A Bayesian Model of Single Party Dominance

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Motivated by the South African case, in this paper I present a new theory explaining the maintenance of single-party dominance in socially heterogeneous countries. The theory explores how citizens' beliefs about a dominant party structure both voter behavior and the electoral strategies of incumbent and opposition parties. Employing a two-part stylized formal model, I hypothesize that variation in the distribution and evolution of citizens' beliefs over time undergirds a political equilibrium in which a dominant party can maintain support among diverse segments of the citizenry with conflicting preferences over policy outcomes. Thus, in contrast to most of the comparative politics literature, the theory emphasizes the *micro-foundations* of single-party dominance. The paper is a partial and preliminary effort in advance of my dissertation prospectus.

In 2004, the African National Congress (ANC) swept to victory in South Africa's national and provincial elections, winning nearly 70 percent of the popular vote. The election—which gave the ANC well over a two-thirds majority in parliament and at least partial control of all nine provinces—represented the party's most resounding of three consecutive victories since the advent of democracy in 1994 At the same time, economic and social conditions for millions of South Africans have deteriorated: levels of economic inequality, income poverty, unemployment, violent crime, and HIV/AIDS prevalence have all increased. Moreover, the severity of these indicators varies considerably across the country's ethnically and economically diverse provinces. Under such conditions, why are politics in South Africa so thoroughly dominated by the ANC? Why do (mostly poor) voters continue to vote for the ANC, and why has no credible opposition challenger emerged?[1]

These questions are pertinent to democratic settings[2] beyond South Africa, particularly in the Southern African region. In Botswana and Namibia, single political parties—the Botswana Democratic Party and the South West African People's Organization, respectively—have held uninterrupted power since independence, winning consistent electoral super-majorities. While both countries (especially Botswana) are widely considered to be among sub-Saharan Africa's most politically and economically successful polities (Acemoglu, Robinson, and johnson 2001; Lindberg 2006), both countries are also marked by persistently high levels of poverty, unemployment, and income inequality (UNDP 2007). As in South Africa, these measures speak to potential avenues for social conflict that are not reflected in party competition or electoral outcomes. In Namibia (again, like South Africa), ethnic divisions are another such avenue. In

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[1] It remains to be seen if the newly-formed Congress of the People (COP) party—led by ANC defectors—will pose a real challenge to ANC dominance. Most local analysts do not believe the COP will threaten the ANC's majority in the near future (Kane-Berman 2008; Friedman 2008).

[2] I will limit the analysis presented here to (minimalist) democracies; further iterations may expand the model to include non-democratic regimes.

addition, it is important to recall that Robert Mugabe's Zimbabwe African National Union-Patriotic Front (ZANU-PF) ruled Zimbabwe for twenty years in a mostly democratic fashion, before resorting to authoritarian tactics in 2000.

Outside of Southern Africa, political parties have maintained dominance in a number of economically and demographically diverse democracies. In India, the Indian National Congress party (INP, or Congress) won every national election from 1947 until 1977, only the last of which was earned undemocratically (Gowda and Sridharan 2007). In Mexico—like India, a country that features high poverty rates and massive inequalities—the Partido Revolucionario Institucional (PRI) dominated the country's political arena for seventy years. While the debate over the extent of democracy (or lack thereof) in Mexico during the period of PRI dominance is ongoing, recent scholarship suggests that outright electoral fraud and repression of oppositionists were incidental to the party's political success (Magaloni 2006; Greene 2007).[3]

Motivated by the South African case, in this paper I present a new theory explaining the maintenance of single-party dominance in socially heterogeneous countries with new democratic regimes. The theory explores how citizens' beliefs about the dominant party—inspired by the party's association with a formative politico-historical moment—structure both voter behavior and the electoral strategies of incumbent and opposition parties. These beliefs are based on a citizen's understanding of the true nature of the party, or—more concretely—whether the party is governing in her interest. In short, I hypothesize that variation in the distribution and evolution of citizens' beliefs over time under-girds a political equilibrium in which a dominant party can

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[3] Both Magaloni and Greene consider Mexico to be an autocracy (or a "hegemonic-party autocracy" and a " dominant party authoritarian regime," respectively) due to the PRI's ability to manipulate electoral institutions and due to lack of turnover, and not due to the use of fraud or repression. As a result, both their general classification schemes also include Botswana as an autocracy, and should by rights also include South Africa and Namibia, all countries that are democracies according to both Polity IV and Freedom House (Polity IV 2007; Freedom House 2007). I employ a more minimalist, Schumpentarian (1962) conception of democracy, in which I believe PRI-dominated Mexico mostly fits. Using this minimalist conception may require an expansion of my set of cases to include Malaysia, Taiwan, and Senegal.

maintain support among diverse segments of the citizenry with conflicting preferences over policy outcomes. In such an equilibrium, the emergence of a viable electoral challenger is unlikely. Thus, in contrast to most of the comparative politics literature, the theory emphasizes the *micro-foundations* of single-party dominance.

In what follows, I devote a bit more space to discussing the puzzle of single-party dominance in socially heterogeneous, democratic settings. I then briefly review the set of existing explanations for single-party dominance in the literature, including a section on South Africa-specific theories. Next, I lay-out the logic of my own theory and present a two-part, stylized formal model of single-party dominance. The first part employs a simple Bayesian framework to demonstrate how different groups of citizens interpret signals and update beliefs about the dominant party in different ways; the second part uses a probabilistic voting model to demonstrate how parties' equilibrium strategies maintain dominance. I conclude by discussing the theory's set of observable implications, which I intend to test in future iterations.

The Puzzle

Why does the confluence of social heterogeneity and political dominance provide a puzzle for political scientists? The earliest answer comes from Lipset and Rokkan's (1967) seminal work on party systems, in which they argue that the social cleavages most salient at the time of party system formation will be reflected in the number and (ideological) scope of parties. Lipset and Rokkan identified urban-rural, economic (i.e. class), and religious cleavages as potential sources of political competition and party system structure in new democracies.[4]Accordingly, dominant parties—defined here, following Sartori (1976), as a party

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[4] Most students of European and Latin American party systems have focused on economic cleavages (Mair 1990; Collier & Collier 1991).

that wins absolute parliamentary majorities in three consecutive elections—will arise in polities that feature a clearly dominant social grouping. In addition, dominant parties can represent a coalition of social groups (what I refer to below as a "broad-church" party), in which case the durability of this coalition will be critical to dominance.

Scholars of ethnic politics have expanded greatly on Lipset and Rokkan's framework to explain how salient ethnic cleavages get translated into ethnic votes and ethnicity-based political competition. While some scholars see these cleavages as fixed (Horowitz 1985), others have argued convincingly that politically salient ethnic identities—and thus patterns of ethnic voting—change over time, particularly in response to institutional change (Posner 2005; Wilkinson 2004). Either way, unless one ethnic group is large enough to maintain a winning coalition on its own, ethnic heterogeneity poses a problem for single-party dominance. Thus, we would expect a dominant party in a ethnically-diverse polity to represent a multi-ethnic coalition, the durability of which—as above—requires explanation. This explanation is particularly urgent in light of scholarship describing and predicting the difficulties of maintaining multi-ethnic coalitions in new states, especially under democratic conditions (Shepsle and Rabushka 1972).

I should mention here that scholars of electoral institutions have argued that social heterogeneity should effect 'the number of parties *only* once the electoral system is sufficiently permissive.' (Clark & Golder 2006, italics mine) This argument is based on perhaps the most well-known finding of political science: that party system structure is a function of electoral rules, and that plurality systems (as opposed to proportional representation) have a reductive effect on the number of parties in a given system (Duverger 1954; Cox 1997). This literature does not seek to explain single-party dominance per se.[5] However, it implies that such

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[5] An exception is Cox (1997), chapter 13, which points to the coordination advantages enjoyed by a dominant party under a single non-transferable vote (SNTV) system, as in japan.

dominance is more likely in plurality systems, where social heterogeneity matters less. Likewise, scholars of sub-Saharan African and Latin American politics have argued that presidentialism reduces the size of a party system, as parties organize around presidential candidates and/or are co-opted by the executive (van de Walle 2003; Shugart 1998). While I find these arguments compelling, they are clearly inadequate to explain the maintenance of single-party dominance. Even if we limit our sample to the cases mentioned above, South Africa and Namibia employ proportional representation systems that rank among the world's most pure (Reynolds 1999), while only Mexico and Zimbabwe are presidential systems. In addition, the institutional logic cannot explain the collapse of dominance in static institutional environments.

Existing Explanations

The comparative politics literature offers a number of potential explanations for dominant party systems in socially diverse polities. An exhaustive review of this literature is beyond the scope of this paper. Nevertheless, several prominent theories of single-party dominance deserve mention.

