

The Role of Subnational Politicians in Distributive Politics: Political Bias in Venezuela's Land Reform Under Chávez

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Michael Albertus¹

Abstract

This article examines how the partisanship of empowered subnational politicians can affect within-district benefit distribution. I present a theory of the role of subnational politicians in distributive politics, and then test this theory on a distributive Venezuelan land reform initiative by leveraging unique individual-level data on revealed voter preferences and the receipt of particularistic benefits. Using data from a list of millions of voters who signed petitions to recall former President Chávez, I match information on recent land grant applicants to petition signers to measure how political preferences affect the likelihood of applying for and receiving land, and how state governors condition this relationship. I find evidence for both strategic core voter targeting and blockage of benefits to opposition voters. These effects, however, are modified by the political affiliation of governors. The findings point to the importance of considering how intervening subnational politicians influence distributive politics, particularly under federal structures.

Keywords

political economy, subnational politics

¹University of Chicago, IL, USA

Corresponding Author:

Michael Albertus, Assistant Professor of Political Science, University of Chicago, 5828 S. University Ave., Pick Hall 426, Chicago, IL 60637, USA.

Email: albertus@uchicago.edu

Introduction

Scholars have long recognized distributive politics as a staple of the electoral strategies deployed by modern political parties. Non-programmatic distribution characterizes politics from the Philippines to Taiwan, Argentina to Senegal, and beyond, and occurs even in advanced democracies (Chen, 2013; Kitschelt, 2013; Stokes, 2005). Yet, while politicians often use material resources to bolster their electoral prospects, the menu of strategies involving particularistic transfers is diverse. How do incumbent parties allocate particularistic goods to enhance their electoral support?

Although the literature on this topic is rich and theoretically sophisticated, there are two main competing explanations for how party operatives will distribute material benefits to individuals or groups to garner votes. On the one hand, if a political party has an advantage at swaying a particular set of voters because it can more accurately predict its reactions to specific transfers or can more efficiently deliver goods to them, then it will target these core voters (Cox & McCubbins, 1986; Dixit & Londregan, 1996). If some voters are already predisposed to one party and cannot credibly threaten to vote against it, however, parties may instead target swing voters (Stokes, 2005).¹

In part because the unit of analysis in most empirical studies lends a focus on benefit allocation across districts rather than individuals or groups,² few analyses consider that subnational politicians often play an intermediary role between the national governing parties that supply resources and the local constituents who receive them. Distributive programs with this structure—non-programmatic, individual distribution managed by incumbents with the plausible threat of withdrawal of support—are classified by Stokes, Dunning, Nazareno, and Brusco (2013) as clientelism in the form of “manipulation of public programs.” Such programs differ from distributive targeting by parties directly to individuals through local party brokers, which is frequently the case with vote buying and turnout/absentee buying.

In distributive programs where intermediary incumbent politicians either deliver benefits from the center or are key in “signaling” how distribution should occur, the ability of the national governing party to target a particular constituency is conditional on a political link with subnational politicians. Simultaneously, the ability of individuals to access benefits from the center is also conditional on the link to political intermediaries. Based on this insight, this article advances the existing literature by relaxing the implicit assumption of unified government in such programs. It then builds a theoretical framework that acknowledges the critical role of subnational politicians who mediate distributive relations between voters and national-level politicians.

The theoretical intuition is as follows. Because of federal structures, difficulties in implementing a national-level program across geographically dispersed locales, and gains in the precision of targeting due to local knowledge, distributive government programs targeted at individuals are often designed at the national level but strongly influenced by subnational political actors. If a subnational politician shares a partisan affiliation with the executive, they may aid in targeting benefits to their constituency consistent with the interests of the central governing party, whether this is to core or swing groups. But if the subnational politician is an opposing party member, he or she may disrupt or sabotage the center's intended delivery of benefits. The observed distributive outcome in this case depends critically on subnational autonomy. When subnational politicians have full autonomy and are not denied goods, they can redirect distributive benefits according to their own electoral calculations (e.g., to their own core constituents). But when subnational politicians have only limited autonomy—for instance, if they serve principally to “signal” to the central government how to politically allocate distributive goods, or if the center can use alternative channels to distribute the same good or attempt to block benefits allocated by the subnational politician—then the resulting pattern of distribution will be the outcome of competing allocation attempts at both levels. For example, if both the center and subnational politicians are attempting to target their own core constituents but disrupting each other's ability to do so, swing voters may become the ultimate beneficiaries.

This article empirically tests several of these theoretical predictions in the context of the contemporary and controversial Venezuelan land reform initiative *Misión Zamora* using a unique individual-level dataset on revealed voter preferences and the receipt of particularistic benefits, paired with the partisan affiliation of state governors. Former President Hugo Chávez tapped the vast resources from Venezuela's state-owned oil company to finance a set of large-scale social programs (*misiones*), which his successor Nicolás Maduro has maintained. Yet despite the size of Venezuela's social programs, scholarship that suggests that they are being used clientelistically (Corrales & Penfold, 2011; Penfold, 2007),³ and the foundational role of the poor in supporting *Chavismo* (Canache, 2004), there is still much to learn about how these ongoing social programs are targeted at individuals.

Land distribution is one of the major social programs, placing it among the most important recent land reforms in a region with a long history of such reforms (Albertus, 2015). Its structure fits squarely into Stokes et al.'s (2013) definition of manipulation of public programs: Land distribution is characterized by non-programmatic individual distribution controlled by central incumbents with the reasonable threat of withdrawal of support. From the time the National Land Institute (INTi) centralized operations in 2007 until

the February 2009 constitutional referendum for indefinite presidential reelection, 145,000 individuals applied for land grants. How are land grants targeted, and how are the distributive patterns affected by subnational politicians? These questions can be answered with particular precision due to the availability of voter information. In late 2003, over 3 million of Venezuela's 12 million registered voters signed a petition to recall Chávez from office, forcing a recall referendum. Well over a million Chávez supporters simultaneously signed a counter-petition to recall opposition politicians. The list of recall petition and counter-petition signers was merged with information on the universe of registered voters in Venezuela and packaged into a database (*Maisanta*) that was then distributed throughout the bureaucracy and leaked to the public. Allegations soon arose that this list was being used in hiring public employees and distributing social benefits.

The analysis here employs *Maisanta* directly to link land applicant information to voter lists to determine how signing the petition to recall Chávez or the petition to recall opposition politicians affects the likelihood that an individual applies for a land grant and the likelihood of receiving a grant conditional on applying.⁴ I find that land applications are somewhat more common among strong Chávez partisans that may be more easily mobilized. Pro-Chávez individuals are also significantly more likely to receive land conditional on applying—clear evidence of the central government's politicization in allocating social benefits. This is consistent with Cox (2009), who argues that a highly polarized electorate with few swing voters such as that in Venezuela (Ortega & Penfold, 2008) should induce a party to target transfers to core supporters. This is particularly true when mobilization is an attractive strategy (Cox, 2009, Nichter, 2008), a condition that holds in Venezuela given a highly variable turnout rate amid a host of referendums and presidential and parliamentary elections.

