Demanding Deeper Democracy: Party Fragmentation, Ethnic Mobilization, and Programmatic Politics in the Indian States

Emmanuel Teitelbaum Assistant Professor of Political Science & International Affairs George Washington University ejt@gwu.edu

Tariq Thachil
Postdoctoral Associate
The MacMillan Center for
International & Area Studies
Yale University
tariq.thachil@gmail.com

Abstract: How do countries transition from more hierarchical and clientelist political structures to more programmatic and participatory politics? In this paper, we address this crucially important question by looking at the political system in India, the world's largest and most stable developing democracy. We argue that the recent proliferation of political parties has loosened India's traditional, hierarchical patronage structures and promoted the emergence of a robust, if nascent, programmatic politics. The emergence of new parties increases the voice of lower caste voters, who demand more and better public goods and services. We analyze of public spending data from 16 major Indian states over a period of 45 years. Our analysis shows that fragmentation of the party system and the political rise of India's lower castes are associated with higher spending on public goods, less spending on club goods and better delivery of public services.

Prepared for presentation at the Leitner Program's Conference on Redistribution, Public Goods and Market Failures, Yale University, April 9-10 2010.

The 'third wave' of transitions to democracy in the waning decades of the 20th century has had clear and profound implications for debates about democracy in the 21st century. In policy and scholarly circles alike, the emphasis has shifted from how to promote and stabilize democratic institutions, to how countries can 'deepen democracy' or, in other words, improve the scope and quality of citizen participation in public life. Within this broader conversation, one major topic of discussion regards the manner in which politicians seek to mobilize voters. Scholars working on this issue have sought to classify different tactics of political incorporation, focusing primarily on the distinction between clientelistic and programmatic modes of incorporation. Where the former is defined as a technique predicated on the discretionary dispensation of excludable resources in return for votes, the latter is understood as a system under which parties implement officially articulated public policies to secure broad support (Stokes 2007; Kitschelt and Wilkinson 2006).

Within comparative studies of clientelism, scholars have identified the myriad ways in which politicians use the selective dispensation of resources to garner votes. Some analyses have further distinguished between patronage, which uses public assets for these purposes, and other types of clientelistic strategies using private resources. Even within patronage, tactics can range from the direct exchange of public sector jobs in return for political support (Robinson and Verdier 2002) to debt forgiveness (Blaydes 2009) to targeting means-tested social welfare schemes (Magaloni 2006, Dunning and Stokes 2009). Whatever their form, it is generally believed that clientelistic tactics of incorporation are targeted benefits to a select group of individuals, whereas programmatic forms of

mobilization tend to promote investments in public goods and services that can be accessed by a far larger percentage of the population.

While debates over definitions and categorizations have illuminated our understanding of the range of strategies parties in developing countries may pursue, there remains much work to be done in explaining variations in the adoption of these strategies. Why do some parties engage in more clientelism than others? What features of a political system or society encourage political leaders to rely more on providing public goods and services as a strategy for winning elections? More broadly, what are the factors that enable countries to transition from more hierarchical and clientelist political structures to more programmatic and participatory politics?

In this paper, we address these crucially important questions by looking at the political system in India, the world's largest and most stable developing democracy. We focus on understanding how changes in the electoral arena affect the ability of Indian voters to register demands and to ensure that their voices are heard. In particular, we examine how trends of increasing spending on social provisions like education and healthcare in many (but not all) regions in India, relates to an oft-noted feature of the political system--the steady rise in the number of parties in many states since the late-1970s. Such 'fragmentation' of the Indian political system has been singled out as a factor inhibiting political compromise and contributing to political disorder (Kohli 1990), and even reduced spending on public goods in certain states (Chhibber and Nooruddin 2004). The fact that electoral fragmentation is associated with the increasing political salience of caste, and formation of caste-based parties, only serves to further expectations of its negative consequences on social policy. A number of studies have outlined the dampening

impact of social heterogeneity and ethnic polarization on public goods provisioning (Alesina, et. al 1999; Habyarimana 2009), and hence the proliferation of ethnic parties might be considered deleterious for the prospects for programmatic politics.

However, we argue that the increasing politicization of caste identities, and the consequent proliferation of caste-based parties in India, has actually had a salutary effect on public spending patterns. Such fragmentation has been a key cause of the loosening of India's traditional patronage structures based on caste hierarchies, thereby providing space for a robust, if nascent, programmatic politics. We argue that the emergence of new parties have given voice to the concerns of previously underrepresented groups of voters, and helped transform caste into a more horizontally organized political category than in the past.

Perhaps the most important of these groups are backward castes (also known as Other Backward Classes or OBCs), who constitute between 40 and 50 percent of the Indian population and have become increasingly powerful in national politics over the last three decades. While scholars have commented on the growing clout of OBCs, there have been few attempts to empirically assess their indisputably rising influence on policy outcomes. We argue that although OBCs are a highly heterogeneous group of voters, on balance they demand and utilize key public services far more than the upper castes who have historically controlled local governments. The increased inclusion of OBCs in Indian politics has therefore forced political parties to provide higher levels of those services, particularly education, that appeal to most members of this diverse constituency.

We test our argument with public spending and elections data from 16 major Indian states. Specifically, we analyze how state budgets reveal varying levels of fiscal clientelism,

by distinguishing between two categories: spending on economic services, which is easily directed at politically salient insiders, and spending on basic social services, which tends to benefit broad swaths of voters. The former type of spending is more likely to be associated with clientelism, which focuses on providing excludable benefits to voters under *quid pro quo* arrangements, while the latter spending is more programmatic because of its emphasis on services with a 'public-good quality' (Stokes 2007).

Through studying patterns in these different kinds of public expenditures, we are able to demonstrate how party fragmentation fuelled by increasing backward caste political assertion relates to the level of local programmatic politics. The analysis has important implications for the study of political participation in new democracies. Over the years, India has been the locus for a veritable cottage industry for studies of clientelism. Early work outlined how the longtime dominance of the Indian National Congress was predicated on the party funneling public resources and jobs to key local elites in exchange for the votes of the constituencies the latter controlled (Kothari 1964: Weiner 1967). Later studies have analyzed the patronage politics associated with new entrants into Indian democracy, which institutionalized what Chandra has termed a 'patronage democracy' (Chandra 2004).

Yet recent discussions have also suggested that Indian politics might be moving in a more programmatic direction, as rapid economic growth has also raised costs of providing acceptable selective benefits to increasingly demanding voters, thus forcing parties away from clientelistic behavior (Wilkinson 2006). Our study confirms this optimistic view and, in so doing, suggests some important dynamics through which young democracies may become more participatory and programmatic as they mature. If our analysis is correct,

the experience of India suggests that rather than simply enduring political exclusion and unresponsive party leaders, voters have substantially enhanced the quality and effectiveness of the political system by increasing their participation in democratic processes as voters, as legislators, and through forming new political parties.