Early scholars emphasized parties' roles in leading nationalist or independence movements as the ultimate source of their dominance. Thus, Huntington (1968) argued that "the stability of a one-party regime derives more from its origins than from its character. It is usually the product of a nationalist or revolutionary struggle (424). Duverger (1959) spoke directly to citizens' beliefs inspired by such roles, writing that "a dominant party is dominant because people believe it is so…The party is associated with an epoch." (308) Though not the focus of their analysis, Arian and Barnes (1974) likewise claim that "it may be virtually necessary for a [dominant] party to preside over the establishment of a polity…" (598)

The next set of explanations for single-party dominance emphasized the type of strategic choices made by party leaders to maintain their dominant positions. More specifically, these studies point to a dominant party's centrism and its related ability to keep opposition parties on the margins of the political arena. Riker's (1976) landmark analysis of the Indian Congress Party cites party elites' consistent centrism as key to maintaining its umbrella structure and ensuring its position a Condorcet winner against any potential competitor. In the same vein, Arian and Barnes contend that dominant parties in Italy and Israel maintained sufficiently "flexible boundaries" to capture and remain in the political center, keeping opposition parties on the periphery of the issue space. Pempel's (1990) wide-ranging study of dominant-party democracies similarly emphasizes the benefits of ideological flexibility and cultivating broad-based support beyond a party's "founding" base. According to Pempel, a "dominant party is the one that plays this [flexibility] game well enough to keep itself in power long enough so that it can continue enacting and implementing policies that reinforce its power base."

How do dominant parties maintain the loyalty of its base while pursuing more centrist policies—or, in the words of Pempel, while "abandon[ing] the very tactics and patterns of mobilization that bought it victory?" (349) Similarly, how do such parties shift to the center while preventing opposition-enhancing defections? The most recent approach to dominant party systems—based largely on studies of Mexico's PRI—focuses on the party's exploitation of state resources. To be sure, the fusion of party and state in a dominant party system. and the party's use of state resources to ensure re-election, is a component of each of the earlier studies mentioned above. However, none of these articulated a "resource theory of single-party dominance," as Kenneth Greene's (2007) work purports to do. In brief, Greene argues that dominant parties use state resources to co-opt the bulk of voters and potential oppositionists,

driving remaining opposition parties to the margins of the issue space. Parties must "create a large public sector and politicize the public bureaucracy" (27) to sustain this "dominant party equilibrium;" when the state shrinks, so does dominance. In developing a three-pronged theory that includes both top-down (elite-driven) and bottom-up (voter-driven) mechanisms of "hegemonic-party survival," Beatriz Magaloni's (2006) PRI-based study gives us a more comprehensive explanation than Greene. Still, the critical elements of "elite unity," "electoral support," and the "opposition's coordination dilemmas" all come back to the party's ability to dispense or withhold patronage.

As described below, my theory of single-party dominance borrows from (and attempts to synthesize) all three sets of explanations in the literature. Like Huntington and Duverger, my theory emphasizes the critical role of party reputation and citizens' beliefs. Similarly to Riker, Arian and Barnes, and Pempel, I argue that a party stakes out strategic policy positions that (just) satisfy the base while keeping potential swing voters inside the party's "broad church." Lastly, I concur with the whole range of scholars that dominant parties exploit their status as well-entrenched incumbents to use state resources for political ends. However—while I agree with Magaloni's assertion that the "pillar" of a dominant party is "its monopoly of mass support" (15)—I treat patronage (or private transfers) as a stop-gap measure used to shore up support, and not as the basis of such support.

Explaining ANC Dominance

Because my theory is driven by the South African case, I include here a brief section addressing existing explanations for ANC dominance. In many ways, the most prevalent explanations for ANC dominance rely on Lipset and Rokkan's (1967) idea about the party system's reflection of the major social cleavages present at the time of party system formation.

Thus, scholars describe South African politics as a "racial census" reflecting the racial cleavages most salient during the country's transition to democracy (Mattes 1995; johnson & Schlemmer 1996; Lodge 1999; Mattes & Piombo 2001; Friedman 2004; Ferree 2006). In other words, the ANC is dominant because "blacks" (or "Africans") make up nearly 80 percent of South Africa's population, an argument given substantial weight by the power of race as a predictor of vote choice (see citations above).

Among proponents of the "racial census" approach, however, an important debate exists concerning the precise mechanism by which race gets translated into votes.[6] Following Horowtiz's (1985) depiction of ethnic voting as driven by voters' desire for "self worth," a first line of argument posits that blacks vote for the ANC in order to 'express' their (long-repressed) identities as black South Africans (Friedman 2004, johnson & Schlemmer 1996). Unfortunately for these scholars, black South Africans generally do not identify as 'black', with most opting for ethno-linguistic identities instead (Afrobarometer 2000-2005).[7] Moreover, most black South Africans view the ANC as a racially and ethnically *inclusive* party (Idasa 1999),[8] largely precluding the idea of the party as a vessel for the expression of black identity. Indeed, if the "expressive voting" approach were accurate, one might expect black voters to opt for another, explicitly "black" party, such as the Pan Africanist Congress or the Azazian People's Organization, both of which split-off from the ANC[9] in order to pursue a more racialized agenda.

A second set of explanations for racial voting patterns in South Africa contends that blacks vote for the ANC because they approve of its performance and believe the party offers the policy platform that best represents their economic interests (Mattes 1995; Mattes and Piombo

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[6] Much of what follows comes from Ferree (2006).
[7] The Afrobarometer surveys in South Africa ask respondents a range of question in which they must identify the identity groups (racial, ethnic, cultural, or national) to which they belong.
[8] Although they do consider opposition parties to be racially "exclusive."
[9] Both splits occurred before the transition to democracy.

2001; Brattton & Mattes 2003). As Ferree points out, scholars in this school assume that policy preferences within ethnic groups are homogenous, an assumption shared by many prominent studies of ethnic politics (Bates 1974; Chandra 2004; Posner 2005). While I agree that instrumental calculations do play a major role in ANC dominance, I believe this approach fails to capture the prime motivators of such calculations. First, the assumption of homogenous policy preferences is hard to justify in the South African case, particularly in light of a spate of recent literature demonstrating the emergence of politically salient class cleavages within the African population (Habib & Naidu 2006; Seeking & Natrass 2006).[10] Second, only minimal policy differences have thus far separated the ANC from its main rivals (Lodge 1999; Ferree 2006). Thirdly, while race does predict significant differences in levels of government approval among citizens, blacks still rate the government rather poorly.[11] Finally, the litany of negative trends presented above—especially those concerning unemployment, poverty, and income inequality—do not suggest a government that is instrumentally satisfying its poor black base (Habib & Taylor 2001), a conjecture given substantial weight by a recent up-tick in (occasionally violent) service delivery protests (Ballard, Habib & Valodia 2006) Indeed, if the instrumental approach is correct, there is some other factor at work that explains blacks' satisfaction with performance in the face of much evidence to the contrary.

Enter Karen Ferree's (2006) "informational" approach to racial voting, which claims that voters use race as a heuristic to determine which party is most likely to govern in their best interest. Following Downs (1957) and Popkin (1991), Ferree writes that "uncertainty induces voters to rely on 'cognitive shortcuts'" to facilitate electoral decision-making. In the South African context, parties' "racial credentials"—the "racial component" of a party label—provide

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[10] I will address this point in greater detail below.

[11] At about .5 out of 1 on a government approval index compiled by the author (Rosenberg forthcoming).

such shortcuts. As evidence, Ferree cites her findings that most South Africans identify major parties (at least in part) according to race; that these racial party labels are significant predictors of both ANC support and reduced uncertainty; and that they are related to and interact with performance evaluations.[12]

As I will describe in greater detail below, my theory of party-associated beliefs builds on and expands Ferree's valuable contribution. Like Ferree, I argue that voters' beliefs about the ANC significantly impact their instrumental calculations about policy and performance; that these beliefs are based on the party's credentials; and that such credentials reduce voter uncertainty. However, I differ with Ferree in what I believe to be the source of these credentials: not race, but instead the party's lead role in liberating South Africa from three centuries of de-facto colonial rule (Mamdani 1994). While the differences are subtle, they are important for the following reasons.

First, citizens' (particularly Africans') beliefs about the ANC as a 'broad-church' liberation party (Lodge 1999) allow for groups with different and potentially conflicting preferences to support the same party, freeing the analysis from unrealistic assumptions about common preferences that marks studies of ethnic/racial voting. This point is especially relevant given that Africans makes up about 80 percent of the population, a subset marked by both ethnic and economic[13] variation. Indeed, as South African political analyst Ebrahim Fakir has pointed out, the ANC's success is contingent largely on its ability to appear as "all things to all [mostly

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[12] Respondents that believed opposition parties were more "inclusive" had lower predicted performance evaluations and were less likely to support the ANC—and vice versa. The additive effect of racial party labels and performance evaluations had significant effects on both ANC support and uncertainty (i.e. racially exclusive and high performance evaluations led to near certain support for the ANC).