I also find, consistent with the theory advanced here, that the distribution of benefits is modified by the partisanship of state governors. Although governors do not have direct, autonomous control over land allocation, they are crucial figures in signaling to the center how the land reform program should be targeted and in facilitating or inhibiting the center's targeting attempts. Whereas strong Chávez supporters are more likely to receive land reform benefits in states with pro-Chávez governors, they are less likely to receive grants in opposition-held states. Pro-Chávez governors facilitate land grant targeting and signal that their states are politically deserving, whereas opposition governors inhibit land distribution. At the same time, Chávez opponents in regions with anti-Chávez incumbents are significantly less likely to receive land, which suggests that the center can effectively deny the political opposition from receiving land reform benefits by negating opposition

governors' targeting strategies. Further analyses that take into account the time required for INTi to process land grant applications as well as potential "bureaucratic delay" support these findings of political bias, as does an analysis of whose applications have been effectively rejected by INTi. In short, the national government is very discerning in granting benefits, and even bureaucratic delay has a political logic rather than a lack-of-competence logic. Subnational politicians are well aware of these patterns and attempt to facilitate or complicate targeting.

The availability of a database on beneficiaries is particularly advantageous given that, as Gonzalez-Ocantos, de Jonge, Meléndez, Osorio, and Nickerson (2012) demonstrate, the use of self-reported benefits as in many existing studies of targeted distribution may be subject to social desirability bias. Together with the *Maisanta* data, this article presents the first analysis of a distributive program at the individual level using data on revealed voter preferences and the receipt of particularistic benefits. Yet while these data from Venezuela provide a unique opportunity to closely analyze a distributive program, the phenomenon of individual targeting in countries with powerful subnational politicians is far from uncommon. Stokes et al. (2013) argue—with evidence from cases as diverse as Argentina, India, Mexico, and Venezuela—that the typical clientelist political machine is bottom-heavy and decentralized, enabling local party operatives to micro-target voters by making good inferences about individuals' likely votes based on factors such as their job, membership in organizations, and affiliation with neighbors.⁵ The countries examined by these authors have strong federal structures that can enable subnational authorities to intervene in voter targeting, as well as partisan fractionalization at different levels of government that gives them the incentive to do so.⁶ Findings from Venezuela may therefore be applicable to these and other contexts where multilevel politics filters distributive programs targeted at individuals.

The article proceeds as follows. The Role of Subnational Politicians in Conditioning Voter Targeting section develops a theory of how intervening politicians can condition the distribution of particularistic goods that flow from the center. The Role of Subnational Politicians in Venezuela's Land Reform section outlines the role of local politicians in Venezuela's land reform program. In The Rise of Chávez and the *Maisanta* Database section, I discuss the rise of Chávez and the creation and distribution of the *Maisanta* database. The Research Design and Data section describes the research design and data, and the Empirical Analysis section presents the results. The Scope Conditions: Distributive Politics in Federal Electoral Regimes section examines the scope conditions of the theory, followed by the conclusion.

The Role of Subnational Politicians in Conditioning Voter Targeting

Testing theories of distributive politics at the individual level enables both a greater understanding of the allocation of benefits within districts and an examination of the local political interactions that are often critical to voters receiving benefits. Subnational politicians may play little role in a distributive program if benefits are administered to constituents by functionaries that answer directly to the executive (e.g., ideal-type populism). But targeted programs often rely upon intermediaries because of federal structures, difficulties in implementing a nationwide program across a wide spatial range, and advantages in the accuracy of targeting due to local knowledge. A within-district empirical analysis enables modeling how subnational politicians interact both with individuals in their district and with the central government in ways that affect ultimate voter targeting patterns. Depending on their political incentives and degree of autonomy, these subnational actors can become key players in either facilitating or inhibiting the center's intended targeting of benefits.

Several important recent contributions have shed greater light on the role of local intermediaries—especially brokers—in distributive politics. Stokes et al. (2013), for instance, prominently argue that information asymmetries lead local brokers to target loyal partisans even though national-level party leaders prefer targeting swing voters. But brokers are not the only intermediaries that can influence the allocation of distributive benefits originating from party leaders. Szwarcberg (2012), for example, notes that potential voters often access benefits at rallies. By controlling rules for how parties conduct rallies or restricting permits, local politicians can affect the receipt of party benefits. Local incumbents can also directly administer the allocation of benefits. Auyero's (2001) work on slum dwellers in Buenos Aires demonstrates in detail how local Peronist officials administered and publicized clientelistic projects. Weitz-Shapiro (2012) examines how local mayors across Argentina become personally involved in distributing benefits through a national food program that affords discretion over program implementation. Both these latter studies highlight how subnational politicians can claim credit over decentralized distributive programs to win constituent support. No previous contributions, however, have explicitly focused on the distributive implications of interactions between the center, subnational politicians, and individual voters.

When it comes to understanding distributive patterns in clientelistic government programs mediated by subnational politicians, it is critical to recognize that the relevant political intermediaries are those that act as gatekeepers of a distributive good between national-level incumbents and voters.⁷ Patterns

Table 1. Distributive Outcomes of Competing Center and Subnational Voter Targeting.

Subnational autonomy	Subnational politician partisanship	
	Aligned (Party A)	Opposition (Party B)
Full	Party A core (Scenario 3)	Party B core (Scenario 1)
Limited	Party A core (Scenario 4)	Swing (Scenario 2)

The table assumes that the central governing party (Party A) and subnational politician pursue core targeting strategies. Cells indicate observed distributive outcomes in subnational units.

of distribution depend on the targeting strategies of both the executive and the relevant subnational gatekeepers—strategies that need not be symmetric across levels of government. The autonomy these gatekeepers have in distributing benefits is also critical: Whereas fully autonomous gatekeepers can entirely redirect benefits as they choose, gatekeepers with limited autonomy—as in Venezuela’s land distribution program—serve to facilitate or disrupt the center’s targeting strategy.

Consider four distinct ideal-type scenarios in which the central governing party (Party A) attempts to target its core supporters with benefits in a particular region. In each scenario, subnational gatekeeper politicians have their own political incentives for delivering benefits to voters. I assume for ease of presentation here that subnational politicians also attempt to target their own core voters (e.g., because voters are ideologically polarized and turnout is variable). The four scenarios and the patterns of distribution they are expected to generate are displayed in Table 1.⁸

The subnational politician in the first two scenarios is an opposition member from Party B and therefore has incentives to disrupt or sabotage the delivery of benefits to core supporters of the governing Party A. The expected patterns of distribution in these scenarios depend on the degree of autonomy subnational politicians wield over distribution. Consider first the case of an *opposition subnational politician with full autonomy*. In this first scenario, subnational politicians have sole discretion over the distribution of goods that come from the center and that can be used for particularistic aims to court constituents. Opposition subnational politicians can therefore redirect benefits according to their own electoral calculations rather than the center’s. If they target their own loyalists, we would expect to observe a Party B core targeting strategy in their district.⁹

What if the subnational government does not have sole discretion over the distributive good, in that the governing party can (a) completely manage distribution from the center, (b) use alternative channels to distribute the same

good (or some portion of them), or (c) attempt to block benefits allocated by the subnational politician? This second scenario is therefore characterized by an *opposition subnational politician with limited autonomy*. If an opposition politician tries to steer benefits toward the Party B core, the national governing party may disrupt transfers. This can occur, for instance, by selectively denying nationally controlled benefits to opposition supporters through direct or indirect (e.g., probabilistic) screening mechanisms. But opposition subnational politicians can also use the powers and tools at their disposal to discourage or complicate the ability of the central Party A to target its core voters. This can occur, for instance, through campaigns of misinformation, actions that raise the cost of benefit distribution, and selective local enforcement of the law. With benefits largely blocked to both Party A and Party B core constituents, ideologically indifferent swing voters would therefore be the main beneficiaries.¹⁰

Now consider two scenarios in which the subnational politician is from the same Party A as the incumbent national government. In Scenario 3, characterized by an *aligned subnational politician with full autonomy*, the subnational politician can redirect benefits according to his or her own electoral calculations as in the first scenario above. If the subnational politician targets the Party A core, we should observe benefits flowing to Party A supporters in their district. In Scenario 4 there is an *aligned subnational politician with limited autonomy*. A subnational politician that targets Party A core constituents consistent with the interests of the central governing party would again yield an observed Party A core strategy in their district. Because both the center and subnational politicians are attempting to target their own core voters in Table 1, Scenarios 3 and 4 therefore differ only in terms of whether the subnational politician solely guides distribution according to their own electoral calculations or whether they coordinate jointly with the center in doing so. Importantly, only in these Scenarios 3 and 4 would distributive theories that ignore the role of subnational politicians correctly predict the observed outcomes.