Party Fragmentation and Social Spending

In recent years, scholars of Indian politics have demonstrated increasing interest in explaining variations in the commitment of subnational governments towards spending on the most basic of public services. Prior studies examining the wide variations in such commitment of have emphasized the importance of a range of political and institutional factors. Research focusing on the role of political business cycles has demonstrated how elections boost spending designed to benefit specific groups of voters (Khemani 2004) but decreased spending on social services (Saez and Sinha 2009). Another set of studies have explored whether caste-based quotas diminish or enhance party incentives to spend on selective benefits (Khemani and Keefer 2009; Pande 2003). Chhibber and Nooruddin (2008) show how states with higher revenues and greater 'fiscal space' are better able to enact broad public policies to win the support of a majority of constituents. Still other studies have explored the role of governing party ideology (Kohli 1987; Saez and Sinha 2009), and ethnic heterogeneity (Banerjee and Somanathan 2006) on public goods provision in India.

Another important feature of the political landscape that has received some attention, but generated little consensus, is the role of party fragmentation on social spending. Over the last three decades, India's political system has been radically

transformed from a highly centralized system dominated by the Indian National Congress, into a 'cleavage-based' system structured largely along caste lines with multiple parties competing for votes (Chhibber 2000). Consequently, during the 1980s and 1990s, there has been a proliferation of salient parties in several Indian states. In the literature on party systems, the primary metric of party fragmentation is the standard Laakso and Taagepera (1979) "effective number of parties" measure. In 1980, the average effective number of parties at the state level was 4.42, which had increased to 5.25 by 1990. However this general trend was not experienced uniformly across states: in 1990 the number of effective parties among major Indian states ranged from 2.64 in Orissa to 7.42 in Kerala.

How should we expect these trends to affect the level of political commitment to public goods and services? In the fiscal spending literature, two distinct and opposing interpretations of the effects of party fragmentation on social spending have emerged. Chhibber and Nooruddin (2004) argue that given that the Indian electoral system is single-member simply plurality (first past-the-post), parties in more fragmented states need to win fewer votes to cross a winning threshold than in two-party state systems, in which a majority of votes are required. Quoting de Mesquita et. al (2000), they argue that the key to understanding the political incentives for public goods provision is the size of the minimum winning coalition relative to the size of the selectorate (those who have a say in the selection of leaders). A larger winning coalition makes it more economically efficient to provide broad public goods to the entire selectorate, rather than selective benefits to growing numbers of individual members of the coalition. A second view, proposed by Saez and Sinha (2009), holds that "the extent of party competition increases political

¹ The measure is = $1/\sum x_i^2$ where x_i refers to the percentage of votes (or seats) captured by the ith party.

uncertainty and pressures on state-level incumbents, which is likely to increase public expenditure (98)."

It is worth noting that Chhibber and Nooruddin (hereinafter CN) and Saez and Sinha (hereinafter SS) arrive at different conclusions not only in their theoretical discussion, but in their empirical findings as well. CN provide evidence that multiparty systems in India are less prone to spend their money on programmatic budget items, whereas governments in two-party states tend to focus more on distributing club goods. SS, by contrast, find that the effective number of parties is correlated with higher spending on social services, and especially education.

We will return to the issue of empirical findings later, but our initial focus is on how to theorize the relationship between party fragmentation and social spending. Does fragmentation decrease the size of the winning coalition, thus undermining incentives to spend on public goods? Or is there some verifiable mechanism linking fragmentation with incentives for improved service provision? It is hard to deny the basic logic of CN's insight: a larger number of parties in a plurality system entails that parties require lower vote shares to win seats. Indeed, looking purely at voting statistics appears to validate this theory. Between 1950 and 2007, winning parties in Indian states with fewer than three effective parties typically won 48% of the vote, compared to 39% in states with more than three.² It is also logical to argue that the more individual voters parties need to appeal to directly, the more efficient it is to provide public instead of club goods.

² The difference in winning thresholds were not as large, with winners in the former category beating their closest rivals by just under 20 percentage points across the panel, compared to 15.4 percentage points for winners in more fragmented systems.

However, we believe that there is a social logic at work in Indian democratic politics, which undercuts the institutional logic specified above, and provides the basis for some multiparty systems to spend *more* on certain types of public goods. If voters across Indian states (and different election periods) were uniformly autonomous at the polls, then equating lower vote shares with smaller winning coalitions would be justified. Such an assumption is problematic in the Indian context however, because party fragmentation was a process driven by a particular social development, namely the weakening of traditional hierarchical incorporation of voters through vertical caste structures.

A number of scholars have noted how social hierarchy may inhibit the functioning of democracy despite the presence of formal franchise. Kohli (2003) distinguishes between *democracy*, which emerges when all adult citizens of a country can participate in regular elections, and *democratization*, which refers to "a political process that entails the genuine spread of power in society, leading to enhanced popular control over national choices (40)." Roberts (2002) writes about the process of 'encapsulation', in which aggregative organizations such as unions reduce voter autonomy by delivering en bloc votes. While Roberts understands such encapsulation as providing a level of representation for these blocs, he suggests that the presence of such linkages undermine voter autonomy, and characterizes democratization as a process in which government accountability is improved through the weakening of these linkages (Roberts 2002: 46).

Indeed de Mesquita et. al. (2000) themselves note that the size of the winning coalition is not determined simply by institutional rules, but by socio-political relations as well. Specifically, they argue that aggregative, hierarchical organizational structures of incorporation intervene and distort the purely institutional logic of electoral systems.

When individual members of the selectorate are not able to exercise their franchise autonomously, the actual winning coalition might be much smaller than a simple measure such as vote share would indicate:

If the independence of voters is violated, leaders are more likely to face the political incentives inherent in a *small-coalition, large-selectorate system even though the trappings of governments suggest the system is democratic.* [emphasis added] (473) Thus the level of individual voter autonomy importantly conditions the incentives of parties to behave clientelistically or programmatically.

While both Roberts and de Mesquita et. al focus on organizations like unions as sources for such distortion, it is clear that social hierarchies can perform similar aggregative functions, thereby sustaining the incentives for clientelistic spending to remain high even in conditions of broad procedural franchise. Thus, if strategies of 'encapsulation' dominate the political landscape in two-party systems, then relatively large electoral thresholds can be crossed with smaller winning coalitions than simple vote share statistics can reveal. In contrast, if multiparty systems display evidence of the erosion of patronage and, in fact, the expansion of voter autonomy, and winning coalition size in these systems might ironically be larger than in low-fragmentation states. In the next section, we briefly discuss how such a reality does in fact manifest in India, as party fragmentation has given voice to previously marginalized groups in India. We then move to specify our initial hypotheses before proceeding to a presentation of our empirical analysis.