[13] Van der Berg and Louw estimate the Gini coefficient within black households increased from 0.56 in 1993 to 0.59 in 2000. Calculations of the Theil index for South Africa, which decomposes overall levels of inequality into within-group and between-group components, show that while the between-race share of inequality decreased from 42 percent in 1991 to 33 percent in 1996, the within-race share rose from 58 percent to 67 percent, reflecting the rising inequality in the majority black population (Seekings 2006).

African] people" (Fakir 2006). This characterization is reminiscent of India's Congress (Kochanek 1968; Singh 2003) and Mexico's PRI (Huntington 1968).[14] It is also related to Liphardt's (1977) depiction of India's Congress as a 'consociational' institution in which social conflicts are dealt with internally—another hallmark of a broad church party.

The absence of ethnicity in Ferree's story is another important difference. Ferree makes a sound point in arguing that South Africa's ethnic demography—with the two largest ethnic groups, Zulu and Xhosa, making up about 20 percent of the population each—discourages ethnic politicking to the benefit of race, whereby Africans are ensured a winning coalition (Posner 2005).[15] However, this logic cannot account for why Zulus in Kwa-Zulu Natal tend to split their votes between the explicitly ethnic Inkatha Freedom Party and the ANC, even at the national level. It also cannot explain why ANC governments have broadened the legal state definition of "black" to include Coloureds and Indians,[16] giving them access to a slew of official race-based benefits and thus slicing the state-resource pie far more finely than necessary to keep winning "racial census" elections.[17] More generally, it overlooks the general political salience of ethnic identity in South Africa, at least at the provincial and local levels (McLaughlin 2007), implying that the (primary) ethnic identities of most South Africans are somehow left outside the ballot

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[14] My emphasis on liberation (or 'struggle') credentials allows us to consider the South African case within a larger set of dominant party systems. While South Africa's experience with apartheid has led many analysts to fall back on South African "exceptionalism," (Mamdani 1994) I take issue with this approach. To be sure, South Africa's level of economic development (and diversity) set it apart from the rest of the African continent, and the extent and impact of institutionalized racial separation under apartheid was unique (Price 1991). Nevertheless, the ANC's "broad church" structure looks very similar to the fractious coalitions that made-up the group of African nationalist parties which came to power in the immediate post-colonial period (Zolberg 1966; Rotberg 1962). In addition, and as discussed briefly above, it is useful to think about ANC dominance alongside other, non-African dominant 'liberation parties' representing broad-church coalitions, most prominently in Mexico and India.

[15] In a similar vein, Piombo (2005) makes a institutional case in claiming that the country's closed-list PR electoral system (with one national district) and its weak federalism combine to concentrate power at the national level, incentivizing racial or multi-racial political mobilization and dis-incentivizing ethnic mobilization.

[16] A recent High Court ruling mandated that Chinese South Africans also be classified as black, a change the government generally opposed.

[17] Nevertheless, Coloureds and Indians still generally split their votes between the ANC and opposition parties like the Democratic Alliance (DA) and the Independent Democrats (ID) (SAIRR 2007).

box during national elections. Indeed, recent evidence suggests that ethnicity explains a significant amount of variation in support for the ANC among black South Africans (Rosenberg forthcoming),[18] variation—like that produced by economic/class differences—that likely impacts Africans' beliefs about the party.

Theory

I explain the maintenance of single-party dominance in socially diverse, democratic settings by developing a theory about the *micro-foundations* of political dominance. More specifically, I focus on the role of party reputation and citizens' beliefs in the maintenance of dominant party systems. Following Duverger (1952) and Huntington (1968), I posit that the creation of a dominant party depends on its strong association with a formative politico-historical moment, such as a country's achievement of independence or majority rule. In the South African case, for example, the ANC is the political entity most closely identified with bringing about the demise of South Africa's apartheid regime and over 300 years of de-facto colonial rule. I contend that this association inspires a set of party-specific beliefs among citizens. These beliefs concern the nature of the party itself: they represent a citizen's understanding about whether the party is governing in his interest.[19] Initially, favorable beliefs about the party are widely distributed among the citizenry. However, significant variation exists across economic, spatial and ethnic boundaries. As the dominant parties in question all led nationalist or liberation struggles, this variation may stem from different participation rates in the struggle; from the ideological or

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[18] Especially among Zulu and Xhosas, the two largest groups. These differences are especially acute in more ethnically homogenous rural areas, further evidence for the inadequacy of race-based explanations for ANC dominance.

[19] This characterization of a citizen's beliefs about the nature of the party is an attempt to capture—from the 'bottom up'—both Duverger's and Huntington's ideas about the bases of party reputation. To Duverger, this reputation was based on the unique 'aura' of the party; to Huntington, it was based on the party's monopoly on governing legitimacy. I believe both of these elements, as well individual-level evaluations, can be incorporated in the idea of citizens "interests."

group-specific platforms espoused during the struggle; or from the demographic make-up of the party leadership, among other sources.

Unlike most contemporary scholars of dominant party systems, I do not treat these beliefs (or, in turn, party reputations) as epiphenomenal (Greene 2007; Magaloni 2006; Pempel 1990). Instead, I argue that citizens update their beliefs about the party over time by observing a series of signals—or pieces of information—about the party's true nature. The range of these signals is theoretically quite large, including general information like political stability or economic growth, as well as more specific information like employment or service delivery. In the interest of elucidating the main mechanisms at work in this theory, I will treat these signals as the government's policy bundles, denoted $\hat{q}$. In essence, $\hat{q}$ represents the make-up and supply of public goods provided by the government, a piece of information which is common to all citizens; due to party dominance, the government and the party are the same actor. The party-government face two clear trade-offs in choosing $\hat{q}$. First, because different citizen types have different policy preferences, signals that are viewed favorably by some citizens may be viewed unfavorably by others. Second, $\hat{q}$ is costly: the more state resources spent on q, the less the government/party can keep as rents or spend on private transfers.

In addition, signals about the nature of the dominant party are 'noisy': citizens do not observe $\hat{q}$ with total accuracy. Instead, citizens are uncertain about the true meaning of the signal, and are thus uncertain as to what the new information tells them about the true nature of the party. This uncertainty effects the precision with which citizens update their beliefs. Moreover, the uncertainty/precision with which citizens observe $\hat{q}$ varies across groups of citizens, allowing some groups to update their beliefs more accurately than others. For example, urban citizens—with access to diverse media and thick social networks—are likely observe $\hat{q}$

with greater precision (i.e. less noise) than rural citizens. The same can be said for more educated citizens or citizens living in ethnically diverse constituencies, where a multitude of information sources may help citizens observe signals with greater accuracy.

By way of this updating process, citizens' beliefs about a dominant party provide the micro-foundations for the maintenance of single-party dominance. If favorable beliefs remain stable (or become even more robust) among a sufficiently large segment of the electorate, the party will continue to enjoy political dominance (as voters will continue to vote it). If favorable beliefs are diluted, so goes dominance.

Citizens, of course, are only part of the story. The dominant party and opposition parties (including potential opposition leaders among the dominant party elite) also condition their strategic behavior, at least in part, on the state of citizens' beliefs. Because of its privileged position as an entrenched incumbent, the dominant party is the first mover, with opposition parties playing mostly reactive strategies (Greene 2007). The party-government uses its information about the distribution(s) and robustness of favorable beliefs among the citizenry to determine which type of policy bundle signal—subject to its budget constraint—to send to the citizenry about its true nature. I predict that the party will send the lowest-cost signal that ensures it re-election, maximizing the size of the remainder of its budget available for elite rents and targeted patronage (see below). As information about citizens' favorable beliefs is critical to party strategy, the party-government invests significant resources in collecting such information, employing research instruments like public surveys and electoral analyses, as well as 'on-the-ground' intelligence reported by party cadres serving in local party branches (Zolberg 1962), as well as other local intermediaries (Kasara 2007).

Because of variable abilities to accurately observe signals and update beliefs among citizen groups, I hypothesize that groups with both favorable and "sticky" prior beliefs about the party—for example, relatively poor rural loyalists—will vote for the party despite an unfavorable signal—for example, a policy bundle biased toward the urban middle class. The latter group is a useful illustration of a subset of the citizenry with the ability to observe signals accurately and thus update beliefs relatively quickly. As a result, they are more likely than their rural countrymen to become disenchanted with the party-government in the face of unfavorable signals, and are thus more likely to defect to an opposition party.[20] As a result, the party-government is likely to have a strong incentive to ensure these citizens observe favorable signals, depending on other factors such as group size and exit options. Putting all these parts together, it is clear that given a sufficient number of "sticky" or "slow" updaters, the party-government is able maintain support among heterogeneous groups with conflicting preferences by using a common signal, lowering the costs of dominance. This conjecture captures one of the central insights of the dominant party literature, referenced above: the ability of dominant parties to simultaneously maintain support among a traditional base while using policy to keep potential swing voters in the electoral coalition (Arian & Barnes 1974; Pempel 1990). Relatedly, it points to the literature's emphasis on centrism as the key to maintaining a party's umbrella structure and ensuring its position a Condorcet winner against any potential competitor (Riker 1976).