As will be discussed below, Scenario 2 with limited subnational autonomy most closely represents Chávez's land reform in opposition states. Scenario 4 best captures the land reform in states with pro-Chávez governors.

The Role of Subnational Politicians in Venezuela's Land Reform

The centralized administration of Venezuela's land reform alongside geographically dispersed demand for reform and the importance of subnational politicians in rural distributive politics make its reform program ideal for

testing theory on the role of subnational partisanship in conditioning particularistic distribution. Ambiguity in the Land Law and the wide margin for interpretation and implementation by government bureaucrats also renders its land reform subject to political bias.

Venezuela's status as a hybrid regime further makes it an excellent candidate for studying the widespread and politically biased distribution of goods. In a fully autocratic regime, the lack of electoral pressure should diminish the executive's incentives to seek an electoral advantage through the widespread distribution of goods in a politically biased fashion. The politically biased distribution of goods in a democracy may be more concealed or constrained—though hardly eliminated, as demonstrated by the rampant clientelism in democracies such as Argentina, Brazil, Mexico, and India. By contrast, hybrid regimes face electoral pressures to engage in politicized clientelism and few of the restraints that democracy has the potential to impose.

The 2001 Law of Land and Agrarian Development set forth a number of ambitious goals. The main provisions called for land distribution to the poor, a tax on unexploited land, and a landholding ceiling. The key institution charged with administering the land reform is INTi, which registers and regulates both public and private property and also manages the distribution of land in accordance with the law. Begun as a decentralized process with regional INTi offices registering and distributing land, the reform only affected state-owned property until 2005. The Land Law was strengthened and amended in that year, in part to overcome Supreme Court annulments (Duque Corredor, 2009). Peasants can now legally occupy private land if they hold *cartas agrarias*, or usufruct certificates valid until legal disputes over ownership are settled. The chief source of land for redistribution are “latifundios,” defined under the 2005 law as properties larger than the regional average and with a yield less than 80% of that suitable to its extent (Article 7). However, there is no complete property registry or a classification of soils according to their productivity. Definitions of farm productivity thus leave a wide margin of interpretation for government functionaries (Delahaye, 2006; Duque Corredor, 2009), who have established varying criteria and applied them unevenly across different regions. Shifting definitions of property rights and ambiguities in the Land Law have led to opposition from private property owners and allegations of political bias in the Law's administration.

In 2007, INTi's organizational structure changed under the amended Land Law, transferring final decisions on property registration and land distribution to its central offices in Caracas. INTi's regional offices, typically in state capitals, nonetheless serve important functions. Individuals apply for grants, including *cartas agrarias*, through these regional offices. After their own review, and often after coordination with state governors where there is

political agreement, these offices then forward applications to Caracas. Individuals also must have regional INTi officials inspect and certify their property claims and report their findings to INTi's central offices. As a result, regional land reform officials in concert with state governors affect the application and land distribution process.

INTi's regional offices, however, are ultimately headed by bureaucrats that are appointed by INTi's president, who is named by the national executive. It is consequently easier for pro-Chávez politicians to help their supporters, which is consistent with other evidence that discretionary transfers have been channeled to subnational authorities with party affinities to Chávez (e.g., de la Cruz, 2004). Nonetheless, opposition politicians, while facing political obstacles in aiding their own supporters, retain considerable capacity to inhibit grants to pro-Chávez individuals in their jurisdictions. This capacity (termed "limited autonomy" above) derives from Venezuela's federal structure.

Governors as Gatekeepers: Signals in Facilitating and Inhibiting Land Grants

State governors play a particularly important role in the administration of Venezuela's land reform. Though they do not have autonomous control over land distribution and therefore do not make final allocation decisions, their actions and partisan affiliations serve as signals that can either *facilitate* or *inhibit* the targeting of land grants to individuals and groups within their jurisdictions. Governors are well equipped to access and use group-based and individual information about land applicants due to interactions both with regional INTi officials that have detailed information about land applicants (including individuals' national identity numbers) and with land-based interest groups and petitioners whose activities and affiliations are informative. Governors therefore not only signal which regions are politically deserving of reform but also which individuals within those regions are deserving.

To facilitate grants, governors can publicize the land program in speeches and ceremonies and through public expropriation proceedings to encourage specific groups and individuals to apply for land, and then follow up directly with these individuals or indirectly in concert with regional INTi offices. Governors can also help INTi identify properties to distribute, increasing the pool of potential land grants in their state. Close coordination of this type between INTi and state governors is seen in a number of examples. In expropriating and dividing the El Toco estate in a public ceremony in Guárico, the pro-Chávez governor Willian Lara signaled that facilitating the land reform was part of his mandate in office, and "therefore, we accompany the

peasants and INTi in taking the wise decision to advance the legal process to deliver land to organized, small-scale producers.” He then invited land applicants to meet with him personally to advance their petitions. In the case of the San Luis estate in Calabozo, Guárico, Governor Lara personally presided over the expropriation together with the regional INTi coordinator Fernando Colmenares and the Minister of Agriculture. Lara met directly with those petitioning INTi for the San Luis land. Lara, with Colmenares at his side, could reasonably assess applicants’ partisan affiliations. One applicant in this case, for instance, was an employee who worked for the Foundation for Training and Innovation to Support the Agrarian Revolution, which formed within the Ministry of Agriculture; the employee was thus a clear pro-Chávez partisan. Hugo Chávez’s brother Adán Chávez has similarly worked closely with INTi as the governor of Barinas, pledging his “enormous commitment to providing support” to INTi and leveraging his connections as a former INTi director to bring visibility to the program—including hosting INTi events directly in the governor’s offices—and facilitate its expansion in his state.

In many similar cases, these and other governors directly meet INTi applicants and personally hand over land grant certificates to beneficiaries in public ceremonies. Applicants themselves may facilitate partisan targeting. Members of the peasant group Argimiro Gabaldón in La Estancia, for instance, openly petitioned INTi for land using as justification that Maisanta indicated the landowner signed against Chávez and thus supports counter-revolutionary *latifundismo*; the clear (and stated) implication was that the applicants were strong Chávez partisans.¹¹

Finally, pro-Chávez state officials can aid individual applicants in an effort to credibly claim credit over reform progress. Governors, for instance, personally host meetings between potential applicants and high-level government actors from institutions that collaborate with INTi in financing reform beneficiaries and providing loans and technical assistance (e.g., the Bank of Venezuela). Such meetings facilitate coordination among potential applicants, encouraging greater and more informed participation in the program, as has occurred with its repeasantization programs (Page, 2010). The coordination with INTi to host these meetings provides an easy conduit through which applicant information can flow.