The Rise of Lower Castes and Social Spending in India

Indian Democracy Under the Congress

The development of the party system in India can be periodized in different ways, but most analysts would characterize the first two decades following independence from British colonial rule in 1947 as the era of the Indian National Congress' unchallenged dominance (Corbridge and Harriss 2000). There can be little doubt that the Congress benefitted from its status as the party of the independence movement, but its hegemony was at least equally predicated on the establishment of an effective electoral machine. A rich tradition of scholarship by sociologists, political scientists, and anthropologists have documented how under the Congress 'system', upper caste intermediaries such as local landlords and business elites, exercised their social and economic control over local communities at election time (Weiner 1967, Kothari 1964). As Jaffrelot (2003) notes:

The views of influential figures...led the Congress to accommodate upper caste notables. The party, in doing so, sought to use their social influence, in terms of economic leverage or physical intimidation. These were the sources of the notables' political clout and hence the starting-point of Congress's 'vote-bank politics', an arrangement where votes can be delivered by local potentates acting as political intermediaries between the parties and the electorate (66).

Thus elite-centric patronage structures, such as those historically constructed by the Congress in India, existed precisely to violate the independence of ordinary voters, which crucially conditions the effective size of a polity's winning coalition.

Since the Congress faced few salient opponents in this era, voters had little alternative to existing elitist methods of incorporation. This was especially true in states in

11

North India, where even when opposition to the Congress emerged, it primarily came from the Hindu nationalist Bharatiya Janata Party (BJP), which was historically a political formation drawing support from upper castes. In such areas of low party fragmentation, elite parties like the Congress and BJP could continue to court a relatively small number of intermediaries, even to secure the relatively larger vote share needed to win seats.

According to our theoretical expectations, states with few effective parties are therefore likely to be typified by fiscal patterns privileging expenditures on selective benefits for these influential supporters, rather than broad-scale public provisioning.

The Political Rise of India's Lower Castes

In contrast, voters in states with higher levels of fragmentation tend to face a very different set of options. To understand why, it is necessary to situate our discussion of fragmentation in the context of the evolution of caste-based politics in India since independence. Beginning in the south of India in the 1960s and 70s, lower caste populations have increasingly organized themselves as political communities, seeking greater representation and 'voice' within the Indian polity (Hirschman 1970). The vast majority of these mobilizations have come from lower caste communities somewhat confusingly labeled 'Other Backward Classes' (OBCs) in the lexicon of the Indian state.

OBCs are a sprawling category, which by some estimates comprise almost half of the Indian population. Not surprisingly, there is a tremendous amount of internal differentiation within this governmental aggregation. Having said that, the vast majority of OBCs come from the Sudra caste category, which refers to a heterogeneous grouping of *jatis* or subcastes, who are seen as occupying the 'bottom' rung of the four-tiered *varna* system of

caste. Accordingly to the ritual hierarchy of caste, Sudras are below castes in the three other *varnas*, but above former untouchable castes (Scheduled Castes) as well as indigenous tribal communities (Scheduled Tribes), both of which are seen as outside of the traditional caste system (literally 'outcastes').

Several accounts have noted how the decline of upper caste Congress hegemony described above was in large part facilitated by the increasing political assertiveness of OBCs (Varshney 2000; Jaffrelot 2003; Guha 2007). This pattern was first evidenced in the south, where OBC politicians built upon rich legacies of social protest by lower caste reformers of the early twentieth centuries. Classic examples include the activities of Sree Narayana Guru, who organized the Ezhava backward caste community in Kerala to mobilize for the lifting of the most oppressive caste sanctions in the state. In the neighbouring state of Tamil Nadu, E.V. Ramaswamy (a.k.a. Periyar) quit his post in the Indian National Congress in 1925 in protest that the party served only Brahmin elites. His subsequent organizational work among non-Brahmin communities laid the platform for the backward caste political formations, the Dravida Munnetra Kazagham (DMK) and All India Anna Dravida Munnetra Kazagham (AIADMK) which dominate the state's politics even today. During the 1960s and 1970s, backward caste politicians in southern states began the process of politicizing the horizontal linkages created by these earlier movements to produce voting blocs among their co-ethnics. This process in turn spread to the north by the 1980s and 1990s, fuelled in part by the controversial extension of quotas in central administrative posts to OBC populations in 1990.

Backward caste mobilization took several forms. First, OBCs became increasingly active at the polls, a fact highlighted by the increasing turnout rates among lower caste

communities in recent elections. These rates now match or exceed those of upper castes, a trend which stands in sharp contrast to global patterns of poor voter participation (Yadav 1999; Kumar 2009). Indeed, Yadav (1999) suggests that this "participatory upsurge of the *sudras* [OBCs} is the defining characteristic" of India's post-Congress electoral system. As OBC voters became increasingly assertive, they formed the basis for successful OBC candidates to become legislators in Indian government bodies. Thus a second trend associated with this democratic upsurge has been the increasing proportion of lower caste representatives in Indian state legislative assemblies, a development Jaffrelot (2003) terms 'the silent revolution' of Indian politics. In 1971, upper castes comprised 53.9% of Indian Members of Parliament, and OBCs were only 10.1%. By 2004, OBCs occupied 25.3% of posts, while upper castes saw their numbers dwindle to 33% (Jaffrelot and Kumar 2009: 7).

Many successful OBC politicians across India, following the successful southern precedent, then began forming their own political parties organized explicitly to appeal to backward caste communities. In addition to the aforementioned DMK and AIADMK in the south, parties heavily oriented towards OBC communities emerged in other parts of India, including the Samajwadi Party in Uttar Pradesh, the Rashtriya Janata Dal in Bihar, and the Janata Dal (United) in Bihar and Jharkhand. All of these parties were formed by successful backward caste legislators, who had heavily relied on OBC mobilization to succeed, and emerged in the 1990s as significant regional forces. Consequently the higher levels of party fragmentation in India in the post-Congress era were inextricably linked to the increase in OBC electoral formations and political assertiveness more generally.

How the Transformation of the Party System Relates to Social Service Provision

What has this interlinked increase in party fragmentation and OBC mobilization entailed for patterns of social spending in India? Whether the growing influence of backward castes represents a deepening of Indian democracy, or a mere elevation of manipulative and corrupt backward caste elites, is a matter which has been hotly contested by scholars studying India (Varshney 2000: 7). We agree in general with authors who see the various forms of increased OBC participation as more than mere tokenism or manipulative incorporation of corrupt lower caste elites. In fact, the new OBC political assertiveness has likely had dramatic effects on the character of Indian politics. As Jaffrelot (2003: 10) puts it, this new political salience of caste "was responsible for the democratization of Indian democracy."

Specifically, available evidence suggests that by undermining the traditional hierarchical incorporation of lower castes, the party fragmentation resulting from OBC participation in politics has increased voter autonomy as well as legislator presence. For example, in the 2004 National Election Study conducted by the Center for the Study of Developing Society, in states with greater than 4 effective parties, 70.75% of OBC respondents reported their own opinion to matter the most when casting their vote, compared to only 41.78% of such respondents in states with less than 3 effective parties.³ Similarly, Krishna (2003) offers contextual and survey data to demonstrate how a new type of political leader (*Naya Neta*) in the Indian village has resulted in continual increase in poor voter autonomy over successive elections.

