	0.017	-0.015
	(0.268)	(0.237)
Constant	38.66	-127.3
	(53.38)	(144.2)
Controls	Yes	Yes
N	160	105
Adjusted R^2	0.188	0.510

Note: Dependent variable- *log per capita discretionary transfers*. All models include the following control variables: *log population*, *log per capita gdp*, *log per capita state's share in central tax*, and *Ideology*. Standard errors clustered at the state level in parentheses.
* p < 0.1, ** p < 0.05, *** p < 0.01

Table A6: Two way Fixed effect regression for *log per capita discretionary transfers* (to assess regional bias, large states excluding Andhra Pradesh and Telangana)

	(1)
Region_of_origin*NITIdummy	-0.476
	(0.669)
Constant	13.73
	(54.04)
Controls	Yes
N	266
Adjusted R^2	0.363

Note: Dependent variable- *log per capita discretionary transfers*. All models include the following control variables: *log population*, *log per capita gdp*, *log per capita state's share in central tax*, and *Ideology*. Standard errors clustered at the state level in parentheses.
* p < 0.1, ** p < 0.05, *** p < 0.01