Governors opposed to land reform can also influence its targeting. These governors, and the signals they send about distribution, typically work at cross-purposes with the regional INTi office in their state. First, opposition governors can use state police to selectively deter land invasions and shield private property from reform. This occurred frequently in the opposition states of Carabobo under Henrique Salas Feo and Zulia under Pablo Pérez. The latter explicitly

bolstered the state police to deter illegal invasions such as those by the Yukpa in Machiques de Perijá.¹² As with the Yukpa, opposition governors' efforts on this front could be greater in pro-Chávez areas or areas where there are pro-Chávez land invaders, with such information gleaned by the state police, invaders' affiliations with or appeals to the regional INTi office, or precinct-level electoral results. Indeed, this use of state police is likely one major reason why the national guard is employed to seize the properties of prominent opposition politicians in these regions. Even in these more prominent seizures, however, the typical presence of INTi land petitioners (who may have invaded the property) makes their identities knowable to the state police and to governors.

Second, opposition governors can publicly denounce the reform as depressing agricultural production and instigating violence, or as funneling state resources to a small minority of voters, crafting targeted appeals to the majority of voters who will not apply for land grants or are sensitive to allegations of poor government performance (see, for example, Weitz-Shapiro, 2012). Opposition governors such as César Pérez Vivas of Táchira, Henrique Salas Feo of Carabobo, Henrique Capriles of Miranda, and Pablo Pérez of Zulia have all strongly spoken out against the reform in this way.

Finally, state officials can discourage local property registration and withhold updated cadastral information from the government, making it more difficult for INTi to identify properties to target or to resolve specific peasant claims. This is a particularly useful tool as INTi has been trying to examine property rights nationwide to better target properties to reform, and state officials coordinate and catalyze the construction of local-level cadastres. In one of the most egregious cases illustrating the value of cadastral information, the INTi regional office in the then-opposition state of Zulia was burned down shortly after an INTi announcement for the expropriation of a set of large estates in the state (mostly of opposition landowners); key land registry documents were destroyed.

Of course, these mechanisms are not mutually exclusive. Governors can, and have, pursued several of these strategies simultaneously. Doing so has frustrated Chávez supporters. As a Chávez party (PSUV) mayoral candidate for the capital of the former opposition state of Zulia complained, "it is a regional government that blocks the *misiones* and social programs from arriving to Zulia."

The implications of this discussion for observed patterns of land grant targeting are clear when one takes into consideration the overall political context. Venezuela has a highly polarized electorate with few swing voters (Ortega & Penfold, 2008), and a highly volatile turnout rate against a backdrop of numerous referendums and presidential and parliamentary elections makes voter mobilization a key determinant of electoral success. Both of

these factors, which operate nationally and subnationally, greatly favor core targeting (Cox, 2009; Nichter, 2008). Consequently, Venezuela's land reform at the regional level should correspond closely to Scenarios 2 and 4 in the theory, with the center and the aligned and opposition subnational politicians attempting to target their core supporters.

The theoretical discussion thus yields three clear testable hypotheses:

Hypothesis 1: Pro-government individuals should be *more* likely to receive benefits than opposition or undeclared individuals in regions where state governors are of the national government's party.

Hypothesis 2: Pro-government individuals should be *less* likely to receive benefits than undeclared individuals in opposition-held states.

Hypothesis 3: Opposition individuals should be *less* likely to receive benefits than undeclared individuals in opposition-held states.

Electoral Payoffs to Distributive Targeting in Venezuela's Land Reform

For a distributive program to have electoral payoffs, beneficiaries must support the politicians delivering them material goods. Unlike vote buying in which incumbents and challengers can broadly distribute contingent rewards on or near election day, land is only granted by incumbents to applicants. Although land grants were awarded in a wave just prior to voting, many individuals applied before the campaign.

Why do beneficiaries support the politicians that target them through this distributive program? First, land is granted provisionally, which enables conditionality. Beneficiaries are granted usufruct or other provisional rights until definitive ownership over a property is established. Even when land is cleared for distribution, recipients must exploit the property according to its ambiguously defined "social function" for at least 2 years to receive formal title. This leaves bureaucrats a mechanism to sanction potential defectors and maintain voter support. Second, politicians distributing land in rural communities do so in the context of dense political and social networks. Rural voters are often less geographically mobile, and neighbors may be local political operatives who are difficult to mislead about one's vote. Proximity to dense local political networks increases access to distributive goods (Calvo & Murillo, 2013), and enables operatives to elicit greater loyalty (Auyero, 2001) and feelings of reciprocity (Finan & Schechter, 2012) among beneficiaries. Given this arrangement and a polarized electorate with few swing voters but variable turnout, core targeting is an attractive strategy (Gans-Morse, Mazzuca, & Nichter, 2014) and should reap electoral benefits.¹³

The Rise of Chávez and the *Maisanta* Database

Former Venezuelan President Hugo Chávez came to office after the 1998 presidential election on an anti-corruption and anti-poverty populist platform. Following the 1999 passage of a new constitution and another round of elections, Chávez used his electoral mandate to pass a package of 49 laws by presidential decree in 2001. The decree initiated the Law of Land and Agrarian Development.

In 2002, groups in opposition to Chávez and his new economic policies began to collect signatures to petition for a recall election. The first two petitions were rejected on technical grounds. Under the supervision of the Electoral Council, the opposition initiated a third recall petition drive calling for a binding vote to remove Chávez from office. Of the 12 million registered voters, over 3 million signed the third petition between November 28 and December 1, 2003, at signing stations administered by the Electoral Council. At the same time, Chávez supporters began a counter-petition to recall opposition legislators. Well over a million people signed this counter-petition. The 20% recall vote threshold was reached. Chávez won the recall referendum in August 2004 with 59% of the vote.

The identity of the recall petition signers was made public in the early stages of the opposition's recall drive. The pro-Chávez congressman Luis Tascón posted a list of signers of the first petition on his website, ostensibly so that citizens could find out if their signature was forged by the opposition and appeared on the petition. Tascón updated the list for the second and third petitions, and the Electoral Council posted similar lists. Chávez threatened to retaliate against petition signers on nationally broadcast television addresses and encouraged them to withdraw their recall signatures. In 2004, the list of signers of the third petition was compiled into a database known as "Maisanta," which included information on all 12 million registered voters in March 2004. The list of counter-petition signers was also incorporated into this database. The Maisanta software was widely distributed after the 2004 election. Its contents demonstrate that its creators merged voter information with administrative data from the government's social programs. A Maisanta user who enters an individual's identity card (*cédula*) number immediately gains access to his or her name, address, birth date, and whether they participate in various government social programs.

Most importantly for this study, the database also indicates whether the individual signed the third and final recall petition, the counter-petition to recall opposition officials, or neither petition. Individuals who signed the third petition are therefore those most likely to be identified as strong partisan opponents of Chávez after 2004, and those who signed the counter-petition

most likely to be identified as strong Chávez supporters (*chavistas*). Indeed, there soon arose allegations that the Maisanta program had been used by public sector employees to punish Chávez opponents, and there is evidence that it had indeed been used to screen job applicants and fire Chávez opponents (Jatar, 2006), as well as to screen applicants for government identification cards and remedial education programs (Hawkins & Hansen, 2006). Chávez himself suggested as much, stating in a cabinet meeting that “there are still places that use Tascón’s list to determine who gets a job and who doesn’t.”

