The Puzzle of Democratic Monopolies: Single Party Dominance and Decline in India

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The Puzzle of Democratic Monopolies: Single Party Dominance and Decline in India

A dissertation presented

by

Aditya Dasgupta

to

The Department of Government

in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the subject of Political Science

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The Puzzle of Democratic Monopolies: Single Party Dominance and Decline in India

Abstract

How to explain political monopolies in democratic institutional settings? Dominant parties in countries with robust formal democratic institutions are surprisingly frequent, yet poorly understood. Existing theories explain away the puzzle by characterizing dominant parties as ‘catch-all’ parties that survive on the basis of historically imbued mass voter legitimacy. This dissertation develops a theory of how dominant parties in fact routinely win free and fair elections despite counter-majoritarian policy biases and why they decline, utilizing the uneven decline of single-party dominance across regions and localities of India as a historical natural experiment.

The puzzle in the Indian case is that the Congress party was able to monopolize power in a poor and rural society for over four decades after independence despite a counter-majoritarian urban bias and free and fair elections. The dissertation develops a political economy model that rationalizes this — showing how extensive but implicit ties of patronage enable dominant parties to maintain power and counter-majoritarian policies in conditions of formal democratic institutions. The theory generates two new empirical implications about why dominant parties decline and how this reshapes distributive politics — which are tested through sub-national comparative historical analysis, quantitative analysis of historical data, and in-depth fieldwork.

First, the theory suggests that dominant parties do not simply fade away with the passage of time or societal modernization, but decline as a result of protracted distributive conflict with rising but politically excluded economic interests. In the Indian
context, I provide evidence that this took the form of political mobilization by agricultural producers in the aftermath of the green revolution. Exploiting exogenous variation in the diffusion of high-yielding variety crops, the first empirical chapter provides evidence that economic growth in the politically excluded agricultural sector intensified rural-urban distributive conflict, accounting for the rise of agrarian opposition parties and half of the Congress party's long-run decline.

Second, the theory suggests that the decline of single-party dominance democratizes distributive politics, in two ways. One is that policies shift in favor of the rising but previously politically excluded economic interests. Another more complex channel is that in an effort to regain lost political ground, dominant parties strategically reinvent themselves as pro-poor parties, initiating a process of competitive credit claiming for social policy. The second empirical chapter applies a structural break methodology to estimate the timing of dominant party decline across Indian states, and utilizes this variation to show that the decline of single-party dominance led to the rise of agriculture-favoring policies and social spending. Through fieldwork in two states as well as analysis of the electoral effects of India's largest contemporary social program, the third empirical chapter provides micro-level evidence that the emergence of a nascent welfare state is driven by a logic of competitive credit-claiming.

In contrast to existing theories, the case of India suggests that dominant party decline in democratic settings bears a resemblance to the decline of political monopolies generally, representing a process of de facto democratization in de jure democratic institutional settings. I show that the argument can help to explain trajectories of dominant party decline and distributive politics in a number of other cases, including Japan, Italy, Mexico and the American South.
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Introduction

0.1 The Puzzle of Democratic Political Monopolies

How to explain the presence of dominant parties — parties that monopolize political power for prolonged periods of time — in democratic institutional settings? Dominant party democracies constitute a striking puzzle, pitting two conceptualizations of democracy against one another: one which views alternation of power as the defining characteristic of democracy, and another which focuses on the presence of robust formal democratic institutions. In Schumpeter’s (1942) well-known minimalist formulation, “The democratic method is that institutional arrangement for arriving at political decisions in which individuals acquire the power to decide by means of a competitive struggle for the people’s vote”. Normally, it is thought, the competition for votes means that alternation of power and robust formal democratic institutions go together — and this is the prediction of the canonical median voter theorem in political science (Downs 1957). Yet contemporary and historical examples of dominant parties in democratic settings, ranging from Japan’s Liberal Democratic Party and the Botswana Democratic Party to Christian Democracy in Italy, and, the focus of this dissertation, the Congress party in India, challenge this familiar assumption.

For decades, the prevailing theoretical explanation for the puzzle of political monopolies in democratic settings has been to characterize these systems as “uncommon
democracies" (Pempel 1990; Duverger 1959) — an unusual regime type arising from extraordinary foundational historical processes which generate mass voter consensus around a single party. Typically viewed as qualitatively distinct from authoritarian political monopolies (Sartori 1976; Kalyvas 1999), dominant parties in democratic settings are thought to survive on the basis of intra-party accountability to mass voter preferences, maintained by a centrist or ‘catch-all’ policy stance and intra-party factional competition which substitutes for external party competition (Arian and Barnes 1974; Riker 1982). Drawing on these theoretical foundations, dominant parties are thought to decline as a result of societal modernization giving rise to new parties based on increasingly differentiated societies (Dahl and Tufte 1973), gradual institutional sclerosis (Duverger 1959), national crises (Levite and Tarrow 1983), and the fading societal memory of epochal historical events which granted dominant parties their initial legitimacy. According to Duverger, dominant parties for all of these reasons fade away with the passage of time: “The dominant party wears itself out in office, it loses its vigor, its arteries harden. It would thus be possible to show...that every domination bears within itself the seeds of its own destruction. (Duverger 1959, p. 312)"

This dissertation re-investigates the ‘catch-all’ characterization of dominant parties in light of a comparative paradox: the fact that, far from always catering to the center of public opinion, dominant parties routinely win free and fair mass elections in spite of deep unpopularity and counter-majoritarian policy positions. In Japan, despite a rural bias in a predominantly urban country and periods of deep unpopularity, the LDP monopolized political power for over six decades (Scheiner 2006). In Italy, despite repeated corruption scandals and regional bias toward the southern mezzogiorno region of the country (Forlenza 2010), the DC retained power from 1944 to 1994. In Botswana, sometimes regarded as Africa’s most successful democracy (Van de Walle 2002), the BDP has maintained its political monopoly for over five decades, despite a rural base in what is
now a predominantly urban society. In India, the focus of this dissertation, the Congress party dominated elections from 1947 to 1989 despite an economic strategy favoring urban and industrial development in a society that is predominantly poor and rural (Lipton 1977; Rudolph and Rudolph 1987).

To the opposition parties and voters which confront them, dominant parties do not represent catch-all parties — but rather political goliaths, entrenched in every tier of government and bureaucracy, and with a pervasive grip over the commanding heights of the economy. For this reason, the official names of dominant parties, which conjure images of consensus and popular legitimation, often stand in stark contrast to the nicknames provided by society. Christian Democracy (DC) in Italy, for example, was colloquially known as the balena bianca or “white whale”. In India, the narrow circle of Congress party elites that brokered political power within the party was commonly known as the “syndicate”; they were eventually ousted by Indira Gandhi, herself known as India’s “iron lady”, who concentrated control over party, government, and economy in her own hands. Moreover, dominant parties in democratic settings are not exceptional occurrences but a recurrent feature of democratic politics around the world. Since the 1970s, over 20 percent of democratic country-years have been characterized by the rule of a dominant party.¹

Motivated by the gap between ‘catch-all’ theories and comparative evidence on the exclusionary policies of dominant parties, this dissertation asks three inter-related ques-

¹I define a dominant party as one that has won elections to the executive for 15 consecutive years or more. I count countries which score a 7 out of 7 on each of two widely used indices of legislative and executive political competition as procedural democracies. Based on the World Bank database on political institutions, between 1975 and 2012, in any given year on average 10.6% of procedural democracies were led by a dominant party that had been in power for 15 years or more. Retrospectively counting each dominant party’s tenure in office as the period of dominant party rule, this number rises to 21.8%, an under-count as it mechanically excludes parties that took power after 1997, since which not enough has elapsed in the dataset to code definitively as dominant. Restricting attention to 1975-1997, 29.1% of all democratic country-years were characterized by dominant party rule.
tions: How do dominant parties monopolize political power in conditions of procedurally free and fair elections? What causes long-surviving dominant parties to decline? And what, if any, effect does the decline of single-party dominance have on distributive politics in conditions of well established formal democratic institutions?

0.2 The Theoretical Argument

To answer these questions, this dissertation draws on a large-scale historical “natural experiment”: India’s historical transition from single-party dominance to multi-party competition. The uneven decline of the Congress party over time across different regions and localities of India provides an excellent setting in which to investigate the causes and consequences of dominant party decline, while holding important omitted institutional variables relatively constant. The Congress party’s decline in control of state governments and national parliamentary seat share over the post-independence period is displayed in Figure 1.

India is a “crucial case”, not only because it is the world’s largest democracy but also because the existing literature on single-party dominance in India echoes the major claims of the comparative literature, providing a valuable ‘testing ground’ for existing theories. Influential accounts view the era of Congress party dominance as a form of legitimate and benign hegemony characterized by intra-party democracy and competition (Kothari 1964; Weiner 1967a), or even a form of consociationalism (Lijphart 1996). In line with the “catch-all party” view, single-party dominance is thought to have declined as a result of the fading memory of the nationalist movement, various legitimacy crises, intra-party factional conflict, and gradual societal modernization giving rise to new parties based on social cleavages such as caste and religion (Chhibber 2001). Finally, the existing literature suggests that the decline of single-party dominance has not
Figure 1: Decline of Congress Party at State and National Levels
seriously improved and may have even harmed accountability by contributing to political fragmentation and instability (Chhibber and Nooruddin 2004; Kohli 1990).

As some literature suggests, however, the dominant Congress party was not nearly as inclusive as has typically been assumed. In addition to a leadership that was dominated by urban and upper-caste elites (Jaffrelot 2003), during the era of single-party dominance the Congress party pursued a deeply counter-majoritarian economic strategy, characterized by an elite and urban policy bias in the context of a predominantly rural and poor electorate. Jawaharlal Nehru, India’s first prime minister, declared that ending “poverty and ignorance and disease” was among the Indian nation’s highest priorities in his well-known “Tryst with Destiny” speech on the eve of India’s independence. In practice, however, during the years that it dominated Indian politics, from 1947 to 1989, the Congress party prioritized urban over rural development and failed to commit significant political or fiscal resources to the rural sector or to poverty alleviation (Lipton 1977; Rudolph and Rudolph 1987). How to explain the electoral success of a dominant party that despite free and fair elections failed historically to prioritize public policies targeted at its predominantly rural and poor voters?

The ability of a dominant party to monopolize power without catering to mass voter preferences in a context of robust formal democratic institutions is not well explained by existing political economy models. Given free and fair elections, counter-majoritarian incumbent parties should be extremely susceptible to challenges from opposition parties who hew more closely to the preferences of the median voter, according to standard spatial models of electoral competition. Theories of incumbent survival developed in competitive authoritarian institutional settings, based on pervasive vote-buying, coercion, and fraud (Levitsky and Way 2010; Magaloni 2006; Greene 2010; Blaydes 2010), require varying degrees of subversion of electoral institutions and do not readily translate to dominant party democracies, which are characterized by a robust secret ballot
and “free electoral competition, relatively open information systems, respect for civil liberties, and the right of free political association (Pempel 1990)”.

To account for this puzzle, building on historical research this dissertation develops a theory in which democratic single-party dominance is sustained on the basis of implicit patronage ties to voters, a strategy which I term “vote-tying”. In the model, the dominant party can strategically engage selected voters in ongoing relationships of patronage, for example public employment or other forms of favorable dispensation in the current regime. The genius of vote tying is that it ties the fortunes of voters selected for favoritism to the dominant party’s continuation in office, without requiring individualized vote monitoring and buying, coercion, or other overtly authoritarian tactics. Because they are “externally mobilized” (Shefter 1977), without ex ante control of the state and bureaucracy, opposition parties cannot credibly engage in similar patronage ties but they can promise to allocate public resources in ways preferred by the median voter. Nevertheless, even though the opposition party offers a policy that appeals to the majority sector, targeted transfers through vote-tying enable the dominant party to divide the majority’s coalition, enabling it to monopolize political power while pursuing counter-majoritarian policies in a context of free and fair elections.

I contend that this fits many of the stylized facts about single-party dominance in India. In the case of India, vote tying took the form of an over-developed public sector through which the Congress party provided employment (Bardhan 1999), incorporation of local elites ranging from former landlords to princes into the Congress party as local party leaders and candidates (Kohli 2012; Sisson 1971), and well developed local party machines which incorporated selected poor and rural social groups into problem-solving networks (Weiner 1967a; Bailey 1959). This enabled the Congress party to allocate disproportionate investments to and pursue a policy of state-led industrialization favoring urban areas, in which under 30 percent of the Indian population participated,
over the rural sector, from which 70 percent of the Indian population received its income — all the while maintaining sufficient rural electoral support to win elections on the basis of ties of patronage to selected rural elites and voters.

The model provides a political economy explanation for how counter-majoritarian dominant parties win elections in conditions of robust formal democratic institutions, which does not rely upon the implausible claim that they do so on the basis of their inherent legitimacy or accountability to mass voter preferences. The focus on implicit ties of patronage provides an explanation for why many voters support a dominant party even when the party does not advance their policy interests and they possess the option, protected by a secret ballot, to vote for other parties. In highlighting the role of targeted transfers in dominant party survival, the argument meshes well with Scheiner (2006), who highlights the role played by centralized fiscal institutions and fiscal transfers in prohibiting the emergence of credible opposition parties in Japan in spite of the LDP's historical unpopularity with voters. This dissertation's argument differs, however, in developing a model that spells out the details of how patronage operates in the context of robust formal democratic institutions as well as endogenizes the building of patronage ties as a strategic choice that may be available to dominant parties in a number of institutional settings. This permits an explanation of not only how dominant parties survive but when and how both vote-tying and dominant parties decline and how this re-shapes distributive politics.

0.2.1 Main Comparative Statics

Theories are tested through their comparative statics (Samuelson 1941), or predictions about equilibrium change. With a different foundation for single-party dominance, the theory consequently yields very different explanations for why dominant
parties decline and how this affects distributive politics. The theory suggests that distributive conflict with rising commercial interests excluded from the incumbent’s socioeconomic coalition — in the case of India, agricultural producers — as opposed to generic societal modernization drives the decline of dominant parties. It also suggests that the transition from single-party dominance to multi-party competition leads to democratizes distributive politics, leading in the long run to a diminished salience of patronage and realignment of policies with voter numbers — in the case of India, spending increasingly targeted at poor and rural voters.

I argue that dominant parties do not fade away as a function of societal modernization or legitimacy crises, but as a result of distributive conflict with rising but politically excluded interests who demand complementary distributive policies and greater political representation as a result of economic growth in a politically excluded sector. This provides a novel explanation for how single-party dominance declines in spite of the dominant party’s patronage ties to voters, a central puzzle in the literature on democratization and “clientelistic” versus “programmatic” politics (Shefter 1977; Kitschelt and Wilkinson 2007). In the case of India, I argue, this took the form of agricultural producers rebelling against the urban bias of the Congress party as a result of the green revolution. The argument shifts the focus of explanations for dominant party decline in democratic settings from modernization-style arguments to theories about how distributive conflict contributes to regime change, bringing the discussion closer to the wider literature on democratization (Boix 2003; Acemoglu and Robinson 2005; Ansell and Samuels 2014). In the India context, the argument also highlights the important role that rural-urban conflict played in dominant party decline (Varshney 1998; Rudolph and Rudolph 1987), a factor which is frequently overlooked in favor of modernization-style arguments highlighting the rise of opposition parties based on social cleavages such as caste and religion (Jaffrelot 2003; Chhibber 2001).
The decline of single-party dominance democratizes distributive politics, I argue, through two channels. First, policies shift toward the sectoral interests of elite-led opposition parties — in the case of India, agricultural producers. This explains the historical emergence of agriculture-favoring policies as the ‘third rail’ of distributive politics in India, compared to the urban bias of the early post-independence era. A second, more complex channel is that in an effort to regain lost political ground, dominant parties strategically reinvent themselves as pro-poor parties, initiating a process of competitive credit claiming for social policy. The emergence of political competition, even if initiated by opposition parties supported by rival economic elites, therefore expands the scope of political competition to mass voter preferences (Schattschneider 1960), leading to the strategic introduction of social policy as a dimension of political competition and unleashing a politics of competitive “credit-claiming” for social policy (Pierson 1996). In the Indian context, I argue, this can account for the relative absence of welfare policies during the era of single-party dominance as well as the rapid expansion of social spending in recent decades following the advent of multi-party competition. The argument therefore highlights how the presence of a de facto political monopoly can severely constrain majoritarian distributive outcomes, and how the transition to multi-party competition can unleash these democratic impulses in spite of the continuity of robust democratic institutions over this entire time period.

The theory provides a more critical framework that goes beyond the ‘catch-all party’ model of single-party dominance and decline in democratic settings, placing implicit patronage ties and distributive conflict the center of the analysis. It highlights the importance of looking beyond formal democratic institutions to the presence or absence of de facto political monopolies in the study of regime type and distributive politics. The theory also makes sense of stylized facts about the co-evolution of the party system and distributive politics in India: in particular, the early period of patronage-based urban,
elite policy bias and Congress party dominance, to a middle period of growing competition from agrarian opposition parties seeking policies favoring the rural sector, to the present era of multi-party competition in which in addition to subsidies for agriculture social programs and welfare policies targeted at poor and lower-caste voters play an increasingly important role in elections.

In contrast to existing theories, the case of India suggests that the decline of dominant parties in democratic settings bears a strong resemblance to the decline of political monopolies more generally, representing a process of de facto democratization in de jure democratic institutional settings. I argue that a number of other cases, ranging from Italy and Japan to Mexico and the American South, followed comparable pathways from single-party dominance to multi-party competition: going from an early period of patronage-based single-party dominance, to the rise of challenger parties led by politically excluded economic interest groups, and shifts in policies toward the interests of these excluded sectoral interests as well as a long-run expansion of welfare policies as a result of inter-elite party competition.

0.3 Empirical Evidence and Structure of Dissertation

The theoretical argument is developed in Chapter 1. While the theory fits many of the stylized facts of single-party dominance and distribution in India and other democracies, for empirical evidence I turn to sub-national and historical comparative analysis. I test the three core comparative statics of the argument: i) that single-party dominance in India declined as result of economically ascendant but politically excluded agricultural producers in the aftermath of the green revolution; ii) that across states the decline of single-party dominance led to increases in policies favoring agriculture; and iii) that the rise of multi-party competition unleashed a politics of competitive credit-claiming
and growing social spending. These implications are tested through three empirical chapters, drawing on sub-national comparative historical analysis, quantitative analysis of natural experiments, and in-depth fieldwork in two states. The empirical analyses trace the co-evolution of the party system and distributive politics in India from the era of single-party dominance to the present era of multi-party competition, revealing how the decline of single-party dominance represents a democratization of distributive politics in the world's largest democracy.

Chapter 2 examines the pivotal role played by the green revolution in the agrarian political mobilization that contributed to the Congress party’s long-run decline. Utilizing fixed effects and instrumental variable analyses which exploit exogenous variation across districts in the spread of high-yielding variety (HYV), I provide evidence that the green revolution accounted for over half of the long-run decline of single-party dominance in both state and parliamentary elections. HYV crop adoption contributed to the rise of agrarian opposition parties, including the Janata party, but not other types of parties, such as the BJP or left-wing parties. I also provide evidence against modernization style arguments by showing that rising incomes on their resulting from rainfall shocks actually strengthened the dominant party while the green revolution had no significant impact on the caste composition of the Indian legislature.

Chapter 3 examines the long-run consequences of dominant party decline on state-level budgets in the three decades between 1973 and 2002. In contrast to previous studies mis-applying measures of political fragmentation, I apply a structural break methodology to identify transitions between single-party dominance and multi-party competition across states in India. Utilizing three case studies, Andhra Pradesh and the comparison of the Communist Party of India-Marxist (CPM) in Kerala and West Bengal, I provide suggestive historical evidence that the transition to multi-party competition across states led to a realignment of policies with voter numbers, shifting the focus of spending
to the rural sector and to poor voters. Consistent with the theory and case study evidence, panel fixed effects regressions utilizing state-level budgetary data show that the decline of single-party dominance led to large increases in agricultural sector and social spending but not patronage spending. The results are robust to controlling for a variety of potential confounding factors, including economic development and demographic change. Remarkably, the results are also robust to controlling for political fragmentation as well as fixed effects for the specific party in power — highlighting how less important than political ideology or the number of parties is the threat of alternation of power, which generates structural pressure for all parties, including the previously dominant Congress party, to cater to majoritarian distributive preferences.

Finally, Chapter 4 explores the micro-dynamics of competitive credit claiming and politicians’ electoral incentives to cater to the majority of poor voters through quantitative and fieldwork-based analysis of the electoral logic of India’s largest contemporary social program, the National Rural Employment Guarantee Act (NREGA). Exploiting the staggered roll-out of NREGA across districts between 2006 and 2008, I provide quantitative analysis that large-scale social programs do generate programmatic electoral returns for the parties which enact them, consistent with the theoretical claim that inter-party competition for votes leads politicians to adopt social policies. Through in-depth fieldwork in the states of Rajasthan and Uttar Pradesh, I also show how a logic of competitive credit-claiming can explain why NREGA performs well in Rajasthan but poorly in Uttar Pradesh. I contrast the lively contemporary dynamics of claiming credit for social policy to the extremely limited role that social programs played historically in electoral mobilization during the era of single-party dominance.

Chapter 5 concludes by situating the trajectory of dominant party decline and distributive politics in India in comparative perspective. I argue that other cases, including the DC in Italy and the LDP in Japan, as well as dominant parties in more authoritar-
ian institutional settings, including the PRI in Mexico and the dominant Democratic Party in the American South, followed comparable pathways to democratization and with similar consequences for distributive politics. I conclude that, far from representing 'catch-all parties', dominant parties in democratic settings suppress accountability and opposition through a subtle form of patronage that ties voters to the incumbent regime. Dominant parties decline as a result of distributive conflict with elite-led parties representing the interests of politically excluded commercial interests, giving way to more competitive, and as a result accountable, distributive politics in the long run.
1 | A Theory of Democratic Political Monopolies

1.1 Explaining Dominance in Democracies

How do dominant parties monopolize power in democratic settings? For many decades the prevailing belief in political science has been that dominant parties represent a form of “catch-all” party — surviving on the basis of their tremendous legitimacy owing to their status as founding parties, or because of intra-party representative mechanisms that obviate the need for external political party competition. Such a view is supported by the absence of visible fraud or coercion during periods of single-party dominance in democracies such as Canada, Japan, Sweden, Italy, Botswana, Trinidad and Tobago, Israel, and many others cases. Voter support for dominant parties in is freely given, leading observers to conclude that dominant parties are simply an outcome of rare historical processes generating mass political consensus around a single party.

A similar tale has been told in the Indian context. Kothari (1964), in his well known description of the ‘Congress system’ in India, described the dominant Congress party as an internally competitive and essentially accountable “party of consensus” held in check by the latent possibility of electoral turnover: “if the ruling group strays too far from the balance of effective political opinion, and if the factional system within it is not mobilized to restore the balance, it will be displaced from power by opposition
groups." Weiner (1967a) documented the grassroots incorporation of different social groups into the Congress party via well-developed local party branches. Drawing on Kothari (1964) and Weiner (1967a), Lijphart (1996) also describes the historic dominance of the Congress party as a consociational “grand coalition” providing pluralistic and inclusive representation of different social groups within a single party.

This is at least the consensus view of the Congress party under Jawaharlal Nehru. Historians and political scientists contend that Indira Gandhi deviated from Nehru’s strategy of inclusion by concentrating power in her own hands, leading to a societal backlash, the Emergency period of rule by executive decree from 1975-77, and the Congress party’s first defeat in national elections in 1977 (before returning to power in 1980). But in many ways, this narrative reinforces the view of single-party dominance as essentially just as accountable as a multi-party system — with opposition forces providing a much needed “corrective” when the dominant party strayed momentarily too far from the center of public opinion.

But is accountability via pluralist mechanisms of interest articulation within the dominant party really “just as good” as any multi-party democracy? Such a view is susceptible to well known criticisms of pluralist theories of intra-party democracy (Michels 1915): “The flaw in the pluralist heaven is that the heavenly chorus sings with a strong upper-class accent. (Schattschneider 1960)” In the Indian context, caste might be added to class (Jaffrelot 2003). But beyond the sociological un-representativeness of the Congress party’s leadership, drawn overwhelmingly from an urban, upper-caste, elite, a closer examination of the the policies enacted during the era of single-party dominance suggests that the system was much more counter-majoritarian than the existing literature on single-party dominance suggests.

In spite of a rhetorical commitment to pro-rural and pro-poor policies, the distinguishing feature of economic policy during the era of single-party dominance was a
sharp urban and elite policy bias — marked by a strategy of import substituting industrialization favoring industry, under-investment in rural infrastructure relative to urban infrastructure, excessive investment in higher education relative to primary schooling, and in extremely low levels of investment in social spending (Lipton 1977; Rudolph and Rudolph 1987). This was despite the fact that 70 percent of the Indian population earned income from the rural sector, and just 30 percent from the urban and industrial sector, with an overall poverty rate in 1960 of about 50 percent (Datt and Ravallion 2002). How to explain what appears to be a direct violation of the median voter theorem? How did the Congress party win elections for four decades after independence in spite of failing to appeal to the policy preferences of India’s predominantly rural and poor voters?

One potential explanation lies in the literature on competitive authoritarianism. Research in this area suggests that in spite of the nominal existence of competitive elections in practice to maintain power unpopular incumbents “abuse state resources, deny the opposition adequate media coverage, harass opposition candidates and their supporters, and in some cases manipulate electoral results. Journalists, opposition politicians, and other government critics may be spied on, threatened, harassed, or arrested. Members of the opposition may be jailed, exiled, or — less frequently — even assaulted or murdered. (Way and Levitsky 2002)” Similarly, Magaloni (2006) and Greene (2010) highlight the important role that pervasive vote-buying together with massive resource asymmetries between the dominant party and opposition parties played in sustaining the hegemony of the PRI in Mexico for over eight decades, despite periods of deep unpopularity with voters.

These theories developed in authoritarian institutional settings do not readily translate to procedural democratic settings, however. The puzzle in the Indian case is that historically elections in India are widely regarded to have been characterized by a robust
secret ballot and free and fair conduct,\textsuperscript{1} on par with some of the most robust democratic election systems in the world — a product of historical legacies and the unusual strength of India’s Election Commission (Kohli 2001; Tudor 2013; McMillan 2012).

Indeed, a hallmark of dominant party democracies is that they are generally characterized by “free electoral competition, relatively open information systems, respect for civil liberties, and the right of free political association. (Pempel 1990)” How to explain the survival of counter-majoritarian dominant parties in settings where all the conditions are ripe and electoral opportunity available for opposition parties to take power? This is a puzzle characteristic not only of single-party dominance in India but in democracies around the world more broadly, where dominant parties routinely manage to win elections in spite of unpopularity with voters. Below, I develop a theory of how dominant parties build implicit ties of patronage to a strategic subset of voters in order to elicit and maintain voluntary political support in spite of a counter-majoritarian policy bias and free and fair elections.