Given these dynamics, it is easy to see how—given an unfavorable signal for a certain group—the party-government has an incentive to try to increase the uncertainty with which the signal is viewed by that group. I contend that the dominant party can (and does) pursue this kind

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[20] Given the example of an urban middle class, the potential of this group to support (both electorally and financially) oppositionist movements is well established in the literature (Lipset 1959; Moore 1966; Fish 2005; Arriola forthcoming). The propensity of disenchanted groups to defect away from a ruling party is just as feasible if we replace the spatial and economic cleavages presented above with ethnic cleavages (Shepsle and Rabushka 1972; Posner 2005).

of manipulation by reinforcing the nationalist and/or revolutionary discourse that brought it to power in the first place (Duverger 1952). As a result, I hypothesize that the party-government will use political rallies, electoral campaigns, and its generally outsized influence on state-owned media to target nationalist or revolutionary rhetoric at citizens observing potentially unfavorable signals; party cadres at the branch level can deliver similar messages. The fact that these citizens, due to a lack of diverse information sources, will likely be "slower" updaters even without party manipulation makes such manipulation that much easier (i.e. lower cost) to accomplish. To be sure, the party-government may also attempt to manipulate the updating process of more discerning citizens. However, these efforts are likely to be more costly and less effective than targeting already "slow" updaters.

As stated above, the party-government's ability to ensure widespread support with a common, lowest-cost signal frees up the remainder of its budget for elite rents and targeted patronage. I will address the latter first. Following a long line of dominant party scholars (especially scholars of Mexico like Magaloni 2006 and Greene 2007), I hypothesize that the party-government exploits state resources to target patronage (i.e. private) goods[21] for political ends. More specifically, I contend that the party uses private transfers to shore-up political support among groups of discontented citizens, or citizens whose favorable beliefs about the party have been diluted via updating. Thus, patronage is a secondary electoral-support resource for the party-government, distributed after the policy bundle (qˆ, the signal) and targeted at specific groups. As with qˆ, I hypothesize that the party-government will minimize the overall

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[21] For the moment, I follow the classical economic distinction between public and private goods based on the exclusivity (or lack thereof) of a given good (Easterly 1997). In this vein, patronage goods are private, excludable goods delivered by the state to specific individuals or groups for political ends.

level of transfer to ensure re-election,[22] keeping as much of the remaining budget as possible for elite rents.

These elite rents achieve two major objectives for the leaders of the party-government. The first, and most straightforward, is self-enrichment, as party elites take advantage of their privileged positions not only to siphon off state resources directly, but also through parastatals, government contracts, and the like (Krueger 1990). The second objective—and certainly the more important one for maintaining dominance—is preventing elite defections to either existing or potential opposition parties (Van de Walle 2003; Magaloni 2006). A dominant party elite considering defection must consider whether she has more to gain outside the party than within it, a calculation clearly affected by the rents she accrues as part of the party-government. Of course, if a group of potential defectors were able to displace the dominant party, their potential rents may very well be larger than the slice they receive in their current positions. However, due to the dominant party's strategic maintenance of citizens' beliefs and access to patronage resources, displacement is unlikely. By implication, I hypothesize that a dominant party elite will defect only if 1) his share of rents has been greatly reduced (or eliminated); and 2) he has information indicating that favorable beliefs toward the party are sufficiently diluted such that an electoral challenge is viable.[23] The latter condition depends in part on the country's electoral

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[22] Of course, some groups may value patronage resources more than others (Bates & Humphreys 2005), variation that enters into the party's allocation strategy. I will explore the implications of this variation in future iterations.

[23] Formally, $\Pr(\pi_{DP} \geq .5) \, (r_{iDP}) < [1-\Pr(\pi_{DP} \geq .5)] \, (r_{iO})$ for any election at any level of government. Below, I will derive π_{DP}—the dominant party's vote share—in terms of citizens' beliefs, the government's policy bundle, and patronage. I consider r_{iDP} to be the share of rents allocated to dominant party elite i, where $r_{iDP} = R\eta^i/N$; η^i as a binary (0,1) parameter capturing whether elite i is an "insider" elite (total number N) with access to a share of R (total dominant party rents) or an "outsider" elite without access. A symmetric set-up yields r_{iO}, elite i's share of opposition rents.

institutions, with federal and proportional representation systems generally providing more opportunities for dominant party displacement and thus increasing the probability of defection.[24]

Already existent opposition party leaders face similar constraints: so long as a majority of citizens hold favorable beliefs about the dominant party, opposition parties will not waste their precious resources challenging the dominant party outright. Indeed, even if favorable beliefs are diluted among electorally valuable groups, the dominant party's ability to credibly dispense patronage is likely sufficient to discourage a head-on challenge. Instead, opposition party leaders will pursue electoral strategies aimed at niche voters, such as initially "disloyal" citizens[25] or small groups of rapidly discontented citizens . As above, only when an opposition party leader believes that favorable beliefs toward the dominant party are diluted among sufficiently large segments of the population will she attempt to organize a real electoral challenge and capture large numbers of previous dominant party supporters.[26] This calculus will also be affected by changes in the dominant party's ability to deliver patronage, including the effects of structural adjustment programs or economic shocks (Greene 2007). In contrast to potential defectors among dominant party elites, electoral institutions which provide more opportunities for small parties to secure sub-national (federalism) or legislative (proportional representation) offices should decrease the likelihood that opposition party leaders will purse non-niche electoral strategies. While potential defectors may be able to increase their rents by winning these offices,

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[24] In other terms, $[1-\Pr(\pi_{DP} \geq .5)]$ will likely vary depending on electoral rules (plurality vs. PR) or level (national vs. sub-national).

[25] Including supporters of the previous regime or supporters of political organizations that competed with--and lost out to--the dominant party in the run-up to independence or majority rule.

[26] Adapting footnote 23, $\Pr(\pi_O \geq .5)^{niche} (r_{iO})^{niche} < [1-\Pr(\pi_{DP} \geq .5)] (r_{iO})$, where the left-hand side of the inequality captures an opposite elite's probable gains from pursuing a niche strategy. For the moment, I assume that opposition parties will coordinate against the dominant party when it is in their mutual interests to do so. In others words, the opposition does not suffer from coordination dilemmas beyond the fact that potential dominant party defectors will not join ranks with the opposition if the conditions specified above are not met. I am well aware that this a heroic assumption (Riker 1976; Sartori 1976; Pempel 1990; Cox 1997), and hope to address opposition coordination in future iterations.

opposition party leaders may very well lose office rents by risking their current positions to mount a broader challenge.

A Bayesian Model of Single-Party Dominance

In what follows, I present a simple, stylized Bayesian model describing voter learning about a parameter θ, representing the "true" nature of a dominant party (i.e. the ANC).[27] As described above, in any given period, citizens hold certain beliefs about θ, or whether the party is governing in his or her interest. I call these "prior beliefs" and assume that different groups of citizens (given j groups) are characterized by different distributions of prior beliefs, all of which are normal with a mean μ_j and a variance σ^2_{0j}: $\pi_j(\theta) \sim N(\mu_j, \sigma^2_{0j})$, $j = \{1,\ldots, j\}$. For the moment, I will analyze only two groups of citizens, $J = A, B$. In this stylized model, Group A represents rural supporters of the dominant party, while Group B represents urban supporters of the party; citizens in both groups are all members of some common ethnic or racial grouping.[28] I assume that while citizens in both groups believe the party is governing in their interests, the groups' interests conflict due to conflicting preferences over policy outcomes.[29] As a result, they have different (though favorable) ideas about the true nature of the party. Focusing on values of $\pi_j(\theta)$ between -1 and 1, I capture this dynamic with the following preference orderings over the nature of the dominant party:

Citizens in Group A: $1 > 0 > -1$

Citizens in Group B: $-1 > 0 > 1$

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[27] I adapt this model from Leamer (1978) and Bartells (2002).

[28] Of course, that grouping may feature its own sub-divisions (Mozaffar 1999)

[29] For example, while urbanites will prefer a robust industrial policy, ruralites will prefer resources be directed to the agricultural sector (Bates 1981). For purposes of the model, I assume the party-government's policy choices are zero-sum for Groups A and B.

It is clear that citizens in Group A prefer a party whose true nature (θ) is as close as possible to 1, while citizens in Group B prefer a θ as close as possible to -1. Still, because both groups support the dominant party, I assume the distributions of prior beliefs for both groups are each centered on a favorable mean; for example, μ_A = ½ for Group A and μ_B = -½ for Group B. I have thus presented formally the notion that a broad-church party is considered "all things to all people."

Over time, citizens in both groups observe information (signals) about θ and update their beliefs. As specified above, I will treat these signals as the government's policy bundles, denoted qˆ. In essence, qˆ represents the make-up and supply of public goods provided by the government in each period, a piece of information which is common to all citizens. qˆ is chosen by the government from a distribution of available policy bundles, or q.[30] Following Bartells (2002), Gerber and Green (1999), and Magaloni (2006), I assume q is a normally distributed random variable, $q \sim N(\theta, \sigma^2_q)$.[31] Note that the mean of the distribution of q is θ, indicating that there is some $q = \theta$ which reflects the true nature of the party.