Although it is entirely possible that INTi functionaries directly used Maisanta in allocating land grants as individuals provide their *cédula* number in their application, and revealed this information to governors, this need not be the case for the argument or the empirics to hold. Rather, functionaries could have used other informative clues about partisanship to direct grants in concert with governors, so that Maisanta simply provides us here with an especially accurate measure of partisanship at the individual level that can be used to test the theory.

Research Design and Data

The analysis seeks to determine how the partisanship of governors conditions distributive bias in the administration of Venezuela’s land reform program. There are two particularly unique aspects of this analysis. First, I have data on actual petition signing as well as the database the government used to target the opposition. Second, I have data on all land applicants, including those who were successful in receiving a land grant. By matching land applicant information to voter lists using an individual’s *cédula*, or national identification number, I can distinguish the effect of one’s political preferences for or against Chávez on both the likelihood of applying for a land grant as well as the propensity for receiving a grant conditional on applying. I also examine the role of governors in distribution. That the national-level program is structured similarly across states ensures that differences in implementation are not a function of program characteristics but rather subnational incentives to influence the scale or character of participation.

Dependent Variables: Land Grant Applicants and Beneficiaries

The first part of the analysis seeks to determine whether Chávez supporters are more likely to *apply* for land grants. Because the data here were collected after the recall referendum when the Maisanta database was already widespread, potential land grant applicants who signed against Chávez may have

been less likely to apply for a grant with knowledge that their political preferences could be used against them. At the same time, potential land grant applicants who signed the counter-petition in support of Chávez may have been more likely to apply for a grant, expecting that their support for Chávez would increase their likelihood of receiving a grant. Of the 12 million registered voters in 2004, there were more than 115,000 who applied for at least one of INTi's programs (yielding 145,000 applications) between April 2007 and February 2009, when Chávez won a referendum for a constitutional amendment removing presidential term limits.¹⁴ I focus on this period for the analysis because it is the only time period for which complete data on land reform applicants and beneficiaries are available.¹⁵ The land reform program is popular throughout the country's 334 municipalities and capital district, with an average of 345 applicants per municipality. All but one municipality had applicants. The mostly plains states of Anzoátegui, Apure, Barinas, Bolívar, and Guárico along the Orinoco River all had a high number of applicants, as did Lara and Portuguesa.

The second part of the analysis examines whether there is a political bias in the land grant process conditional on applying for land; it therefore focuses on who becomes a *beneficiary*. There are two principal ways in which bureaucrats can bias the grant process. First, they could simply refuse to grant land to opposition members, instead of giving preference to applicants who are known Chávez supporters or appear ideologically swing. Second, bureaucrats could prefer the applications of petition non-signers by expediting the process of fulfilling an application relative to that of an opposition applicant, thus introducing a "bureaucratic delay" in opposition applications or "bureaucratic haste" in pro-Chávez applications.

I test both of these possible mechanisms. The first mechanism distinguishes between the 6,000 beneficiaries who successfully received land grants during the period and the remaining applicants who did not. I also examine which individuals have reached the legal review stage, one step from becoming a beneficiary. Whereas the reform was still in its early stages at the beginning of 2009 and the number of beneficiaries was relatively low, more than 21,000 individuals had reached legal review, and these applicants represented the most likely next round of beneficiaries. The second mechanism takes into closer account the timing of land grant applications to address the issue of right-censoring in the duration of the application process. Since INTi's operations were centralized in Caracas in 2007, the average application has spent 10.6 months in processing, with applications enduring anywhere between the full time span (April 2007-February 2009) and only 1 month, which are those that entered the system just prior to the constitutional referendum in February 2009. This information allows the analysis to account

for application time in the likelihood of becoming a beneficiary and also enables an analysis of which applicants have remained in the earliest stages of the application process for prolonged periods, having their applications effectively rejected.

Key Explanatory Variables: Support for Chávez and Governor Partisanship

The first key explanatory variable in the analysis is whether or not an individual is an opponent of former President Chávez, which is measured as whether or not they either signed the third recall petition to hold a referendum on Chávez's tenure (Opposition), signed a counter-petition to recall opposition politicians (Loyalist), or signed neither petition (Swing). The availability of such data is unique in that it represents revealed political preferences rather than stated preferences typically employed from surveys, and that it comes from the same database used in part to actually target Chávez opponents. As Hsieh, Miguel, Ortega, and Rodríguez (2011) and Stokes et al. (2013) discuss, there is little evidence suggesting that individuals were coerced into signing. These authors also use petition signing to tap political preferences. Hsieh et al. (2011), who use Maisanta to examine how petition signing influenced individual earnings and employment, plausibly argue that petition signing was a signal of particularly strong partisanship. Stokes et al. (2013) refer to these measures as "ex-ante political ideology" (pp. 291-294), in that they represent the information set available to the government prior to its campaign against the recall referendum and as it was just beginning its *misiones* social programs.¹⁶ Furthermore, because the voting center fixed effects included in most models below yield comparisons of individual outcomes *within* a voting center, this eliminates concerns that individuals may have signed strategically based on whether they live in a pro- or anti-Chávez state or municipality.

Data on Chávez support are available for the entire registered voting population in 2004. Of a total of 12 million registered voters, more than 3 million signed the third petition. Opposition is concentrated in the western states of Mérida, Táchira, and Zulia, and northern states such as Falcón and Yaracuy.

As the theory indicates, however, the likelihood of receiving land is influenced not only by an individual's political preferences but also by the political affiliation of relevant subnational politicians who govern in the district in which they reside. State governors serve as signals to the center about land allocation and can either facilitate or inhibit the application and land distribution process. Because of the importance of state-level politicians in the reform program, the analyses include not only an individual's political preferences,

but also interactions between these preferences and the political affiliation of the governor of the individual's state. The affiliation of governors was coded according to whether they were members of Chávez's PSUV party or members of an opposition party. Because grants during the period of analysis were rewarded in a wave shortly before the 2009 referendum, political affiliation is coded from the 2008 elections.

Control Variables

The analyses include a set of additional variables that may affect the likelihood that an individual applies for or receives a land grant, which if omitted could confound the results. The first control is age. Because one has to demonstrate that they will use any land received productively, individuals with more farming experience may be more likely to enter the program. Age may also be related to ideology. The second control is whether an individual is a participant in one of a set of the government's other social programs—Misión Ribas, Vuelvan Caras, or other programs. Misión Ribas aids poor adults in studying for a high school degree, Misión Vuelvan Caras is aimed at creating jobs through the promotion of cooperatives, and a series of other programs provide low-cost health care and food, teach literacy, and provide citizens with identification cards. If an individual is involved in one of these government programs, they may be more likely to apply for and receive grants from the land reform agency. On one hand, receiving benefits likely correlates with income, so participation in other social programs may proxy for this, even if imperfectly. More directly, participants in other social programs may have more information about other social programs or have greater knowledge about how to navigate the bureaucracy to successfully apply for benefits.¹⁷

The third control variable is the log of the rural population, measured at the municipal level with data from the National Statistics Institute (INE). This variable captures the potential demand for land reform, which is higher in more rural areas. A fourth control is the poverty rate, as poverty may drive both political preferences and the probability of applying for or receiving a land grant. This variable, again measured at the municipal level with data from the INE, indicates the percentage of households that lack basic necessities. Finally, the first part of the analysis includes a control for the percentage of overall pro-Chávez vote in 2004 in a given voting center (those who voted "No" to recalling Chávez), as this may influence voter targeting and the administration of government programs. These last three controls drop from the analyses when individuals are compared within voting centers, as the inclusion of voting center fixed effects implicitly controls for factors that do not vary within voting centers.