\subsection*{1.1.1 A Model of Vote Tying}

In contrast to the ‘catch-all’ model, I argue that dominant parties represent a form of political monopoly based upon implicit ties of patronage to voters. Instead of engaging in the intensive machine politics and overtly coercive vote buying characteristic of authoritarian incumbents (Blaydes 2010; Magaloni 2006; Greene 2010), where voters are monitored and coerced into supporting the incumbent, dominant parties in democracies rely upon extensive ties to voters taking the form of an ongoing employment relationship or other favorable dispensation within the existing regime. To distinguish this implicit and non-contingent usage of patronage to craft a minimum winning coali-

\footnote{With the period of Emergency rule by executive degree from 1975-77, declared by Indira Gandhi, a notable exception in India’s otherwise robust record of institutional democracy.}
tion from explicitly coercive and individualized vote buying, which requires the subversion of electoral institutions, I term this strategy “vote tying” — which is akin to the implicit labor tying arrangements between employers and employees in rural economies (Bardhan 1983), which can arise “voluntarily” without external coercive enforcement but nonetheless represent a form of dependence.

The distinction between vote buying and vote tying is important conceptually as well as theoretically. Ethnographic accounts spanning the early post independence period to the present day suggest that politicians in India have never viewed individualized vote buying to be effective (Bailey 1970; Banerjee 2015), because a secret ballot renders it effectively impossible to monitor voter behavior (Baland and Robinson 2008), a requisite for vote buying (Stokes 2005). Vote tying, however, enabled the dominant Congress to fashion political support among selected voters with ongoing ties of patronage in a more subtle manner — through the provision of jobs to large swathes of the population, positions in the party to local elites, regulatory exemptions and subsidies to selected firms and industries, and ongoing party-based problem-solving services to the poor. By promiscuously but strategically engaging in vote tying, dominant parties link the fortunes of a large section of the electorate to the continuation in office of the dominant party. A hallmark of dominant party democracies, unsurprisingly, is an over-developed public sector and party machinery through which the dominant party maintains employment relationships with a large section of the population.

Voter support fashioned in such a manner is entirely compatible with free and fair elections and is voluntarily given, in the sense that voters face no individualized sanction or deprivation of resources for voting for opposition parties. On an aggregate level, it can have seriously detrimental consequences for democratic accountability, however. Voters tied to the dominant party strategically choose to support its continuation in office though their choices are protected by a secret ballot. Since voters selected for such
favoritism do not know if they can expect the same favorable treatment to continue under a new regime, they choose privately to support the incumbent in elections. While opposition parties may better represent the preferences of voters, as “externally mobilized” parties that do not possess ex ante control of state and bureaucracy they can promise policies that hew more closely to preferences of the majority but cannot credibly commit ex ante to tie resources to specific voters conditional upon re-election in the way that the dominant can (Shefter 1977). As a result, vote tying enables dominant parties to split the majority and maintain a minimum winning coalition while pursuing counter-majoritarian policies.

The idea is summed up neatly by an excerpt from an interview conducted by Bailey (1970) with an upper-caste government employee in the state of Orissa during the 1950s. Asked to describe why he and others supported the dominant Congress party, despite dissatisfaction with its public policies in office and the secrecy of the ballot, he replied: “Harijans and Adibasis [lower-caste and tribal groups] get preference for jobs; so they vote Congress...People say Ganatantra [the opposition] will do a lot of good for Orissa, if it is voted in. But who knows what it will do? No-one knows.” The quotation is interesting because it captures both the interviewee’s antipathy toward lower-caste and tribal voters, who are perceived to support the Congress party because of their preferential access to jobs in the incumbent regime, as well as an implicit admission that he himself remains reluctantly committed to the Congress party because of uncertainty about the opposition party’s policy choices should it come to power, a concern amplified by his current status as government employee.

I develop a formal theory of dominant party survival on the basis of this simple asymmetry in the type of distributive strategies that internally mobilized dominant parties and externally mobilized opposition parties can credibly commit to in elections. This provides a theoretical framework for understanding single-party dominance in proce-
durally democratic settings that helps to explain why the predictions of the median voter theorem — alternation of power and responsiveness to the median voter – may fail to hold in spite of competitive elections and a secret ballot.

Consider a two-sector democratic political economy, where the dominant party represents the interests of one “insider” sector over a second sector comprised of political “outsiders”. I focus in particular on the urban bias of the dominant Congress party, relative to the overwhelmingly rural composition of the electorate. Rural voters, $l_F$, are more numerous than urban voters, $l_M$, so that:

$$l_F + l_M = 1, \quad l_F > \frac{1}{2},$$

(1.1)

where the total population is normalized to a mass of voters of size 1. Following Rodrik and Alesina (1994), aggregate production in each sector is represented as a Cobb-Douglas type function of private capital, labor, and, importantly, public investment in productive services and infrastructure:

$$Y_F = A k_F^a g_F^{1-a} l_F^{1-a}, \quad 0 < a < 1,$$

(1.2)

$$Y_M = B k_M^\beta g_M^{1-\beta} l_M^{1-\beta}, \quad 0 < \beta < 1,$$

(1.3)

where $g_F$ and $g_M$ represents public investment by the government in each sector, subject to the budget constraint, $R$. All other parameters are exogenously given. By assumption, productivity in each sector is complementary with investments and policy choices made by government. This captures the key idea that ruling parties have finite resources to divide between multiple groups or sectors, potentially favoring some over others. For simplicity, assume that citizens cannot move between sectors, though the key intuitions would hold even if there were simply frictions in moving between sectors. For the mo-
ment, I abstract away from income inequality within each sector, though this has some potentially important implications which I discuss later. In this case, per capita income in each sector can be written as:

\[ \pi_F = A \left( \frac{k_F}{l_F} \right)^\alpha g_F^{1-\alpha} \] (1.4)  
\[ \pi_M = B \left( \frac{k_M}{l_M} \right)^\beta g_M^{1-\beta}. \] (1.5)

To model the dominant party’s counter-majoritarian policy bias in the starkest way possible, I assume that the incumbent dominant party \( D \) seeks to allocate resources in order to maximize per capita incomes \( \pi_M \) of the minority of voters in the insider sector, while an opposition party \( O \) seeks to maximize incomes \( \pi_F \) for the majority of voters in the outsider sector. Both parties additionally receive a term, \( V \), from holding political office.

\[ u_D = \pi_M + V \times I_{Office} \] (1.6)  
\[ u_O = \pi_F + V \times I_{Office}. \] (1.7)

### 1.1.2 Benchmark Case: Median Voter Theorem

Before introducing the effects of vote tying, I first examine the predictions of the model if political parties compete simply on the basis of programmatic policy platforms. In this case, the timing of the game is as follows: 1. The parameter values are realized. 2. \( D \) and \( O \) select their platforms. 3. Voters vote for the platform which maximizes their income. 4. The party winning a majority of the vote is elected (randomized in the event of a tie) and its platform implemented. In this benchmark case, for each party a platform consists of a division of resources between the rural and urban sectors. The strategies
available to each party can be described as follows, therefore:

\[
S^D = \{g^D_F, g^D_M\}, \quad g^D_F + g^D_M = R
\]

\[
S^O = \{g^O_F, g^O_M\}, \quad g^O_F + g^O_M = R
\]

In this game, the equilibrium corresponds largely to the predictions of the median voter theorem. \(O\) offers a platform \(\{g^O_F, g^O_M\} = \{R, 0\}\) allocating all resources to the rural sector, while \(D\) is compelled to offer the same \(\{g^D_F, g^D_M\} = \{R, 0\}\) in the interests of winning the election. In equilibrium, both parties are equally competitive and responsive to the median rural voter and neither has an incentive to deviate. In equilibrium, therefore,

\[
g^*_F = R
\]

\[
g^*_M = 0,
\]

and all resources are allocated to the majority rural sector, with both parties standing an equal chance of election. The predictions correspond to the expectation that in a democratic society government typically caters to the voters who are most numerous, with competing parties alternating in political power. This prediction places the puzzle of the Congress party’s ability to dominate elections in spite of an enduring counter-majoritarian \textit{urban} policy bias in sharp relief. Below I provide the incumbent with the additional option of allocating some resources to patronage but not the challenger, while preserving the same budget constraint for both parties, and show how this simple but historically realistic asymmetry in distributive strategies creates the potential for counter-majoritarian single-party dominance in equilibrium.
1.1.3 Equilibrium Single-party Dominance

Now, to capture the possibility of implicit patronage ties to voters, I allow the dominant party to “tie the votes” of a subset of voters through the usage of employment relationships. A platform now consists of a division of resources between the rural and urban sectors — but, to capture the asymmetry in distributive strategies available to dominant parties and challengers, the dominant party is additionally able to credibly commit to offer a subset of voters a targeted transfer should it be elected. Both parties are subject to the same budget constraint, $R$. Since the dominant party only needs to win over a $I_F - \frac{1}{2}$ voters in the outsider sector in order to obtain a majority,\(^2\) its strategic problem is to offer the ‘cheapest’ mix of targeted transfers and policy concessions to this group of outsiders in order to win their support. The strategies available to each party can be described as follows, therefore:

$$S^D = \{g^D_F, g^D_M, T^D\}, \quad g^D_F + g^D_M + \left(I_F - \frac{1}{2}\right)T^D = R \quad (1.12)$$

$$S^O = \{g^O_F, g^O_M\}, \quad g^O_F + g^O_M = R. \quad (1.13)$$

The dominant party’s problem is to purchase a minimum winning coalition through a mix of policy concessions to the outsider sector and vote tying while preserving as many resources for spending on the insider sector. Specifically, the dominant party needs to win over $I_F - \frac{1}{2}$ voters in the outsider sector in order to obtain a majority. The dominant party’s platform can therefore be represented spatially as follows:

\(^2\)The assumption that the dominant party wishes to construct a bare majority is not essential. Similar comparative statics hold if the dominant party wishes to construct a super-majority for various possible reasons, for example deterring elite defection (Magaloni 2006), or deterring counter-offers (Groseclose and Snyder 1996).
To win elections as cheaply as possible, while preserving the remaining resources for insider sector spending, the dominant party offers this strategic subset of ‘tied’ voters a promise of targeted benefits just enough to make them prefer the dominant party’s platform over the best possible platform of the challenger party:

$$T^D > A\left(\frac{k_F}{l_F}\right)^a R^{1-a} - A\left(\frac{k_F}{l_F}\right)^a g_F^{1-a},$$

(1.14)

a constraint that is binding since the dominant party wishes to minimize the size of the transfers in order to maximize the remaining resources available for spending on the insider sector. Taking into account the new budget constraint,

$$R = g_M^D + g_F^D + T^D(l_F - \frac{1}{2}),$$

(1.15)

and differentiating $g_M^D$ w.r.t. $g_F^D$ and solving the first-order conditions, the dominant party’s equilibrium strategy is described by the following set of equations:

$$g_F^D^* = \left(A(1 - \alpha)(l_F - \frac{1}{2})\right)^{\frac{1}{a}} k_F l_F$$

(1.16)

$$T^D^* = \left(R^{1-a} - g_F^{D*^{1-a}}\right) \times A\left(\frac{k_F}{l_F}\right)^a$$

(1.17)

$$g_M^D^* = R - g_F^{D*} - T^D^*(l_F - \frac{1}{2}).$$

(1.18)
This set of equations has an interior solution so long as:

\[
0 \leq \left( A(1 - \alpha)(l_F - \frac{1}{2}) \right)^{\frac{1}{2}} \frac{k_F}{l_F} \leq R.
\] (1.19)

What this tells us is that as long as the productivity of the rural sector, \( A \), the relative importance of rural public investment, \( 1 - \alpha \), as well as the rural sector’s size, \( l_F \) (holding per capita capital wealth \( \frac{k_F}{l_F} \) constant), is not too large relative to the public resources available, \( R \), a dominant party can maintain a counter-majoritarian policy bias while monopolizing power. These policy rents, relative to purely programmatic electoral competition, are reflected in the non-zero allocation resources to the urban sector, \( g_M^{D^*} \).

This provides a formal theoretical answer to the broad puzzle of how unpopular and non-majoritarian dominant parties stay in power in spite of meaningfully competitive elections. This is because patronage enables the dominant party to divide the potential opposition’s coalition through targeted vote tying, in effect maintaining enough support to win elections “on the cheap” while allocating the surplus to insider spending. Unsurprisingly, single-party dominance typically emerges following the founding of new countries or regimes, where due to the presence of an internally mobilized incumbent and opposition parties that have never controlled the state this type of asymmetry in distributive strategies exists.

Despite catering to the programmatic policy preferences of the majority rural sector, the opposition party is unable to win elections. The model therefore highlights the difficult coordination problem that opposition parties in dominant party regimes face, as existing comparative literature shows (Scheiner 2006; Magaloni 2006; Greene 2010; Arriola 2013). Opposition parties confront a behemoth that has been in power for decades, usually since independence, and which doles out the state’s vast resources in order to strategically divide opponents and maintain a winning coalition. Externally mobilized
opposition parties that have never held office can promise changes in policy, but cannot typically engage in patronage-based coalition building on the same scale. This generates an asymmetry in distributive strategies that favors the re-election of dominant parties despite rent-seeking behavior, exclusive policies, and unpopularity with voters.

A classic symptom of a single-party dominance equilibrium is the presence of an “overdeveloped” public sector and party organization through which the dominant party maintains ties of patronage to a large swathe of society. I argue that this equilibrium closely matches the historical reality of how the Congress party monopolized political power in spite of its urban policy bias and free and fair elections on the ground. In early post-independence India, this took the form of extensive public employment in rural areas (Bardhan 1999; Bailey 1970), direct incorporation of local elites and landlords into the Congress party’s local party leadership (Kohli 2012; Sisson 1971), and well developed local party branches which incorporated the rural poor into problem-solving networks (Weiner 1967a; Bailey 1970) — all of which aligned the interests of voters selected for favoritism with the re-election of the Congress party, in an electoral context which is acknowledged to have been fair and free of coercion or transactional vote-buying.

What was the substantive scale of vote-tying? In 1960, the national- and state-level public sector employed about 7 million people (Toye 1981), or nearly 58% of the formal workforce. This included government bureaucrats, teachers, and doctors who penetrated the entire Indian countryside and played an important role in rural opinion formation. Since the Congress party dominated politics, a ticket as the local Congress candidate conferred a high probability of elected political power — and the Congress party possessed centralized control over the nomination of candidates to thousands of state legislative assembly seats and hundreds of parliamentary seats, through which the party could incorporate influential local notables, such as former landlords and princes, upon whom depended a large number of tenant farmers and employees (Sisson 1971;
Party-based problem solving networks targeted directly at the rural poor were also important, and the Congress party’s local machinery was well developed in the decades after independence (Weiner 1967a; Bailey 1970), with about 10 million local party members. It is difficult to provide a precise estimate of what share of, and the extent to which, the rural voters who routinely supported the Congress party at the state and national levels were “tied”, directly or indirectly via rural elites, in this manner — but qualitative evidence suggests that it was substantial, providing a large share of the rural population with incentives to voluntarily support the dominant party’s continuation in office in spite of its counter-majoritarian policy bias, relative to the uncertain proposition that externally mobilized and fragmented opposition parties represented.

1.2 Distributive Conflict in Dominant Party Decline

Given their tremendous stability, why do dominant parties decline? In keeping with the view of dominant parties as catch-all and historically legitimized parties, conventional explanations, both in the India and comparative context, have focused mainly on legitimacy crises, intra-party factional conflict, or long-term societal modernization contributing to structural shifts in mass voter preferences away from support for the dominant party. In the India context, existing theories highlight India’s defeat in the Sino-Indian war in 1962, the death of Nehru in 1964, the Emergency period of rule by executive decree declared by Indira Gandhi from 1975-77, and various other idiosyncratic national shocks. Crises internal to the Congress party, including conflict between Indira Gandhi and rivals leading to a party split in 1971, as well as a general long-run weakening of party institutions, are also held to be important (Kohli 1990). Alternatively, another body of literature suggests that long-term societal modernization contributed
to the growing political assertiveness of traditionally quiescent ethnic groups, giving rise to new parties based on various ethnic cleavages, in particular lower-caste identity and religion (Jaffrelot 2003; Chhibber 2001).

While many of these factors are important and dominant party decline, like democratization more generally, is surely a multi-causal phenomenon (Haggard and Kaufman 2012), the theoretical model makes clear that generic societal modernization leading to changes in mass voter preferences is an implausible explanation for why dominant parties decline — since dominant parties survive not because of but in spite of their (un)popularity. What then does trigger their decline? In the case of India, ethnic cleavages certainly play an important role in political mobilization in the present era of multi-party political competition. However, caste-based and religious parties have come to play a significant role in Indian politics relatively recently, beginning primarily in the 1980s and 1990s (Chandra 2000). The groundwork for the Congress party’s long-run decline was laid, however, beginning in the 1970s — primarily by opposition parties campaigning not on the basis of caste but rural sectoral appeals. I argue that this is consistent with the theoretical model developed in this dissertation, with dominant parties declining not as a result of legitimacy crises but distributive conflict with rising economic interest groups excluded from the incumbent regime — in the case of India, agricultural producers rebelling against the Congress party’s urban bias in the aftermath of the green revolution.

The growing political activism of agricultural producers was among the most prominent features of Indian politics in the 1970s and 1980s, a phenomenon described by Brass as “the politicization of the peasantry” and by Varshney as “the rise of agrarian power” (Brass 1980; Varshney 1998). In addition to capturing several state-level governments, agrarian opposition parties played a pivotal role in the Janata coalition of parties which defeated in the Congress party in national elections for the first time in India’s his-
tory in 1977. Many of the currently existing regional parties in India descend historically from this coalition of opposition movements that originated in growing political mobilization of agricultural producers. As Rudolph and Rudolph (1980, p.587) put it, “The emergence of agrarian interests on the national scene undid the political settlement of the Nehru era...” However, the root cause of the emergence of a viable agrarian opposition remains an open question – especially in light of the pre-existing long-run stability of the patronage-based Congress system.

The theoretical framework developed in this dissertation provides an explanation for the rise of opposition parties supported by agricultural producers in the 1970s: the technological shock to agricultural sector productivity caused by the green revolution, which can be conceptualized as an exogenous increase in the $A$ parameter of the model. In the model, as $A$ increases, the economic demand for representation in the excluded sector increases — forcing the dominant party to respond first primarily through intensified targeted transfers, then primarily with policy concessions as targeted transfers become less effective, before finally reaching a tipping point at which opposition parties become competitive because the dominant party is no longer able to split the opposition coalition in order to maintain a counter-majoritarian policy bias as well as political power. I unpack these comparative statics in greater detail below.

1.2.1 Comparative Statics

To see how changes in the “technology” of productivity in the agricultural sector, changes the political equilibrium, consider first the extreme case where the outsider sector is completely unproductive and subsistence oriented as parameterized by a value of $A = 0$. In this case the dominant party need not not allocate any resources to the outsider sector in order to maintain political support since outsider demands for policy represen-
tation are non-existent. At the other extreme, if $A$ becomes large enough, the demand for policies favoring the rural sector is so great that the dominant party no longer possesses resources to maintain a minimum winning coalition and must compete on level terms with the opposition party by catering to the median voter with policies catering to the outsider sector. This “tipping point” occurs specifically at:

$$A_1 = \frac{\left(\frac{R I_F}{k_F}\right)^{\alpha}}{(1 - \alpha)\left(I_F - \frac{1}{2}\right)}$$ (1.20)

In-between, as $A$ increases, the dominant party must shift resources away from own-sector spending toward an electorally optimal mix of public service provision in the outsider sector and vote tying. Public policies catering to the outsider sector increase monotonically, while the intensity of patronage increases initially before declining as it becomes less effective relative to policy concessions. This “inflection point” in the efficacy of patronage relative to policy concessions occurs specifically at:

$$A_0 = \frac{R^{\alpha\left(\frac{k_F}{I_F}\right)^{\alpha(a-1)}}}{(1 - \alpha)\left(I_F - \frac{1}{2}\right)^{\alpha} \left(\frac{1}{a}\right)^{\alpha-\alpha}}. \quad (1.21)$$

Moreover, it is easy to show that $A_0 < A_1$ so that dominant party decline as a function of economic growth in the outsider sector is characterized by a consistent trajectory: first a combined increase in policy concessions and patronage up to $A_0$, then a decline in patronage, until finally a “tipping point” at $A_1$ which the erstwhile dominant party and challenger parties are equally competitive and both cater with policies to the median voter in the outsider sector. I present these predictions graphically in Figure 1.1.

I contend that India’s green revolution provided just such a productivity shock to the political excluded agricultural sector. India’s green revolution began in 1966-67, when
Figure 1.1: Comparative Statics: Distributive Politics and Dominant Party Decline
HYV seeds, at first primarily of wheat and rice, were finally adapted to Indian conditions and saw widespread uptake. The introduction of HYV crops, which required controlled irrigation to be cultivated, delivered yield increases of up to 200 percent in appropriate conditions. Crucially, however, consistent with the model and like most new technologies or innovations these potential gains depended heavily upon complementary public investment in the agricultural sector (Evenson and Gollin 2003). Namely, potential profits depended upon investment in irrigation infrastructure, access to electricity to operate tube-wells (Rud 2012), investment in roads, transport and storage infrastructure in order to bring agricultural surplus to domestic and international markets, and cheap public provision of inputs of production — in particular loans and waivers for farm equipment and fertilizers and pesticides which play a crucial role in HYV crop cultivation (Foster and Rosenzweig 1996).

The theoretical model developed has focused specifically on public investment as the dimension of distributive conflict, but other distributive policy instruments, in particular policies affecting terms of trade also play an important role. As the “urban bias” literature has contended (Bates 2005; Lipton 1977), India maintained a number of policies after independence which held the prices of goods produced by the politically excluded agricultural sector below the domestic and international market price to benefit political insiders, the urban and industrial sector. The opportunity costs of such policies were small when the agricultural sector was largely subsistence-oriented, but became much larger with growing surpluses and the economic rise of agricultural producers in India as a commercial class.

As a result, I argue, the introduction of HYV crops “unleashed” rural demand for greater political representation, with a view to obtaining public policies more favorable to the agricultural sector. In the short run, the rise of agrarian opposition parties resulted in a combination of intensified patronage and policy concessions. For example, Indira
Gandhi nationalized industries and banks and launched a number of new agricultural credit programs during the 1970s as well as more generous price support policies for the agricultural sector. By the mid-1970s, traditional ties of patronage were increasingly ineffective at maintaining support for the Congress party, which now was compelled to compete on relatively more even terms with opposition parties in elections that centered around responsiveness to farmers. As Hasan (1989a) notes, rural-urban conflict played a pivotal role in the rise of opposition parties: “What helped [the Bharatiya Kranti Dal] most was its image as the voice of rural India speaking on behalf of the agricultural sector, arrayed against the urban industrial interests which dominated the Congress.” These rising agrarian opposition parties played a pivotal role in India’s long-run transition to multi-party competition.

What about the role of taxation? One might imagine that sector-specific taxation could potentially have been utilized to reinforce single-party dominance by taxing economic growth in the politically excluded agricultural sector in order to provide greater resources to fund patronage, thereby offsetting the growing demands for political representation from outsiders. Yet, this did not occur, historically. From independence, the agricultural sector paid no income taxes, and this remained the case throughout the green revolution. A potential explanation lies in the fact that if taxation must be voted on before it is implemented, then this potentially creates a credible commitment problem where, fearing expropriation and reinforcement of single-party dominance as described above, political outsiders are provided with added incentives to support opposition parties in response to economic growth — much as in the model of Ansell and Samuels (2010). In considering the comparative implications of the theory, economic growth in a politically excluded sector could potentially have divergent effects, depending on initial conditions. In highly authoritarian pre-existing conditions, unilateral taxation may mean that economic growth in a politically excluded sector reinforces single-party dom-
inance whereas in more democratic pre-existing conditions it *undermines* single-party dominance. Such dynamics have been documented in previous research on the impact of Atlantic trade on the democratization or reinforcement of absolutist regimes in Europe, contingent on initial conditions (Acemoglu, Johnson and Robinson 2005). In the case of India, however, a meaningfully competitive political system meant that the Congress party could not unilaterally tax the agricultural sector ex ante — placing taxation of the green revolution and the entrenchment of single-party dominance off of the equilibrium path.

The argument therefore links the decline of single-party dominance in India to the wider literature on democratization, in which rising commercial classes excluded from the incumbent regime are frequently highlighted as important forces for democratic reform. Growing opportunities for wealth or fear of expropriation from rising economic interest groups outside of the incumbent regimes have provided the impetus for regime outsiders to seek political representation and democratization in a wide range of settings, ranging from the role of Atlantic trade in the rise of merchants and the historical democratization of England (Acemoglu, Johnson and Robinson 2005; North and Weingast 1989; Jha et al. 2015) to the role of rising commercial classes in democratization more generally (Moore 1966; Ansell and Samuels 2010; Collier 1999). Though the comparative literature typically highlights the emergence of the “modern” industrial classes as the liberalizing group pitted against conservative landed elites (Lizzeri and Persico 2004; Rueschemeyer, Stephens and Stephens 1992; Ziblatt 2008), the case of India reveals that rising commercial classes in the rural sector can play a crucial role in democratization as well — suggesting that less important than structural change and societal modernization is the deepening of conflict over distributive policies between political insiders and outsiders.
1.3 Competition and Distribution

How did the gradual decline of the Congress party, first at the state level and then at the national level, affect distributive politics? As predicted by the theoretical model, the rise of these new opposition parties resulted in a profound shift in policies, with investment in the agricultural sector rising dramatically and government spending on agricultural subsidies as a share of GDP tripling from 1.2% to over 3% between 1980 and 2000 (Gaiha and Kulkarni 2005). As Varshney (1998) and others note, policies favoring agriculture have come to represent a “third rail” of Indian distributive politics, which no competitive political party can dare to challenge. The theoretical model explains the historical emergence of this focus of distributive politics, a quite dramatic transformation relative to the urban bias that characterized early post-independence India. Consistent with the theory, a technological shock to the agricultural sector contributed to the formation of a rural coalition which undermined the counter-majoritarian dominant party equilibrium, leading to the initial emergence of multi-party competition oriented around the preferences of the previously excluded rural sector.