³ Data from responses to Question 9 on the 2004 NES survey, 'In deciding whom to vote for, whose opinion mattered to you most?'.

Thus, as was suggested earlier, the dynamics associated with fragmentation in India represent a breakdown of 'encapsulation' and entail that the effective size of the winning coalition is actually *larger*, even as the absolute vote share required to win seats is lower in multiparty states. As a result, competitors in fragmented states are now forced to appeal more directly to voters as individuals instead of as blocs. In other words, since political elites in multiparty systems are less able to effectively capture lower caste votes through traditional clientelist structures, it has become preferable for them to begin providing public goods to the broad selectorate.

More generally, the social logic of fragmentation in India overrides the abstract institutional logic of plurality system vote-counting, with important implications for fiscal priorities. For our argument to find empirical resonance, we expect low fragmentation states to be typified by legislative bodies in which upper castes remain dominant, thereby constraining winning coalitions to remain a small restricted to a small number of the overall selectorate, and consequently providing incentives for the continuation of dispensing pork to these few influential elites. Conversely we expect higher party fragmentation to be witnessed in states with increased representation of backward caste legislators. In turn, we would expect such conditions to be positively associated with greater state commitment to public goods provisioning, since backward castes are more likely to demand spending on social services than wealthier members of upper castes, who can more easily afford private providers for both education and health services.⁴

We recognize some observers may find the argument that OBCs would demand public services surprising. A common misperception held by members of the media and by

⁴ Other scholars have found similar positive effects of party fragmentation on public goods provisioning (Hiskey 2003).

some academics is that OBCs are by now socially and economically 'dominant' in Indian society, and due to their newfound wealth and status, are unlikely to exhibit a high demand for basic public services. Such arguments do not, however, hold up to empirically scrutiny. While it is true that some OBC individuals are extremely wealthy, OBC populations as a whole remain considerably behind those of upper castes on all measures of economic and human welfare. For example, 34% of OBCs remain functionally illiterate, compared to 23% of upper castes according to the 2004 NES study. Income statistics provide further evidence that, in spite of OBC gains in recent years, upper castes continue to exert their dominance in Indian society. Only 10% of OBCs surveyed came from households earning more than Rs. 5000 (roughly \$110) per month, compared to 23% of upper castes. And while 36% of OBC households earned less than Rs. 1000 (\$22) per month, only 21% of upper caste households earned below this threshold.

For households earning such small sums, even low-cost private alternatives to public services are simply unaffordable. This fact was illustrated by a recent comprehensive report on Indian education (ASER 2009). The report notes that enrollment in public schools still accounts for between 80 and 85 percent of total enrollment nationwide (ASER 2009: 9). Moreover the overall high rates of enrollment in India (between 75 and 90 % by most estimates) indicate that, despite the numerous problems in public education in India (teacher absenteeism chief among them), these services are nevertheless both broadly *demanded* and *accessed*. Since OBCs constitute half the Indian

_

⁵ The difference in these figures depends on whether one uses the number of formally registered students, as per official practice, or the number of children who on average actually attend school (which lowers the figure to the 75% level). This distinction between official enrollment and attendence rates is made in the introduction to the ASER report (ASER 2009:1). However, for

population and are on average poorer than upper caste Indians, these enrollment statistics provide us with a fair degree of confidence that the average OBC household is demanding and utilizing public education services more than the average upper caste family.

Summary of Expectations

Our expectations about the relationships between party fragmentation, legislative representation, and public spending can be summarized as follows:

H1: States with higher levels of backward caste representation will have greater levels of party fragmentation.

H2: States with higher levels of party fragmentation will spend more of their budgets on providing public goods and less on club goods.

H3: States with greater levels of backward caste representation will spend relatively more of their budgets on providing public goods than states with high levels of upper caste representation.

Data and Methods

Measuring Programmatic Spending

Our analysis builds on previous studies by examining spending within various categories of the government's budget. Our goal is to distinguish between two broad types of expenditures in Indian state government budgets: spending on public goods, or those items from which it is difficult to exclude specific groups of voters; and spending on club goods, or those items that are easier to target toward specific constituencies. Spending on

purposes of our argument, even 75% enrollment suggests that OBCs must necessarily be consumers of public education.

public goods is indicative of a more programmatic style of politics, whereas spending on club goods suggests a more clientalist form of politics. We choose the state as the unit of analysis not simply for purposes of comparative analysis, but because state governments in India have almost exclusive control over the dispensation of social and economic services that most immediately impact local communities. We analyze 16 major states in our analysis, which together comprise approximately 95% of the population.⁶

Within the literature on public spending, various approaches have been utilized to distinguish between spending on public goods and more targeted expenditures designed to buy the votes of key supporters. Two of these approaches are of particular importance for our analysis. Khemani (2004) exploits the distinction between 'revenue account' and 'capital account' expenditures within the Indian budget. The revenue account category is comprised of current and recurring expenditures for the operation of state government, such as salaries and wages, administrative costs, and debt servicing, whereas the capital account category is comprised of expenditures on physical infrastructure such as roads, bridges and irrigation (Jaganathan 1986). Khemani's argument is that capital expenditures are easier to target towards particular groups of voters because they are geographically and sector specific (Khemani 2004; p. 132).

Chhibber and Nooruddin (2004) disaggregated public finance data along a different dimension. They exploit the distinction between 'development' and 'non-development' spending. Development expenditures are those that are designed to promote human or economic development, whereas non-development expenditures are primarily on public

⁶ Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Jammu & Kashmir, Karnataka, Kerala, Maharashtra, Madhya Pradesh, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal.

administration (courts, police, tax collection, etc) plus public pensions, transfer payments and subsidies. Chhibber & Nooruddin's argue that development expenditures tend to have more of a public goods nature, whereas non-development expenditures are more easily captured by special interests, like public sector unions.

While there are merits to these approaches, for our analysis it is necessary to disaggregate budgetary spending even further. Khemani's approach has the virtue of isolating targeted spending, and Chhibber and Nooruddin are correct in pointing to the political importance of development spending. However, both approaches have the drawback of lumping together a number of large categories of spending (like fiscal services and interest payments) into their respective 'populist' or 'programmatic' spending categories that are not the types of public goods we would expect the median voter to demand at election time.⁷ This makes it difficult to determine whether the analysis is really comparing targeted clientalistic expenditures against programmatic spending on public goods.