Another set of controls for the type of grant applied for is included in the analysis of the land grant process conditional on application. Applicants apply for one of four types of grants: adjudications, *cartas agrarias*, declarations of permanence, and simple property registrations. An adjudication grants the legal right to work and exploit a parcel of land. A property registration verifies an owner's full legal possession of a property and enters it into the national land registry. A *carta agraria* grants temporary usufruct rights over an occupied plot of land until legal disputes over ownership are settled. A declaration of permanence allows an applicant to remain on and continue occupying a plot of land over which they hold no title absent a separate proceeding that must pass through INTi. These grant types are not substitutes; individuals apply for different grants depending on their de facto and de jure landholding status. Existing landowners would apply for property registration, whereas new squatters apply for a *carta agraria* or permanency rights (depending on the ownership of the land they occupy) and farmers with informal rights apply for an adjudication. Given INTi's mandate to advance land distribution along with strict new requirements to prove formal property rights, I expect that applications for a *carta agraria* or permanency rights are more likely to succeed than other applications, and property registrations are least likely to succeed.

A final control included in the analysis of land grants is the time in months, as of February 2009, that have elapsed since an applicant delivered his or her application to the local INTi office and was registered in the centralized national land reform database. Earlier applicants are more likely to have had their claim investigated and processed than those who applied shortly before the 2009 referendum.

A full set of descriptive statistics is found in the Online Appendix. Regarding the pool of registered voters, of a random sample of 200,000 registered voters from Maisanta about 26% of individuals signed the petition to recall Chávez and 11% signed the counter-petition to recall opposition politicians; just less than 1% of registered voters in the sample applied to INTi for a land grant.¹⁸ As a whole, INTi land applicants were more likely than average citizens to participate in *misiones* programs and more likely to come from rural areas with smaller voting centers. They were also somewhat less likely to be Chávez opponents, with only 21% having signed the recall petition, and slightly more likely to be ardent Chávez supporters, with just more than 12% signing the counter-petition.

From the pool of all 145,000 land applications (i.e., not just the subset from the Maisanta sample), 5% received grants during this period, representing 7,327 applications from 6,000 individuals. Nearly 15% of applications, a total of 21,472, reached the legal review stage. The most common instrument applicants petitioned INTi for was a usufruct certificate (*carta agraria*).

Controlling for Unobserved Heterogeneity

Because there is geographical variation in political preferences, and individuals that apply for and receive benefits may also be strong Chávez supporters for unobserved reasons, most models compare individuals within voting centers (*centros*) using a conditional (fixed effects) logit specification to control for unobserved local heterogeneity that may affect both these factors. Implicitly including voting center fixed effects addresses the possibility that an individual-level omitted variable not available in Maisanta or captured by the controls such as income may be driving both political preferences and the likelihood of applying for and receiving a grant. While the variable for participation in other social programs may proxy for income to some degree, benefits administered through these programs may also be politicized. Because unobserved individual factors such as income are fairly homogeneous within a voting center, it is possible to identify the role of political preferences in land applications and grants.

The very small size of voting centers within Venezuela largely accounts for their “homogenous socioeconomic composition” (Lander & Maya, 2005, p. 47). There were a total of nearly 8,600 voting centers for the 2004 recall referendum and an average of 1,400 voters per voting center. The average voting center among land applicants had about 2,000 individuals. The unit of the voting center is therefore much smaller than a municipality or even a parish, and typically consists of a couple city blocks, part of a small town, or a short stretch of valley (see the Online Appendix for examples). Voting centers are often placed in schools or other public buildings in the neighborhood close to a voter’s residence (Wells, 1980). In sum, the ability to compare individuals within voting centers enables a very fine-grained analysis that can more effectively distinguish between programmatic policies that target sectors of the population and non-programmatic distributive strategies that target individuals.

Empirical Analysis

There are five main parts of the analysis. I first explore the relationship between petition signing and the likelihood of applying for land using a series of logit analyses. Second, I restrict the focus to land applicants and analyze the likelihood an applicant receives a land grant conditional on applying to the program. I extend this analysis in a “placebo test” of the theory by examining whether mayoral political affiliation is less relevant than governor affiliation in land allocation, with results presented in the Online Appendix. Third, because the land reform program is ongoing and many applications

have not reached final approval or denial, I conduct an analysis on the likelihood of receiving land that takes into account the censored nature of the data. This analysis is also expanded to examine which applicants have reached the legal review stage, which is only one step short of becoming a beneficiary but counts 3 times as many individuals as beneficiaries. Fourth, I examine the possibility of endogeneity bias in receiving land grants, for instance, due to the omission of variables that are linked to both expressed political preferences and the likelihood of receiving a land grant (whether due to the propensity to apply or otherwise). Finally, given that many applications have disproportionately languished in the earliest stages of the process for prolonged periods, I analyze what makes some applicants more likely to have their applications effectively rejected.

Barriers to Application: Who Applies for Land Grants

Are Chávez supporters more likely to apply for land grants with the expectation that their political support will yield them material benefits? Table 2 explores this question in a series of logit models using whether or not an individual applied for a land grant as the dependent variable. The results for the application stage only are based on 200,000 randomly chosen registered voters from Maisanta given the massive size of the overall database. Several of the specifications are voting center fixed effects logit models to allow the incidence of land applications to vary by locality for unobserved reasons such as income or land productivity. The standard errors are clustered by voting center to address any arbitrary correlation among observations at this level.

Models 1 to 3 of Table 2 present the aggregate results of a set of logit models that do not compare individuals within voting centers. Model 1 serves as a baseline, to which the political variables are added in Model 2. Age is positive and statistically significant across Table 2 as is $\log(\text{Rural Population})$, indicating that older voters from more sparsely populated rural areas are more likely to apply for land. Misiones, which captures participation in other major government social programs, is positively associated with applying for land. Higher poverty rates are also positively linked to land applications, as is support for Chávez as measured by the voting center vote share not to recall him in the 2004 referendum. Model 2 adds variables for whether an individual signed the petition to recall Chávez (Opposition) or a counter-petition to recall opposition politicians (Loyalist). These signers can be considered, respectively, strong Chávez opponents and strong supporters. Model 2 indicates that relative to non-signers (swing), pro-Chávez loyalists (labeled “patriots” in Maisanta) were more likely to apply for land. Chávez opponents, however, were not statistically distinguishably less likely to apply for land than petition non-signers.

Table 2. Who Applies? Logit Analyses of the Role of Political Preferences in Land Applications, 2007-2009.