Unlike most models of Bayesian learning, I allow σ^2_q to vary among j in order to capture the idea that the 'noise' (variance) around qˆ is greater for some groups than for others. As above, I assert that this variation allows some groups to update their beliefs more accurately than others. I justify this alteration by thinking about qˆ as the same draw from two, group-specific distributions of q with the same mean but different variances. Thus, $q_j \sim N(\theta, \sigma^2_{qj})$. For the reasons stated above, I assume that urban citizens can observe qˆ with less uncertainty than rural citizens, $\sigma^2_{qB} < \sigma^2_{qA}$. As a result, Group A observes qˆ with greater precision than Group B, $1/\sigma^2_{qB} > 1/\sigma^2_{qA}$.

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[30] In the second part of the model, I demonstrate the party-government's equilibrium choice of qˆ ensuring re-election (and thus continued dominance).

[31] I am aware that I am constructing q to be both a choice variable and a random variable, a potential problem for the model (a similar problem marks Magaloni's (2006) Bayesian model of vote choice, where a party's campaign promises are a signal). Any suggestions concerning possible solutions to this problem will be most welcome.

After observing $q\hat{}$, citizens in both groups update their beliefs about θ. Each group's posterior beliefs are represented by the probability distributions $\pi_j(\theta| q\hat{})\sim N(\mu_j(q\hat{}), \sigma^2_{1j})$, where:

$$\mu_j(q\hat{}) = \mu_j + (q\hat{} - \mu_j)(\sigma^2_{0j}/(\sigma^2 q\hat{}_j + \sigma^2_{0j})), \text{ and} \tag{1}$$

$$\sigma^2_{1j} = \sigma^2_{0j}\,\sigma^2 q\hat{}_j / (\sigma^2 q\hat{}_j + \sigma^2_{0j}) \tag{2}$$

Following Bartells (2002), I believe these equations are better expressed after some algebraic manipulation (see Appendix for proof):

$$\mu_j(q\hat{}) = \mu_j(1/\sigma^2_{0j})/(1/\sigma^2_{0j} + 1/\sigma^2 q\hat{}_j) + q\hat{}(1/\sigma^2 q\hat{}_j)/(1/\sigma^2_{0j} + 1/\sigma^2 q\hat{}_j) \tag{1a}$$

$$1/\sigma^2_{1j} = 1/\sigma^2_{qj} + 1/\sigma^2_{0j} \tag{2a}$$

Thus, $\mu_j(q\hat{})$—the mean of the distribution of posterior beliefs of group j—is a weighted average of the group's average prior belief (μ_j) and the value of the policy bundle/signal ($q\hat{}$), each weighted by its relative precision. The variance (precision) of these posterior beliefs is simply a combination of the variance (precision) of prior beliefs and the variance (precision) around $q\hat{}$.

Looking at equations 1a through 2b, it is rather straightforward to see how variation on μ_j, $1/\sigma^2_{0j}$, and $1/\sigma^2_{qj}$ across groups would affect distributions of posterior beliefs. I have already established that μ_A and μ_B will inevitably differ given groups' conflicting interests (and, as a result, their beliefs about a party both groups believe is governing in those interests). For ease of exposition, I will assume that both groups' distributions of prior beliefs are centered around an equally favorable mean, such that $|\mu_A| = |\mu_B|$. I further assume that in some initial period t_0, citizens' in both groups are equally clustered around those means, such that $\sigma^2_{0A} = \sigma^2_{0B}$ ($1/\sigma^2_{0A} = 1/\sigma^2_{0B}$).

Consistent with the example above in which $\mu_A = 0.5$ and $\mu_B = -0.5$, consider prior distributions (in t_0) of $\pi_A(\theta)\sim N(0.5, 0.025)$ for Group A and $\pi_B(\theta)\sim N(-0.5, 0.025)$ for Group B. In order to demonstrate how variation in the uncertainty (precision) with which different groups'
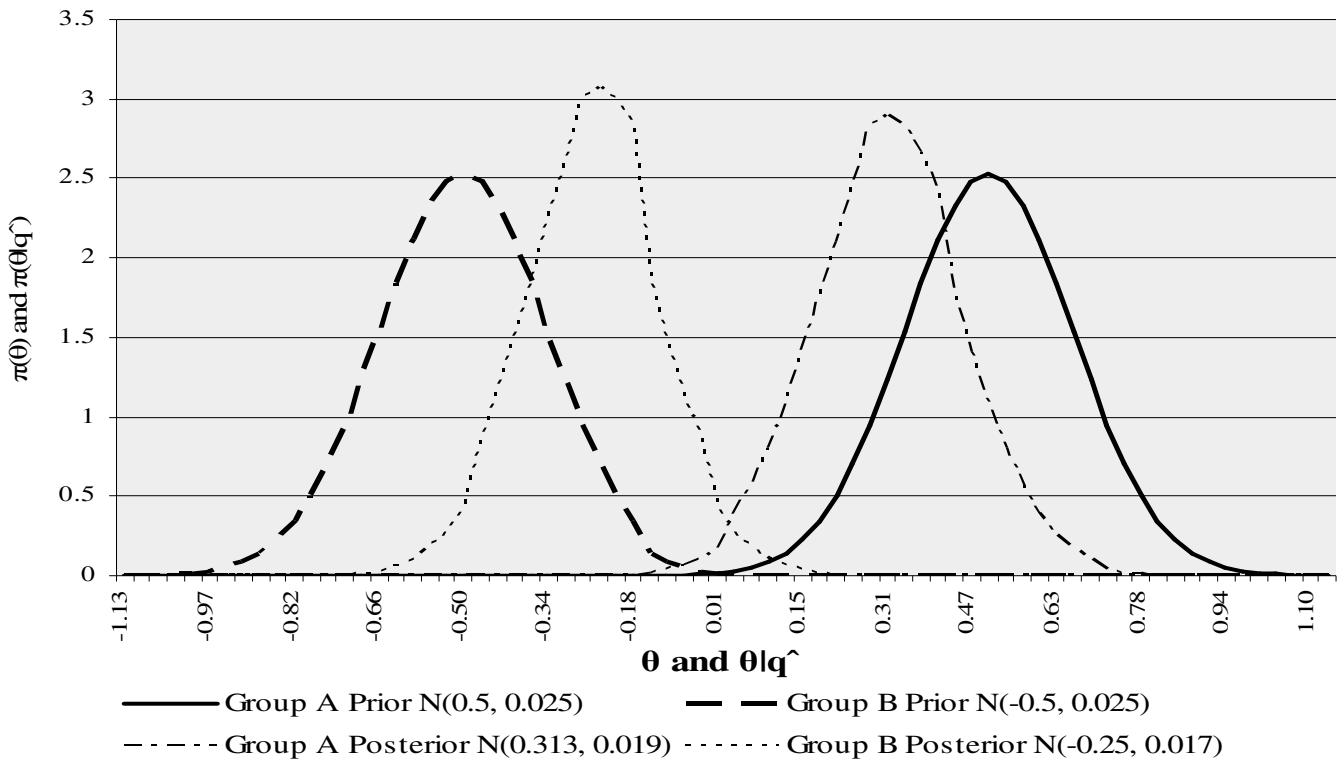
observe signals about θ affect citizens' abilities to update their beliefs, I will examine the effects of an equally unfavorable signal[32] on the posterior belief distributions of Group A and Group B, respectively. Thus, suppose that, in t_1, Group A—a rural group that views signals with greater uncertainty than the urbanites in Group B—observes a signal $q\hat{} = -0.25$, drawn from the distribution $q_A \sim N(\theta, \sigma^2_{qA} = 0.075)$. *Separately*, suppose that in t_1, Group B observes a signal $q\hat{} = 0.25$ drawn from the distribution $q_B \sim N(\theta, \sigma^2_{qB} = 0.05)$. Note that while each group's signal is equally unfavorable ($|\mu_A - q\hat{}| = |\mu_B - q\hat{}|$), the uncertainty (precision) with which each group view these signals differs, with $\sigma^2_{qB} = 0.05 < \sigma^2_{qA} = 0.075$. By equations 1 and 2—and as displayed graphically in Figure 1—it is clear that rural Group A updates less accurately than urban Group B, given an equally unfavorable signal. More specifically, Group A's posterior beliefs $[\pi_A(\theta| q\hat{}=0.75)\sim N(0.313, 0.019)]$ are characterized by an updated mean ($\mu_A(q\hat{}) = .313$) that is further away from the value of the signal (and closer to the group's prior mean) than is the case for Group B, whose posterior beliefs $[\pi_B (\theta| q\hat{}=0.25)\sim N(-0.25, 0.017)]$ feature an updated mean ($\mu_B(q\hat{}) = -0.25$) that is more "accurate" (i.e. closer to the value of $q\hat{}$ and further from the group's prior mean).[33] Thus, $\mu_A(q\hat{}) - q\hat{} > \mu_B(q\hat{}) - q\hat{}$ and $\mu_A(q\hat{}) - \mu_A < \mu_B(q\hat{}) - \mu_B$, despite both groups' (separate) observation of a equally unfavorable signal. In other words, Group A's favorable beliefs about the dominant party are more robust to negative signals than Group B's beliefs.[34]

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[32] Because the groups have conflicting preferences over θ, an unequally unfavorable signal is represented by $|q\hat{}|$.