To address this problem, we focus our analysis exclusively on the 'development expenditures' category within the budget, and we distinguish between two components of the aggregate category of development spending: expenditures on 'social services' versus expenditures on 'economic services'. During the period of our analysis, approximately 75% of social service spending was education, health and family welfare, water supply and housing. The largest category of spending was education, which comprised approximately 60% of the social services budget in a given year. While clearly not immune from instrumental co-option, education, health and social welfare programs would arguably find

⁷ While distinct, there is substantial overlap between the 'non-developmental expenditures' and 'revenue expenditures' categories of the budget.

the greatest consensus as 'public' goods. In line with Khemani's logic, 95% of the funding for social services comes from revenue account expenditures. In contrast, 'economic services' are primarily funded through capital account expenditures and are more easily targeted towards select individuals or groups of voters. The major components of 'economic services' include expenditures on crop and animal husbandry, irrigation, energy, industry and minerals, and programs falling under the nebulous headings of 'rural development' and 'special area programs'. Thus states that spend more on economic services should be considered less programmatic than those spending more on education, health care, and social welfare programs.

In our analysis, we examine the effects of fragmentation on social service spending as a percentage of total budgetary spending, as well as the log levels of spending on social services and economic services per capita. In fragmented states with higher levels of voter autonomy, and therefore larger winning coalitions, we expect to find that legislators will find it increasingly efficient to allocate a greater proportion of their budget to social services demanded by these groups, and less to the more excludable economic services categories. Further, since the political rise of OBCs has been the driving force behind the transformation of the party system, we expect OBC dominance to be positively associated with spending on social services.

We do not limit our analysis to a specific time period; rather, the period of analysis is governed solely by data constraints. Data for the broad categories 'social service spending' and 'economic service spending' exist from the mid-1970s onward, whereas data for specific categories of spending, such as education and health, are available from the early 1960s.

Literacy

An obvious potential implication of our argument is that the transformation of the political system has resulted not just in more programmatic spending, but real benefits for citizens of India. We explore this possibility by looking at the relationship between party fragmentation and literacy. We focus on literacy because educational spending is typically the largest category of spending within the 'social services' category of the budget, and because as we show below OBCs have demanded educational services more than other social services. Data on literacy come from the Indian Census.

Party Fragmentation

In contrast to measuring programmatic spending, the issue of how to measure party fragmentation is easily resolved. In the literature on party systems, party fragmentation is measured as the 'effective number of parties' (Laakso and Taagepera, 1979). This measure is = $1/\sum x_i^2$ where x_i either refers to the percentage of votes or seats captured by the ith party. We use both of these measures—the effective number of parties based on votes (ENPV) and the effective number of parties based on seats (ENPS)--in our analysis. *OBC Political Representation*

The measure of OBC representation is the percentage of seats won by OBC candidates. This measure is based on a recent study led by Jaffrelot and Kumar (2009) that documented the caste background of members of the state legislative assemblies (MLAs) for a sizeable number of Indian states for all elections since Independence. These data have been used to report the percentage of seats held by SC, OBC and upper caste representatives. Twelve of the states in the Jaffrelot and Kumar study overlap with the sixteen that we analyze in this paper.

Control Variables

In our analysis, we control for relevant economic, political and demographic factors. Since government spending is likely to correlate with wealth, we control for level of development by including the log per capita state domestic product. Because spending priorities are also arguably tied to political ideology (Saez and Sinha 2009), we control for the percentage of seats held by three most dominant ideological centers in Indian politics—the Indian National Congress (INC), the Bharatiya Janata Party (BJP) and left (mainly communist) grouping of parties. Additionally, we include a dummy for election years because previous studies have found that elections influence patterns of spending (Khemani 2004; Saez and Sinha 2004). Finally, we include log population on the right hand side of the equation to control for the fact that it may be harder for politicians to win votes with club goods in large states than in states in which the targeted constituency comprises a larger percentage of the selectorate. Details regarding the sources of these and all of the variables that we use in our analysis can be found in the data appendix.

Models and Results

We test our hypotheses using three sets of models. To test hypothesis 1, we look at the relationship between OBC dominance and the effective number of parties. In these models, measures of party fragmentation are regressed on the caste composition of the state assemblies. The expectation is that party fragmentation correlates positively with OBC dominance but not the dominance of other caste groupings. The second set of models test hypotheses 2 and 3 by regressing measures of public spending on measures of party fragmentation and OBC dominance. Specifically, we look first at how fragmentation relates

to the balance of spending on social versus economic services. Then, we show specifically how OBC dominance translates into higher levels of spending by analyzing spending on education and health. In a final set of models, we explore the relationship between party fragmentation on literacy.

Each model is a pooled, time-series cross-section (TSCS) analysis and includes fixed effects for states and years. We use a fixed effects specification because it allows us to measure changes within states over time. For all of the models, we use panel corrected standard errors as recommended by Beck and Katz (1995).⁸ All models were cleaned of outliers, which were defined as observations exceeding three standard deviations above the mean.⁹

OBC Dominance and Party Fragmentation

The models in Table 1 test the hypothesis that OBC dominance is related to the transformation of the party system. The models provide strong support for the argument that the decline of the Congress and the political rise of OBCs is associated with the increasing fragmentation of the party system. OBC participation in the Vidhan Sabhas is correlated with both ENPV and ENPS at the .01 level. By contrast, upper caste dominance is negatively correlated with ENPV and not correlated with ENPS.

--table 1 about here--

The substantive effect of OBC participation on the party system is also fairly large.

The models predict that a one percent increase in OBC participation leads to approximately

⁸ We do not cluster our standard errors because, as Donald and Lange (2007) standard asymptotic assumptions do not apply when the number of groups is small. In our analysis the number of groups (states) ranges between 12 and 16.

⁹ In a standard normal distribution, observations exceeding three standard deviations will account for approximately .3% of all observations.

an increase of .045 in ENPV and .027 in ENPS. The mean participation of OBCs across all states and years is 19% and the standard deviation 15%. Thus, a one standard deviation change in OBC participation results in about a .68 unit increase in ENPV and a .40 unit increase in ENPS. This is a sizeable effect considering that, after cleaning for outliers the standard deviation of ENPV is 1.32 and the standard deviation of ENPS is 1.14.

Fragmentation and Public Spending

The models in Table 2 test the core hypothesis of this study--that party fragmentation generates more spending on public goods and reduces spending on club goods. The first four models in the table explore the effects of fragmentation on social services spending as a percentage of the total budget. Models 1 and 2 explore the effects of ENPV and models 3 and 4 explore the effects of ENPS. The first of each set of models regresses social services spending on social spending only including fixed effects for states and years, and the second set of models includes the full battery of controls.

--table 2 about here--

In all four of the models, ENPV and ENPS are positively and significant associated with a higher percentage of budgetary spending on social services at the .01 level.

Substantively, the effect of ENPV and ENPS is similar. A one-unit increase in ENPV or ENPS is associated with an approximately one percent change in social services spending relative to the total budget. Thus, highly fragmented states may spend as much as 8 % more of their budget on social services than a state with a two-party system.