But did dominant party decline bring any distributive benefit to the rural poor — or only to agricultural “capitalists” and dominant rural-caste groups? The theoretical argument has so far abstracted away from intra-sectoral income inequality, but clearly within the agricultural sector capitalists and owners of land benefited to a greater extent from the green revolution and pro-agricultural sector policies than did the rural poor (Basu 1990) — which is consistent with research suggesting that land-owning farmers played a much greater role in supporting agrarian opposition parties than did landless laborers (Brass 1980). Did India’s transition from single-party dominance to multi-party competition simply shift of policies from the preferences of one narrow dominant proprietary class (to borrow Bardhan’s (1999) terminology), urban capitalists, to a more “broadly-
Theories of democratization which emphasize the role of rising commercial interests in driving democratization as opposed to the poor or working class, for example Ansell and Samuels (2014), sometimes pit themselves against ‘redistributionist’ theories of democratization (Acemoglu and Robinson 2005; Boix 2003). However, in the case of India and beyond, I argue, political competition, even if between a set of rival elite interests, in the long-run shifts the structural "center of gravity" of distributive politics toward responsiveness to numerous poor voters, who are likely to support social programs and policies with significant redistributive content (Meltzer and Richard 1981). This is because in the competition for office opposing elite-led parties possess structural incentives expand the scope of political conflict to poor voters in order to under-cut one another's coalitions (Schattschneider 1960; Riker 1986). The initial emergence of political competition, even if led by rival elite interests, can therefore serve as the “thin edge of the wedge” in expanding distributive politics in a majoritarian direction.

In the case of India, the erstwhile dominant Congress party possessed strategic incentives to re-orient the salient political cleavage away from the urban-rural divide toward distributional conflict between poor and wealthy voters by appealing to voters on the basis of social spending. This form of “heresthetic” enabled the dominant Congress party to recover lost political ground as well as to re-orient the focus of distributive politics away from the interests of agricultural producers, which was anathema to the sectoral commitments of the Congress party’s urban leadership, toward catering toward poor voters in both the rural and urban sector with welfare policies. This is not unique to India, I argue, but part of a broader pattern in which losing dominant parties reinvent themselves (Shepsle 2003) — frequently as populist parties as a way of adjusting to the emergence of elite-led challenger parties. The structural “heresthetic" generated by inter-elite political competition results not necessarily chaos but potentially stabiliza-
tion around a set of policies (McKelvey 1976, 1986) — which likely intersects with the preferences of poor voters in developing countries, as long as there are not “too many” additional cross-cutting cleavages (Baldwin and Huber 2010).

This can explain, I argue, the long-run rise of welfare policies and social spending that has characterized India’s transition from single-party dominance to multi-party competition as well as the important role that spending on the agricultural sector played in the early transition from single-party dominance to multi-party competition but its moderated importance over time. Similar dynamics appear to characterize the initial emergence of rival parties in a number of other settings: leading first to greater responsiveness to the opposition parties’ core elite sectoral interests early on, before giving way to competition for mass voter support with social spending in later stages.

1.3.1 Strategic Introduction of Social Policy

I now unpack the strategic incentives for incumbents to introduce social policy as a dimension of political competition in conditions of single-party dominance versus multi-party competition. Clearly, given the prevalence of low- or below-mean income voters in most societies (Meltzer and Richard 1981), including India, conditional upon the presence of social policies as a dimension of political competition, politicians possess strong electoral incentives to cater to the poor majority by diverting a significant share of public resources to social spending (Pierson 1996).

However, social policy is rarely a naturally occurring dimension of political competition. As previous research has argued (Przeworski and Sprague 1988), the poor are a diffuse and rarely self-organizing constituency, and historically the welfare state and social policies have been “invented” and “imagined” strategically by political elites seeking to build mass coalitions, rather than represented a pre-existing policy choice. In Europe,
this occurred to some extent following franchise expansions beginning at the end of the
nineteenth century but primarily following the world wars as a form of a new social com-
 pact (Lindert 1994; Marshall 1950), whereas in developing countries around the world
social programs have developed much more recently. As a result, I argue that the rise
of social policies as a dimension of political competition resembles a process of strate-
gic agenda setting (Shepsle and Weingast 1981). What role does single-party dominance
and decline play in the absence or emergence of social policy as dimension of electoral
mobilization?

I argue that social policies emerge following the advent of multi-party competition,
and will potentially be introduced as a defensive measure by the erstwhile dominant
party as a means of dividing the rising opposition’s coalition — in the case of India, as
a means for the Congress party to divide the rural base of support of agrarian opposi-
tion parties. However, the very same party would not choose to introduce social policies
discretionarily from a position of dominance — highlighting the role of inter-elite com-
petition in generating structural pressures to expand the scope of political competition
to poor voters.

To see this, consider an informal reduced-form game with the following structure. 1.
Nature first decides whether to provide a sectoral shock of the kind discussed previously
leading to multi-party competition or to preserve a scenario of single-party dominance.
2a. At the single-party dominance node, as the sole incumbent the dominant party re-
tains the decision on whether or not to introduce social policies. 2b. At the multi-party
competition node, since parties alternate in power the choice is made sequentially and
social policies are introduced on the political agenda if any one party chooses to do so.
I represent this informal game in extensive form in Figure 1.2.

We can “solve” this informal reduced-form game through a process of backwards
induction. In the case of single-party dominance, the dominant party is unlikely to
Figure 1.2: Strategic Logic of Introducing Social Policy onto Political Agenda
discretionarily introduce social policies to the political agenda, since this would place tremendous pressure for the dominant party to shift spending from away from its core interests, urban and industrial capitalists. In the case of multi-party competition, however, the introduction of social policies into the policy space provides an opportunity for the erstwhile dominant party to divide the rising opposition party’s base of support and create electoral pressure to shift spending away from the rural sector toward the social sector. While the opposition party would prefer the non-introduction of social policies, since this attracts spending away from its core supporters, rural capitalists, it does not possess a veto and so must either preemptively introduce social policies or wait for the erstwhile dominant party to do so.

In this fashion, relative to single-party dominance inter-elite competition contributes to the rise of social policy as a dimension of political competition and rising social spending — even though such spending does not serve the core interests of elite-led political parties but instead arises due to the structural pressures of political competition. The theory therefore provides a rationale for why dominant parties, ranging from the Congress party in India to the PRI in Mexico, often reinvent themselves as populist parties representing the poor in response to challengers — even when the very same party implemented highlight elitist policies from a position of dominance.

I argue that this strategic interaction helps to explain the relative absence of social spending and welfare policies during the era of single-party dominance as well as the recent proliferation of social programs in the era of multi-party competition in India. In spite of the Congress party’s rhetorical commitment to socialism and pro-poor policies, during the years that it dominated Indian politics, from 1947 to 1989, the Congress party failed to make a major dent on poverty or to commit significant political or fiscal resources to poverty alleviation. Over a nearly four-decade period between 1951 and 1988, for example, the rural poverty rate fell just 8 percentage points from 47% to 39%
Over the last three decades, however, India has launched a massive spate of anti-poverty programs, ranging from a mid-day school meal and universal primary schooling initiatives launched in the mid-1990s to massive rural employment, village road connectivity, and rural medical infrastructure schemes enacted in the 2000s to a new biometric infrastructure for transferring benefits directly to the poor and universalistic food security law, currently underway. Quietly, these programs have delivered major benefits on the ground and revolutionized India’s poverty alleviation efforts, with the poverty rate falling to roughly 22% in 2012.

Strikingly, many but not all of these policies have been enacted by the Congress party, which has sought to re-brand itself as a party of the poor. Consistent with the theory, the Congress party’s reinvention as a party of the poor began initially during the 1970s, when Indira Gandhi launched a “garibi hatao” or “abolish poverty” campaign. As I will discuss in detail in the final empirical chapter, many fixtures of the emergent contemporary welfare state in India, including an early version of a rural employment guarantee as well as the expansion of the public distribution system and subsidized food distribution to rural areas, date to this early period of deepening political competition. The decline of single-party dominance has therefore played, I argue, a pivotal role in the emergence of nascent welfare state in India, both at the state and national levels, by unleashing a politics of competitive credit-claiming for social policy.

1.4 Historical Sequence and Empirical Implications

As discussed, I argue that the model presented here fits many of the stylized facts about the co-evolution of the party system and distributive politics in India from the early post-independence period of single-party dominance to the present era of multi-
party competition. In particular, it explains the transitions from an early period of patronage-based counter-majoritarian urban policy bias and Congress party dominance, to a middle period of growing competition from agrarian opposition parties seeking policies favoring the rural sector, to the present era of multi-party competition in which social programs and welfare policies targeted at poor and lower-caste voters play an increasingly important role in elections.

More broadly, the argument provides a theory of dominant party survival, decline, and distributive politics that plausibly sheds light on the trajectories of a number of other countries around the world. The theory suggests that far from representing catch-all parties, dominant parties in democratic settings suppress accountability and opposition through a subtle form of patronage that ties voters to the incumbent regime, typically through a heavily over-developed public sector and extensive party organization. Dominant parties decline as a result of distributive conflict with politically excluded but rising interest groups, which play an important role in the early formation of opposition parties leading to multi-party competition. In the long-run, multi-party competition, even if initiated by competing elites, generates structural competition for mass voter support, unleashing a politics of competitive credit claiming for welfare policies and greater social spending. In contrast to existing theories, the decline of dominant parties in democratic settings therefore bears a strong resemblance to the decline of political monopolies more generally, representing a process of de facto democratization in de jure democratic institutional settings. I display a flow-chart of the argument and historical sequencing in Figure 1.3.

I have suggested that the theoretical model advanced in this dissertation corresponds to many of the stylized facts about single-party dominance and distribution in India. Theoretical models are tested, however, through their “comparative statics” or predictions about equilibrium change (Samuelson 1941) — in this case, the argument’s predic-
Figure 1.3: Historical Sequence and Empirical Implications

T1. Single party dominance
Urban policy bias, low social spending, over-developed public sector

→

T2. Rise of Agrarian Opposition Parties
Increase in rural spending, low social spending, non-monotonic effects on public sector

→

T3. Multi-party Competition
Inter-elite competition leads to rise of social patience

Long-run increase in social spending and rural spending, reduction in public sector
tions about why dominant parties decline and how the transition to multi-party compe-
tition shapes distributive politics. These predictions are tested through a sub-national
comparative analysis of dominant party decline and distributive politics divided be-
tween three empirical chapters, drawing on a combination of quantitative analysis of
natural experiments, historical analysis, and eight months of rural fieldwork in two states,
Rajasthan and Uttar Pradesh.

A central challenge for comparative research on dominant parties has been the dif-
ficulty of finding comparable cases in similar time periods that permit inferences about
the causes and consequences of dominant party regimes. This dissertation circumvents
this challenge by adopting a historical and sub-national comparative research design,
exploiting sub-national variation in India's transition from single-party dominance to
multi-party competition as a historical “natural experiment”. Comparing sub-national
political units to one another permits the analysis of micro-level data while also holding
important omitted variables, such as institutional structure, relatively constant (Snyder
2001). Bringing a time dimension into the analysis permits an analysis of long-term pat-
terns that may be obscured by a short-term perspective (Pierson 2004), an approach that
has proven especially fruitful in the study of the dynamics of democratization (Capoccia
and Ziblatt 2010; Rustow 1970; Ziblatt 2009).

In terms of level of analysis, the argument is tested empirically on “multiple tracks”,
from the constituency and district level as well as to the state and national level. I will
provide evidence that local variation in the intensity of the green revolution explains
much of the Congress party’s long-run decline in both state and national-level elections.
I will provide evidence that at the level of states, transitions from single-party domi-
nance to multi-party competition caused large long-run increases in agricultural sector
spending as well as social spending. Finally, through quantitative analysis as well as
fieldwork on the politics of India's largest contemporary national social program, which
I place in historical perspective, I will provide evidence that distributive politics has at the state and national level evolved systematically toward greater responsiveness to poor voters through social policy provision as a result of the historical decline of single-party dominance.

Chapter 2 examines the role of distributive conflict between agricultural producers and the urban-biased Congress party in contributing to the long-run decline of single-party dominance. Specifically, exploiting sub-national district-level variation in the intensity of the green revolution, I show that economic growth in the agricultural sector resulting from the introduction of high-yielding variety (HYV) crops accounted for over half of the long-run decline of single-party dominance in India. I also provide evidence that this was due to mobilization by agrarian opposition parties which sought, and achieved, policies favoring the rural sector.

Chapter 3 exploits variation across states in the timing of dominant party decline to study the long-run consequences for distributive politics and state budgets between 1973 and 2002. Consistent with the theory, I show that across states in the long-run the decline of single-party dominance caused large increases in agricultural sector spending and social sector spending while patronage spending as proxied by administrative expenditures remained flat, implying a decrease in the salience of patronage relative to majoritarian distributive policies.

Chapter 4 examines the micro-dynamics of proliferating social programs in contemporary India. Through in-depth fieldwork in two states, as well a quantitative analysis of the electoral effects of India's largest rural anti-poverty program, the National Rural Employment Guarantee Act (NREGA), I provide evidence that the proliferation of social programs is driven by a desire to win the votes of India's predominantly poor voters. I provide qualitative as well as quantitative evidence that the adoption and implementation of these programs is governed predominantly by a logic competitive credit-claiming
for social policy — which I contrast to the very limited role that social programs played historically in electoral mobilization during the era of single-party dominance.
2 | Why Dominant Parties Decline: Evidence from India’s Green Revolution

2.1 Introduction

What explains the Congress party’s decades-long electoral dominance and eventual decline? The previous chapter has developed a theory of how the Congress party maintained extensive, implicit ties of patronage to voters, enabling it to win elections in spite of a counter-majoritarian urban policy bias. A central implication of the theory is that dominant parties decline not as a result of legitimacy crises or gradual societal modernization, but as a result of distributive conflict with rising interest groups excluded from the incumbent regime.

Building on historical research, I argue that political mobilization by agricultural producers in the rural sector played a pivotal role in the urban-biased Congress party’s long run decline (Brass 1980; Rudolph and Rudolph 1987; Hasan 1989b; Jaffrelot 2003; Varshney 1998). Going beyond existing research, I discuss how the broader argument provides an explanation for why agricultural producers mobilized against the dominant party beginning in the 1970s and not prior: because of rapid agricultural economic growth in the politically excluded sector due to India’s green revolution.

Because the introduction of highly productive and input responsive HYV crops increased the prospective value to agricultural producers of complementary policies and
investment controlled by the state, as well as the cost of existing policies holding the prices of agricultural goods below their market value, the green revolution plausibly provided economic incentives for agricultural producers to mobilize politically in order to obtain more favorable policies. This led, I argue, to growing support among agricultural producers, dissatisfied with the Congress party’s urban bias, for agrarian opposition parties, culminating in the rise of opposition parties which first captured state governments across India and then, in 1977, played a pivotal role in the Janata coalition of parties which defeated the Congress party for the first time in national elections.

To test the argument, this chapter assembles a historical dataset that connects over 20,000 local state assembly election races and 3,000 parliamentary elections races to district-level data on the adoption of high-yielding variety crops between 1957 and 1987. Fixed effects regressions exploiting within-district variation over time in the spread of HYV crops provide evidence that economic growth in the politically excluded agricultural sector accounted for over half of the dominant Congress party’s long-run decline. Instrumental variable regressions, which exploit cross-sectional variation in ecological suitability for the new crops (based on their water-intensiveness) together with time variation arising from their introduction in 1967, provide further support for these large democratizing effects.

I provide evidence for the posited rural-urban distributive conflict channel over some potential alternatives with a variety of additional tests. I provide evidence that the green revolution led to the rise of parties campaigning on pro-rural sector platforms, but not other kinds of opposition parties. By contrast, I rule out a simple story line based on rising incomes by showing that rising incomes on their own resulting from rainfall shocks tended to strengthen the dominant party, consistent with research suggesting that economic performance tends to strengthen, not democratize, incumbent regimes (Huntington 1991). I also provide evidence against more sociological theories of modernization.
by showing that the green revolution did not lead to an upsurge in lower-caste representation in the Indian parliament; while the rise of lower-caste groups in Indian is important (Jaffrelot 2003), it is a relatively recent phenomenon and was not the channel for the green revolution’s pivotal role in the early decline of single-party dominance.

The findings show that the green revolution played a pivotal role in the decline of single-party dominance in India, by contributing to distributive conflict between a dominant party with a counter-majoritarian urban bias and a rising commercial class of agricultural producers in the majority rural sector. The findings highlight the importance of rural-urban conflict in the decline of single-party dominance India, and also explain its growing salience from the 1970s onward, differing from accounts which instead focus on the rise of lower caste groups in politics (Jaffrelot 2003), economic liberalization (Chhibber and Kollman 2009), or various national crises that are held to have de-legitimized the dominant party.

More broadly, the findings support a new class of explanations, based on distributive conflict, for why patronage-based political monopolies decline. By highlighting the role of distributive conflict in contributing to opposition mobilization, the findings provide a link between the literature on dominant party decline and the wider literature on democratization (Boix 2003; Acemoglu and Robinson 2005; Ansell and Samuels 2014). The core finding, that economic growth in a politically excluded sector can lead to opposition mobilization by shifting the relative returns to controlling policy over divisive patronage, is similar to the argument of Lizzeri and Persico (2004), who show that similar dynamics among regime insiders can lead to endogenous democratic reform and of Ansell and Samuels (2014), who build a model of how rising commercial classes seek democratic regime change in order to protect their growing wealth.

The findings additionally provide within-country evidence that helps to reconcile competing theories about the effects of economic growth on the decline of dominant
party regimes and on democratization more generally (Greene 2007; Limongi and Przeworski 1997; Boix and Stokes 2003; Acemoglu et al. 2008). Contrary to the predictions of modernization theory, income increases on their own enhance the performance legitimacy of the incumbent regime. However, economic growth in a politically excluded sector can contribute to the emergence of opposition parties and dominant party decline in the long run. This is a novel theoretical lesson that, to my knowledge, has not been systematized and tested before.

The remainder of the chapter is organized as follows. It first provides historical background on the role of agrarian political mobilization in dominant party decline. Drawing on the theoretical framework developed in the previous chapter, I then develop the theoretical argument about the role played by the green revolution in this decline. I then describe the data before presenting the empirical strategy and reporting results.

### 2.2 Agrarian Political Mobilization and the Green Revolution

#### 2.2.1 The Role of Agrarian Political Mobilization

What explains the demise of single-party dominance in India? Revisiting the districts in which Weiner (1967a) originally documented remarkably effective Congress local political machines, Kohli (1990) found that the Congress party had experienced a de-institutionalization of its local branches, contributing to its diminished success in elections. Others highlight the effects of national crises, such as Indira Gandhi’s declaration of rule by executive decree in 1975, which galvanized opposition parties and alienated voters (Weiner 1982). Historians point to the death of Nehru and fading glow of India’s independence struggle, erstwhile sources of prestige and legitimacy for the
Congress party. Jaffrelot (2003) and Chhibber (2001) highlight the role of social cleavages giving rise to new parties based on caste and religion. Finally, Chhibber and Kollman attribute the emergence of multi-party competition in India to the decentralization and liberalization of economic policy (Chhibber and Kollman 1998).

While each of these explanations is compelling, to the extent that these are national-level explanations they do not account for sub-national variation in the incidence and timing of decline in support for the Congress party. Later empirical analyses control for the national-level explanations described above by including in all regression specifications year fixed effects, which adjust for national events, trends and shocks affecting election outcomes similarly across constituencies in India. Additionally, theories based on economic liberalization, a popular comparative explanation for democratization (Greene 2007; Haggard and Kaufman 2012), do not account for the fact that the bulk of dominant party decline, especially at the state level, occurred long before India's liberal economic reforms, which date to 1991 (Jenkins 1999), or possibly the late 1980s (Kohli 2006). I focus instead on the major role that rural-urban conflict played in the Congress party's long-run decline, and on the role of the green revolution in driving the rise of agrarian opposition parties.

During the time period under analysis, India was an overwhelmingly a rural economy, with over 70 percent of the population participating economically in the rural sector. Indeed, India is one of very few countries to have adopted formal democratic institutions and universal suffrage prior to significant industrialization and urbanization (Varshney 2000). However, the Congress party was dominated by elites focused on urban development and state-led industrialization through five-year plans — a partial consequence of the largely foreign-educated elite’s exposure to socialism, ideological commitment to “catch-up” through rapid state-supported industrialization and import substitution (Gerschenkron 1962), and the important role that industrial interests played
in financing the independence movement (Kochanek 1987). As discussed, this deeply counter-majoritarian policy bias was sustained largely on the basis of vertical networks of patronage in rural areas, which tied rural voters to the Congress party through patronage networks. In Wilkinson's words, “at the local level, Congress politicians in the 1950s and 1960s typically contracted for votes through upper-caste local intermediaries, who used their social status and control of land, credit and muscle power to deliver local upper as well as lower-caste votes to the Congress candidate (Kitschelt and Wilkinson 2007, p. 113).” Thus despite a primarily urban, upper caste leadership (Jaffrelot 2003), and an economic agenda focused upon state-supported industrial growth (Rudolph and Rudolph 1987; Lipton 1977), the Congress party was remarkably successful at securing mass voter support.

The Congress party’s traditional patronage-based strategy for winning elections in a predominantly rural country began to break down from the late 1960s onward, however, largely at the hand of rising opposition parties that appealed to agricultural producers (Rudolph and Rudolph 1987; Lipton 1977). The quintessential example of agrarian power was the Bharatiya Kranti Dal (BKD), a party which under the leadership of iconic kisan (farmer) mobilizer Charan Singh defeated the Congress party in Uttar Pradesh on the basis of policy platforms oriented around greater public investment in agricultural and subsidies for farmers. The BKD’s successor party, the Bharatiya Lok Dal (BLD), served as one of the major constituents of the Janata party which defeated Congress nationally, an indication of the growing political clout of agricultural producers as a “demand group” in Indian politics (Rudolph and Rudolph 1987). Apart from the BKD and its descendants, regional opposition parties which disrupted Congress dominance in other states, such as such as the Akali Dal in Punjab and the Telugu Desam Party in Andhra Pradesh, also drew much of their support and leadership from agricultural producers. More broadly, agrarian political mobilization increased across the political spectrum
from the late 1960s onward, resulting in over 40 percent of national legislators coming from agricultural occupational backgrounds in 1989, compared to just 23 percent in 1952 (Varshney 1998).

The present era of multi-party politics in India owes much to the emergence of opposition parties which drew political support from agricultural producers. As Rudolph and Rudolph (1980, p.587) put it, “The emergence of agrarian interests on the national scene undid the political settlement of the Nehru era...” However, the root cause of the emergence of a viable agrarian opposition remains an open question – especially in light of the pre-existing long-run stability of the patronage-based Congress system. The following sections theoretically connect the decline of Congress party dominance to India’s green revolution.

2.2.2 The Green Revolution

The decline of the Congress party coincided with a dramatic increase in agricultural productivity due to the introduction of high-yielding variety (HYV) crops to India in the late 1960s. HYV crops, highly productive crop cultivars invented in the 1950s by Norman Borlaug and scientists working in Mexico, revolutionized agricultural production across the developing world over the course of the 1960s, 1970s and 1980s, a transformation commonly known as the “green revolution” (Evenson and Gollin 2003).

India’s green revolution began in 1966-67, when HYV seeds, at first primarily of wheat and rice, were finally adapted to Indian conditions and saw widespread uptake. Public distribution of HYV seeds occurred initially, before country-wide roll-out, via the Intensive Agricultural Districts Program (IADP), which targeted the 16 ‘model’ districts viewed as most agriculturally advanced and equipped with irrigation infrastructure to take advantage of the new seeds (Mohan and Evenson 1975; Frankel 1971). This targeting was
motivated by the fact that for biological reasons HYV crop cultivation requires access to controlled irrigation (Rawlins 1977; Evenson and Gollin 2003; Khush 2001). While in the presence of controlled irrigation, HYV crops delivered yield increases of up to 200 percent, in the absence of irrigation they typically delivered lower yields than did traditional strains (Cleaver 1972).

The government’s new agricultural strategy, formulated in the early 1960s under the prime ministership of Lal Bahadur Shastri, was a response to domestic food shortages as well as a desire to reduce dependence on US food aid amid the Cold War (Evenson and Rosegrant 1998). HYV crop seeds and techniques were disseminated by the Indian bureaucracy, in part with the aid of international agencies such as the Ford and Rockefeller foundations and World Bank, in part with the support of major domestic agricultural research centers and universities (Ladejinsky 1970). The spread of HYV crops resulted in a massive increase in agricultural output and transformed India from a net food importing to a net food surplus country by the mid-1970s.

The diffusion of HYV crops also fundamentally altered the structure of India’s agricultural sector (Frankel 1971). Because of the greatly increased productivity of HYV crops, the green revolution encouraged a transition from subsistence to commercialized agriculture, resulting in the rise of a vast new class of landowning commercial farmers, accounting for roughly 30 percent of the rural population, famously termed by Ruolph and Rudolph as “bullock-cart capitalists” (Rudolph and Rudolph 1987). The greatly increased output of HYV crops turned India from a net food-importing to a net-food exporting country by the mid-1970s and also resulted in a steady decline in the market prices of crops. Because HYV crop yields were highly responsive to the usage of inputs, the green revolution also greatly intensified the usage of inputs such as fertilizer, pesticides, irrigation, tractors, and electricity for operating tube-wells (Evenson and Rosegrant 1998; Frankel 1971; Walker and Ryan 1990; Rud 2012).
2.3 Rural-Urban Distributive Conflict

Historical research has suggested a connection between the agrarian political mobilization of the 1970s and the agricultural economic growth sparked by HYV crop adoption. Brass (1980), analyzing the social base of support for the Bharatiya Kranti Dal (BKD) during the 1960s and 1970s, noted that “...politicization, as measured in turnout rates, has been highest in the districts where agriculture is most advanced in terms of yields.” Hasan (1989a) also notes the “politicization of backward and middle castes in the wake of the Green Revolution...” However, these authors stop short of offering a systematic theory or empirical test of this relationship.

As discussed, a central feature of HYV crops is that they were highly productive. But, as with many new innovations, their potential profitability depended heavily upon complementary public investments and public policies (Byres 1981). For the rising “bullock-cart capitalists”, three policy issues became increasingly pressing. First, HYV crop cultivation required intensive application of fertilizer and pesticide and greater usage of mechanization, inputs which at the time were largely provided by the state. This made subsidies for these direct inputs of production an increasingly important issue in terms of farmers’ “cost functions” (Evenson and Gollin 2003). Second, the profitability of HYV crop cultivation also depended heavily upon state-provided rural infrastructure, especially electricity networks for operating tube-well irrigation (Rud 2012), as well as transportation and storage infrastructure for bringing agricultural surpluses to market. Third, unfavorable agricultural pricing policies, including large-scale public procurement of crops at low prices and heavily subsidized distribution through the public distribution system (Lipton 1977), came to impose an increasingly large absolute cost on commercial farmers. This made the level at which the Indian government set “minimum support prices” an increasingly important issue for agricultural producers.
These economic transformations in the agricultural sector transformed the relationship between the previously quiescent countryside and the Indian state. The increasing economic value to agricultural producers of complementary distributive policies meant that traditional ties of patronage were increasingly ineffective in deterring farmers from supporting opposition parties promising more favorable agricultural policies. This can explain the upsurge of agrarian political mobilization over the course of 1970s and 1980s, I argue, as well as why prior to the green revolution the majority rural sector failed to mobilize. The key difference was the growing economic returns to more favorable agricultural policies, which diminished the relative effectiveness of the Congress party’s patronage-based strategy for maintaining electoral support in rural areas.