[33] Note that—given a common variance of prior distributions—the posterior variance of both groups' distributions are quite similar, despite the substantial difference between σ^2_{qA} and σ^2_{qB}. The similarity between the groups' posterior variances holds in the ten period simulation presented in Figure 3, with the largest gap equaling only .003 (in period 6).

[34] Outside of this example, both groups would observe the same $q\hat{}$ at the same time and update accordingly. However, the basic dynamic would be the same: given any $q\hat{}$, Group B will update their beliefs about θ more accurately than Group A because B observes $q\hat{}$ with less uncertainty (more precision) than A.

Figure 1
q^ = -0.25 (A), -0.25 (B)

Group A Prior N(0.5, 0.025) — — Group B Prior N(-0.5, 0.025)
– - - - - Group A Posterior N(0.313, 0.019) - - - - - - Group B Posterior N(-0.25, 0.017)

To demonstrate how groups' variable uncertainties about q^ affect their abilities to update over multiple periods, I include Figure 3 below. Holding σ^2_{qA}, σ^2_{qB}, and |q^| at the same values specified above, the graph tracks the values on $\mu_A(q^)$ and on $\mu_B(q^)$—the updated means of group posterior belief distributions—over 10 periods (t_0 to t_{10}).[35] The figure confirms that citizens in Group B are more accurate updaters and thus less tolerant of a series of consistently unfavorable signals. By t_3, $\mu_B(q^)$ is positive, meaning that the group's mean belief about the party holds that the party is *not* governing in Group B's interest. $\mu_A(q^)$ reaches the equivalent (negative) point only in t_7. In the same vein, by t_{10} $\mu_B(q^) = .14$ while $\mu_A(q^) = -0.077$, indicating

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[35] I do not track changes in posterior variances because the differences are minor (see fn 33).

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that citizens in Group B have on average updated about twice as accurately as citizens in Group A.

Figure 2: $\mu_J(q\hat{\ })$ over time

$q\hat{\ } = -0.25$ (A), -0.25 (B); $\sigma2_{qJ} = 0.075$ (A), 0.05 (B)

Period (t)

⎯⎯ $\mu A(q\hat{\ })$　⎯ ⎯ $\mu B(q\hat{\ })$
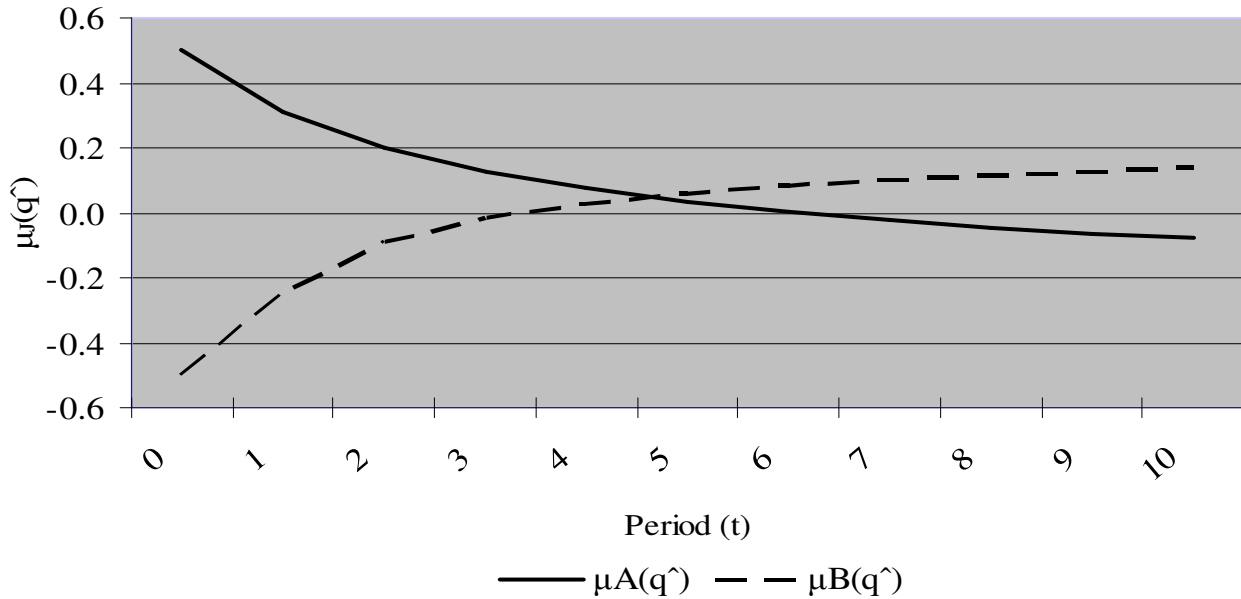
Implications for Dominant Party Strategy

What are the implications of this largely descriptive model for the dominant party? As demonstrated above, the less accurate updaters in Group A are more tolerant of unfavorable signals about the true nature of the party (θ) than the more accurate updaters in Group B. Thus, if we assume that citizens base their vote choices (at least in part) on their beliefs about the dominant party, we can suppose that citizens in Group A are more "loyal" supporters of the party than their compatriots in Group B: they will continue to vote for the party despite a series of signals—in this case, the government's public goods bundle q^—that are not reflective of their interests. Citizens in Group B, however, will recognize the true nature of the party more quickly, and thus are more likely, ceteris paribus, to support an opposition party.

If we think about qˆ as a choice variable, the most obvious implication is that the dominant party can—given sufficient information about variations in citizens' party-associated beliefs and their abilities to accurately update those beliefs—strategically announce a qˆ that retains support among groups citizens with conflicting preferences over that qˆ. Moreover, and in line with the theory outlined above, in any period the party-government will seek to select the lowest-cost qˆ (|qˆ|) that ensures re-election, keeping a larger remainder for rents and private transfers. Below, I employ a stylized probabilistic voting model to derive the policy-bundle signal that ensures the party's re-election, and examine how different group-specific variables affect it. I have not yet modeled how the party-government minimizes the cost of that signal, and thus have not addressed the party's strategic use of private transfers or its rent-maximizing behavior. I will do so in future iterations.

Return to some period where both groups A and B hold (conflicting) favorable beliefs about the nature of the dominant party. Consider the following indirect utility functions for citizen i in each group:

$$w^{ij} = -(q^\wedge - q^j)^2 + \mu_j(q^\wedge) + \tau^{ij} + \delta^i \tag{3}$$

$$w^{iA} = -(q^\wedge - q^A)^2 + \mu_A(q^\wedge) + \tau^{iA} + \delta^i \tag{3a}$$

$$w^{iB} = -(q^\wedge - q^B)^2 - \mu_B(q^\wedge) + \tau^{iB} + \delta^i \tag{3b}$$

Thus, the party-government's policy bundle qˆ enters the citizen's utility function in two ways: first, via a simple distance function between qˆ and the citizen's groups ideal policy bundle, q^A; and second, via the mean of the relevant group's posterior belief distribution.[36] I conceive of this second element as the "psychic" benefit a citizen receives from the belief that a party aligned with her group is in government (Horowitz 1985; Chandra 2004). In more material terms, one

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[36] I use the mean of the posterior distribution for both substantive and practical reasons. I address the former in the text. As for the latter, I cannot pin-down individual values of $\theta | q^\wedge$.

can also think of $\mu_j(q\hat{})$ as representing a citizen's expected future benefit of being governed by such a party. As indicated by 3a and 3b, a citizen also derives utility from her share of group-specific private transfers (τ^{ij}) allocated by the party-government. Finally, each citizen may suffer utility gains or losses from the effects of some exogenous economic shock, $\delta^i \sim U[-1/2\varphi, 1/2\varphi]$ (Lindbeck and Weibull 1987). The party-government's (PG) indirect utility function is

$$w^{PG} = R - |q\hat{}| - \tau(\tau^A, \tau^B), \text{ with R representing total rents.} \tag{3c}$$

I assume that citizens will continue to vote for the dominant party if $w^{ij} \geq \beta$, with β representing a citizen's indirect utility from voting for the opposition.[37] Given function 3 and the distribution of δ^i, the party-government's predicted vote share (π_{PG}) is:

$$\pi_{PG} = \sum \alpha^j (\varphi/2 - \delta^{i*}\varphi) = \alpha^A[(\varphi/2) - \varphi(q\hat{}-q^A)^2 - \mu_A(q\hat{}) - \tau^{iA} + \beta)]] + \\ \alpha^B[[(\varphi/2) - \varphi[(q\hat{}-q^B)^2 + \mu_B(q\hat{}) - \tau^{iB} + \beta)]] \tag{4}$$