	Model 1	Model 2	Model 3	Voting center fixed effects		
				Model 4	Model 5	Model 6
Age	0.003*** (0.001)	0.003*** (0.001)	0.003*** (0.001)	0.002* (0.001)	0.002** (0.001)	0.002* (0.001)
Misiones	0.396*** (0.065)	0.372*** (0.065)	0.342*** (0.065)	0.189*** (0.070)	0.145** (0.070)	0.144** (0.070)
log(Rural population)	0.152*** (0.014)	0.153*** (0.014)	0.101*** (0.015)			
Poverty rate	0.039*** (0.003)	0.040*** (0.003)	0.041*** (0.003)			
Percent "No" in recall	0.018*** (0.003)	0.016*** (0.003)	0.011*** (0.003)			
Loyalist		0.194** (0.076)			0.429*** (0.086)	
Opposition		-0.095 (0.059)			-0.088 (0.062)	
Loyalist in Chávez state			-0.324* (0.174)			-0.230 (0.188)
Loyalist in opposition state			0.504*** (0.150)			0.587*** (0.161)
Opposition in Chávez state			-0.103 (0.141)			-0.044 (0.149)
Opposition in opposition state			-0.008 (0.126)			-0.052 (0.132)
Chávez Governor Baseline			0.724*** (0.085)			
Voting center fixed effects	No	No	No	Yes	Yes	Yes
Observations	197,871	197,871	197,871	46,294	46,294	46,294

Dependent variable: INTI land applicant. Standard errors clustered by voting center. Results based on 200,000 randomly chosen registered voters from Maisanta. Baseline for political variables is petition non-signers in Model 2 and petition non-signers in states with opposition governors in Model 3. Baseline for political variables in Model 5 is petition non-signers within a given voting center. Baseline for political variables in Model 6 is petition non-signers within a given voting center, where the governor's partisan affiliation corresponds to the state where the voting center is located.

* $p < .10$. ** $p < .05$. *** $p < .01$ (two-tailed).

Model 3 splits the effect of support for Chávez on applying by the partisan affiliation of the state governor. Whether an individual signed either the recall petition or counter-petition is interacted with dummy variables for the

governor's partisan affiliation to determine whether the likelihood of applying was conditional on the political affinity of the governor. The baseline category of comparison for the political variables is now an individual in an opposition state who signed neither petition. The results suggest that land applicants are more likely to be petition non-signers in states with pro-Chávez governors or Chávez supporters in opposition regions. It is possible that the PSUV works harder to mobilize Chávez supporters in opposition regions to pose a strong challenge to incumbent governors, and part of this strategy includes the promotion of distributive programs.

Because the results of Models 1 to 3 may be driven by some omitted variable that is correlated with political preferences and influences the likelihood of receiving land, Models 4 to 6 compare individuals within voting centers to control for unobserved heterogeneity. The coefficients for variables fixed by voting center are therefore no longer estimated. Furthermore, individuals in voting centers that do not vary in the outcome variable (applying for land) are also dropped, which reduces the number of observations in these models relative to Models 1 to 3. As in Models 1 to 3, Age and Misiones remain positively linked to applications. Similarly to Model 2, the Model 5 coefficient for pro-Chávez individuals is again positive and significant. Using the Model 5 coefficients with the observation-specific fixed effect set to 0 and other covariates set at their means, the probability of loyalists in a given voting center applying for land is 10% higher than the baseline predicted probability for petition non-signers. Strong Chávez opponents, by contrast, are not statistically significantly more or less likely to apply than petition non-signers.

Model 6 again interacts an individual's political preferences with the partisan affiliation of their governor. Because there is no variance in a governor's political affiliation within voting centers, the baseline category of comparison is now simply petition non-signers within a given voting center, where the governor's partisan affiliation corresponds to the state where the voting center is located. For example, the coefficients on pro-Chávez and opposition individuals in states with pro-Chávez governors can be interpreted relative to petition non-signers within a given voting center, when the voting center resides in a state with a pro-Chávez governor. The "Chávez Governor Baseline" is therefore not estimated. As in Model 3, the pro-Chávez effect found in Model 6 operates primarily in states with opposition governors. How an individual signed the petition had no measureable impact on applying for land in states with pro-Chávez PSUV governors.

In sum, the Table 2 results indicate that pro-Chávez individuals are somewhat more likely to be land applicants. The partisanship of governors has a partial influence on this: Loyalists apply more than others in opposition

regions. This is the only discernible partisan application trend that holds in the full model. The next three sections examine if governors are more important in delivering benefits than in influencing applications.

Land Reform Recipients: Who Receives Land Grants

Conditional on applying for land, which individuals actually receive a land grant? Tables 3 to 6 use a set of logit models with whether or not an individual received a land grant as the dependent variable. Given Table 2 findings that strong Chávez supporters are somewhat more likely to apply for land on average, I also ran a series of Heckman selection models on the sample of 200,000 individuals to address potential non-random selection into the land applicant pool. These models consistently reported a statistically insignificant inverse Mills' ratio; furthermore, likelihood ratio tests failed to reject the hypothesis that an independent selection equation was needed. As an alternative approach to concerns about selection, I also present below a series of instrumental variables (IVs) regressions in Table 5. By capturing exogenous variation in expressed political preferences, the IV regressions help ameliorate the possibility that omitted variable bias correlated with political preferences, such as characteristics linked to the propensity to apply for land, is driving the findings for land beneficiaries. Finally, that Table 2 indicates that strong Chávez supporters are somewhat more likely to apply for land in certain areas on average suggests that the land applicant data are, if anything, biased *against* finding an effect for a core voter targeting strategy. Strong Chávez supporters may apply with weak credentials, hoping their partisan affiliation will suffice for receiving a grant.

The models in Tables 3 to 6 employ data on the full set of all land grant applicants during the period April 2007-February 2009. As in Table 2, a series of pooled models are presented, followed by models that compare individuals within voting centers. The Table 3 models include interactions between an individual's political preferences and the party affiliation of the incumbent governor of their state, as well as covariates.

Age, participation in the misiones programs, and rural population are not strongly linked with an increased likelihood of receiving a grant, although the former two are generally positive and reach significance in some models. The poverty rate, however, is positive and statistically significant across models, indicating that land is granted at higher rates in poorer areas. Model 2 adds a variable for when an application was submitted and therefore how long it has been under review. Model 3 also adds terms for the type of grant application. The baseline categories of comparison for the political variables in Models 1 to 3 are petition non-signers in opposition states. Models 1 to 3 indicate that

Table 3. Who Benefits? Logit Analyses of the Role of Political Preferences and Governors in Receiving a Land Grant.

	Model 1	Model 2	Model 3	Voting center fixed effects		
				Model 4	Model 5	Model 6
Age	0.003*** (0.001)	-0.003** (0.001)	0.002 (0.001)	0.005*** (0.001)	0.000 (0.002)	0.003** (0.002)
Misiones	-0.008 (0.058)	0.084 (0.057)	-0.008 (0.057)	0.063 (0.049)	0.088* (0.053)	0.080 (0.053)
log(Rural population)	-0.003 (0.011)	0.002 (0.012)	0.004 (0.011)			
Poverty rate	0.018*** (0.003)	0.026*** (0.003)	0.025*** (0.003)			
Loyalist in Chávez state	0.696*** (0.131)	0.024 (0.135)	-0.004 (0.137)	0.340** (0.142)	0.339** (0.166)	0.338** (0.170)
Loyalist in opposition state	-0.264** (0.111)	0.095 (0.117)	0.020 (0.121)	-0.321** (0.127)	-0.382** (0.151)	-0.381** (0.156)
Opposition in Chávez state	0.035 (0.087)	0.107 (0.100)	0.026 (0.099)	0.136 (0.096)	0.193 (0.121)	0.133 (0.119)
Opposition in opposition state	-0.059 (0.072)	-0.289*** (0.086)	-0.123 (0.085)	-0.145* (0.082)	-0.280*** (0.108)	-0.187* (0.106)
Chávez Governor Baseline	-0.583*** (0.069)	-0.626*** (0.073)	-0.652*** (0.074)			
Time in application		0.402*** (0.005)	0.478*** (0.007)		0.396*** (0.006)	0.432*** (0.008)
Carta Agraria			0.375*** (0.093)			0.285*** (0.092)
Permanency rights			0.380*** (0.096)			0.463*** (0.096)
Title registration			-1.687*** (0.121)			-1.274*** (0.135)
Voting center fixed effects	No	No	No	Yes	Yes	Yes
Observations	122,196	122,196	122,196	62,280	62,280	62,280

Dependent variable: Land reform beneficiary. Estimations conducted on full sample of land applicants. Standard errors clustered by voting center. Baselines for political variables in Models 1 to 3 are petition non-signers in states with opposition governors. Baselines for political variables in Models 4 to 6 are petition non-signers within a given voting center, where the governor's partisan affiliation corresponds to the state where the voting center is located.