In the medium-term, the rise of agrarian political mobilization resulted in a combination of intensified patronage and policy concessions from the Congress party — taking the form of Indira Gandhi’s new agricultural credit programs as well as agricultural price support schemes, particularly targeted at the influential “sugar lobby” (Lalvani 2008), of the early 1970s. In the long-run, however, the Congress party found itself competing on increasingly level terms with opposition parties on the basis of majoritarian appeals to the rural sector.

A theory of inter-sectoral conflict as the driver of dominant party decline is consistent with the growing politicization of agricultural policy beginning in the 1970s. Rudolph and Rudolph (1987) and Varshney (1998) document the major role played by price supports in the demands of agrarian opposition parties. The theory also consistent with the expanded public investments and subsidies as well as higher procurement prices for agriculture that competing parties actually implemented when elected to office. For instance, the first opposition coalition to defeat the Congress party in national elections, the Janata coalition government, passed a 1979 national budget that provided major new investments and subsidies for the agricultural sector — earning it the pejorative
moniker, the “kulak budget”, in the Indian press. In the long run, policies favoring agri-
culture have proliferated, arguably resulting in the long-run emergence of a rural bias
in many policies. Today, investment, subsidies and generous public procurement prices
for the agricultural sector are a well known “third rail” of distributive politics in India
(Min and Golden 2014), especially in states such as Punjab and Haryana where the green
revolution’s effects were particularly large.

2.3.1 Alternative channels

The theory of dominant party decline presented above differs sharply from some
potential theoretical alternatives. In particular, a large body of research suggests that
societal modernization contributes to dominant party decline. Broadly, two forms of
the theory have been advanced. One, more sociological in nature, suggests that rising
incomes transform traditional societies (Lipset 1959), eroding traditional ties of depen-
dence and feudalism in favor of liberal societies in which competition and cross-cutting
cleavages rather than traditional hegemony is the norm. The other, drawing on the polit-
ical economy literature, suggests that rising incomes make voters less dependent upon
the dominant party’s largess and therefore more willing to support opposition parties
on the basis of ideological preferences (Scheiner 2006; Magaloni 2006).

Several authors have implicitly or explicitly advanced versions of the modernization
argument in the context of India. Guha (2007, p. 532), for example, rising incomes
among farmers “converted themselves into political ambition” (Guha 2007, p. 532). ¹
Similarly, Jaffrelot (2003) argues that agricultural economic growth made lower- and
intermediate-caste voters wealthier and therefore more politically “assertive”, resulting

¹Writes Guha, “The commercialization of agriculture and milk production had benefited a significant
section of farmers in rural India. Crucially, economic gains had converted themselves into political ambi-
tion. In the 1960s it was these rising rural castes who came to dominate governments in northern India.”
in an expansion of lower-caste political representation in legislatures: “The Jats of western Uttar Pradesh and Haryana grew wealthy, notably thanks to the increase in sugar cane production resulting from extensive irrigation programmes in the framework of the Green Revolution. The assertion of these middle farmers...largely explains the growing success of Charan Singh’s kisan [farmer] politics in the 1960s.” The argument resembles Deutsch’s (1961) theory that economic growth encourages political participation by raising incomes and eroding traditional social hierarchies.

However, societal modernization per se is unsatisfactory as an explanation for dominant party decline in India, for multiple reasons that characterize weaknesses in modernization theory more broadly. First, despite rapid agricultural economic growth, India remained among the poorest countries in the world at the end of the green revolution. Second, even if increased incomes did reduce the effectiveness of patronage, this channel does not on its own explain why farmers who benefited from the green revolution supported opposition parties instead of being incorporated directly into the Congress party. Third, it runs counter to a large literature in political science on retrospective voting which suggests that voters in fact reward political incumbents for strong economic performance (Healy and Malhotra 2013). Huntington (1991) and Reuter and Gandhi (2011) argue that economic performance is a source of legitimacy and strength for authoritarian regimes and dominant parties.

The theory of inter-sectoral conflict differs from a theory based on rising incomes in observable implications. In particular, it suggests that rising incomes on their own should not weaken single-party dominance. In the context of India, it also suggests that the green revolution ought to have caused no significant change in the presence of lower-caste or other traditionally disadvantaged groups in legislatures, as has been argued by proponents of the modernization theory of dominant party decline. Instead, the primary prediction of the distributive conflict theory of dominant party decline in the con-
text of India is that the adoption of HYV crops should have led to the *rise of opposition parties representing the interests of agricultural producers* as well as a *shift in policy toward favoring the rural sector*. Below, I discuss how I estimate the effects of the green revolution and how these observable implications will be tested.

### 2.4 Empirical Strategy and Results

To test the theoretical argument in the context of India’s green revolution, this chapter proceeds in two steps, exploiting sub-national variation in the intensity of the green revolution. First, it estimates panel fixed effects OLS regressions which exploit within-district variation in HYV crop adoption over time to estimate the effects of HYV crops on the dominant Congress party’s election performance. In Figure 2.1, I display side-by-side maps of average HYV crop adoption across districts as well as percentage point change in Congress seat share in state assembly elections from the pre- to the post-green revolution period.

Annual district-level data on the share of agricultural land under HYV crop cultivation is available in a dataset compiled by Sanghi et al. (1998) from annual Indian agricultural surveys. The panel dataset covers 270 districts between 1957 and 1987. The districts covered span all of India’s major states except for Assam and Kerala, and account for over 85 percent of India’s land area. To account for administrative splits of districts over time, all data are aggregated to the level of 1961 district boundaries. This district-level data was then geocoded to state assembly and parliamentary constituency boundaries. 

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2 Data on crop coverage come random samples of areas within districts by state-level officials, who report the data to the Ministry of Agriculture for centralized compilation in annual publications.

3 During the period under analysis, India experienced three rounds of re-districting of constituency boundaries: in 1961, 1967 and 1976. This chapter therefore utilizes the 1956, 1961, 1967, and 1976 re-
Figure 2.1: HYV Crop Adoption vs. Change in Congress Seat Share by District
To measure election outcomes, I exploit digitized historical data on constituency-level election data in state assembly election races between 1957 and 1987 and parliamentary races between 1962 and 1985 across India’s major states. The data are based on PDF election reports produced by the Election Commission of India, which were scraped by Jensenius (2013) for elections from 1961 onward. This chapter extends this election dataset back in time by scraping the data for state assembly elections held in 1957. The resulting data set contains constituency-level information on over 20,000 state assembly election races and 3,000 parliamentary races across India’s major states.

To deal with potential endogeneity in the diffusion of HYV crops, as a second step this chapter instruments for HYV crop adoption, exploiting cross-sectional variation in suitability for the new crops based on the water-intensiveness of the crops in interaction with time variation arising from the introduction of HYV crops to India in 1967. The two key measures of suitability for HYV crop cultivation that I utilize are the irrigated share of agricultural land as measured in 1966, just prior to the introduction of HYV crops, and an indicator for the presence of a naturally occurring thick aquifer, suggesting suitability for tube-well irrigation, upon which HYV crop cultivation was widely based.

A discussed, for biological reasons HYV crop cultivation requires access to controlled irrigation. This drove much of the variation in the intensity of the green revolution across regions of India (Cleaver 1972). The northwestern states, such as Punjab and
Haryana, were particularly suitable for HYV crop adoption due to the presence of extensive groundwater aquifers, which made private tube-well irrigation possible, as well as colonial-era irrigation infrastructure (Stone 2002). Even within states there was often considerable inter-regional disparity in the intensity of the green revolution. For instance, due to colonial legacies of canal irrigation the coastal region of Andhra Pradesh and the western region of Uttar Pradesh experienced much higher levels of HYV crop adoption than other parts of those states.

2.4.1 OLS Results

To estimate the political effects of HYV crops, in the basic specification this chapter estimates a panel fixed effects OLS regression of the form,

$$ Y_{dit} = \gamma_d + \tau_t + \alpha HYV_{dt} + \varepsilon_{dit} $$

(2.1)

where $Y_{dit}$ is a measure of Congress election performance, in constituency $i$ in district $d$ and year $t$. The variable $HYV_{dt}$ is a district-level measure of HYV crop adoption, defined as the share of agricultural land planted with HYV crops. A fixed effects regression of this form estimates the effect of changes within districts over time in HYV crop adoption on the Congress party’s performance in elections, while also partialing out any time-based shocks and trends common to all constituencies. Because the explanatory variable, HYV crop adoption, is measured at the district level while election outcomes are observed at the assembly or parliamentary constituency level, all analyses report robust standard errors adjusted for clustering by district, which accounts for correlation of errors within districts as well as over-time correlation of errors within districts. A simplified version of the analysis is displayed in Figure 2.2 in the form of a district-level scatter plot of change in Congress party seat share from the pre- to the post-1967 HYV crop introduc-
tion period against mean post-1967 HYV crop adoption. A large, negative relationship is apparent, providing preliminary evidence that districts which experienced the green revolution with greater intensity experienced a larger decline in Congress party election performance.

Table 2.1 reports the main OLS regression estimates of the effect of HYV crop adoption on the probability of electing a Congress legislator and Congress vote share in state-level and parliamentary elections based on constituency-level panel data. The magnitude of the estimates suggest that the green revolution played a pivotal role in the decline of Congress party dominance. The average share of agricultural land under HYV crops across all district-years following the introduction of HYV crops to India was 0.24. At the state level, this implies that, if we multiply this number by the estimated impact of HYV crops, the green revolution was overall responsible for a 6.4 percentage point reduction in Congress party seat share and a 2.3 percentage point reduction in Congress party vote share. These are very large estimates, accounting for nearly half of the Congress party’s observed decline of 16.8 percentage points in seat share and 6.4 percentage points in vote share from the pre- to the post-HYV crop introduction period in the sample under analysis. Similar sized effects are found at the level of parliamentary elections. The estimates suggest that the green revolution on average was responsible for a roughly 8.5 percentage point decline in Congress party seat share and a 1.9 percentage point decrease in Congress party vote share. This suggests that at the level of parliamentary elections the green revolution accounted for roughly half of the half of the Congress party’s overall decline of 15.2 percentage points in seat share and about two-thirds of the Congress party’s decline of 2.5 percentage points in vote share in parliamentary elections.

All specifications include year and district fixed effects, meaning that a large number of time-invariant omitted variables as well as common time trends and shocks are ruled out. All specifications additionally control for year fixed effects interacted with a dummy
Notes: Points represent districts. Horizontal axis measures mean share of agricultural land under HYV crop cultivation between 1967-1987. Vertical axis measures percentage point difference in share of assembly constituencies with a Congress legislator, subtracting the pre-1967 period average from the post-1967 (inclusive) period average. HYV crops were first widely adopted in 1967. Line represents fitted bivariate OLS regression line. Slope of line is -50.3 (standard error: 9.8).

Figure 2.2: Scatter Plot of HYV Crop Adoption vs. Change in Congress Seat Share
Table 2.1: OLS Estimates: Effects of HYV Crops on Congress Performance in Elections

<table>
<thead>
<tr>
<th></th>
<th>Dependent variable:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State Elections</td>
</tr>
<tr>
<td>Seat</td>
<td>Vote</td>
</tr>
<tr>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>−26.848***</td>
<td>−9.691***</td>
</tr>
<tr>
<td>(5.854)</td>
<td>(2.439)</td>
</tr>
</tbody>
</table>

Controls: Y Y Y Y
Year FE: Y Y Y Y
District FE: Y Y Y Y
Observations: 21,907 21,907 2,953 2,953
Adjusted R²: 0.19 0.33 0.33 0.36
Clusters: 270 270 260 260

Notes: Outcomes: Seat is indicator for whether Congress won seat and Vote indicates Congress vote share, both multiplied by 100 so that coefficients have a percentage point interpretation. Explanatory variables: HYV crop adoption is district-level share of agricultural land with HYV crops (0-1). Control variables include an indicator for location in Hindi-speaking state and indicator for historical exposure to direct British colonial rule, both multiplied by year fixed effects. Analysis estimated by OLS. Standard errors adjusted for clustering within districts. *p<0.1; **p<0.05; ***p<0.01
variable indicating location in a Hindi-speaking state and with a dummy variable indicating location in a region historically under direct British colonial rule. The analysis controls for time trends specific to the Hindi-speaking states because much of the mobilization in opposition to the Congress party during the 1970s, such as the mass protests organized by Jayprakash Narayan, originated in India's 'Hindi belt' (Jaffrelot 2003). It also controls for time trends specific to directly ruled areas because the Congress party was historically banned in areas of indirect colonial rule, raising the possibility of different trajectories of Congress performance in places exposed historically to direct versus indirect colonial rule.

**Determinants of HYV Crop Adoption**

In spite of controlling for district and year fixed effects and a range of potential confounding variables, the estimates reported thus far may be biased if the diffusion of HYV crops was related to the dynamics of the Congress party's election performance in ways not controlled for. In particular, the Congress party may have strategically manipulated the targeting of HYV crops; the direction of the bias implied by such targeting is unpredictable, depending upon whether the Congress party targeted supporters, opposition areas, or swing voters (Dixit and Londregan 1996). It is therefore important to understand the determinants of HYV crop adoption.

Qualitative information suggests that HYV crop adoption was not driven by political targeting. The IADP and other programs used to propagate HYV crops in the early stages were formulated in the context of food shortages and a pressing need to increase food production regardless of the long-run political consequences. Additionally, the techni-

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5 The Hindi-speaking states are defined as Bihar, Haryana, Madhya Pradesh, Rajasthan and Uttar Pradesh.

6 District-level data on direct colonial rule come from Iyer (2010).
cal management of these programs was often delegated to domestic and international
technocratic agencies (Evenson and Rosegrant 1998). Finally, the government's new
agricultural strategy was formulated in the early- to mid-1960s, well before the emer-
gence of agrarian political mobilization and threats to Congress party dominance. For
all of these reasons, there appears to have been little political targeting in the distribu-
tion of HYV crop seeds.

This view finds support in the data. Table 2.2 reports estimates from OLS regressions
of two district-level indicators of the intensity of the green revolution on pre-treatment
predictors. The measures of the intensity of the green revolution are mean HYV crop
adoption, 1967-1987, and whether or not a district was selected for the IADP program.
The regression estimates show that pre-treatment Congress seat share is completely un-
correlated with the diffusion of HYV crops or selection for the IADP program. However,
pre-treatment irrigation levels strongly predict HYV crop adoption and selection for the
IADP program, consistent with qualitative information about the dependence of HYV
crop cultivation on access to controlled irrigation. The presence of a thick aquifer, a
source of variation in capacity for tube-well irrigation, upon which much HYV crop cul-
tivation was based, strongly predicts the diffusion of HYV crops but not selection for the
IADP program; this is also consistent with qualitative information, as the IADP program
was targeted at districts with pre-existing irrigation infrastructure, whereas tube-well ir-
rigation expanded rapidly following the introduction of HYV crops (Rud 2012). These
results give additional credibility to the OLS estimates reported so far by mitigating con-
cerns about selection bias arising from electoral targeting of the diffusion of HYV crops.
Table 2.2: Pre-treatment Determinants of HYV Crop Adoption

<table>
<thead>
<tr>
<th></th>
<th>HYV</th>
<th>IADP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td><strong>State Assembly INC Seat</strong></td>
<td>0.001</td>
<td>0.0003</td>
</tr>
<tr>
<td></td>
<td>(0.0004)</td>
<td>(0.001)</td>
</tr>
<tr>
<td><strong>Parliamentary INC Seat</strong></td>
<td>0.0001</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td>(0.0002)</td>
<td>(0.0004)</td>
</tr>
<tr>
<td><strong>1966 Irrigation</strong></td>
<td></td>
<td>0.516***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.032)</td>
</tr>
<tr>
<td><strong>Aquifer</strong></td>
<td></td>
<td>0.195***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.030)</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>0.203***</td>
<td>0.237***</td>
</tr>
<tr>
<td></td>
<td>(0.030)</td>
<td>(0.018)</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>270</td>
<td>247</td>
</tr>
<tr>
<td><strong>Adjusted R²</strong></td>
<td>0.002</td>
<td>−0.002</td>
</tr>
</tbody>
</table>

*Notes: Unit of observation is district. Outcomes: HYV Intensity is mean district-level HYV crop adoption, 1967-1987 (0-1). IADP is an indicator for whether a district was selected for the Intensive Agricultural Districts Program. Explanatory variables: INC Seat is percentage point Congress seat share before 1967, for state assembly and parliamentary elections, respectively. 1966 irrigation is pre-treatment share of agricultural land with access to irrigation in 1966 (0-1). Aquifer is an indicator for the presence of a naturally occurring thick aquifer. Analysis estimated by OLS. * p<0.1; ** p<0.05; *** p<0.01
2.4.2 IV Results

An alternative strategy for dealing with possible endogeneity is to utilize an instrumental variables empirical strategy. To construct an instrument for HYV crop adoption, this chapter utilizes the fact that HYV crops, which are water-intensive in their cultivation, delivered higher yields only in areas with access to controlled irrigation. It is widely recognized that for this reason HYV crops tended to diffuse to areas with pre-existing irrigation infrastructure (Rawlins 1977; Evenson and Gollin 2003; Khush 2001; Cleaver 1972), as has also been shown empirically. Based on this information, this chapter constructs a difference-in-differences style instrument for HYV crop adoption. The first stage regression takes the form,

\[ HYV_{dt} = \gamma_d + \tau_t + \beta \text{Irrigation}_{1966}^d \times Post_{1967}^t + X_{dit} \kappa + \nu_{dit}, \]  

(2.2)

where \text{Irrigation}_{1966}^d \times Post_{1967}^t is the excluded instrument, the interaction of a cross-sectional measure of suitability for HYV crops based on irrigation coverage in 1966 with a dummy variable which 'switches on' with the introduction of HYV crops to India, from 1967 onward. As an alternative instrument, some specifications replace pre-existing irrigation as the suitability measure with an indicator of the presence of a naturally occurring thick aquifer, a source of exogenous variation in capacity for tube-well irrigation, upon which HYV crop cultivation was widely based. Lower order terms are accounted for in the equation via district and year fixed effects. The second stage regression is the main OLS specification described previously, with HYV crop adoption as the endogenous explanatory variable.

This identification strategy utilizes the combination of time variation arising from the introduction of HYV crops in 1967 together with cross-sectional variation in suitabil-
ity for HYV crop cultivation to estimate the impact of HYV crop adoption on Congress election performance, an identification strategy analogous to other studies of the effects of new technologies utilizing panel data (Nunn and Qian 2011). A simplified version of the analysis is displayed in Figure 2.3 in the form of two district-level plots: one displaying the absence of a relationship between pre-existing irrigation coverage and the dominant Congress party’s election performance before the introduction of HYV crops in 1967, and the second displaying the large, negative relationship that emerged following the green revolution.

Table 2.3 reports instrumental variable regression estimates of the effect of HYV crop adoption on the Congress party’s election performance. In instrumental variable regressions, utilizing either aquifers or pre-existing irrigation as the cross-sectional measure of suitability together with time variation arising from the introduction of HYV crops in 1967, HYV crop adoption is estimated to have caused a large decline in the dominant Congress party’s election performance. A discernible pattern is that the IV estimates are roughly double the magnitude of the OLS estimates. The larger IV estimates may be due in part to endogeneity and measurement error in attenuating the OLS estimates. Part of the explanation also lies in the fact that IV regressions estimate a local effect of HYV crop adoption in a sub-population, better irrigated areas, in which HYV crops were particularly productive. Therefore, while the IV estimates provide additional evidence for a large, causal effect of HYV crop adoption on the decline of single-party dominance in India, the estimates may be larger than the average effect of HYV crop adoption across all districts.
**Figure 2.3: Irrigation and Congress Performance Before and After Green Revolution**

*Notes: Points represent districts. Horizontal axis measures irrigated share of agricultural land in 1966. Vertical axis measures average percentage point share of assembly constituencies with a Congress legislator, before or after the green revolution. Line represents fitted bivariate OLS regression line.*
Table 2.3: IV Estimates: Effects of HYV Crops on Congress Performance in Elections

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>State Elections</th>
<th>Parliamentary Elections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Seat</td>
<td>Vote</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td><strong>Panel A: 2SLS Irrigation Instrument</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HYV</td>
<td>$-77.768^{***}$</td>
<td>$-21.992^{***}$</td>
</tr>
<tr>
<td></td>
<td>(19.873)</td>
<td>(6.440)</td>
</tr>
<tr>
<td><strong>First-stage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1966 Irrigation×Post</td>
<td>$0.403^{***}$</td>
<td>$0.403^{***}$</td>
</tr>
<tr>
<td></td>
<td>(0.051)</td>
<td>(0.051)</td>
</tr>
<tr>
<td>F-statistic</td>
<td>61.7</td>
<td>61.7</td>
</tr>
<tr>
<td><strong>Panel B: 2SLS Aquifer Instrument</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HYV</td>
<td>$-89.187^{**}$</td>
<td>$-8.580$</td>
</tr>
<tr>
<td></td>
<td>(47.444)</td>
<td>(12.141)</td>
</tr>
<tr>
<td><strong>First-stage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquifer×Post</td>
<td>$0.113^{***}$</td>
<td>$0.113^{***}$</td>
</tr>
<tr>
<td></td>
<td>(0.034)</td>
<td>(0.034)</td>
</tr>
<tr>
<td>F-statistic</td>
<td>11.0</td>
<td>11.0</td>
</tr>
</tbody>
</table>

Notes: Panel A utilizes interaction between pre-existing irrigation and post-1967 time dummy variable as instrument. Panel B utilizes interaction term between indicator of naturally occurring thick aquifer and post-1967 time dummy variable as instrument. All analyses include district and year fixed effects as well as dummies for Hindi-speaking states and historical exposure to direct colonial rule, interacted with year fixed effects. Standard errors adjusted for clustering within districts. *p<0.1; **p<0.05; ***p<0.01.
Robustness

The validity of the IV estimates rests on several important assumptions (Angrist, Imbens and Rubin 1996), perhaps most importantly the exclusion restriction. In this case, the exclusion restriction requires that the interaction of a time indicator representing the introduction of HYV crops in 1967 and a group indicator of pre-existing suitability for HYV crops based on irrigation coverage in 1966 is, after conditioning on covariates, correlated with the Congress party’s election performance only via its impact on HYV crop adoption.

The difference-in-differences setup of the IV analysis, including both district and year fixed effects, rules out any time-invariant variables or common trend threats to the exclusion restriction. Concerns about the exclusion restriction therefore take the form of the possibility that counter-factually absent the introduction of HYV crops in 1967 areas with greater pre-existing irrigation coverage would have experienced a larger decline in Congress election performance than areas with less pre-existing irrigation coverage. There is no obvious evidence to support such a concern. There were no major innovations during this period that disproportionately impacted better irrigated areas besides HYV crops. Irrigation infrastructure has historically been accumulated slowly in India, with much of it dating to the colonial era (Stone 2002). This makes strategic allocation of irrigation infrastructure, in ways that might be related to the dynamics of the Congress party’s election performance around the time HYV crops were introduced to India, unlikely.

Though the exclusion restriction cannot be tested directly, one way to assess its plausibility is to identify the timing of the emergence of a negative reduced-form relationship between pre-existing irrigation coverage and the Congress party’s election perfor-
mance. To do this, it is possible to estimate a regression of the form,

\[ Y_{dit} = \tau_t + \sum_{k=1}^{6} \theta_k \text{Irrigation}_{d}^{1966} \times I_t^k + u_{dit}, \]  

where \( Y_{dit} \) is a measure of Congress party election performance, \( I_t^k \) is a dummy variable representing a half decade \( k \) (in the six half decades between 1957 and 1987), and \( \text{Irrigation}_{d}^{1966} \) is the cross-sectional suitability measure of pre-existing irrigation coverage in 1966. The analysis also controls for year fixed effects, \( \tau_t \). Figure 2.4 displays the coefficients \( \theta_k \), representing the correlation between 1966 irrigation coverage and Congress election performance in state assembly elections in the six half decades between 1957 and 1987.\(^7\)

The estimates suggest that pre-existing trends unrelated to HYV crop adoption do not drive the results. The point estimates of the correlation between 1966 irrigation coverage and Congress election performance are statistically indistinguishable from zero in the two half-decades before the green revolution. By contrast, a large, negative and statistically significant reduced form relationship between 1966 irrigation coverage and Congress election performance emerges precisely following the introduction of HYV crops to India in 1967.

### 2.5 Competing Channels

How did India’s green revolution contribute to dominant party decline? This dissertation highlights the role of rural-urban distributive conflict in generating support for

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\(^7\)A similar test for pre-trends is not available in the case of parliamentary elections, since election data before 1962 is missing important information. However, parliamentary and state assembly elections are highly correlated. Additionally, the analysis of pre-treatment determinants of HYV crop adoption show that Congress seat share in the 1962 parliamentary elections at the district level does not predict HYV crop adoption.
Notes: Unit of analysis assembly constituency-year for election years between 1957-1987. Points represent estimates of coefficient on time period dummy variables interacted with the cross sectional measure of suitability for HYV crop adoption based on pre-existing irrigation coverage in 1966. Regression also controls for year fixed effects. Analysis estimated by OLS. Standard errors adjusted for clustering within districts. Dashed bands represent 95% confidence interval.

Figure 2.4: Irrigation Coverage and Congress Performance Over Time
agrarian opposition parties. However, the estimated effects described above are potentially driven by a different channel related to rising incomes on their own. Modernization-type theories suggest that rising incomes make voters less dependent upon government benefits and so more willing to support opposition parties on the basis of ideology. Alternatively, more sociological theories of modernization suggest that rising incomes contribute to the social and political mobilization of voters previously bound by traditional social hierarchies. Below, I provide evidence for the distributive conflict channel over the income channel through three tests.

2.5.1 Rural-Urban Distributive Conflict

To distinguish between the competing theories, this chapter first dis-aggregates the political effects of HYV crop adoption in order to investigate which type of opposition parties, agrarian versus non-agrarian, benefited in elections from HYV crop adoption. A theory based on distributive conflict predicts that specifically opposition parties with support from agricultural producers ought to have benefited in elections from HYV crop adoption. By contrast, if rising incomes made voters more autonomous, there is little theoretical rationale for why one type of opposition party, among the many forms of opposition to Congress available, should have benefited in elections from the green revolution.

Parties are coded on the basis of historical research as agrarian if they received significant support from and/or advocated programs oriented around the interests of agricultural producers. The BKD family of parties, including the BLD and Janata parties, are coded as agrarian opposition parties because of their well-documented support from farmers and advocacy of agricultural subsidy policies. Regional parties, including the DMK and AIADMK in Tamil Nadu, the Akali Dal in Punjab, and the Telugu Desam party
in Andhra Pradesh, which are widely recognized for drawing support from farming caste
groups and advocating for agricultural subsidies, are also coded as agrarian. By con-
trast, the Hindu nationalist Bharatiya Jana Sangh, and its descendent, the BJP, are coded
as non-agrarian, as are communist opposition parties, such as the CPI and CPI(M). Table
2.4 reports the OLS and IV regression estimates of the effects of HYV crops on different
types of opposition parties in both state assembly and parliamentary elections.