Providing more evidence of the mechanism at work, population is highly significant and positive. This suggests that parties in states with large selectorates will find it more

difficult to win elections by targeting specific groups of voters with club goods, and instead will be forced to win over large numbers of voters through public goods provision. Other control variables do not correlate well with social spending as a percentage of the budget.

The remaining models in the table examine the effects of fragmentation of log per capita levels of spending. Models 5-8 look the level of spending on economic services, and models 9-12 analyze levels of spending on social services. ENPV and ENPS are both correlated with a reduction in economic services at the .01 level, providing more support for the argument that fragmentation results in a reduction of spending on clientelistic club goods. ENPV is positively and significantly correlated with the level of spending on social services. While we do not see a statistically significant correlation between ENPS and levels of social spending the signs of the coefficients are expected positive direction. Finally, the coefficient for population is negative and significant in the models of spending on economic services and positive in the models of spending on social services, again suggesting that larger selectorates force politicians to spend less on club goods and more on public goods.

OBC Dominance and Spending on Education and Health

In Table 3 we further test the mechanisms at work by analyzing how OBC dominance relates to specific types of social spending. We look at education and health because these are typically the largest sub-categories of spending within the services category. If hypothesis 3 is correct, then OBC dominance in state legislatures should be positively related to spending on health and education, whereas upper caste dominance should be correlated with lower levels of spending in these categories.

--table 3 about here—

Models 1 and 2 present the results of our analysis of spending on education. Model 1 analyzes the effects of OBC dominance on education spending as a % of total budgetary spending while model 2 looks at levels of spending. Confirming hypothesis 3, we find that OBC dominance is positively and significantly associated with spending on education at the .05 level, whereas upper caste dominance is negatively associated with spending on education at the .01 level. Further, as with the models overall social spending, population is positively and significantly related to spending on education.

Models 3 and 4 present the results of our analysis of spending on healthcare. In line with our expectations, we see that upper caste dominance is correlated with lower spending on healthcare at the .01 level. However, OBC dominance is not correlated with higher spending on healthcare as hypothesis 3 would imply. While this particular result is not evidence in favor of the hypothesis, it is not particularly damaging either. As Banerjee and Duflo (2009) note, there is manifestly less demand for healthcare in India than for other public goods. This may be due to the fact that, like most developing countries, India has a high dependency ratio (.6).¹⁰ In a country with a young population and many dependents, education is a public good that benefits most people, either by providing opportunity or by serving as a form of childcare. In contrast, health care is an intermittent expense that some people incur more of than others. Thus it is not entirely surprising that public demand for education will be higher and more consistent than demand for healthcare.

¹⁰ The dependency ratio is the ratio of the dependent population to the working age population. It is calculated based on figures from the Indian Census.

Literacy

The final part of our analysis looks at the relationship between fragmentation and literacy. As mentioned previously, we focus on education outcomes because education is typically the largest category of social service spending in the budget, and because our previous analysis revealed that it is the service that has been most in demand by newly dominant OBCs. Models 1 and 2 demonstrate that ENPV and ENPS are significantly correlated with literacy at the .01 level. These results provide good support for the argument that the transformation of the party system have not been mere tokenism, but have resulted in tangible benefits for the average voter.

--table 4 about here—

Conclusion

In this paper, we advanced a new argument about the structure of party systems and programmatic politics. We argued that in a patronage democracy, the emergence of new political parties represents the breaking down of traditional patronage structures. This transformation of the political system provides greater political voice to groups that have been traditionally co-opted and excluded from key decision-making processes. In more theoretical terms, we argued that the social logic of party fragmentation freed 'encapsulated' groups to participate autonomously in politics, and in doing so served to *increase* the size of the winning coalition relative to the selectorate. This increase in voter autonomy thus fundamentally alters how politicians relate to voters. As the hierarchical patronage system erodes, targeting club goods at a small group of political elites becomes less viable as an electoral strategy and politicians are forced to spend more on public goods to appeal to a broader set of interests.

We provided evidence in favor of this theory by drawing on the recent experience of India, where we argued that the breakdown of the traditional patronage system, and the emergence of lower caste voters have given rise to new demands for spending on social services. Our analysis demonstrated that party fragmentation is positively associated with higher levels of spending on social services and lower spending on economic services that can be more easily targeted at specific groups of voters. Further, our analysis showed that the emergence of lower caste parties has given rise to greater demand for spending on education. Conversely, high caste dominance in the legislature is associated with decreased spending on education as well as health care. Finally, we showed the implications of the transformation of the party system for levels of literacy.

These findings have implications for a variety of literatures. First, they inform debates about how party systems relate to the deepening of democracy. Our results suggest that the participation of political parties that represent traditionally marginalized groups democratizes the relationship between political leaders and voters. In turn, this relationship has a tremendously important impact on budgetary priorities, shifting public money away from clientelistic practices towards more programmatic ends, which ultimately also produces better policy outcomes.

Additionally, our analysis informs a debate in economics as well as area studies, about the importance of lower caste representation on the allocation of public resources. Previous studies have analyzed the effects of significant mobilization by other lower caste communities, most notably those of Scheduled Castes and Tribes who stand 'below' OBCs in the Indian caste hierarchy (Chandra 2004, Jeffrey and Jeffrey 2008; Pande 2003; Banerjee and Somanathan 2007). Yet for all the attention given to SC empowerment in the

literature, SC mobilization has been significantly less than that of OBCs. Between 1971 and 2004, OBC representation in the Indian Parliament more than doubled from 10.1% to 25.3, while SC representation stagnated (18.26% in 1977, 17.80 in 2004) largely because SC candidates continue to win only in seats reserved for their caste communities. Further, there remains a clear discrepancy between the political influence of SCs and that of OBCs, who have been at the undisputed center of 'the rise of the plebians' in Indian democracy (Jaffrelot 2009). Thus, the fact that the effects of increasing OBC political influence have not been systematically analyzed represents a significant gap in the literature. By assessing the impact of the increasing dominance of 'backward caste' communities on public spending, our study takes a first step toward filling this lacuna.

Our analysis also has implications for the study of ethnicity and public goods provisioning. Many scholars of developing democracies have argued that ethnic identity has a dampening effect on the provision of public goods (Bates 1981; Alesina, Baqir and Easterly 1999; Habyarimana et. al 2007; Banerjee and Somanathan 2007). However, most of these accounts focus on demographic indices of ethnic fragmentation, which do not take into account the political representation of minority groups. In contrast to these studies, our findings suggest that the increased political salience of ethnic identity (in this case, caste) do not serve to fracture communities, thereby preventing collective goods provisioning, but instead weakens relations of local dominance that prevent marginalized populations from having their demands met.