(see Appendix for proof)

where α^j denotes group size and $\alpha^A + \alpha^B = 1$. Thus, the probability that the party-government is re-elected (and thus maintains dominance), $P_{PG,}$ is given by:[38]

$$P_{PG} = Pr[\pi_{PG} \geq 0.5] = Pr[[\alpha^A[(\varphi/2) - \varphi((q\hat{}-q^A)^2 - \mu_A(q\hat{}) - \tau^{iA} + \beta)] + \\ \alpha^B[(\varphi/2) - \varphi((q\hat{}-q^B)2 + \mu_B(q\hat{}) - \tau^{iB} + \beta)] \geq 0.5] \tag{5}$$

In light of the probabilistic vote function above, which policy-bundle signal ($q\hat{}*$) must the party-government send to maximize its probability of re-election? To find the answer, I substitute equation 1 into equation 5 and derive the first order condition of P_{PG} with respect to $q\hat{}$. Thus:

$$q\hat{}* = \alpha^A[q^A + 1/2 + \sigma^2_{0A}/\sigma^2_{q\hat{}A})] + \alpha^B[q^B - 1/2 - \sigma^2_{0B}/\sigma^2_{q\hat{}B})] \tag{6}$$

(see Appendix for proof)

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[37] In future iterations, I will explore and analyze the make-up of ß; for the moment, I vest no agency in the opposition and treat ß as a stand-along variable.
[38] Here I return to Sartori's (relatively minimalist) definition of a "pre-dominant party," referenced on pg. 4.

This result features some important comparative statics. [Recall that citizens in Group A prefer positive values of q̂ while citizens in Group B prefer negative values of q̂: thus, q^{iA} is always positive and q^{iB} is always negative.] Unsurprisingly, the larger the group's share of the population, the more preferred the policy bundle selected by the party-government, and therefore the more favorable the signal observed by the group's citizens. If, ceteris paribus, $\alpha^A > \alpha^B$, the positive weight of the "Group A" part of the right-hand side of equation 6 will outweigh the negative, "Group B" part, resulting in a positive q̂*.

Variation among $\sigma^2_{q̂A}$ and $\sigma^2_{q̂B}$ —the uncertainty with which citizens in each group observe q̂—yields a more interesting result: ceteris paribus, the larger the value of $\sigma^2_{q̂j}$, the less preferred policy bundle selected by the party-government. This result is closely tied to the effects of $\sigma^2_{q̂j}$ in the Bayesian model presented above, in which $\sigma^2_{q̂A} > \sigma^2_{q̂B}$. Because—in light of an unfavorable q̂—Group A will retain more favorable beliefs about the dominant party than would Group B, the party risks losing less votes (ceteris paribus) by selecting a q̂* < 0 than by selecting a q̂ > 0. Moreover, as demonstrated by Figure 3, this strategy may very well be viable over a number of periods, facilitating the maintenance of single-party dominance in socially heterogeneous societies. Finally, the relationship between $\sigma^2_{q̂j}$ and q̂* makes clear the party-government's incentive to manipulate $\sigma^2_{q̂j}$ (as hypothesized above) in order to create more uncertainty around an unfavorable signal.

Figure 3 provides a graphical representation of the effect on q̂* of differences between $\sigma^2_{q̂A}$ and $\sigma^2_{q̂B}$, where $\sigma^2_{q̂A} > \sigma^2_{q̂B}$ In line 1, all else is equal: $\alpha^A = \alpha^B = 0.5$; $\sigma^2_{0A} = \sigma^2_{0B} = 0.025$ (from $\pi_j(\theta)$ above); and $|q^A =1| = |q^B = -1|$. It is clear that q̂* is negative—and thus favorable to Group B—until $\sigma^2_{q̂A} = \sigma^2_{q̂B}$., when q̂* = 0.[39] In order to examine the effects of differences in

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[39] This result clearly follows the media voter theorem (Black 1952).

$\sigma^2_{q\hat{}j}$ given countervailing effects of α^A and σ^2_{0A},[40] in line 2 α^A = 0.6 and α^B = 0.4, while σ^2_{0A} = 0.019 and σ^2_{0B} = 0.017 (from $\pi_A(\theta|q\hat{})$ and $\pi_B(\theta|q\hat{})$ above). In this case, while q^* becomes positive below $\sigma^2_{q\hat{}A}$ - $\sigma^2_{q\hat{}B}$ = 0.065, its value stays below 0.4 even when $\sigma^2_{q\hat{}A}$ = $\sigma^2_{q\hat{}B}$. Of course, given the party-government's as yet un-modeled additional support-maintaining options (private transfers) and its own budget constraint, these are very incomplete predictions of equilibrium party strategy.

Figure 3
Effect of $\sigma^2_{q\hat{}A}$ - $\sigma^2_{q\hat{}B}$ on q^*
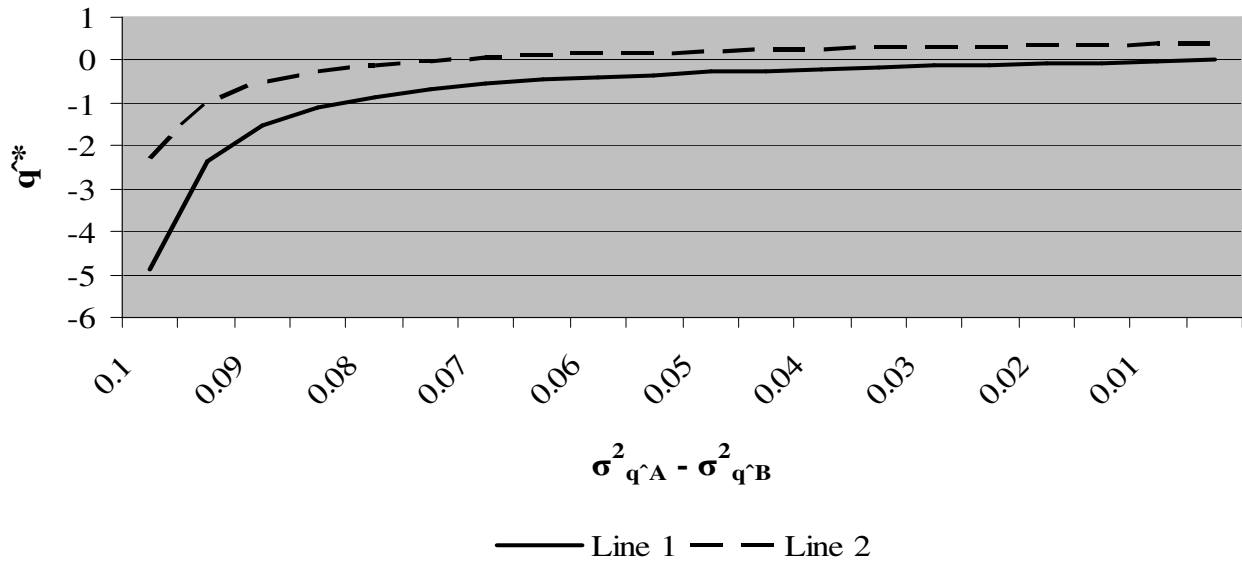
This analysis assumes that the party-government knows the values of q^{ij}, σ^2_{0j} and $\sigma^2_{q\hat{}j}$ among the citizenry. As discussed above, I believe these assumptions are not unrealistic. Given the import of such information to party strategy, I hypothesize that the party-government invests substantial resources in research capacity and uses branch-level cadres and other intermediaries

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[40] It is important to note σ^2_{0j} may offset the relationship between $\sigma^2_{q\hat{}j}$ and q^*. However, given the nature of the Bayesian model, values of σ^2_{0j} are generally quite similar across groups in any given period (see fn 33). In addition, the value of σ^2_{0j} is generally less than the value $\sigma^2_{q\hat{}j}$ in any given period.

to learn about distributions of party support (and beliefs) among citizen groups. Thus, before selecting $\hat{q}^*$, the party-government has gathered sufficient information about values of μ_j and σ^2_{0j} to make a strategic decision. As for values of $\sigma^2_{\hat{q}j}$, the party-government can acquire this information in two ways: first, by inducing backward from the effects of previous signals on group support; and second, by gathering intelligence about media penetration levels, education levels, numbers of citizen associations, population densities, social diversity and other indicators that effect a group's access to diverse, non-state information sources. As above, I hypothesize that the greater citizens' access to such information, the more accurately the can observe signals about the true nature of the party.

Conclusion: Observable Implications

Though incomplete, this theory of single-party dominance produces a number of observable implications that can be tested empirically.[41] I discuss these implications below, and include potential illustrations from the South African case where possible.