Strikingly, both the OLS and IV results show that opposition parties oriented around
increased subsidies for the agricultural sector and supported by agricultural producers,
such as the BKD, Lok Dal and Janata parties, benefited in terms of vote share in state
and parliamentary elections. By contrast, other types of opposition parties did not. The
estimates reported in columns (2) and (6) are similar in magnitude and opposite in sign
relative to estimates of the impact of HYV crops on the Congress party’s election perfor-
mance, suggesting that nearly all of the green revolution’s negative impact on Congress
party vote share was due to a rise in the vote share of agrarian opposition parties.

In terms of seat share, HYV crops only benefited agrarian opposition parties in state
assembly elections and not other types of opposition parties, while in parliamentary
elections other types of opposition parties did benefit slightly, but to a lesser extent than
did agrarian opposition parties. The spillover benefits in terms of seat share to non-
agrarian opposition parties, despite no increase in their vote share, is attributable to a
first-past-the-post electoral system which permitted vote share gains by agrarian oppo-
sition opposition parties at the Congress party’s expense to benefit other types of oppo-
sition parties as well.

An ambiguous case in the DMK. Relative to the AIADMK, the DMK has historically drawn more sup-
port in elections from urban areas in Tamil Nadu. However, the populist platforms of both parties have in-
cluded considerable subsidies, notably free electricity, for farmers. I code the DMK as well as the AIADMK
as agrarian, consistent with Wyatt’s (2009, p.53) observation that “both parties have shown willingness to
accomodate rural interests. In contrast the Dravidian parties have been criticized for neglecting urban
development.”

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Table 2.4: Effects of HYV Crop Adoption by Opposition Party Type

<table>
<thead>
<tr>
<th></th>
<th>Dependent variable:</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>State Assembly Elections</td>
<td></td>
<td></td>
<td>Parliamentary Elections</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agrarian</td>
<td>Non-Agrarian</td>
<td>Agrarian</td>
<td>Non-Agrarian</td>
<td>Agrarian</td>
<td>Non-Agrarian</td>
<td>Agrarian</td>
</tr>
<tr>
<td></td>
<td>Seat</td>
<td>Vote</td>
<td>Seat</td>
<td>Vote</td>
<td>Seat</td>
<td>Vote</td>
<td>Seat</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7)</td>
</tr>
</tbody>
</table>

**Panel A: OLS**

<table>
<thead>
<tr>
<th>HYV</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.203***</td>
<td>19.355***</td>
<td>0.729</td>
<td>−5.509*</td>
<td>24.904***</td>
<td>11.699**</td>
<td>16.173*</td>
<td>2.842</td>
<td></td>
</tr>
</tbody>
</table>

**Panel B: 2SLS**

<table>
<thead>
<tr>
<th>HYV</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>73.479***</td>
<td>53.486***</td>
<td>2.844</td>
<td>−24.963***</td>
<td>50.213***</td>
<td>31.596***</td>
<td>32.948</td>
<td>−12.803</td>
<td></td>
</tr>
</tbody>
</table>

| Year FE | Y | Y | Y | Y | Y | Y | Y | Y |
| District FE | Y | Y | Y | Y | Y | Y | Y | Y |
| Observations | 21,907 | 21,907 | 21,907 | 21,907 | 2,953 | 2,953 | 2,953 | 2,953 |
| Clusters | 279 | 270 | 270 | 270 | 260 | 260 | 260 | 260 |

Notes: Panel A is OLS specification. Panel B instruments for HYV crop adoption with interaction term between a time dummy variable indicating the introduction of HYV crops in 1967 and measure of pre-existing irrigation coverage in 1966. See text for coding of the top 20 opposition parties as agrarian or non-agrarian. Seat is binary indicator of winning the seat and Vote is vote share, both multiplied by 100 so that coefficients have a percentage point interpretation. HYV crop adoption is district-level share of agricultural land planted with HYV crops (0-1). Standard errors adjusted for clustering within districts. *p<0.1; **p<0.05; ***p<0.01.
2.5.2 **Ruling out the Modernization Channel**

To rule out rising incomes on their own as a source of dominant party decline, I exploit rainfall shocks as a source of exogenous variation in rural incomes (Miguel, Satyanath and Sergenti 2004). Rainfall is measured in terms of the natural log of annual rainfall (ln mm). Because all analyses utilize district fixed effects, they implicitly identify the effects of within-district rainfall variation over time, i.e. shocks. Data on annual rainfall at the 1961 district boundary level comes from Jayachandran (2006), who aggregates 0.5° × 0.5° gridded annual rainfall maps from the Center for Climatic Research at the University of Delaware to 1961 district boundaries. Examining the effects of within-district variation in rainfall, strikingly we find that income improvements on their own benefited the dominant party — exactly the opposite of what is predicted by modernization-type theories. Table 2.5 reports these results.

Positive rainfall shocks *improved* the Congress party’s election performance, consistent with argument highlighting the role of rising incomes in enhancing the performance-based legitimacy of the incumbent regime (Cole, Healy and Werker 2012; Huntington 1991; Reuter and Gandhi 2011), and in sharp contrast to the argument that rising incomes per se contribute to democratization. A one within-district standard deviation (0.29) improvement in rainfall *increased* the percentage probability of electing a Congress party state legislator by 3.3 percentage points and Congress MP by 5.5 percentage points. By contrast, positive rainfall shocks *decreased* the probability of electing an agrarian opposition party legislator and had no statistically significant impact on electing a non-agrarian opposition party legislator, in both state assembly and parliamentary elections.

Table 2.6 examines the economic impacts of rainfall shocks. These estimates rationalize the political effects of rainfall shocks. Rainfall improvements increased rural incomes but had little impact on the underlying structure of the agricultural sector. Pos-
Table 2.5: Electoral Effects of Rainfall Shocks

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>State Assembly Win</th>
<th>Parishimentary Win</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Congress</td>
<td>Agrarian Opposition</td>
</tr>
<tr>
<td>Rainfall (ln mm)</td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td>11.516***</td>
<td>−15.351***</td>
</tr>
<tr>
<td></td>
<td>(2.506)</td>
<td>(2.208)</td>
</tr>
<tr>
<td>Year FE</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>District FE</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Observations</td>
<td>21,907</td>
<td>21,907</td>
</tr>
<tr>
<td>Clusters</td>
<td>270</td>
<td>270</td>
</tr>
</tbody>
</table>

Notes: Unit of observation constituency-year for state and parliamentary elections, respectively. Outcomes: See text for coding of opposition parties as agrarian or non-agrarian. Explanatory variable: Rainfall is measured in ln(annual mm). The inclusion of district fixed effects means that the effects of rainfall are identified from within-district deviations from long-run mean i.e. rainfall shocks. Analysis estimated by OLS. Standard errors adjusted for clustering within districts. *p<0.1; **p<0.05; ***p<0.01.
itive rainfall shocks increased agricultural productivity and wages. By contrast, posi-
tive rainfall shocks did not have a statistically or economically significant impact on the
intensity of input usage as measured by fertilizer and tractor usage or on crop prices.
These estimates therefore confirm that increased incomes on their own, unconnected to
deeper economic incentives for political mobilization by agricultural producers, did not
contribute to the decline of the Congress party but instead enhanced its performance
legitimacy.

Arguably, rising incomes generated by transitory rainfall shocks do not simulate the
sociological changes generated by the lasting rise in rural incomes brought about by the
green revolution. As discussed, some scholarship suggests that rising incomes created
a class of upwardly mobile lower-caste farmers, disrupting patron-client ties of depen-
dence upon the local upper caste elites who served as brokers for the dominant Congress
party (Jaffrelot 2003; Rudolph and Rudolph 1987). If HYV crops contributed to democ-
ratization by eroding traditional social hierarchies and enabling the entry of new social
groups into politics, as modernization theory suggests (Deutsch 1961), this ought to be
observable in the sociological profile of elected politicians. To test this hypothesis, I esti-
mate the impact of HYV crop adoption on the caste, education, and reported occupation
of elected MPs.

Data on the biographies of Indian MPs comes from two sources. One, assembled by
Jaffrelot (2003), collects data on the caste of elected MPs in India’s Hindi speaking states
based on surname analysis, legislator biographies and key informant interviews. This
chapter assembles a second dataset by scraping the official self-reported ‘Who’s Who’
biographies of Indian MPs across all states from the Indian parliament’s website, and
utilizing natural language processing to code the educational level and occupation of
MPs. The results of regression analyses utilizing these data as outcome variables are
reported in Table 2.7.
Table 2.6: Economic Effects of Rainfall Shocks

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Yield</th>
<th>Wage</th>
<th>Crop Price</th>
<th>Fertilizer</th>
<th>Tractors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Rainfall</td>
<td>96.528***</td>
<td>0.221***</td>
<td>-1.896</td>
<td>0.771</td>
<td>0.227</td>
</tr>
<tr>
<td></td>
<td>(24.678)</td>
<td>(0.062)</td>
<td>(1.258)</td>
<td>(0.795)</td>
<td>(0.371)</td>
</tr>
<tr>
<td>Year FE</td>
<td>Y</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>District FE</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Observations</td>
<td>8,332</td>
<td>8,337</td>
<td>8,332</td>
<td>8,337</td>
<td>8,337</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.81</td>
<td>0.77</td>
<td>0.58</td>
<td>0.66</td>
<td>0.50</td>
</tr>
<tr>
<td>Clusters</td>
<td>269</td>
<td>269</td>
<td>269</td>
<td>269</td>
<td>269</td>
</tr>
</tbody>
</table>

Notes: Unit of observation district-year for years 1957-1987. Outcomes: Yield is measured in terms of rs./ha for the top 6 major crops. Wage is the daily wage of a male agricultural laborer in rs./day. Crop Price Index is a revenue weighted average of the price in rs./quintal of the top 6 crops. Fertilizer usage is measured in terms of kg/ha. Tractor usage is measured in terms of tractors/1000 ha. All monetary amounts are deflated by state-specific consumer price indices to obtain real prices, base year 1973. Explanatory variable: Rainfall is measured in ln(annual mm). The inclusion of district fixed effects means that the effects of rainfall are identified from within-district deviations from long-run mean i.e. rainfall shocks. Analysis estimated by OLS. Standard errors adjusted for clustering within districts. *p<0.1; **p<0.05; ***p<0.01.
Table 2.7: Impact of HYV Crops on MP Caste, Education, and Occupation

<table>
<thead>
<tr>
<th></th>
<th>Dependents variable:</th>
<th>Socioeconomic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower caste</td>
<td>OBC caste</td>
<td>Upper caste</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
</tbody>
</table>

**Panel A: OLS**

| HYV      | 0.124                | –0.257*       | 0.133       | –0.116     | –0.062        | 0.135        |
|          | (0.135)              | (0.134)       | (0.150)     | (0.115)    | (0.118)       | (0.119)      |

**Panel B: 2SLS**

| HYV      | –0.400               | 0.548         | –0.148      | –0.224     | –0.067        | –0.073       |
|          | (0.801)              | (0.569)       | (0.955)     | (0.270)    | (0.311)       | (0.349)      |

Year FE  Y  Y  Y  Y  Y  Y
District FE  Y  Y  Y  Y  Y  Y
Observations 1,330 1,330 1,330 2,384 2,2384 2,2384
Clusters 133 133 133 245 245 245

Notes: Unit of observation parliamentary constituency-year for years 1962-1985. Outcomes: Indicator for upper, intermediate or other backward class caste, and for lower caste and/or religious/ethnic minority. Caste data from Jaffrelot (2003) dataset for Hindi-speaking states only. University indicates whether MP self-reports a university degree. Agriculturist indicates whether MP self-reports as an "agriculturist". Professional indicates whether MP self-reports as a doctor, lawyer, journalist, writer, or teacher. Socioeconomic variables coded through natural language processing of digitized 'Who's Who' MP biographies. Explanatory variable: HYV crop adoption is district-level share of agricultural land planted with HYV crops (0-1). Analysis estimated by OLS. Standard errors adjusted for clustering within districts. *p<0.1; **p<0.05; ***p<0.01.
Modernization theory again finds little support in the data, with HYV crop adoption causing no increase in the probability of electing a lower caste, less educated, or agriculturist MP. The only marginally statistically significant estimate (at the 10% level), the OLS estimate in column (2), implies that HYV crop adoption caused a decrease in the likelihood of electing an other backwards class (OBC)/intermediate caste MP; however, the sign on the coefficient switches in the IV specification, suggesting that this result may be spurious. Overall, the evidence suggests that the erosion of traditional social hierarchies in political representation was not a salient channel for the green revolution’s democratizing effects.

It is informative that HYV crop adoption did not cause an increase in the likelihood that an MP self-describes as an “agriculturist”, despite causing large improvements in the election performance of opposition parties representing the interests of agricultural producers. This may be due in part to the fact that many MPs simply adopted the label of “agriculturist” as a way of signifying their grassroots credentials, with the term amounting essentially to “cheap talk”. More importantly, the results provide evidence that the green revolution did not cause a significant shift in the sociological composition of elected politicians at the parliamentary level. The evidence instead suggest that the green revolution created a structural opportunity for the rise of opposition parties running on platforms geared toward agricultural producers, an interest group neglected by the dominant Congress party and with growing economic incentives to seek political influence through opposition parties seeking their votes.

2.6 Conclusion

This chapter has provided evidence for the theory which highlights the role of distributive conflict between political insiders and outsiders in contributing to opposition
mobilization and dominant party decline. Exploiting the historical impact of the green revolution on single-party dominance in India as a natural experiment, it has provided evidence that economic growth in the politically excluded agricultural sector intensified rural-urban distributive conflict, contributing to the rise of agrarian opposition parties and accounting for half of the urban-biased Congress party’s long-run decline.

Contrary to modernization theory (Lipset 1959), rising incomes on their own reinforce and legitimize the incumbent regime and are unlikely to lead to democratization. However, economic growth in a politically excluded sector which increases the opportunity costs of supporting patronage-based dominant parties can contribute to democratization. The following chapters examine the long-run distributive consequences of dominant party decline in India.
3 | Dominance, Competition, and Distribution: Evidence from State Budgets

3.1 Introduction

The previous chapter has provided empirical evidence for the first part of the theoretical argument: that dominant parties survive on the basis of patronage ties to voters, declining not because of societal modernization or legitimacy crises but due to the rebellion of rising economic interests excluded from dominant party — in the case of India, agricultural producers in the aftermath of the green revolution. The question that arises is how the decline of single-party dominance subsequently impacts distributive politics and democratic accountability.

There is surprisingly little empirical evidence on the matter, in large part because studies tend to focus on the effects of the adoption of formal democratic institutions as opposed to the effects of alternation of power versus political monopoly, holding formal democratic institutions constant (Stasavage 2005; Ross 2006). Existing theoretical arguments in the democratization literature suggest, however, that democratization driven by rising commercial interests is unlikely to lead to greater accountability to poor voters, since the primary motive for the emergence of opposition to the authoritarian incumbent is not mass redistribution but private sectoral interests (Ansell and Samuels 2014). Does dominant party decline simply imply the replacement of one narrow elite with a
slightly broader set of elite policy interests in the long run — in the case of India a shift from policies favoring urban capitalists to policies favoring rural capitalists?

Theoretically, this dissertation has argued that this is certainly part of the story. One important consequence of the rise of agrarian opposition parties was a shift in public spending toward the agricultural sector away from the urban-biased priorities of the previously dominant Congress party. I have also argued, however, that inter-elite political competition leads to “unintended” consequences, placing structural pressure on rival elite-led parties to expand the scope of political competition to poor voters. In the theoretical argument, the previously dominant party possesses strong economic incentives to engage in heresthetic and introduce policies that divided the opposition parties’ sectoral base of support by catering to the large majority of poor voters. As a result, an additional long run consequence of the transition to multi-party competition, even if initiated by elite-led opposition parties, has been an expansion of welfare policies and social spending.

The key prediction of the theory in the Indian context is that in the long run, the transition from single-party dominance to multi-party competition led to a large increase in both agricultural sector spending and social spending. To investigate this proposition, this chapter examines how the transition from single-party dominance to multi-party competition across states affected state-level budgets and distributive politics. I first provide illustrative case studies of how single-party dominance and decline shaped distributive politics in three states, Andhra Pradesh, Kerala, and West Bengal. Andhra Pradesh illustrates the trajectory of the transition from Congress party dominance to multi-party competition with a regional opposition party giving rise to a “populist” politics benefiting farmers and the rural poor alike. The comparison of the performance of the Communist Party of India-Marxist (CPM) in Kerala and in West Bengal illustrates how in the former competitive pressure generated pressure for pro-poor poli-
cies, whereas in the latter due to the sub-national dominance of the CPM commitment to pro-poor policies has been much weaker — highlighting the structural importance of threat of electoral turnover for accountability over political ideology.

To test the argument in a larger sample of states, this chapter takes a panel fixed effects empirical strategy which exploits variation across states in the timing of dominant party decline to estimate the effects of the the transition from single-party dominance to multi-party competition on agricultural sector spending, social sector spending, and patronage spending as proxied by administrative expenditures. Utilizing detailed state-level budgetary data across India’s major states from 1972-2002, as well as a novel statistical method based on structural breaks for identifying the precise timing of dominant party decline, I provide evidence that the decline of single-party dominance corresponded to large increases in agricultural sector and social spending but no change in administrative spending, implying a diminished relative salience of patronage politics. Not only are these results robust to controlling for economic growth and demographic change, but strikingly the results are stable when I control non-parametrically for the party in power as well as political fragmentation – highlighting the importance of the structural pressures of electoral competition over the ideology of the ruling party or the effective number of parties.

Overall, the findings support the key comparative statics of the theory. Across states, the transition from single-party dominance to multi-party competition led to large substantive increases in spending targeted toward India’s predominantly poor and rural voters, re-aligning distributive outcomes with voter numbers and democratizing distributive politics in India.

The remainder of this chapter is structured as follows. First, it reviews the theoretical argument about how the decline of single-party dominance shifted distributive politics in a majoritarian direction across states in India. Second, it applies a structural break
methodology to identify the timing of dominant party decline across states. Third, it illustrates the theoretical argument through three state case studies before estimating the long-run effects of dominant party decline on state budgetary outcomes.

3.2 Theory

This chapter examines the determinants of changes in spending across India's major states over time. Both agricultural sector spending and social spending — including welfare policies as well as spending on health, education, and other state social services — are tasks constitutionally delegated to state-level governments, though the federal government in practice plays an important role as well. The sheer scale of Indian states makes an analysis of variation in state-level spending analogous to previous studies of the determinants of spending across countries in Europe or Latin America (Kaufman and Segura-Ubiergo 2001; Lindert 1994), but with the added advantage of a sub-national comparative analysis which holds potentially confounding variation in formal democratic institutions constant across sub-national units (Snyder 2001).

Across states, the amount of public spending on the agricultural sector has expanded considerably over time, transforming India from a heavily urban-biased political system into one which is arguably rural-biased today, characterized by extensive subsidies and investment for agriculture. Subsidies alone, particularly for electricity and fertilizers, at the state and national level together take up about 20 percent of the Indian government's total budget (Gaiha and Kulkarni 2005). As Varshney (1998) has argued, contemporary India challenges the assumption of urban bias in developing countries. While I concur with this point, I also contend that India's rural bias is not simply a static function of the country's formal democratic institutions but has in fact emerged over time as a consequence of the rise of agrarian opposition parties and the decline of single-party
dominance over time, leading to a democratization of distributive politics.

Both over time and across states, state governments have varied tremendously in their commitment to social spending targeted at the poor, whether in the form of social services such as health and education or welfare policies. Existing literature has posited a number of different explanations for this variation over time. Singh (2015), for example, documents the tremendous rise in commitment to social development and spending in some states, such as Kerala, over time relative to laggards, such as Uttar Pradesh. She highlights the importance of the extent of subnational social solidarity in driving this variation. Others highlight the importance of social democratic and communist parties in generating accountability to poor voters (Kohli 1987; Heller 2000). Others point to the growing representation of lower-caste groups in legislatures as a source of growing attentiveness to the needs of marginalized social groups (Thachil and Teitelbaum 2015).

None of these arguments is in principal at odds with that advanced in this dissertation, which focuses instead on the structural pressure for winning the support of poor voters arising from the transition from single-party dominance to multi-party competition. Indeed, there are several direct synergies. Both Singh (2015) and Thachil and Teitelbaum (2015) suggest that deepening political competition played a role in contributing to the rise of subnationalism and lower-caste political representation, respectively. The theory developed in this dissertation can also explain why parliamentary communism in the state of West Bengal has been much less successful at producing long-run social development than in the state of Kerala. In West Bengal, beginning in the 1980s the Communist Party of India–Marxist (CPM) became sub-nationally dominant in the state, while in Kerala the CPM has been forced to compete for political power with a credible opposition party, the Congress party.

The argument does, however, dispute some competing theories about the long-run effects of political competition on democratic accountability in India. Existing work
describes India as a “patronage democracy” (Chandra 2007), suggesting that contemporary electoral competition revolves around patronage instead of policy competition. This is consistent with other work which views India’s long-run transition from single-party dominance to multi-party competition skeptically, suggesting that it may have contributed to a “crisis of governability” (Kohli 1990), or excessive political fragmentation leading to under-provision of public goods (Chhibber and Nooruddin 2004).

A crucial theoretical point of departure from this literature is that the theory advanced in this dissertation distinguishes specifically between two distinct equilibria, single-party dominance and multi-party competition, between which states in India have transited over long periods of historical time. The theory therefore suggests that even if patronage continues plays some role in contemporary Indian politics, over time the transition from single-party dominance to multi-party competition has increased programmatic spending on the agricultural sector and social services and diminished the relative salience of patronage as a mechanism of electoral control. This is consistent with research suggesting the emergence of a deep incumbency disadvantage in state and national elections in contemporary India (Uppal 2009), the precise opposite of the hyper-incumbency advantage characterizing single-party dominance, which was possible when patronage was more effective in the past.

The theory also distinguishes between the decline of single-party dominance and intensity of political competition as proxied by measures of political fragmentation. Previous studies of the impact of political competition on distributive politics utilize the widely used effective number of parties (ENP) measure, which measures the concentrations of seat shares across political parties. As previous research has shown, ENP is often extremely poorly correlated with single-party dominance, conflating fragmentation with the existence of alternation of power (Bogaards 2004). A second issue with previous research is that it examines cross-sectional correlations between the number
of parties and public goods provision (Chhibber and Nooruddin 2004), which bears little relationship to the historical decline of single-party dominance over time. To ensure that all estimates are identified from over-time dynamics, this chapter includes state fixed effects in all empirical analyses.

### 3.3 Structural Breaks and Transitions

How does one define single-party dominance and the timing of a transition from single-party dominance to multi-party competition? A joint conceptual and methodological contribution this chapter makes is to distinguish the concept of single-party dominance from commonly used quantitative indicators of political competition such as the effective number of parties (ENP). As several authors have noted (Bogaards 2004; Sartori 1976), statistics such as ENP do not effectively capture the idea of single-party dominance, especially not in cases such as India where a single party dominates alongside a highly fragmented opposition (Ziegfeld and Tudor 2015); such cases may well appear to correspond to a large effective number of parties, though in practice a single party easily wins repeated elections. Research in a number of settings has found that political monopolies are often achieved through strategies which preserve dominance in spite of relatively low vote shares for the incumbent (Gibson 2005).

I propose a minimalist definition of single-party dominance that accommodates the key idea — repeated and foreseeable electoral victory by a single party — without incorporating too many idiosyncratic qualifiers (Collier and Levitsky 1997). In the theoretical model, single-party dominance is an *equilibrium* in the which the dominant party faces no serious threat of electoral turnover, while multi-party competition is a distinct equilibrium in which multiple parties are equally competitive and alternate in political power. The theoretical model suggests that political systems reach a ‘tipping point’ at
which dominant party systems transit to multi-party systems — suggesting that these transitions ought to resemble structural breaks between two political equilibria over time.

Statistical methods for identifying structural breaks in time series data therefore represent a promising method for identifying the transition between single-party dominance and multi-party competition which is theoretically motivated, transparent and replicable. This avoids having to construct idiosyncratic and deterministic ‘counting rules’ for defining party systems (Bogaards 2004; Sartori 1976). Instead, focusing on the absence of alternation of power in elections as the key trait of single-party dominance and alternation of power as the key trait of multi-party competition, it is possible to utilize structural break methods to identify transitions from single-party dominance to multi-party competition within a statistical framework.

In particular, I propose to utilize the multiple structural break method of Bai and Perron (2003) to identify structural breaks in the probability of turnover in political power in state assembly elections in India. For each state, I select a model of the form:

\[ Y_t = \alpha + \sum_i \mu_i I(t \geq T_i) + \epsilon_t, \]  

(3.1)

where for a given state \( Y_t \) is a binary indicator for whether there is alternation of power in the party controlling the chief minister’s office in an election in year \( t \). The term \( \sum_i \mu_i I(t \geq T_i) \) represents the vector of coefficients on the structural breaks, \( T \), that are estimated from the data utilizing the multiple structural break method proposed by Bai and Perron (2003). These dummy variables represent lasting shifts in the probability of an alternation of power in elections. This method requires the user to specify the minimum length of time corresponding to a distinct regime or minimum “segment” size between estimated break points. I define this minimum segment size as four consecu-
tive elections. The proposed method permits temporary “blips” in dominant party rule, differentiating momentary losses of support for a single party, which occur quite frequently without seriously denting single party dominance, from lasting transitions to multi-party competition and alternation power.

I provide a visual representation of this approach used to estimate the timing of dominant party decline across India’s major states between 1951 and 2015 in Figure 3.1. For each state, an observation represents an election year, coded for whether or not an alternation of power occurred in terms of the party winning the election. The dashed vertical lines represent estimated structural breaks, i.e. when each state experienced a lasting, as opposed to transitory, change in the probability of an alternation of power in elections. The horizontal lines represent the estimated probability of an alternation of power in elections over time. In terms of identifying periods of single-party dominance, it is up to the researcher to specify what probability of victory represents “dominance”. For the purposes of the subsequent empirical analysis, I use a probability of alternation of power less than 0.2 as defining a period of single-party dominance, though all results are substantively unchanged for alternative plausible specifications.

Consistent with the theoretical model, we see that states do appear to experience systematic shifts in the probability of alternation in power. We also see that the timing of these shifts varies across states in India, providing leverage to study the impact of single-party dominance on distributive politics. The results of the analysis make qualitative sense. For example, they suggest that the Telugu Desam Party’s victory in 1983 initiated Andhra Pradesh’s transition to consistent alternation of power, that due to competition with the Communist Party of India–Marxist (CPM) the Congress party was never historically dominant in Kerala, and that in West Bengal Congress dominance gave way to competition with the CPM in the mid-1970s before the CPM itself became the new sub-national dominant party in the state beginning in the 1980s. The application of this
Figure 3.1: Variation Across States in the Timing of Dominant Party Decline
method thus helps to resolve debates about “where the historical marker is placed noting the end of the party’s dominance” (Rudolph and Rudolph 2008).