In conclusion, one limitation of our analysis should be noted, which is that our argument need not apply to contexts in which the proliferation of parties is not associated with democratization in the social profile of leaders and parties. It is only when the

process of political fragmentation is being driven by formerly excluded social groups that we would we expect to witness similar changes in fiscal spending priorities elsewhere. However, we have confidence that the situation that has prevailed in India until very recently is not unique. Rigid clientelist structures that enable a small group of elites to dominate a heterogeneous society have been the hallmark of political incorporation in developing countries around the world, and in most cases the mere adoption of democratic institutions has not entailed the immediate disintegration of these structures. We believe that the processes through which citizens have been demanding deeper democracy in India are likely to recur many times over in India, and abroad, over the long durée.

.

References

Banerjee, Abhijit and Esther Duflo, 'Improving Health Care Delivery in India', working paper, November 2009.

Banerjee, Abhijit and Rohini Somanathan, 'The political economy of public goods: some evidence from India', *Journal of Development Economics*, Vol. 82 (2), 2007, pp. 287-314.

Beck, N. & J.N. Katz (1995). What to do (and not to do) with time-series cross-section data. *American Political Science Review*, 89(3), 634-647.

Besley, Timothy and Robin Burgess, 2004. "Can Labor Regulation Hinder Economic Performance? Evidence from India," The Quarterly Journal of Economics, MIT Press, vol. 119(1), pages 91-134, February.

Blaydes, Lisa 'Electoral Budget Cycles under Authoritarianism: Economic Opportunism in Mubarak's Egypt', working paper draft, 2009.

Bueno de Mesquita, Bruce and Alastair Smith, Randolph M. Siverson and James D. Morrow, <u>The Logic of Political Survival</u>, Cambridge: MIT Press, 2000.

Chandra, Kanchan 'The Transformation of Ethnic Politics in India: The Decline of Congress and the Rise of the Bahujan Samaj Party in Hoshiarpur, *Journal of Asian Studies*. 59 (1): pp. 26-61.*

Chandra, Kanchan <u>Why Ethnic Parties Succeed</u>, Cambridge: Cambridge University Press, 2004.

Chhibber, Pradeep. 2000. *Democracy Without Associations: Transformation of the Party Systems and Social Cleavanges in India*. Ann Arbor: University of Michigan Press.

Chhibber, Pradeep and Irfan Nooruddin, 'Do Party Systems Count? The Number of Parties and Government Performance in the Indian States', *Comparative Political Studies*, 37 (2), March 2004, pp. 152-87.

Chhibber, Pradeep and Irfan Nooruddin, 'Unstable Politics: Fiscal Space and Electoral Volatility in the Indian States', *Comparative Political Studies*, 41 (8), August 2008, pp. 1069-1091.

Corbridge, Stuart and John Harriss, Reinventing India, Cambridge: Polity, 2000.

Donald, S. and K. Lange. 2007. "Inference with Difference-in-Difference and Other Panel Data." *Review of Economics and Statistics* 89(May).

Guha, Ramachandra India After Gandhi, New York: HarperCollins, 2007.

Habyarimana, James, Macartan Humphreys, Daniel Posner, and Jeremy Weinstein, 'Why Does Ethnic Diversity Undermine Public Goods Provision?', *American Political Science Review*, 101(4), November 2007, pp. 709-725.

Hirschmann, Albert Exit, Voice, and Loyalty, Cambridge, MA: Harvard University Press, 1970

Jaffrelot Christophe and Sanjay Kumar (eds.), <u>The Rise of the Plebians?</u>, New Delhi: Routledge, 2009.

Jaffrelot, Christophe The Silent Revolution, New Delhi: Permanent Black, 2003.

Jaffrelot, Christophe 'Sanskritization vs. Ethnicization in India: Changing Identities and Caste Politics before Mandal, *Asian Survey*, Vol. 40, No 5 (October 2000), pp. 756-66.

Jeffrey, Craig, Patricia Jeffery and Roger Jeffery, "Dalit revolution? New politicians in Uttar Pradesh, India" *The Journal of Asian Studies*, 67 (4), Nov. 2008, pp. 1365-1396.

Khemani, Stuti 'Political cycles in a developing economy: effect of elections in the Indian States', *Journal of Development Economics*, 73 (2004), pp. 125-154.

Khemani, Stuti,

Khemani, Stuti and Philip Keefer, 'Why Do Legislators Pass on "Pork"? The Determinants of a Constituency Development Fund in India, World Bank Policy Research Working Paper, 4929, May 2009;

Kitschelt, Herbert and Steven Wilkinson, <u>Patrons, Clients, and Policies</u>, Cambridge: Cambridge University Press, 2006.

Kitschelt, Herbert 'Political Accountability in Democratic Party Competition and Economic Governance', report, 2009 version.

Kohli, Atul The State and Poverty in India, Cambridge: Cambridge University Press, 1987.

Kohli, Atul "Democracy and Development: Trends and prospects" in Kohli, Chung-In Moon and Georg Sorenson (eds.) <u>States, Markets, and Just Growth</u>, New York: United Nations Press, 2003, pp. 39-63.

Kothari, Rajni 'The Congress system in India', *Asian Survey*, 4 (12) Dec. 1964, pp. 1161-1173.

Krishna, Anirudh 'What is happening to caste: a view from some north Indian villages.' *The Journal of Asian Studies*, Vol. 62, No. 4. (Nov., 2003), pp. 1171-1193.

Kumar, Sunjay 'Patterns of Political Participation: Trends and Perspectives,' *Economic and Political Weekly*, 44 (39), September 26, 2009, pp. 47-51.

Laakso, M. and R. Taagepera. 1979. Effective Number of Parties: A Measure With Application to Western Europe. *Comparative Political Studies* 12 (1): 3-27.

Magaloni, Beatriz, *Voting for Autocracy: Hegemonic Party Survival and its Demise in Mexico.* Cambridge: Cambridge University Press, 2006.

Pande, Rohini "Can Mandated Political Representation Provide Disadvantaged Minorities Policy Influence? Theory and Evidence from India," *American Economic Review*, September 2003, Vol. 93 (4): 1132-1151.

Pratham, 'Annual Status of Education Report (ASER) 2009'. Downloaded from http://www.asercentre.org/ on March 27th, 2010.

Roberts, Kenneth M. 'Social Correlates of Party System Demise and Populist Resurgence in Venezuela', *Latin American Politics and Society*, Vol. 45, No. 3 (Autumn, 2003), pp. 35-57

Roberts, Kenneth M. and Erik Wibbels, 'Party Systems and Electoral Volatility in Latin America: A Test of Economic, Institutional, and Structural Explanations', *The American Political Science Review*, Vol. 93, No. 3. (Sep., 1999), pp. 575-590.

Robinson, James and Thierry Verdier, 2003 *The Political Economy of Clientelism*. Typescript, University of California, Berkeley.

Saez, Lawrence and Aseema Sinha, 'Political Cycles, Political Institutions, and Public Expenditure in India, 1980-2000', *British Journal of Political Science*, 40, November 2009, pp. 91-113.