First, in heterogeneous societies with a significant population of "loyal" citizens (relatively inaccurate observers of signals about θ), I expect a dominant party to maintain support among voters with conflicting policy preferences by strategically selecting policies that satisfy loyalists but in fact more closely reflect the interests of more discerning citizens (relatively accurate observers), keeping both groups within the party's broad electoral coalition. As a result, I expect dominant parties to stake out relatively centrist policies, albeit those that slightly favor more accurate updaters. In the South African case, I believe this dynamic explains the ANC's ability (at least thus far) to pursue mostly liberal economic policies (Hirsch 2005) and keep the

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[41] I will design and implement such tests in the near future.

emerging black middle class in the party's fold while maintaining a large, poor and largely rural electoral support base.

Second, I expect more "loyal" citizens to be those with relatively restricted access to diverse information sources, including citizens that a) live in rural (or other) areas without diverse media; b) have few mobile assets (including education); c) are affiliated with few civic associations; and/or d) live in ethnically homogenous areas. In South Africa, I believe this explains variation in feelings toward and support for the ANC among rural blacks and urban blacks in general, particularly among rural Xhosas and urban Xhosas. Somewhat by contrast, I believe the same dynamic may explain why the situation is reversed among Zulu, with urbanites more supportive of the party than their rural co-ethnics (Rosenberg forthcoming). I further expect that dominant parties will seek to increase the uncertainty with which "loyal" citizens observe signals using nationalist or revolutionary rhetoric delivered by way of political rallies, electoral campaigns, and influence on state-owned media, as well the efforts of party cadres at the branch level.

Third, I expect that a dominant party will allocate more patronage resources (private transfers) to shore up support among discontented citizens (or potentially discontented citizens) than to reward loyalists. I suspect this dynamic explains the relative paucity of discretionary social spending in the Eastern Cape as compared to other, less "loyal" provinces (such as Kwa-Zulu Natal and Gauteng) (SAIRR 2007). I also suspect a related strategy helps explain the form and functions of the government's Black Economic Empowerment (BEE) programs (Southall 2002).

Fourth—and related to the point above—I expect that potential party-elite defectors are discouraged from doing so due to the rents they earn due to their positions in the party. In this

vein, I expect that the most likely defectors will be "outsider" elites who have already lost privileged positions within the party, as is the case with most of the leaders of the recently formed ANC splinter party Congress of the People (COP). I further expect that defections will be more likely in parliamentary or federalist systems, as well as systems that employ proportional representation (PR).

Finally, I expect that opposition parties will pursue niche constituencies until they believe favorable beliefs toward the dominant party are sufficiently diluted to make a frontal challenge worthwhile, and that parliamentarianism, federalism, and PR will decrease the likelihood of such challenges. I suspect these factors explain both the thus-far niche electoral strategies of South African opposition parties and their recent (though as yet sporadic) signals about forming a united front against the ANC.

Appendix
Proofs of Equations 1a and 2a:

$$\mu_j(\hat{q}) = \mu_j + (\hat{q} - \mu_j)(\sigma^2_{0j} / \sigma^2_{\hat{q}j} + \sigma^2_{0j}) \tag{1}$$

$$\mu_j(\hat{q}) = \mu_j(\sigma^2_{0j} + \sigma^2_{\hat{q}j} / \sigma^2_{\hat{q}j} + \sigma^2_{0j}) + (\hat{q} - \mu_j)(\sigma^2_{0j} / \sigma^2_{\hat{q}j} + \sigma^2_{0j})$$

$$\mu_j(\hat{q}) = (\mu_j \sigma^2_{\hat{q}j} + \hat{q} \sigma^2_{0j}) / \sigma^2_{\hat{q}j} + \sigma^2_{0j}$$

$$\mu_j(\hat{q}) = (\mu_j \sigma^2_{\hat{q}j} / \sigma^2_{\hat{q}j} + \sigma^2_{0j})(\sigma^2_{0j} / \sigma^2_{0j}) + (\hat{q} \sigma^2_{0j} / \sigma^2_{\hat{q}j} + \sigma^2_{0j})(\sigma^2_{\hat{q}j} / \sigma^2_{\hat{q}j})$$

$$\mu_j(\hat{q}) = [(\mu_j / \sigma^2_{0j}) / (\sigma^2_{\hat{q}j} + \sigma^2_{0j} / \sigma^2_{0j})](1/\sigma^2_{\hat{q}j}) + [(\hat{q} / \sigma^2_{\hat{q}j}) / (\sigma^2_{0j} + \sigma^2_{\hat{q}j} / \sigma^2_{\hat{q}j})](1/\sigma^2_{0j})$$

$$\mu_j(\hat{q}) = \frac{\mu_j(1/\sigma^2_{0j})}{(1/\sigma^2_{0j}) + (1/\sigma^2_{\hat{q}j})} + \frac{\hat{q}(1/\sigma^2_{\hat{q}j})}{(1/\sigma^2_{0j}) + (1/\sigma^2_{\hat{q}j})} \tag{1a}$$

$$\sigma^2_{1j} = \sigma^2_{0j} \sigma^2_{\hat{q}j} / \sigma^2_{\hat{q}j} + \sigma^2_{0j} \tag{2}$$

$$\sigma^2_{1j} = [\sigma^2_{0j} \sigma^2_{\hat{q}j} (1/\sigma^2_{\hat{q}j})] / [(\sigma^2_{\hat{q}j} + \sigma^2_{0j})(1/\sigma^2_{\hat{q}j})]$$

$$\sigma^2_{1j} = \sigma^2_{0j} / (\sigma^2_{0j} / \sigma^2_{\hat{q}j} + 1)$$

$$\sigma^2_{1j} = 1 / (1/\sigma^2_{0j} + 1/\sigma^2_{\hat{q}j})$$

$$1/\sigma^2_{1j} = 1/\sigma^2_{\hat{q}j} + 1/\sigma^2_{0j} \tag{2a}$$

Proof of Equation 4:

$$w^{ij} = -(\hat{q} - q^{ij})^2 + \mu_j(\hat{q}) + \tau^{ij} + \delta^i \tag{3}$$

In each j, i votes for the party-government if:
$$\delta^i \geq (\hat{q} - q^{ij})^2 - |\mu_j(\hat{q})| - \tau^{ij} + \beta$$

$$\pi_{PG} = \sum \alpha^j \varphi (1/2\varphi - \delta^{i*})$$

$$\pi_{PG} = \sum \alpha^j (\varphi/2 - \delta^{i*}\varphi) = \alpha^A[(\varphi/2) - \varphi(\hat{q} - q^{iA})^2 - \mu_A(\hat{q}) - \tau^{iA} + \beta)]] + $$
$$\alpha^B[[(\varphi/2) - \varphi[(\hat{q} - q^{iB})^2 + \mu_B(\hat{q}) - \tau^{iB} + \beta)]] \tag{4}$$

Proof of Equation 6:

$$\partial P_{PG}/\partial q\hat{} = \alpha^A \varphi[-2(q\hat{}-q^{iA}) + (\partial\mu_A(q\hat{})/\partial q\hat{})] + \alpha^B \varphi[-2(q\hat{}-q^{iB}) - \varphi(\partial\mu_B(q\hat{})/\partial q\hat{})] = 0$$

From Equation 1: $\partial\mu_A(q\hat{})/\partial q\hat{} = \sigma^2_{0A}/(\sigma^2 q\hat{}_A + \sigma^2_{0A})$
$\partial\mu_B(q\hat{})/\partial q\hat{} = -\sigma^2_{0B}/(\sigma^2 q\hat{}_B + \sigma^2_{0B})$

$$\partial P_{PG}/\partial q\hat{} = \alpha^A \varphi[-2(q\hat{}-q^{iA}) + \sigma^2_{0A}/(\sigma^2 q\hat{}_A + \sigma^2_{0A})] + \alpha^B \varphi[-2(q\hat{}-q^{iB}) - \sigma^2_{0B}/(\sigma^2 q\hat{}_B + \sigma^2_{0B})] = 0$$

$$\varphi(\alpha^A+\alpha^B)2q\hat{} = \alpha^A[(2q^{iA}) + \sigma^2_{0A}/(\sigma^2 q\hat{}_A + \sigma^2_{0A})] + \alpha^B[2q^{iB} - \sigma^2_{0B}/(\sigma^2 q\hat{}_B + \sigma^2_{0B})]$$

$$q\hat{}* = \alpha^A[q^{iA} + \sigma^2_{0A}/(2(\sigma^2 q\hat{}_A + \sigma^2_{0A}))] + \alpha^B[q^{iB} - \sigma^2_{0B}/2(\sigma^2 q\hat{}_B + \sigma^2_{0B}))]$$

$$q\hat{}* = \alpha^A[q^{iA} + 1/2 + \sigma^2_{0A}/\sigma^2 q\hat{}_A] + \alpha^B[q^{iB} - 1/2 + \sigma^2_{0B}/\sigma^2 q\hat{}_B] \tag{6}$$