One potential alternative approach to conducting this analysis is to use as an outcome variable a dummy variable for whether or not the Congress party was in power as opposed to an indicator for an alternation of power in election years. All estimates in this chapter are substantively robust to utilizing this alternative strategy, mainly because the story of dominant party decline in India is mostly equivalent to the decline of a specific political party, the Congress party. However, in two state cases such an approach produces two substantively different codings. In the case of West Bengal, single-party dominance by the CPM from the 1980s onward would fail to be captured. In the case of Gujarat, single-party dominance by the BJP from the 1990s onward would fail to be captured. Since the theoretical argument is structural in nature, I have opted for the coding strategy which captures the presence and decline of single-party dominance at a structural level, as opposed to the decline of the Congress party specifically.

3.4 Cases: Andhra Pradesh, Kerala, West Bengal

Before I turn to the large-N quantitative analysis, I provide a brief comparative historical analysis how patterns of dominance and competition in Andhra Pradesh, West Bengal, and Kerala fit into the argument that single-party dominance constrains accountability while alternation of power creates structural pressure for competing elite-led parties to expand the scope of political competition to majoritarian distributive preferences, in particular for greater rural sector and social spending.

These state cases broadly illustrate the argument through three distinct trajectories. Andhra Pradesh followed the model of most states in India, with a prolonged period of Congress party dominance giving way multi-party competition following a “critical
election” in 1983, in which the Telugu Desam Party won elections for the first time. I argue that the transition to multi-party competition corresponded to the growing policy importance of both farmers and the rural poor in the state. The paired comparison of the performance of a social democratic party, the CPM, in Kerala and West Bengal, by contrast, illustrates how even in the case of a party committed ideologically to pro-poor policies competition in the former and sub-national dominance in the latter gave rise to differing trajectories of distributive politics, policies and social development.

3.4.1 Andhra Pradesh

Andhra Pradesh during the era of Congress party dominance was, consistent with theory, a quintessential example of single-party dominance sustained largely on the basis of patronage politics. In Andhra Pradesh, the leadership of the Congress party was dominated by the Reddys (Bernstorff 1973), a locally dominant caste group that had become prosperous and during the colonial period (Washbrook 1973), migrated to the cities, and come to dominate the leadership of the Congress party and bureaucracy in the state shortly after independence. As in other regions of India (Brass 1965), the Congress party represented a “coalition of extremes”, drawing support from urban and rural elites as well as the rural poor through networks of patronage, particularly in the impoverished Telangana region (Forrester 1970).

Consistent with the wider argument, historical evidence suggests that the green revolution played an important role in the Congress party’s demise in Andhra Pradesh by contributing to the economic rise of Kammams, a dominant rural caste group located primarily in coastal Andhra Pradesh, where the impact of the green revolution was the greatest, due to colonial-era irrigation, in particular the Grand Annicut, which made the region suitable for the new crops (Pingle 1978; Srinivasulu 2009). Excluded from the
Reddy-dominated Congress party, the rising Kammas, pursuing greater political representation and policies complementary to the green revolution, threw their support behind the Telugu Desam Party, which formed in 1982 and became the first opposition party to win elections in the state in 1983 (Vaugier-Chatterjee 2009; Reddy 1989). This proved to be a “critical elections” (Key 1955), with political power alternating between the TDP and Congress party regularly ever since in the state.

In every sense, both the Congress party and TDP possessed highly elitist leaderships, with the dominant Kamma and Reddy caste groups constituting, respectively, roughly 5-6% and 10-12% of the total population of the state (Kohli 1988). In spite of the elite and agrarian origins of the rising Kammas and TDP, the transition to multi-party competition led to a surprising turn in policies geared not only at agricultural producers but also the rural poor. Under the charismatic leadership of Telugu cinema icon N.T. Rama Rao, or NTR as he was commonly known, between 1983 and 1989 the TDP advanced the interests of the state’s “farmer-capitalists” (Upadhya 1988), in particular through policies of free or heavily subsidized electricity for farmers (Wyatt 2009; Kale 2014). Under NTR, the TDP also pioneered several new welfare policies, including most famously a scheme of heavily subsidized rice sold to poor households at two rupees per kilogram. When the Congress party came into power, it did so largely by copying the same appeals to the rural poor and pioneered several new welfare programs of its own.

Cumulatively, competitive credit claiming for pro-poor policies has resulted in a transformation of distributive politics in Andhra Pradesh. By the early 1990s, Andhra Pradesh ranked second (after Kerala) in per capita public distribution of food grains under the Public Distribution System, an indication of the extent to which social policy, particularly subsidized food, had been mobilized as an electoral issue (Mooij 1999). Today, politics in Andhra Pradesh remains vigorously contested between the TDP and Congress party. As in many other states, “populism” is the key feature of multi-party pol-
itics in the state, with the state's growing post-liberalization focus on attracting private investment in Hyderabad coinciding with electoral strategies based upon competitive credit claiming between the two parties over who has done more for the two most numerous, and partially overlapping, voter groups the state (Rudolph and Rudolph 2001): agricultural producers and the rural poor.

3.4.2 Kerala

Kerala is famed case of spectacular social development in post-independence India. In addition to today possessing the highest levels of literacy and life expectancy in India, between 1960 and 1990, Kerala experienced a larger reduction in poverty than in any other state of India (Datt and Ravallion 1998), and today has the lowest poverty rate, 7.1%, of all major Indian states (Planning Commission 2013). Explanations abound for this success, ranging from labor mobilization (Heller 1996), the presence of a major social democratic party (Kohli 1987), the long run effects of christian missionaries (Lankina and Getachew 2012), pre-colonial investment in education by a local king (Desai 2005; Dreze and Sen 2002), to the prevalence of a shared sense of sub-national identification and solidarity (Singh 2015).

Curiously neglected in explanations of Kerala's exceptionalism is that in addition to possessing a major social democratic party it also was arguably the only major state in India in which at independence the Congress party did not occupy a position of dominance, due in large part to a pre-independence legacy of communist mobilization in the state (Desai 2005).¹ Competition between the Congress party and the pro-poor CPM

¹According to the structural break analysis, Orissa and Tamil Nadu are additional cases. However, this is a limitation of beginning the structural break analysis at 1951. Taking into account the pre-colonial strength of the Congress party, at independence, Orissa was widely considered a case of Congress party dominance, e.g. (Bailey 1970), and Tamil Nadu perhaps an intermediate case with some successes by the Justice Party in the Madras Presidency during colonial-era elections.
had complementary effects on social welfare provision, generating an ‘out-bidding’ dynamic in which both parties competed with policies to demonstrate their pro-poor credentials. Several social policies that subsequently became national, including a school mid-day meal scheme introduced in 1984, were introduced first in Kerala. Though Kerala performed better than the rest of India on a variety of indicators of social development even prior to independence, this gap jumped following India’s independence and Kerala’s transition to democracy (Singh 2011), which unlike the rest of India was characterized by robust political competition at the outset.

A difficulty in attributing Kerala’s success in social development to the absence of single-party dominance is that, in a sense, this is directly correlated with a long history of a robust communist movement in the state. Was the presence of a social democratic party the key to Kerala’s success or was it the electoral incentives to expand the scope of political competition to poor voters arising from inter-party competition? I have suggested that the combination of robust competition and the presence of one party ideologically committed to social democracy were mutually complementary forces favoring pro-poor distributive politics. To demonstrate this, I turn to the case of West Bengal, where CPM rule in the absence of competition resulted in a different trajectory.

3.4.3 West Bengal

Unlike in Kerala, the CPM did not emerge as a major force until several years after independence. As in the rest of India, West Bengal was characterized by Congress party dominance in the first two decades after 1947, and was in fact a bastion of support and leadership dating to the pre-independence era (Wiener 1968). In keeping with the general pattern, the Congress party maintained political support largely on the basis of patronage ties to selected groups, in particular wealthy landowners or jotedars, within
the rural sector together with a primarily urban, upper caste “bhadralok” or gentry leadership based in Calcutta (Kohli 2012).

The decline of the Congress party in West Bengal was largely a result of urban unrest. The vast post-partition refugee population from East Bengal (now Bangladesh) created a housing and employment crisis in Calcutta, to which the Congress party responded poorly and belatedly — generating support for the CPM in the state (Weiner 1967b). Rising support for the CPM, together with growing left-wing activism in the state, made it difficult for any party to form a stable government between 1967 and 1977. Together with the central government's draconian approach to dealing labor activism and student-led participation in the radical Naxalite movement in West Bengal (Kohli 1990), voter support swung away from the Congress party, resulting in a decisive victory in 1977 for the CPM — which became sub-nationally dominant thereafter, ruling continuously until losing power in 2011.

Under electoral pressure from the erstwhile dominant Congress party in the state, the CPM's most impressive poverty alleviation reforms occurred during its early years in office — most famous is ‘Operation Barga', introduced in 1978, arguably the most successful and systematic effort at land reform in India's history (Kohli 1987). By comparison, attempts at land reform under the Congress party had been largely half-hearted, since it threatened the rural elites which were part of the Congress party's rural patronage networks. Over the course of the 1970s and 1980s, West Bengal experienced major reductions in poverty (Deaton and Dreze 2002; Datt and Ravallion 1998), going from an above-national average to a below-national average poverty state.

With the emergence of CPM single-party dominance in West Bengal, the government's commitment to alleviating poverty gradually gave way to to a more patronage based strategy and corruption within the party. Congress dominance maintained through ties of patronage to jotedars were supplanted by dense networks of local CPM cadres es-
tablished at the village level. While the strength of local party organization played an important role in the effectiveness of early land reform (Kohli 1987), in the absence of external party competition by the 1990s these same local party machines became a tool for the subversion of national rural anti-poverty programs and party-based distribution of patronage to CPM cadres (Echeverri-Gent 1992; Mallick 2007; Roy 2013). West Bengal’s impressive reductions of poverty in the 1970s and 1980s gave way to relative stagnation during the 1990s and 2000s (Banerjee et al. 2002), with the state falling in rank from eighth to ninth in terms of poverty rate across major states between 2005 and 2011 (Planning Commission 2013), and particularly poor comparative performance in terms of access to public services such as schooling (Filmer and Pritchett 2001).

As the paired comparison of Kerala and West Bengal demonstrates, alternation of power is crucial in maintaining structural pressure for elite-led parties to compete for votes with pro-poor policies. In conditions of dominance, elite-led parties fail emphasize social policies, preferring instead to win mass voter support cheaply through targeted patronage while deriving policy rents from the surplus. In the absence of monopoly, however, elite-led parties, whether urban-biased, agrarian or social democratic in orientation, expand the scope of political competition to poor and rural voters in order to build mass support and win elections.

3.5 Empirical Strategy and Main Results

Do the trajectories described above characterize the relationship between dominance, competition, and distribution across Indian states more broadly? To estimate the effects of the transition from single-party dominance to multi-party competition on
distributive politics, this chapter estimates panel fixed effects regressions of the form,

\[ Y_{it} = \alpha_i + \tau_t + \beta \text{Competition}_{it} + \epsilon_{it}, \]

(3.2)

where \( \text{Competition}_{it} \) is an indicator of multi-party competition, relative to the (omitted) reference category of single-party dominance. This binary coding comes from the structural break analysis described earlier. The inclusion of state and year fixed effects means that all estimates are identified from within-state transition from single-party dominance to competition over time, while also partialing out time trends and shocks affecting distributive outcomes common to all states.

I examine three state budgetary outcomes central to the theoretical argument: agricultural sector spending, social spending, and (a proxy for) patronage spending. To measure social spending, I collect data on total social spending on health, education, and welfare programs. To measure patronage spending – which, as discussed, is characterized typically by employment relationships distributed through an over-developed public sector – I use administrative expenditures, a large portion of which go to public employment, as a proxy. To measure agricultural sector spending, I collect data on spending on agricultural extension programs as well infrastructure. In regression analyses, I take the log of these variables, so that all coefficients have a percentage change interpretation. The data on spending comes from the detailed budgetary breakdowns of state finances collected in annual reports of the Reserve Bank of India. The dataset on budgetary outcomes covers the period 1973-2002 across India’s 15 major states.

To reiterate, the predictions of the broader theoretical argument are specifically that in the long-run the transition to multi-party competition increased agricultural sectors spending and social spending and led to a reduction in the relative salience of patronage politics. These claims are examined in Table 3.1. For each outcome, I examine the basic
reduced-form effects of the transition to multi-party competition on distributive outcomes. For each outcome, I then additionally estimate a specification including control variables, in particular controls for per capita state GDP, as well as normalizing the outcome by state population before taking the log of this variable. It is important to control for the level of economic development because this is a frequently posited determinant of welfare spending (Huber and Stephens 2001). Because I take the log of all outcome variables, the coefficients have a percentage change interpretation. All coefficients are multiplied by 100 for ease of interpretation.

The estimates provide striking evidence in favor of the argument. Across states over time, the transition from single-party dominance characterized by political monopoly to multi-party competition characterized by alternation of power resulted in a large long-run increase in agricultural sector spending and a large long-run increase in social spending. In the main specifications, the decline of single-party dominance is estimated to increase agricultural sector spending by over 7 percent, and to increase spending on social services and welfare policies by over 11 percent. The democratization of state budgets is not driven by plausible demographic or economic omitted variables, with the estimates robust to normalizing the outcome by the state population as well as controlling for per capita state GDP. By comparison, the transition to multi-party competition had no impact on levels of administrative spending, suggesting an overall diminished relative salience of patronage politics, as predicted by the theory. The estimates suggest that across states the decline of single-party dominance resulted in a decline in counter-majoritarianism in distributive politics and realignment of distributive outcomes with voter numbers.

I now rule out competing political channels for these effects by controlling additionally for fixed effects for the specific political party in power as well as the effective number of parties, two variables posited as important in previous research. These are
Table 3.1: Effects of Alternation of Power on State Budgets

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<thead>
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<th>Agricultural Spending</th>
<th>Social Spending</th>
<th>Administrative Spending</th>
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<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Multi-party Competition</td>
<td>7.447*</td>
<td>7.425*</td>
<td>11.836***</td>
</tr>
<tr>
<td>Socioeconomic Controls</td>
<td>N</td>
<td>Y</td>
<td>N</td>
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<tr>
<td>State FE</td>
<td>Y</td>
<td>Y</td>
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<td>Year FE</td>
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<tr>
<td>Clusters</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

Notes: Unit of observation state-year, 1973-2002. All outcomes logged and coefficients multiplied by 100 so that they have percentage change interpretation. Standard errors adjusted for clustering within states, with a small sample correction for a small number of clusters. State budget data from the RBI State Finances publication series. Specifications with socioeconomic controls normalize the outcome by contemporaneous state population before taking the log of the outcome and also control for per capita state GDP. * p<0.1; ** p<0.05; *** p<0.01
extremely demanding specifications that non-parametrically control for any partisan effects and instead identify the structural effects of multi-party competition on the distributive priorities of state governments, holding the partisan identity of the party in power constant. The results are reported in Table 3.2. Strikingly, the same pattern of effects remains even holding constant the party in power and level of political fractionalization. The results help to illustrate how the effects of single-party dominance are distinct from the effective number of parties, the focus of the comparative literature on political competition and distributive politics (Cleary 2007). Especially consistent with the theoretical argument, the results reveal how independent of the ideology or social base of the party in power the transition from single-party dominance to multi-party competition generated structural electoral pressures for all parties to expand the scope of political competition in a majoritarian direction to policies favoring India's predominantly poor and rural voters.

### 3.6 Conclusion

The empirical analysis of state budgets over time has provided striking favor evidence in favor of the theory. Consistent with the role of agrarian opposition parties in contributing to the Congress party’s long-run decline, the evidence suggests that the transition to multi-party competition has played an important role in the rise of spending on the rural sector. The theoretical argument has also suggested, however, that an additional consequence of competition between rival parties, though elite led, has been a strategic expansion of the scope of political competition to poor voters. Consistent with this argument, the evidence suggests that the decline of single-party dominance led to large long-run increases in social spending.

The findings therefore provide evidence for the broader argument suggesting that
Table 3.2: Structural Effects of Alternation of Power on State Budgets

<table>
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<th>Agricultural Spending</th>
<th>Social Spending</th>
<th>Administrative Spending</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Multi-party Competition</td>
<td>9.401***</td>
<td>8.563**</td>
<td>11.287***</td>
</tr>
<tr>
<td></td>
<td>(4.142)</td>
<td>(3.700)</td>
<td>(2.924)</td>
</tr>
<tr>
<td>Political Controls</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Socioeconomic Controls</td>
<td>N</td>
<td>Y</td>
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<td>State FE</td>
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<td>Observations</td>
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<td>Clusters</td>
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Notes: Unit of observation state-year, 1973-2002. All outcomes logged and coefficients multiplied by 100 so that they have percentage change interpretation. Standard errors adjusted for clustering within states, with a small sample correction for a small number of clusters. State budget data from the RBI State Finances publication series. Specifications with socioeconomic controls normalize the outcome by contemporaneous state population before taking the log of the outcome and also control for per capita state GDP. Political control variables include fixed effects for the party in power as well as a control for party fractionalization based on seat shares. Standard errors adjusted for clustering within states, with a small sample correction for a small number of clusters. State budget data from the RBI State Finances publication series. * p<0.1; ** p<0.05; *** p<0.01
dominant parties represent counter-majoritarian political monopolies sustained by patronage, with the transition to multi-party competition leading to a major democratization of distributive politics. Strikingly, consistent with the theory, this was due to a structural change in accountability due to inter-elite competition, which compelled parties across the ideological spectrum to strategically introduce social policy as a dimension of political competition and to compete for the votes of the rural and poor majority with majoritarian distributive policies. This is evident from the stability of the estimates to controlling non-parametrically for the identity of the specific party in power.
4 | The Politics of Competitive Credit-claiming: India’s Largest Social Program

4.1 Introduction

The previous chapter has established that, consistent with the theory, in the long-run the transition to multi-party competition led not only to an increase in agricultural sector spending – which was the demand of agrarian opposition parties which played a key role in dominant party decline – but also to a large increase in social spending. Theoretically, I have argued, this is because political competition, even if between rival elite-led parties, creates structural pressures for parties to expand the scope of political competition to poor voters — even when those very same parties would have preferred to adopt elitist policies, protected electorally by patronage, from a position of dominance.

The dynamic of competitive credit-claiming for social policy unleashed by the decline of single-party dominance can plausibly help to explain not only the expansion of access to basic educational and health services but the deep historical roots of the emergence of a nascent welfare state in India, including the adoption of an “alphabet soup” of ambitious national anti-poverty programs in India over the previous two decades as part of a new social “rights agenda” (Ruparelhia 2013). Quietly, the proliferation of social programs at the national and state level has transformed distributive politics in India and delivered major benefits to the poor.
At a micro-level, the argument presumes that poor voters are electorally responsive in elections to social policies, a potentially controversial argument in developing country settings such as India, in light of the literature on clientelism which suggests that voters are often ‘captured’ through vote buying and that government performance is largely de-linked from electoral returns as a result (Stokes et al. 2013). In this chapter, I explicate how the argument depends on the programmatic responsiveness of poor voters to social spending — and provide evidence for this claim. I provide micro-level evidence, through in-depth fieldwork in two states as well as a quantitative analysis of the electoral effects of India’s largest contemporary social program, the National Rural Employment Guarantee Act (NREGA), that the proliferation of social policies is driven by a logic of electoral credit claiming. Poor voters do provide programmatic electoral returns to social policies. Given this responsiveness, political parties across the political spectrum introduce, adopt and maintain these policies with a view to building mass voter support.

This chapter proceeds empirically in three steps. First, I conduct an empirical analysis of the electoral effects of the roll-out of NREGA. I take a difference in differences identification strategy based on the staggered roll-out of the program across districts to estimate the effects of program enactment on elections held shortly after the program was unveiled for the first time. I provide evidence that NREGA resulted in large electoral returns for the Congress party, which enacted the program in 2005. These electoral returns appear to have been largely programmatic in nature; they were present even in states where the Congress party did not control the government or local administration of the program, which would be required to utilize the program in clientelistic fashion. I also provide evidence that the estimates are not driven by strategic allocation of the program to districts over time by instrumenting for program adoption with an official algorithm used to allocate districts to different phases of NREGA adoption.
Second, through fieldwork I show how a logic of competitive credit-claiming can explain variation in the performance of NREGA across states. Through eight months of fieldwork in two neighboring north Indian states, Rajasthan and Uttar Pradesh, I provide evidence that yardstick competition between the Congress party and the BJP places electoral pressure on governments to ensure the program is implemented effectively. By contrast, in Uttar Pradesh, the program is implemented poorly because neither of the two major parties in the state, the SP and BSP, stand to claim credit from it. In sharp contradiction of the clientelism thesis, though the program comes with tremendous “free money” from the central government, ruling parties in Uttar Pradesh express little interest in NREGA. They instead focus on adopting their own branded state-level welfare policies for which they can claim electoral credit.

Third, I conclude by comparing the lively national and state-level dynamics of competitive claiming of credit for social policy to the scant role that social policies played historically in electoral mobilization during the era of single-party dominance. In combination with evidence from the previous chapters, the findings highlight how the decline of single-party dominance in India has unleashed a politics of competitive credit claiming that has democratized the focus of distributive politics and led to the emergence of a nascent welfare state both nationally and at the state level.

The remainder of the chapter is structured as follows. It first discusses why the programmatic responsiveness of poor voters to social policy is central to the broader theoretical argument. It then discusses the empirical strategy for estimating the electoral effects of NREGA as well as results. Following this, it reports qualitative findings on the local politics of social policy in Rajasthan and Uttar Pradesh, before placing the politics of social programs in India in broader historical perspective.
4.2 Do Poor Voters Reward Social Policy?

Theoretically, the broader argument suggests that the emergence of multi-party competition leads to rival parties to strategically introduce social policy as a dimension of political competition. In particular, I argue, this can explain why the Congress party, which implemented highly elitist policies from a position of dominance, today seeks to position itself as a party of the poor. The theory can help to explain why, even though in origins as well as leadership the poor are weakly represented in India's heavily elite-dominated political parties (Kohli 2012), parties across the ideological spectrum increasingly focus on social policy as a strategy of electoral mobilization. Thachil (2014) argues that elite-led parties such as the BJP rely upon non-state provision of social services to win the votes of the rural poor. By contrast, in this chapter I seek to highlight how competitive credit claiming also occurs in the realm of national and state social policy.

The dynamic of competitive credit-claiming for social policy unleashed by the decline of single-party dominance can help to explain the adoption of an “alphabet soup” of ambitious national anti-poverty programs in India over the previous two decades, including: a rural connectivity scheme (PMGSY), a universal primary schooling initiative (SSA), a rural health initiative (NRHM), a rural electrification scheme (RGGVY), a rural employment guarantee (NREGA), a food subsidy (Food Security Act), and a new digital infrastructure for transferring benefits directly to the poor (UID). The emergence of multiple, large-scale, universalistic national social programs has been championed by civil society activists and the judiciary as part of a so-called “rights agenda” (Ruparelia 2013). However, the deep roots of the emergence of nascent welfare state in India lies, I argue, not in the efforts of activists but in the pressures and opportunities of electoral competition unleashed by the decline of single-party dominance.

Perhaps no policy better represent the democratization of distributive politics in In-
dia than NREGA, a national workfare program enacted by the in 2005 which guarantees every rural household up to 100 days of public works employment annually. The emergence of NREGA, one of the largest social programs in the world, is consistent with the argument of this dissertation in several regards. First, it targets the group of voters in India which are most numerous: the rural poor. Among this group of voters, uptake of the program is substantial, with over 24 percent of India’s rural households reporting participation in the program (Dutta et al. 2012). Second, the program was enacted in 2005 by the erstwhile dominant Congress party, a party that remains highly elitist in its dynastic leadership but today seeks to position itself as a party of the poor and marginalized. The origins of program lie in the Congress party’s creation in 2004 of the National Advisory Council — an advisory panel composed of progressive civil society activists — which played an important role in the design of and advocacy for NREGA. As striking as the incorporation of civil society progressives into the policy-making decisions of a major political party in India was the dynastic progenitor of this body: Congress party president Sondia Gandhi, the widow of Jawaharlal Nehru’s grandson and ex-prime minister, Rajiv Gandhi. Third, credit-claiming and branding is central to the program, with the Congress party going as far as to rename the program MGNREGA, the Mahatma Gandhi NREGA, in 2009 in order to solidify voter attribution of credit for the program to the party which enacted it.

But beyond the broad outlines of social programs like NREGA and their origins, do poor voters in fact attribute credit for social policies to the parties responsible for enacting and implementing them? The electoral sanctioning and rewarding of politicians for performance lies at the heart of democratic accountability (Barro 1973; Ferejohn 1986), and a large empirical literature documents the prevalence of voter responsiveness to government performance and programs in developed country settings (Healy and Malhotra 2013). Competitive credit claiming and competition for the lower-income voter
support is widely held to explain the expansion of redistributive policies and the welfare state in the developed world (Pierson 1996; Meltzer and Richard 1981).

The argument in this dissertation hinges on the assumption that poor voters in developing countries in India are capable of similar attribution for performance, providing rival elite-led parties with strategic incentives to expand the scope of political competition to the rural poor in the electoral competition for political office. The comparative evidence on whether poor voters are responsive to pro-poor policies in developing countries generally suggests that they are (De La O 2013; Zucco 2013; Besley and Burgess 2002; Cole, Healy and Werker 2012), though there is some controversy (Imai, King and Rivera 2016). The principal challenge to this view comes from the clientelism literature (Stokes et al. 2013), which suggests that voter support is purchased cheaply through vote-buying, with the consequence that government performance is largely de-linked from electoral outcomes and that public policies and public goods benefiting the majority of citizens are under-provided (Kitschelt and Wilkinson 2007).

Do poor voters reward social policy? This question is central to the argument that multi-party competition compels political parties to expand social policy in order win the votes of the rural poor. Below I discuss the empirical strategy I adopt for investigating these propositions in the context of the electoral effects of NREGA. Following the quantitative empirical analysis, I also provide fieldwork-based evidence on the electoral politics of NREGA on the ground in two Indian states, Rajasthan and Uttar Pradesh.