Stokes, Susan 'Political Clientelism', in C. Boix and S. Stokes (eds.) <u>Handbook of Comparative Politics</u>, Oxford: Oxford University Press, 2007, pp. 604-628

Stokes, Susan and Thad Dunning, 'Persuasion vs. Mobilization: What is the Electoral Logic of Sociald Spending in Venezuela?', Working paper draft 2009.

Svallfors, Stefan, 'Class, Attitudes and the Welfare State: Sweden in Comparative Perspective' Social Policy and Admistration, 38, 2, April 2004, 119-138 Weiner, Myron Party Building in a new Nation, Chicago: University of Chicago Press, 1967.

Wilkinson, Steven 'Explaining changing patterns of party-voter linkages in India', in Kitschelt and Wilkinson (eds.) <u>Patrons, Clients and Policies</u>, Cambridge University Press, pp. 110-140.

Wilkinson, Steven 'The Politics of Infrastructural Spending in India', working paper draft, 2009.

Varshney, Ashutosh '<u>Is India Becoming More Democratic</u>', *Journal of Asian Studies*, Vol 59. No. 1, February 2000, pp. 3-25.

Yadav, Yogendra 'Electoral Politics in the Time of Change: India's Third Electoral System, 1989-99', *Economic and Political Weekly*, 34 (34/35), Aug. 21 - Sep. 3, 1999, pp. 2393-2399.

Table 1: OBC Participation and Party Fragmentation

	ENP Votes		ENP Seats	
	(1)	(2)	(3)	(4)
% MLAs OBC	.0451***		.0265***	
	(.0124)		(.0098)	
% MLAs Upper Caste		0246**		.0008
		(.0110)		(.0094)
Constant	3.242***	3.956***	.9002	1.143**
	(.3975)	(.4215)	(.5792)	(.4827)
R-squared	.59	.58	.55	.54
Observations	530	545	530	545
States	12	12	12	12

Notes: Panel corrected standard errors are in parentheses, *significant at the .1 level, **significant at the .05 level, ***significant at the .01 level. Regressions include fixed effects for states and years. For a discussion of the sources and construction of the variables, see the 'Data and Methods' section of the text. The data are for the period 1952 -2006 (all years for which data are available).

Table 2: Party Fragmentation and Spending on Social and Economic Services

		Social Sper			Lo		Spending o	n	Lo	g Per Capita		on
		of Total Rev	_	_			ic Services			Economic		 -
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ENP Votes	0.012***	0.010***			-0.029***	-0.018***			0.018**	0.024***		
	(0.002)	(0.002)			(0.008)	(0.007)			(0.007)	(0.007)		
ENP Seats			0.009***	0.008***			-0.034***	-0.024**			0.003	0.008
			(0.003)	(0.003)			(0.009)	(0.010)			(0.007)	(0.008)
Log Real SDP		-0.017		-0.029*		0.076		0.094		-0.003		-0.034
Per Capita		(0.016)		(0.017)		(0.057)		(0.059)		(0.051)		(0.055)
INC % Seats		-0.006		0		0.052		0.029		0.016		0.015
		(0.010)		(0.011)		(0.035)		(0.039)		(0.028)		(0.031)
BJP % Seats		-0.027		-0.029		0.101		0.115*		-0.022		-0.015
		(0.018)		(0.019)		(0.064)		(0.064)		(0.048)		(0.051)
Left % Seats		-0.024		-0.026		-0.172		-0.138		-0.26		-0.231
		(0.057)		(0.061)		(0.208)		(0.211)		(0.209)		(0.227)
Election		-0.004		-0.004		0.006		0.006		-0.012		-0.009
		(0.004)		(0.004)		(0.014)		(0.014)		(0.012)		(0.012)
Log Population		0.165***		0.174***		-0.431**		-0.424**		0.248*		0.295**
		(0.031)		(0.036)		(0.167)		(0.165)		(0.138)		(0.138)
Constant	0.388***	-1.315***	0.404***	-0.029	0.961***	5.238**	0.938***	5.095**	0.505***	-2.169	0.548***	-2.505
	(0.008)	(0.325)	(0.006)	(0.017)	(0.027)	(1.795)	(0.023)	(1.786)	(0.024)	(1.568)	(0.019)	(1.561)
Adjusted R ²	.67	.69	.66	.68	.97	.97	.97	.97	.97	.97	.97	.97
Observations	481	416	481	416	465	416	465	416	465	416	465	416
States	16	16	16	16	16	16	16	16	16	16	16	16

Notes: Panel corrected standard errors are in parentheses, *significant at the .1 level, **significant at the .05 level, ***significant at the .01 level. Regressions include fixed effects for states and years. For a discussion of the sources and construction of the variables, see the 'Data and Methods' section of the text. The data are for 16 major states and the period 1973 -2006 (all years for which data are available).

Table 3: Caste Composition of the State Assemblies and Spending on Education and Health

	Education		Health		
	(1)	(2)	(3)	(4)	
		As % of		As % of	
	Log Per	Total	Log Per	Total	
	Capita	Revenue	Capita	Revenue	
	Spending	Spending	Spending	Spending	
% MLAs OBC	0.066**	0.302**	0.001	-0.046	
	(0.03)	(0.12)	(0.01)	(0.19)	
% MLAs Upper Caste	-0.212***	-0.887***	-0.035***	-0.407**	
	(0.03)	(0.12)	(0.01)	(0.21)	
Log Real SDP	0.028*	0.177***	0.009	0.144*	
Per Capita	(0.01)	(0.05)	(0.01)	(80.0)	
Log Population	0.112***	0.199**	0.028***	0.05	
	(0.03)	(80.0)	(0.01)	(0.14)	
Constant	-1.057***	-3.206***	-0.234***	-2.395	
	(0.29)	(0.82)	(0.09)	(1.54)	
Adjusted R ²	.73	.97	.53	.93	
Observations	422	422	422	422	
States	11	11	11	11	

Notes: Panel corrected standard errors are in parentheses, *significant at the .1 level, **significant at the .05 level, ***significant at the .01 level. Regressions include fixed effects for states and years. For a discussion of the sources and construction of the variables, see the 'Data and Methods' section of the text. The data are for 11 major states and the period 1960-2005 (all states and years for which data are available).

Table 4: Party Fragmentation and Literacy

_	% Literate		
	(1)	(2)	
ENP Votes	0.036***		
	(0.01)		
ENP Seats		0.024**	
		(0.01)	
Log Real SDP	0.656***	0.638***	
Per Capita	(0.06)	(0.06)	
Constant	-1.355***	-1.212***	
	(0.24)	(0.22)	
Adjusted R ²	.98	.98	
Observations	616	616	
States	16	16	

Notes: Panel corrected standard errors are in parentheses, *significant at the .1 level, **significant at the .05 level, ***significant at the .01 level. Regressions include fixed effects for states and years. For a discussion of the sources and construction of the variables, see the 'Data and Methods' section of the text. The data are for 16 major states and the period 1960-2002 (all states and years for which data are available).