4.3 Empirical Strategy and Results

To examine whether the enactment of NREGA led to electoral returns to the Congress party for enacting it, this chapter takes a difference in differences identification strategy based on the staggered roll-out of the program across districts in three phases between
2006 and 2008. This chapter analyzes election outcomes in the seven major states – Assam, Kerala, Tamil Nadu, West Bengal, Punjab, Uttar Pradesh, Gujarat – holding state assembly elections during the phased implementation period of NREGA and using a publicized ‘backwardness index’ constructed by India’s Planning Commission to assign districts to NREGA implementation phases.¹

In the sample of states under analysis, we observe elections in which some ‘treatment’ districts had received NREGA while other ‘control’ districts were yet to receive the program. This chapter compares changes in election outcomes before and after the enactment of NREGA in treatment and control districts. NREGA was implemented in all non-urban districts of India in three phases: 200 phase 1 districts received NREGA in February 2006, 130 phase 2 districts in April 2007, and all remaining phase 3 districts in April 2008.² Treatment and control districts in the states under analysis are displayed in a map in Figure 4.1.

A two-group, two-time period difference in differences (DID) analysis of NREGA’s electoral effects simply compares the change in election outcomes from the pre- to the post-NREGA enactment period in the treatment and control groups. This can be estimated via an OLS regression equation of the form,

\[ Y_{it} = \beta_0 + \beta_1 TREATMENT_i + \beta_2 POST_t + \beta_3 TREATMENT_i \times POST_t + \epsilon_{it}, \quad (4.1) \]

where \( Y_{it} \) is a measure of election outcomes — the election performance of the Congress party, which enacted NREGA, or the election performance of the state-level incumbent

¹The analysis omits the small ‘hill states,’ Manipur, Meghalaya, Nagaland, Tripura, and Uttarakhand, which held elections during the phased implementation period but were not scored on the backwardness index and did not use a public procedure to assign districts to NREGA implementation phases, an important part of this chapter’s empirical strategy.

²In the state of Uttar Pradesh, the implementation of NREGA in phase 2 districts was postponed by one month to May 2007 because of state assembly elections held in April.
Figure 4.1: Map of Districts of India by NREGA Adoption Status
party in percentage points — in constituency $i$ at time $t$. The $TREATMENT_i$ variable is an indicator for constituencies which received NREGA during the time frame under analysis. The time dummy variable $POST_t$ represents the post-NREGA enactment period. The coefficient $\beta_3$ on the interaction term $TREATMENT_i \times POST_t$ represents the estimated electoral returns to NREGA adoption, the central quantity of interest.

To empirically assess the central empirical claims of the argument in this dissertation I first examine whether voters attributed credit for the adoption of NREGA to the Congress party which enacted it — suggesting that there does exist scope for programmatic electoral returns to social policies in developing countries. Second, I examine whether voters were capable of discriminating between the incumbent responsible for enacting the policy versus other incumbents by examining effects on state-level incumbent party election performance. Third, I examine these effects in Congress-controlled states and states ruled by other parties during the period in which NREGA was adopted. This provides a test of the clientelism thesis. If the Congress party was able to gain electorally from the adoption of the program where its local administration was controlled by a rival party, then this is strong evidence against the argument that the returns to social policies are clientelist in nature.

Table 4.1 reports estimates of the impact of NREGA on elections held shortly after the program was enacted. The table reports the effects of NREGA's enactment both in the full sample of states as well as in the sample of states controlled by parties other than the Congress party. Strikingly, the results provide evidence that voters heavily rewarded the Congress party in elections for enacting NREGA. In the full sample, the estimates suggest that NREGA adoption had a large positive impact on the election performance of the Congress party, causing a 3.25% point increase in Congress party vote share (over a pre-treatment mean of 15.01% points) and a 6.12% point increase in the probability of electing a Congress legislator (over a pre-treatment mean of 14.39 % points). Surpris-
ingly, even in the sample restricted to opposition controlled states, NREGA is estimated to have caused a 2.25% point increase in Congress vote share, though the estimated impact on the probability of electing a Congress legislator is close to zero. By contrast, NREGA is estimated to have had little, or possibly negative, effect on pro-state-level incumbent party voting behavior across the board.

Consistent with the theory, voters rewarded the party widely perceived to responsible for enacting a new, beneficial social program. Additionally, the fact that voters did so even in the sample of states where the Congress party did not control the local administration of the program suggests that this effect operated through a channel of voter attribution, as posited, rather than some form of clientelism. This is consistent with research suggesting that anti-poverty programs can have relatively “programmatic” electoral effects in developing countries (De La O 2013)

Are these results perhaps driven by strategic political allocation of districts to different NREGA adoption phases? As an additional robustness test, I utilize information on the algorithm used to assign districts to different phases of NREGA implementation. Districts were assigned to NREGA implementation phases non-randomly. In all major states, districts were scored on a ‘backwardness index’ (BI) constructed by India’s Planning Commission prior to the enactment of NREGA (Nayyar 2003). A fixed number of slots for each NREGA implementation phase were assigned by the Planning Commission to states, with the recommendation that within states poorer districts be allocated to earlier phases in order of their intra-state rank on the backwardness index. Using this information, it is possible to construct a variable representing intended treatment status under hypothetical perfect compliance with the official procedure. By instrumenting for

\[ BI_i = \frac{\max(M_i - M)}{\max(M) - \min(M)} + \frac{\max(O_i - O)}{\max(O) - \min(O)} + \frac{\max(W_i - W)}{\max(W) - \min(W)} \]

3 A district’s composite score was based upon percentage of disadvantaged minorities (scheduled caste and tribal groups) in the population (M), agricultural output per worker (O), and agricultural wage rate (W), measured with census and sample survey data from the 1990s. The formula used to compute a district’s BI score was: $BI_i = \frac{\max(M_i - M)}{\max(M) - \min(M)} + \frac{\max(O_i - O)}{\max(O) - \min(O)} + \frac{\max(W_i - W)}{\max(W) - \min(W)}$. 

119
Table 4.1: OLS Estimates: Electoral Effects of NREGA Adoption

<table>
<thead>
<tr>
<th></th>
<th>All States</th>
<th>Opposition Controlled States</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INC %</td>
<td>INC</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Treatment×Post</td>
<td>3.245***</td>
<td>6.118*</td>
</tr>
<tr>
<td></td>
<td>(1.294)</td>
<td>(3.673)</td>
</tr>
<tr>
<td>Treatment</td>
<td>-4.001</td>
<td>-8.736**</td>
</tr>
<tr>
<td></td>
<td>(2.904)</td>
<td>(4.013)</td>
</tr>
<tr>
<td>Post</td>
<td>-0.105</td>
<td>-5.463**</td>
</tr>
<tr>
<td></td>
<td>(0.763)</td>
<td>(2.497)</td>
</tr>
<tr>
<td></td>
<td>(1.686)</td>
<td>(2.778)</td>
</tr>
</tbody>
</table>

Observations: 2,560 2,560 2,560 2,560 1,874 1,874 1,874 1,874
Clusters: 181 181 181 181 129 129 129 129
Adjusted R²: 0.004 0.007 0.013 0.011 0.014 0.001 0.005 0.008

Notes: Coefficient on Treatment×Post variable represents estimated ATT of NREGA. Standard errors in parentheses adjusted for clustering at the district level. INC and Incumbent are binary indicators of electing a legislator from the Congress and state-level incumbent parties, respectively, multiplied by 100 so that coefficients have a percentage point interpretation. INC % and Incumbent % are variables representing percentage point vote share. Analysis estimated by OLS. *p<0.1; **p<0.05; ***p<0.01
NREGA adoption with this public index, it is possible to rule out the possibility that the results are driven by some form of political favoritism in the assignment of districts to different phases of implementation. An instrumented DID analysis estimates a first stage regression of the form,

\[ N_{\text{REGA}}_{it} = X'_i \lambda + \gamma I_{RANK}^{\geq 0} \times POST_t + v_{it} \]  \hspace{1cm} (4.2)

and a second stage regression of the form,

\[ Y_{it} = X'_i \zeta + \theta N_{\text{REGA}}_{it} + \eta_{it} \]  \hspace{1cm} (4.3)

where \( Y_{it} \) represents the election outcome variable. The variable \( N_{\text{REGA}}_{it} \) is an indicator of actual NREGA implementation and the interaction term \( I_{RANK}^{\geq 0} \times POST_t \) is the instrument for \( N_{\text{REGA}}_{it} \). The variable \( I_{RANK}^{\geq 0} \) indicates a non-negative BI rank, which indicates intended treatment under compliance with the official procedure. The post-NREGA enactment period is indicated by the time dummy variable \( POST_t \). An instrumented DID regression of this form compares changes in election outcomes from the pre- to the post-period in the constituencies induced to receive NREGA as a result of encouragement under the official procedure vs. those not receiving NREGA as a result of non-encouragement under the official procedure. All regressions include district fixed effects as well as state-year fixed effect, the latter of which is intended to absorb any strategic political allocation of slots for NREGA implementation across states (for which we do not possess an official algorithm). Table 4.2 reports the IV estimates of the impact of NREGA's enactment on elections.

The instrumented DID estimates are consistent with the previously reported DID

\[^4\text{For examples of well known papers utilizing an instrumented DID identification strategy see e.g. Lochner and Moretti (2004) or Duflo (2001).}\]
Table 4.2: IV Estimates: Electoral Effects of NREGA Adoption

<table>
<thead>
<tr>
<th></th>
<th>All States</th>
<th>Opposition Controlled States</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INC % (1) INC (2) Incumbent % (3) Incumbent (4)</td>
<td>INC % (5) INC (6) Incumbent % (7) Incumbent (8)</td>
</tr>
<tr>
<td>NREGA</td>
<td>3.120** (1.286) 7.126 (4.406) 0.220 (1.962) -4.562 (6.325)</td>
<td>3.034** (1.363) 6.526 (4.307) -1.320 (1.996) -2.126 (6.827)</td>
</tr>
<tr>
<td>District FE</td>
<td>Y Y Y Y</td>
<td></td>
</tr>
<tr>
<td>State-Year FE</td>
<td>Y Y Y Y</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>2,560 2,560 2,560 2,560</td>
<td>1,874 1,874 1,874 1,874</td>
</tr>
<tr>
<td>Clusters</td>
<td>181 181 181 181</td>
<td>129 129 129 129</td>
</tr>
<tr>
<td>First Stage F-statistic</td>
<td>97.91 97.91 97.91 97.91</td>
<td>78.57 78.57 78.57 78.57</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.432 0.180 0.184 0.152</td>
<td>0.385 0.076 0.195 0.170</td>
</tr>
</tbody>
</table>

Notes: Standard errors in parentheses adjusted for clustering at the district level. INC and Incumbent are binary indicators of electing a legislator from the Congress and state-level incumbent parties, respectively, multiplied by 100 so that coefficients have a percentage point interpretation. INC % and Incumbent % are variables representing percentage point vote share. Analysis estimated by 2SLS. *p<0.1; **p<0.05; ***p<0.01
estimates. In the full sample, NREGA adoption caused a roughly 3.12% point increase in Congress party vote share and a 7.13% point increase in the probability of electing a Congress legislator. Coefficients of similar magnitude are estimated in the sample restricted to state controlled by local opposition parties. By contrast, the program is estimated to have had no effect on pro-local incumbent party voting. These results provide evidence that the main findings – that voters rewarded the party responsible for enacting NREGA – are not driven by some form of strategic political allocation of districts to different phases of NREGA implementation.

The quantitative analysis of NREGA's electoral effects therefore provides strong support for the micro-foundations of the broader theoretical argument. Poor voters do provide large electoral returns to parties for adopting social programs. Moreover, they appear to do so for largely programmatic as opposed to clientelistic reasons. Below, through fieldwork I explore how the politics of competitive credit-claiming play out on the ground in two neighboring north Indian states, Rajasthan and Uttar Pradesh. I argue that the presence of the Congress party in Rajasthan has initiated yardstick competition between the Congress party and the BJP to implement NREGA effectively. In Uttar Pradesh, however, because neither of the two major parties stands to claim credit for the program and because social policies cannot be utilized clientelistically, politicians show little interest in implementing the program.

4.4 Credit-claiming in Rajasthan and Uttar Pradesh

The results so far have provided quantitative evidence consistent with the idea that proliferating social programs in India are governed by a dynamic of competitive credit-claiming. Voters provide programmatic electoral returns to pro-poor policies, providing strong extrinsic incentives for competing elite-led political parties to offer new social
policies and social spending as a way of winning elections. I now provide qualitative fieldwork-based evidence that credit-claiming dynamics can explain why NREGA is implemented effectively in the state of Rajasthan but poorly in the state of Uttar Pradesh. By law, any household that wishes to obtain NREGA employment is entitled to it, up to a 100 day annual limit. In practice, however, poor implementation means that employment provision under NREGA is heavily “rationed”, with the extent of this rationing varying considerably across states. According to a 2009 sample survey, in Rajasthan over 61.8% of rural households reported participating in NREGA whereas in Uttar Pradesh the figure was just 16.2% (Dutta et al. 2012). Both are poor, diverse provinces in Hindi-speaking north India. What explains this stark difference across two neighboring states and what can we learn about the local politics of social policy?

To investigate these questions, I conducted semi-structured interviews with citizens, village NREGA officials and elected leaders, block-level administrators, civil society activists, district collectors, state legislators, as well as high-ranking administrators in both Rajasthan and Uttar Pradesh over 8 months in 2014-15. In each state, I selected 8 village councils selected from two neighboring “blocks” in one district. Through this design, I “traced” the performance of NREGA from the village-level “upwards”, analyzing where along the “chain” of service delivery NREGA fails in Uttar Pradesh compared to Rajasthan, and whether or not this fits into a logic of competitive credit claiming.

4.4.1 Symbolic Politics, Credit-claiming and Yardstick Competition

Strikingly, my research suggests that the key difference between Rajasthan and Uttar Pradesh is not that in the latter parties are inherently less welfare minded or that voters are more demanding of government performance. The main difference is the pres-
ence of one party (Congress) which stood to claim credit for NREGA in Rajasthan, which generated yardstick competition with its rival, the BJP, to implement NREGA effectively (Besley and Case 1995) — thus reinforcing voter demand and awareness of the program from an early period. In Uttar Pradesh, by contrast, neither of the two main parties, the Samajwadi Party (SP) or the Bahujan Samaj Party (BSP), stood to claim credit for NREGA. On the contrary, the BSP and SP shared a collusive interest in obstructing its implementation to prevent the Congress party from claiming credit and making electoral inroads in the state, while focusing instead on adopting state-level welfare policies for which they can claim credit.

Difference in grassroots household demand does not explain the gap in NREGA's performance in Rajasthan and Uttar Pradesh. Both states are characterized by a predominantly rural economy with a large percentage of landless laborers or farmers with small landholdings, who stand to benefit the most from a workfare program which provides public works employment when demand in the rural sector is slack. The poverty rate in Uttar Pradesh, 40.75%, is in fact slightly higher than in Rajasthan, 31.2%, suggesting that objective levels of demand for NREGA, which primarily benefits the rural poor, ought to be higher in Uttar Pradesh. Through household interviews, I found that recipients of NREGA employment in both states viewed the program as a valuable, though predictably many fewer households had benefited from or knew about the program in Uttar Pradesh.

This gap in access is driven by a failure of program implementation rather than absence of demand for the program. Anecdotally, this was confirmed by tremendous instances of bottom-up citizen mobilization that I witnessed in Uttar Pradesh, including a concerted demonstration organized by a group of neighboring villages to demand greater NREGA employment provision from the local Block office (see Figure 4.2a). Indeed, the 2009 national sample survey reveals that much of NREGA's poor performance
in Uttar Pradesh has to do with government under-provision of employment relative to demand. Among survey respondents, in Rajasthan, just 15.5% of households who wanted NREGA employment were unable to obtain it whereas in Uttar Pradesh the “rationing rate” was a whopping 53.6% (Dutta et al. 2012).

Why do politicians and bureaucrats meet citizen demand for NREGA in Rajasthan but fail to do so in Uttar Pradesh? They key proximate difference is the electoral salience of the program. In Rajasthan, politicians from the Congress party and the BJP alike are active in placing pressure on bureaucrats to implement the program in order to claim credit for constituency service. Local bureaucrats routinely report pressure from elected politicians, both state legislators and village council leaders, to provide NREGA projects to their villages. Likewise, partisan credit claiming at the level of local village councils, which implement NREGA, is widespread; this is evident, for example in the recently elected BJP government's renaming of local village council buildings as Atal Seva Kedras (after former BJP prime minister Atal Behari Vajpayee), which were formerly known as Rajiv Seva Kedras (after former Congress prime minister Rajiv Gandhi) under the prior Congress party government (see Figure 4.2b). In Uttar Pradesh, by contrast, elected politicians barely express any interest in NREGA, and interviews with civil society activists suggest that has been the case since the inception of the program.

What is the deeper explanation for why NREGA plays a role in electoral mobilization in Rajasthan but not in Uttar Pradesh? The key distinction is that in Rajasthan, because it stands to claim credit, the Congress party has served as an advocate for NREGA, placing priority on implementation, creating a constituency among voters for the program, and initiating a kind of yardstick competition with its rival (Besley and Case 1995), the BJP, to implement the program effectively in the state. In Uttar Pradesh, by contrast, neither of the two major parties, the SP or BSP, stand to claim credit from the program. On the contrary, the BSP and SP share a collusive interest in obstructing the program in order
Notes: Fieldwork photos: (a) A rally for greater NREGA employment provision in Uttar Pradesh. (b) A panchayat service center building in Rajasthan. Formerly known as Rajiv Seva Kendras under the Congress government, they have been renamed Atal Seva Kendras by the new BJP government. The new name is written on the banner, which covers the old name written in paint. Photos taken in 2015.

Figure 4.2: Photos: Local Politics and Social Policy in Rajasthan and Uttar Pradesh.
to prevent the Congress party from claiming credit and making electoral inroads in the state.

The centrality of credit claiming in electoral incentives to implement the program is striking. NREGA is a “centrally sponsored scheme” that is mainly funded by the central government, meaning that it comes with a great deal of free money, requiring only modest complementary funding for personnel from the state. In spite of this, NREGA is an extremely low political priority for the Department of Rural Development in Uttar Pradesh. In fact, in recent years NREGA has largely been dysfunctional in the state because the state government has failed to pay the salaries of local rozgar sewaks, village-level NREGA officers who are required to implement the program — even though simply paying the salaries would result in financial inflows for NREGA from the central government several times the relatively small salary cost.

This does not mean that rival parties in Uttar Pradesh are immune from the electoral pressure to cater to poor voters. Rather, they focus on enacting and claiming credit for state-level policies which they seek to “brand” though naming strategies linking programs to prominent party symbols. Examples of such symbolic state-level social programs include the BSP’s Ambedkar Village Program (Jeffrey, Jeffery and Jeffery 2008), which provided infrastructure to over 20,000 villages. Named after BR Ambedkar, the Dalit writer of India’s constitution, the program was clearly designed to appeal to Dalits or ex-"untouchable" voters, who are the core supporters of the BSP (Chandra 2000). The SP, meanwhile, has pioneered its own set of programs, for example the Lohia Awas Yojana, a house-building program for low-income “Other Backwards Class” (OBC) families. The program is named after Ram Manohar Lohia, a prominent socialist thinker and advocate for the rights of lower-caste “Other Backwards Class” groups, which comprise the core supporters of the SP. Unfortunately, the symbolic politics of credit claiming in Uttar Pradesh has meant that centrally sponsored schemes which are associated with
one of the national ruling parties are typically poorly implemented in the state, since neither the SP or BSP has an interest in implementing it.

In Rajasthan, by contrast, NREGA has always been among the highest priorities in the Department of Rural Development. Even though the program is not associated with the BJP, competition with the Congress party, which is associated with the program, places yardstick pressure on even BJP-led governments to implement the program effectively. In an interview, a senior bureaucrat promoted under the recently formed BJP government likened NREGA to an “tiger that cannot be caged” in reference to ubiquitous pressure he faces from citizens and politicians to implement the program, though he would have preferred to allocate resources to other programs in the absence of this pressure. On one visit to the Department of Rural Development in the state, I witnessed a senior bureaucrat reviewing clippings of recent newspaper reportage on NREGA — highlighting the extent to which public perceptions of program performance matters to politicians, and therefore bureaucrats, in the state.

Note that the contrast between Rajasthan and Uttar Pradesh highlights not only the importance to politicians of claiming credit for social policy, but also contradicts the clientelism thesis. The proliferation of large scale social programs like NREGA is not driven by a logic of vote buying. If national social programs could be utilized in clientelistic fashion to build political support, because they come with free money from the central government they should be extremely attractive to local politicians. However, because credit-claiming is the main way in which social programs win votes, ruling parties in Uttar Pradesh express little interest in centrally sponsored schemes which they cannot brand for their own purposes.
4.4.2 Competitive Credit Claiming Across States

Looking beyond Rajasthan and Uttar Pradesh, credit-claiming appears to explain broader patterns of the performance of NREGA across states. In Figure 4.3, I provide a plot depicting variation over time in the share of rural households provided with NREGA employment per year – reported for states in which the Congress party is one of the top two parties and for states in which it is not separately. This data is based on annual district-level administrative data on the number of households provided with employment, normalized by data on the number of households from the 2001 census. From the outset, states with a Congress party presence implemented the program more effectively, and consistent with a pattern of yardstick competition implementation improved over time. In states without a Congress party presence, by contrast, implementation was weak from the outset, and in the absence of yardstick competition program implementation appears to have deteriorated over time.

In sum, the politics of credit-claiming crucially shape the electoral incentives for competing political parties to adopt and implement social programs. Because poor voters are responsive to social programs in elections, this generates incentives for national and state-level ruling parties to enact social programs for which they can claim credit. However, this same dynamic means that parties opt not to implement programs if they do not stand to claim credit or do not expect to be blamed for poor implementation by a rival party — even when programs such as NREGA come with free money from the central government. This can explain why NREGA works well in Rajasthan and poorly in Uttar Pradesh, and indeed cross-state patterns of program performance.

6 Households in NREGA administrative data, defined by family members possessing a single NREGA job card, tend to be smaller than households as defined in the census. As a result, the computed share of households receiving NREGA employment is slightly inflated. From my fieldwork, I estimate that on average a census household corresponds to 1.5 NREGA households. Nonetheless, for the purposes of comparison across states this should not bias any inferences.
Figure 4.3: Performance of NREGA Across States Over Time

Households Receiving NREGA Employment as a Share of Total Rural Households

Congress Presence States
Congress Absence States

Year
2008 2009 2010 2011 2012 2013 2014
0 20 40 60 80 100

131
4.5 Social Spending in Historical Perspective

In historical perspective, the proliferation of large, ambitious social programs like NREGA and the lively dynamics of competitive credit claiming for social policy represent a transformative democratization of distributive politics in India. Contrast the dynamics described above to the era of single-party dominance, when the Congress party faced little pressure from external challengers at the state or national level. In this context, social programs were largely a discretionary choice made by Congress party elites, insulated for the most part from mass political pressure as a result of an electoral strategy built upon widespread ties of patronage in rural areas.

During the early post-independence period of Congress party dominance under Nehru, social policy hardly played any role in rural electoral mobilization at all (Wilkinson 2007). Instead, the Congress party won electoral support on the basis of extensive ties of patronage, allocating the public resources freed up as a result to the task of state-led industrialization and services in urban areas. Limited pro-poor attempts at land reform under the Congress party are widely regarded to have been a failure in implementation, and even hurt the Congress party at the polls, because it elicited opposition from local landed elites who served as important nodes in the Congress party’s rural patronage networks (Kohli 2012). The major national welfare program during this period was the Public Distribution System (PDS), a means-tested system for distributing subsidized food grains to the poor. While no doubt this was an important safety net, it was also a highly circumscribed colonial-era system, originating in famines and food shortage during the second world war, that aimed to provide only the bare minimum level of protection against starvation; moreover, until the 1970s, access to PDS was mainly limited to urban areas (Mooij 1998).

To see how far the decline of single-party dominance has democratized distribu-
tive politics in India, consider a simple comparison of national budgets and budget speeches. In 1958-59, Congress party prime minister Jawaharlal Nehru’s budget speech (he held a joint appointment as finance minister) contained no mention of the term “social”, though “health” was mentioned once and “education” three times. A total of 22.7% of the national budget was allocated social spending (Gulati 1961). A half-century of democratization later, the speech and budgetary choices of politicians from the Congress party, no longer dominant, looked completely different. In Congress party finance minister P. Chidambaram’s 2008-09 budget speech, the term “social” appeared 8 times, while “health” appeared 17 times and “education” 20 times. A total of 31.9% of the national budget was allocated to social spending — in the context of a many-fold increase in the absolute size of the budget since 1959. Access to basic services such as primary schooling and healthcare has also expanded dramatically from the early post-independence period to the present era of multi-party competition. Though accurate historical data is difficult to come by, as late as 1981 fewer than half of children aged 6-14 attended school (Weiner 1991), whereas today that figure is above 96 percent (Banerji, Bhattacharjea and Wadhwa 2013). Average life expectancy in 1960 was just 41 years, whereas today it is 66 years (World Bank 2012).

Clearly, many of these changes have been driven by increasing incomes. India’s PPP adjusted per capita GDP in 1960 was $720, while today it is $3,477 (in 2005 dollars) (Aten, Heston and Summers 2009). Economic development improves health outcomes directly, and also expands the tax base, leading to greater spending on social services. However, economic development does not explain why as a share of the budget social spending has increased dramatically from the early post-independence period to the present day. Moreover, the previous chapter has presented evidence that the transition

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7This is not an artifact of the specific year chosen. Budget speeches and allocations in neighboring years are very similar.
from single-party dominance to multi-party competition resulted in large increases in social spending at the state level, controlling for time trends with year fixed effects as well as for state-level economic development.

Though it is not possible to conduct a similar statistical analysis at the national level, since we are limited to a single political unit, consistent with the theoretical argument the timing of expanded social spending at the national level coincides non-linearly with the emergence of deepening political competition. The Congress party began to re-invent itself and shift its distributive appeals to the rural poor as a response to the emergence of credible political opposition parties at the national level beginning in the 1970s, when Indira Gandhi in a so-called ‘populist’ turn launched a ‘garibi hatao’ (abolish poverty) campaign. That this populist turn coincided with the rise of agrarian opposition parties is not a coincidence. Over the course of the 1970s and 1980s, the Congress party initiated a number of new national social programs, including the Drought Prone Areas Programme (DPAP) of 1973, the Integrated Rural Development Program (IRDP) of 1978, the National Rural Employment Program (NREP) of 1980, the Rural Landless Employment Guarantee Program (RLEGP) of 1983, and Indira Awas Yojana (IAY) of 1985. The PDS system was also ruralized over the course of the 1970s and 1980s, expanding access to subsidized food grains to the rural poor (Mooij 1998). Indeed, though NREGA far exceeds its predecessor, NREP, in scale, as an idea the notion of large-scale public works employment provision by the government originates in this earlier historical turn toward social policies resulting from the pressures of electoral competition.

With the cementing of multi-party competition from the 1990s onward, the proliferation of social policies at the national level has only accelerated, leading to the adoption of universalistic programs like NREGA that are increasingly ambitious. Similar dynamics have played out at the state level, as I have argued in the previous chapter. Of course, these programs are no panacea for inequality, poverty, malnutrition, and low
levels of literacy, which remain rampant problems in India (Kohli 2012). Though access to social services and programs has expanded greatly in recent decades, quality of implementation of these services and programs remains extremely weak. Understanding why electoral competition provides incentives for expanded access but not quality of implementation is an important task for future research (Harding and Stasavage 2014). Nonetheless, expanded access in itself is an important achievement and in part a consequence of the decline of single-party dominance.

4.6 Conclusion

This chapter has clarified how the theoretical argument developed in this dissertation, which suggests that inter-elite competition results in the long run in growing social spending, depends crucially on the programmatic responsiveness of poor voters to social policies in elections. Drawing on a natural experiment, I have provided evidence that voters are highly responsive to such programs in elections. Through in-depth qualitative comparison of two states, I have also demonstrated how a logic of competitive partisan credit-claiming explains the success of NREGA in Rajasthan and its relatively poor performance in Uttar Pradesh. Contrasted to the minimal role that social programs played historically in electoral mobilization during the era of single-party dominance, the contemporary politics of competitive credit claiming for social policy represents a democratization of distributive politics in India.
5 Conclusion

5.1 Summary

This dissertation has developed a theory to explain the puzzle of single-party dominance in democratic settings. In India, single-party dominance represented a counter-majoritarian political equilibrium in which the dominant Congress party monopolized political power on the basis of patronage ties to a large swathe of the electorate while enacting policies that favored urban, state-led development and neglected India predominantly poor and rural voters.

The green revolution was the catalyst for the agrarian political mobilization that played a key role in the emergence of agrarian opposition parties and the Congress party’s long-run decline. Consistent with the theoretical model, dominant parties do not simply fade away as a result of gradual societal modernization, but decline as result of deepening distributive conflict with political excluded interest groups.

In the long-run, dominant party decline led, predictably, to the emergence of policies favoring the agricultural sector as the “third rail” of Indian distributive politics. A more surprising, and perhaps even more substantively important long-run consequence has been the emergence of a nascent welfare state in India. I have argued that the transition to multi-party competition provided rival elite-led parties, including the previously dominant Congress party, with strategic incentives to expand the scope of political com-
petition to poor voters in the competition for political office.

Empirically, I have argued that the theory developed in this dissertation is consistent with stylized facts about the co-evolution of the party system and distributive politics in India. The core theoretical claims have been borne out by sub-national comparative empirical analyses drawing on a combination of historical analysis, quantitative analysis of natural experiments, and in-depth fieldwork in two states. Exploiting exogenous variation in the local adoption of HYV crops, I have provided evidence that the green revolution contributed to the rise of agrarian opposition parties and accounted for over half of the dominant Congress party’s long-run decline. Panel fixed effects regressions show that the transition to multi-party competition led to large long-run increases in agricultural sector and social spending across states. On the basis of fieldwork and quantitative analysis of the electoral effects of the staggered roll-out of India’s largest social program, NREGA, I have provided micro-level evidence that the proliferation and implementation of social policies is governed by the dynamics of competitive credit-claiming in a predominantly poor electorate.

To return to the original question that motivated this dissertation, single-party dominance in democratic settings does not appear to represent a historically exceptional form of ‘catch-all’ or consensual hegemony. On the contrary, in spite of India’s robust formal democratic institutions, the era of Congress party dominance represented a deeply counter-majoritarian political monopoly sustained by subtle ties of patronage which co-existed quite comfortably with elections that, procedurally speaking, are widely regarded as among the most free and fair in the world. The decline of single-party dominance, therefore, did not occur gradually or as a result of societal modernization, but as a result of protracted struggle and distributive conflict with rising regime outsiders (Moore 1966) — much as political monopolies are democratized more generally, in authoritarian as well as democratic institutional settings. The consequences of dominant
party decline were not mild but transformative, shifting the focus of distributive politics in a majoritarian direction. In contrast to existing theories, the decline of dominant parties in democratic settings therefore bears a strong resemblance to the decline of political monopolies more generally, representing a process of de facto democratization in de jure democratic institutional settings.

To what extent does the argument travel beyond India? I argue that the theory sheds light on the trajectories of a number of other countries which have experienced single party dominance and decline. For the purposes of comparison, I select two cases of single-party dominance in democratic institutional settings: Christian Democracy (DC) in Italy and the Liberal Democratic Party (LDP) in Japan. The theoretical and empirical findings of this dissertation also call for breaking down the strong qualitative distinctions that scholars have traditionally drawn between dominant parties in democratic and in authoritarian institutional settings. To do this, I additionally compare India's historical trajectory to the trajectories of dominant party decline and distribution in two competitive but more authoritarian electoral settings: the Institutional Revolutionary Party (PRI) in Mexico and the historically dominant Democratic party in the American South following the civil war.

Looking at each of these cases, I identify a consistent trajectory sharing many similarities with the Indian case and the theoretical argument advanced in this dissertation: 1) An early period of unpopular single-party dominance maintained in democratic or partially democratic conditions on the basis of implicit or explicit patronage ties to the electorate; 2) A middle period of rising interest groups excluded from the incumbent's socioeconomic coalition, leading initially to intensified policy concessions and patronage but later to dominant party decline; 3) An expansion of social spending and welfare policies in the long run as a structural consequence of deepening inter-elite political competition.
5.2 Parallel Cases: Italy, Japan, Mexico, US South

5.2.1 Italy

Sometimes regarded by scholars as a stereotypical ‘catch-all” dominant party that was representative of the center of public opinion (Leonardi and Wertman 1989), the DC dominated post-war Italian politics from 1944 to 1994, collapsing in the end amid a range of corruption scandals and inter-regional distributive conflict. The roots of the decline of the DC, as well as the long-run distributive consequences of Italy’s transition to multi-party competition, bear remarkable similarities to the trajectory of dominant party decline in India.

Among ordinary Italians, the DC was colloquially known as the *balena bianca* or ‘white whale’, a reference to its overwhelming dominance of Italian politics, sustained through pervasive ties of patronage to local voters (Chubb 1982). Its party membership lists are widely regarded to have been heavily inflated to provide the semblance of mass voter legitimation, when in fact the party’s platforms tilted toward a large minority: conservative and rural voters in the *mezzogiorno* of rural and southern Italy (Caciagli 1982; Forlenza 2010). Though it faced significant opposition in northern Italy, the party’s ties of patronage, dispensed, as in India, through an overdeveloped public sector, served to maintain support among large swathes of voters and insulated the party from serious electoral challenges for five decades — in spite of distributive policies that disadvantaged large regions of the country and repeated corruption scandals that made the party deeply unpopular with voters.

Industrialization in politically excluded northern Italy played a pivotal role in the demise of the southern-biased DC in Italy, in particular at the hands of the Northern League (Woods 1992). A coalition of various regional opposition parties which formed
beginning in the 1970s and 1980s (Levite and Tarrow 1983; Diani 1996), the Northern league came to represent the regionalist grievances of voters in more industrialized regions of Italy that paid an increasingly large opportunity cost of supporting the DC’s disproportionate allocation of pork-barrel public investments in the south of the country and the corruption scandals associated with the DC’s southern bias. In response the rise of challengers, the DC attempted clean government reforms, including a public campaign finance law in 1974, which resulted in a decline in corruption scandals over the course of the 1980s (Golden and Chang 2001). In the long run, however, voters, particularly in northern Italy defected from the dominant party, culminating in the 1994 election victory of Berlusconi’s Forza Italia, which came to power promising clean government and initiated Italy’s transition to multi-party competition (Waters 1994).

An important but quiet transformation coinciding with Italy’s long-run transition from single-party dominance to multi-party competition has been an expansion of the Italian welfare state. Between 1995 and 2011, government expenditures on social spending expanded from 40.6% of the budget to 55.4% of the budget (OECD 2015), moving Italy from the eighteenth rank among OECD countries to the fifth rank in terms of the size of the welfare state. This is an important transformation of the well-known Christian Democratic model of the welfare state, which is traditionally regarded as moderate in scope (Esping-Andersen 2013). It is consistent with the broader theoretical argument, that the decline of counter-majoritarian single-party dominance unleashes a politics of competitive credit claiming that tends to expand social policy. The case of Italy reveals that these dynamics hold not only in developing countries but in more industrialized countries as well.
5.2.2 Japan

The LDP ruled Japan continuously from 1955 until 1993-94, when for a brief 11-month period a coalition of opposition parties formed a government. The LDP returned to power from 1994 until 2009, when it was handed its first truly decisive defeat in general elections. In 2014, however, the LDP returned to power with an overwhelming legislative majority (Pekkanen, Reed and Scheiner 2015), raising some questions about whether the era of single-party dominance in Japan is in fact truly over. Nonetheless, at the very least the dominance of the LDP in Japan is greatly diminished — and it appears that the factors leading to this decline as well as the long-run consequences for distributive politics are consistent with the argument of this dissertation.

Though conventional wisdom sometimes views the LDP as a centrist and pragmatic party that moves with public opinion, as Scheiner (2006) documents the LDP managed to dominate elections in spite of a rural bias in its policies taking the form of expansive subsidies for agriculture and pork-barrel projects in rural areas (Thies 1998), which frequently made the party deeply unpopular with urban voters, who comprise the vast majority of the Japanese electorate. Despite this unpopularity, the LDP survived for decades largely on the basis of pervasive pork-barrel ties of patronage to localities that compelled local voters to support local LDP candidates over opposition candidates in order to gain access to centrally distributed patronage (Scheiner 2006).

Consistent with the broader argument, economic growth in the politically underrepresented urban sector and growing urbanization have played the major historical role in fueling support for opposition parties in Japan. The LDP successfully responded with intensified patronage that co-opted the emergent urban opposition of the 1970s and 1980s (Flanagan, Krauss and Steiner 1980). But in the long run, the LDP was compelled to respond with policy concessions, in the form a “change the LDP, change Japan”
reformist campaign in the 1990s that sought to reduce subsidies for agriculture and liberalize the economy in ways preferred by urban voters. By all accounts, the LDP’s decisive defeat in the 2009 general elections reflects a political system in which the effectiveness of patronage as a means of electoral control is greatly diminished (Reed, Scheiner and Thies 2012), and in which the LDP must increasingly compete with opposing parties on level terms on the basis of majoritarian policy appeals.

Strikingly, the decline of single-party dominance is Japan has also resulted in a greatly expanded welfare state. From 1995, shortly after the LDP first lost power, to 2011, social spending in Japan expanded from 39.2% of the budget to 55.1% of the budget — a dramatic increase in ranking among OECD countries from twenty-first to sixth (OECD 2015). This highlights the extent to which the decline of single-party dominance in Japan reflects the demise of a counter-majoritarian political monopoly maintained through patronage and the emergence of a competitive distributive politics oriented around building mass voter support through policy appeals — challenging the conventional assumption about East Asian welfare states as relatively limited in scope and scale (Vogel 1981; Esping-Andersen 1997).

5.2.3 Mexico

The PRI came to power in Mexico in 1929 and ruled continuously for 71 years. During the period of single-party dominance, the PRI’s grip on power was so complete that presidential elections were privately decided on the basis of an *el dedazo* (the tap on the shoulder) in which the exiting president pre-selected his successor. With its first defeat in presidential elections in 2000, Mexico entered a new phase of multi-party competition in which three major parties, the National Action Party (PAN), the PRI, and the Party of the Democratic Revolution (PRD) vie for political power at the state and national level.
Though Mexico is better described historically as a competitive authoritarian regime than as a democratic regime in terms of formal democratic institutions, elections were nonetheless meaningfully competitive during the era of single-party dominance, and I argue the trajectory of dominant party decline in Mexico contains important parallels to the Indian case.

The PRI managed to win elections and maintain political power in spite of several periods of deep unpopularity due to economic recessions on the basis of massive resource asymmetries and vote buying (Greene 2007; Magaloni 2006). Though elections were in some periods more free and fair than in others, the relative weakness of electoral institutions appears to have permitted direct vote buying as opposed to subtler forms of vote tying based on patronage in the Indian case. As in India, however, Mexico until the late 1980s was characterized by a heavily overdeveloped public sector through which implicit ties of patronage to a large section of the electorate, in particular organized labor, were maintained. In this context, opposition parties failed to mount a serious challenge, except occasionally and at the sub-national level.

Why did the PRI decline? Focusing on the dominant party’s patronage advantage, existing arguments highlight the privatization of the public sector as well as long-term modernization that made poor voters less dependent on the PRI for access to welfare programs in exchange for votes (Greene 2007; Magaloni 2006). The argument advanced in this dissertation, however, highlights a related important transformation: the growing urbanization and intentional economic integration of the Mexican economy. The economic growth of politically under-represented cities in Mexico as well as small businesses and export oriented industries which suffered under the relatively autarkic policies of the PRI played a pivotal role in the rise of the conservative, business-oriented PAN from a nuisance to a serious electoral challenger beginning in the 1980s (Shadlen 2000; Diaz-Cayeros, Magaloni and Weingast 2007). As a partial response, the PRI adopted poli-
cies of economic liberalization, including accession to NAFTA in 1994, shifting focus from patronage to policy concessions in order to maintain power amid urban mobilization against the incumbent. In the long-run, however, the PRI gradually lost support from the PRD on the left as it shifted rightward to deal with challenges from the PAN (Collier 1999b), culminating in the PRI’s defeat in the 2000 presidential elections.

In spite of the largely urban and business oriented origins of opposition movements which precipitated Mexico’s transition to multi-party competition, arguably one the most important consequences of democratization has been for social policy. As a consequence of the intensification of competition for the votes of the rural poor, Mexico has in recent decades experienced a shift away from narrow, discretionary welfare policies such as Pronasol toward large-scale, universalistic, and rule-based social programs such as Progresa (Diaz-Cayeros, Estévez and Magaloni Forthcoming; De La O 2015). Between 1990 and 2007, social spending has steadily risen, increasing from 6.1% of GDP in 1990 to 12.5% of GDP in 2008 (Rodríguez 2009). As in the Indian case, many of these policies have been pioneered by the former dominant party, which has sought to re-brand itself as a populist pro-poor party in contrast to its chief rival, the PAN.

5.2.4 American South

The case of the historically dominant Democratic Party in the U.S. south, in the century spanning the end of the Civil War in 1866 to the end of Jim Crow in 1965, represents an important case of single-party dominance that is often overlooked. By all accounts the so-called “Solid South” was dominated by white plantation elites, representing a “broadly based oligarchy” (Kousser 1974). Yet this group constituted an elite minority of Americans living in the American South. Not only did it obviously exclude blacks, but poor whites as well (Key 1949).
How did a party dominated by a narrow group of white plantation elites monopolize political power? One dimension was of course through the overt politicization of racial conflict, which played upon racial fears and biases among white voters, and authoritarian tactics which directly disenfranchised black voters through Jim Crow laws (Mickey 2015; Gibson 2013). Control over the machinery of the state and dispensation of patronage through the party was the second dimension, however, enabling party to elites to maintain political power in spite of an increasingly counter-majoritarian leadership and policy stance in a rapidly industrializing South (Mickey 2015; Key 1949).

Consistent with the theoretical argument, the rise of politically excluded industrial and urban business interests played an important role in the formation and mobilization of a white, business constituency for reform of the plantation-elite dominated Solid South (Black and Black 1989). Clearly, the back civil rights movement, together with federal legislation supported by national Democratic party president Lyndon Johnson, played the primary role in the demise of disenfranchising Jim Crow laws and also contributed to white conservative flight from the Democratic party to the Republican party. However, as previous historical research has documented, the decline of Democratic party dominance also came at the hands of a coalition of rising white industrial and business interests, as well as white middle-class voters increasingly employed in these sectors, who payed an increasingly large opportunity cost of supporting a party of agrarian elites that was perceived to be a constraint on the growing “Sunbelt” economy (Lassiter 2013; Wright 2013).

Strikingly, in parallel with the theoretical argument, there is evidence that the demise of the Solid South played an important role in the emergence of a welfare state both locally and nationally during the 1960s. During the era of the Solid South, the ruling plantation elites maintained a highly circumscribed welfare state that provided minimal benefits not only to disenfranchised blacks but also to working-class whites, who
were viewed by elites as an important source of cheap labor (Alston and Ferrie 1999). With the decline of single-party dominance, southern politicians confronting the need to court the support of poor black and poor white voters became much more supportive of welfare policies, with both Democratic and Republican southern politicians providing pivotal political support for several important reforms as part of the Johnson administration’s War on Poverty (Alston and Ferrie 1993), during which the American welfare state was greatly expanded.

5.3 Broader Implications

In sum, ranging from India to Italy and Japan to Mexico and the American South, single-party dominance and decline appears to correspond to a consistent pattern of counter-majoritarian political monopoly maintained through ties of patronage, followed by decline as a result of rising economic interest groups in the politically excluded sector, leading to inter-elite competition and shift in sectoral policy priorities and expansion of welfare policies in the long run.

I have placed this trajectory in a formal theoretical framework which illustrates how patronage ties preserve policy rents for dominant parties despite competitive elections, as well as how this equilibrium may breakdown if politically excluded groups are provided with sufficient incentives to pursue policy representation over patronage. Finally, I have discussed how inter-elite competition encourages rival politicians to expand the scope of political competition to the poor in order to win mass voter support.

These findings have important comparative implications, not only for the literature on dominant parties but also for the literature on political regimes and distributive politics more generally (Stasavage 2005; Ross 2006; Rodrik 1999). They highlight the importance of looking beyond formal democratic institutions to the presence or absence of de
facto political monopolies in the study of the relationship between democratic politics and distributive outcomes, and rethinking the strong division of political systems into those with robust formal democratic institutions and those without. The more salient distinction may be between political systems with real alternation of power and those without. This is an insight that has received some conceptual and theoretical attention (Acemoglu and Robinson 2006; Przeworski 2000), but not systematic empirical investigation. Indeed, the quantitative analyses in this dissertation appear to be among the first systematic analyses of the effects of dominant party decline on distributive outcomes holding formal democratic institutions constant.

The literature on regime type and distribution has reached a number of conflicting conclusions; many of these heterogeneous findings may be driven by a failure to account for the presence of de facto political monopolies and dominant parties in countries with formal democratic institutions. In the Indian case, failure to account for this would lead one to conflate very distinct patterns of distributive politics: one, dominant, counter-majoritarian and patronage oriented and the other, competitive and relatively responsive to mass voter preferences. India's historical transition between these two patterns of party competition and distribution represents a deepening of substantive accountability in the world's largest democracy.
Table A.1: Descriptive Statistics for Major Variables in Analysis in Chapter 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>1957-66 Mean</th>
<th>1967-76 Mean</th>
<th>1977-87 Mean</th>
<th>SD</th>
<th>Within-SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Panel A: State Assembly Constituency-level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congress Seat</td>
<td>63.77</td>
<td>51.77</td>
<td>42.77</td>
<td>49.99</td>
<td>47.85</td>
</tr>
<tr>
<td>Congress Vote</td>
<td>43.30</td>
<td>37.54</td>
<td>37.45</td>
<td>16.26</td>
<td>14.70</td>
</tr>
<tr>
<td>Agrarian Seat</td>
<td>0.87</td>
<td>7.70</td>
<td>32.53</td>
<td>36.88</td>
<td>33.99</td>
</tr>
<tr>
<td>Agrarian Vote</td>
<td>1.00</td>
<td>5.59</td>
<td>26.80</td>
<td>21.68</td>
<td>18.96</td>
</tr>
<tr>
<td>Non-Agrarian Seat</td>
<td>27.31</td>
<td>34.48</td>
<td>22.04</td>
<td>44.72</td>
<td>42.60</td>
</tr>
<tr>
<td>Non-Agrarian Vote</td>
<td>42.62</td>
<td>44.30</td>
<td>29.44</td>
<td>22.59</td>
<td>21.09</td>
</tr>
<tr>
<td><strong>Panel A: Parliamentary Constituency-level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congress Seat</td>
<td>74.89</td>
<td>61.70</td>
<td>58.16</td>
<td>48.58</td>
<td>42.01</td>
</tr>
<tr>
<td>Congress Vote</td>
<td>45.82</td>
<td>44.26</td>
<td>43.99</td>
<td>16.48</td>
<td>13.59</td>
</tr>
<tr>
<td>Agrarian Seat</td>
<td>1.36</td>
<td>4.41</td>
<td>31.68</td>
<td>38.39</td>
<td>35.16</td>
</tr>
<tr>
<td>Agrarian Vote</td>
<td>1.72</td>
<td>2.97</td>
<td>34.15</td>
<td>26.39</td>
<td>23.53</td>
</tr>
<tr>
<td>Non-Agrarian Seat</td>
<td>17.87</td>
<td>30.39</td>
<td>8.62</td>
<td>37.84</td>
<td>31.17</td>
</tr>
<tr>
<td>Non-Agrarian Vote</td>
<td>40.80</td>
<td>46.54</td>
<td>17.53</td>
<td>24.32</td>
<td>21.10</td>
</tr>
<tr>
<td>OBC caste</td>
<td>0.10</td>
<td>0.13</td>
<td>0.21</td>
<td>0.37</td>
<td>0.31</td>
</tr>
<tr>
<td>Lower caste</td>
<td>0.29</td>
<td>0.31</td>
<td>0.35</td>
<td>0.47</td>
<td>0.37</td>
</tr>
<tr>
<td>Agriculturist</td>
<td>0.28</td>
<td>0.34</td>
<td>0.49</td>
<td>0.49</td>
<td>0.42</td>
</tr>
<tr>
<td><strong>Panel C: District-level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HYV</td>
<td>0.00</td>
<td>0.14</td>
<td>0.33</td>
<td>0.20</td>
<td>0.17</td>
</tr>
<tr>
<td>Yield</td>
<td>1060.39</td>
<td>1320.37</td>
<td>1347.93</td>
<td>777.00</td>
<td>367.23</td>
</tr>
<tr>
<td>Wage</td>
<td>4.04</td>
<td>4.09</td>
<td>5.11</td>
<td>1.90</td>
<td>1.13</td>
</tr>
<tr>
<td>1966 Irrigation</td>
<td>0.21</td>
<td>0.21</td>
<td>0.21</td>
<td>0.20</td>
<td>0.00</td>
</tr>
<tr>
<td>Aquifer</td>
<td>0.08</td>
<td>0.08</td>
<td>0.08</td>
<td>0.27</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Notes: Panel A and B: Seat is a binary indicator of winning the seat, multiplied by 100. Vote is vote share, multiplied by 100. Panel C: HYV is share of agricultural land under HYV crops. Yield is agricultural productivity in Rs./Ha. Wage is daily wage of a male agricultural laborer in Rs./day. 1966 Irrigation is irrigated share of agricultural land in 1966. Aquifer is an indicator for the presence of a naturally occurring thick aquifer.
Table A.2: Descriptive Statistics for Major Variables in Analysis in Chapter 3

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Within-SD</th>
<th>5%</th>
<th>25%</th>
<th>50%</th>
<th>75%</th>
<th>95%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Panel A: State Budget Data</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative Spending</td>
<td>11.73</td>
<td>1.34</td>
<td>0.18</td>
<td>9.66</td>
<td>10.64</td>
<td>11.73</td>
<td>12.82</td>
<td>13.85</td>
</tr>
<tr>
<td>Agricultural Sector Spending</td>
<td>11.00</td>
<td>1.25</td>
<td>0.13</td>
<td>9.04</td>
<td>10.03</td>
<td>11.06</td>
<td>12.04</td>
<td>12.92</td>
</tr>
<tr>
<td>Social Spending</td>
<td>11.48</td>
<td>1.34</td>
<td>0.14</td>
<td>9.38</td>
<td>10.39</td>
<td>11.57</td>
<td>12.58</td>
<td>13.57</td>
</tr>
<tr>
<td><strong>Panel B: Explanatory Variables</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competition</td>
<td>0.53</td>
<td>0.50</td>
<td>0.41</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Fractionalization</td>
<td>0.44</td>
<td>0.16</td>
<td>0.20</td>
<td>0.21</td>
<td>0.33</td>
<td>0.42</td>
<td>0.56</td>
<td>0.71</td>
</tr>
<tr>
<td>SGDP</td>
<td>1220.27</td>
<td>569.72</td>
<td>459.16</td>
<td>628.04</td>
<td>806.27</td>
<td>1045.37</td>
<td>1465.61</td>
<td>2518.31</td>
</tr>
</tbody>
</table>

Notes: Unit of observation state-year, 1973-2002. Within-SD is within-state standard deviation of variable after partialing out state averages. All spending data is in the log of absolute spending in 100,000 rupees, based on reports from the Reserve Bank of India. Competition is a binary indicator for a period of multi-party competition, as identified from the structural break analysis. Fractionalization is one minus the Herfindahl index of party seat shares. SGDP is per capita state GDP in rupees.
Table A.3: Descriptive Statistics for Major Variables in Analysis in Chapter 4

<table>
<thead>
<tr>
<th></th>
<th>Pre-NREGA Mean</th>
<th></th>
<th>Post-NREGA Mean</th>
<th></th>
<th>Overall</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control</td>
<td>Treatment</td>
<td>Difference</td>
<td>Control</td>
<td>Treatment</td>
<td>Difference</td>
<td>Avg</td>
<td>25%</td>
</tr>
<tr>
<td>INC Vote %</td>
<td>19.01</td>
<td>15.01</td>
<td>-4.00</td>
<td>18.90</td>
<td>18.15</td>
<td>-0.76</td>
<td>18.21</td>
<td>0.00</td>
</tr>
<tr>
<td>INC</td>
<td>23.13</td>
<td>14.39</td>
<td>-8.74</td>
<td>17.67</td>
<td>15.05</td>
<td>-2.62</td>
<td>18.59</td>
<td>0.00</td>
</tr>
<tr>
<td>Incumbent Vote %</td>
<td>27.10</td>
<td>30.02</td>
<td>2.92</td>
<td>32.02</td>
<td>32.59</td>
<td>0.57</td>
<td>30.13</td>
<td>16.16</td>
</tr>
<tr>
<td>Incumbent</td>
<td>26.47</td>
<td>35.10</td>
<td>8.63</td>
<td>35.79</td>
<td>40.78</td>
<td>4.99</td>
<td>33.32</td>
<td>0.00</td>
</tr>
<tr>
<td>BI</td>
<td>1.29</td>
<td>0.96</td>
<td>-0.34</td>
<td>1.29</td>
<td>0.96</td>
<td>-0.34</td>
<td>1.18</td>
<td>1.00</td>
</tr>
<tr>
<td>BI Indicator</td>
<td>0.09</td>
<td>0.85</td>
<td>0.76</td>
<td>0.09</td>
<td>0.85</td>
<td>0.76</td>
<td>0.33</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Notes: INC and Incumbent are binary indicators of electing a legislator from the Congress and state-level incumbent parties, respectively, multiplied by 100. INC % and Incumbent % are variables representing percentage point vote share. BI score is backwardness index score for a district, while BI indicator represents intended assignment to treatment according to official algorithm.
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