* $p < .10$. ** $p < .05$. *** $p < .01$ (two-tailed).

individuals who signed the petition to recall Chávez and who live in states with opposition governors are less likely to receive land grants conditional on applying. Model 1 suggests, by contrast, that pro-Chávez petition signers in

states with pro-Chávez governors are more likely to be successful in their applications, although this effect loses significance in Models 2 and 3. Pro-Chávez signers in opposition-held states are less likely to receive benefits in Model 1. In addition, and as expected, individuals who applied to the program earlier are more likely to become beneficiaries. Finally, and as anticipated, *cartas agrarias* and declarations of permanence are more likely to result in successful applications relative to adjudications and simple property registrations are less likely to be granted.

Models 4 to 6 are specified similarly to Models 1 to 3 but now compare individuals within voting centers to control for unobserved heterogeneity. As in Table 2, the baseline categories of comparison in these models are petition non-signers within a given voting center, where the governor's partisan affiliation corresponds to the state where the voting center is located. Similarly to Table 2 Models 4 to 6, individuals in voting centers that lack variance in the dependent variable of receiving land are of necessity dropped, reducing the observations. Voting centers with no land beneficiaries were slightly less rural and had slightly lower rates of poverty than those with at least some beneficiaries.¹⁹

Individuals in states with pro-Chávez governors who signed the petition to recall opposition officials were more likely to have successful applications than petition non-signers by an estimated 40% in Model 4. By contrast, pro-Chávez individuals in opposition-held states were significantly less likely to be granted land than petition non-signers in opposition-held states by an estimated 32%. These results are robust across Models 4 to 6. As in Models 1 to 3, Chávez opponents in states with opposition governors were less likely to receive land. The odds of a successful application for these individuals is an average estimated 18% less than petition non-signers. In terms of predicted probabilities, using the Model 4 coefficients with the observation-specific fixed effect set to 0 and other covariates set at their means, the probability of receiving land for pro-Chávez individuals in states with pro-Chávez governors is an estimated 8.2% higher than the baseline predicted probability within voting centers where at least one individual received land. The probability is an estimated 8% lower for pro-Chávez individuals in opposition-held states and 3.3% lower for opposition individuals in opposition-held states.

In sum, Table 3 indicates that Chávez opponents who vote in states held by anti-Chávez governors are significantly less likely to receive land, suggesting that the opposition is being denied land reform benefits. Furthermore, pro-Chávez individuals in states with PSUV governors are significantly more likely to receive land, an indication of a core voter targeting strategy. Pro-Chávez individuals in states with opposition governors, by contrast, are

less likely to receive land. The findings demonstrate the importance of political linkages between state and national officials in benefit distribution.²⁰

The lesser role of mayors in land grants. Mayors have considerably less influence over grant distribution than governors. A finding that their political affiliation is less relevant for who receives land than that of governors would therefore help serve as a “placebo test” supporting the theory. While mayors can, similarly to governors, publicize the land reform program positively or negatively to constituents and serve as an informational signal about the types of individuals in their districts, they do not control the state police units in rural areas that can be used to deter land invasions. Furthermore, the lower visibility and fewer resources of mayors relative to their state counterparts yield them less influence in collaborating with INTi and coordinating meetings with institutions that work with INTi to finance reform beneficiaries. Whereas governors strengthened the administrative infrastructure of their state governments and build independent political bases immediately upon the first regional elections in 1989, municipal initiatives were slower and more uneven (de la Cruz, 2004). Additionally, recent programs such as Plan Bolívar and the creation of *consejos comunales* have undermined municipalities by mobilizing elements of the military and civil society groups to provide public services typically provided by municipalities. The regional land reform offices, located in state capitals where governors operate, are therefore more likely to be influenced by the governor than by one or several of the many mayors in a state.

To test these observations more systematically, I ran a series of models that examined the role of both mayors and governors in the likelihood that an individual receives a land grant. As with Models 4 to 6 of Table 3, these models compared individuals within voting centers. If mayoral political affiliation is less important than that for governors, we should observe that the coefficients for individuals of a particular political affiliation (e.g., loyalists) and with a fixed governor political affiliation (e.g., pro-Chávez) are statistically indistinguishable *across various mayoral political affiliations*. Furthermore, the coefficients by individual/governor political affiliation should be similar in direction to the Table 3 coefficients regardless of the political affiliation of an individual’s mayor.

The results, reported in the Online Appendix, largely bear out these expectations. These models fail to reject the null hypothesis that the coefficients on loyalists in pro-Chávez versus opposition municipalities within states with pro-Chávez governors are statistically different, that the coefficients on loyalists in pro-Chávez versus opposition municipalities within opposition states are statistically different, and that the coefficients on opposition individuals

in pro-Chávez versus opposition municipalities within opposition states are statistically different. Only the coefficients on opposition individuals in pro-Chávez versus opposition municipalities within states with pro-Chávez governors are statistically distinguishable. However, and consistent with Table 3, neither of these coefficients is distinguishable from 0. Furthermore, the coefficients from these models are also largely similar in direction and magnitude to the Table 3 coefficients.

Bureaucratic Delay: Whose Applications Are Expedited or Delayed

Beneficiaries only constituted 5% of applicants in early 2009 because the centralized administration of the land program was still in its relatively early phases. INTi was still processing the majority of applications. Consequently, many applicants could become future beneficiaries, so that treating them as non-beneficiaries may bias inferences. Fortunately, the applicant data distinguish between linear stages in the application process, from the entrance of an application into the system through verification of its validity, property inspection, legal processing, and final grant approval. The data also contain information on how long an application has been with INTi, providing a good indication of how land applicants are moving through the process. Application processing itself may be influenced by political considerations: Because of the important role of INTi functionaries in the grant process, a particular application may be delayed or expedited for political reasons. This section treats these issues in two ways: First, it accounts for right-censored data in the application process. Second, it provides an analysis of the determinants of entering the legal processing stage; there are considerably more individuals in this stage than there are beneficiaries.

Figure 1 displays the proportion of land applications in each stage of the process over time. For each applicant, there is information about their current application stage as well as how long INTi has held their application. The figure displays three interesting program trends. First, a number of applications have languished in the early stages of the process. This is particularly true for earlier applicants. Although there were fewer applicants in the first half of 2007, many of their applications have not advanced. At the same time, applicants who have been in the system longer are more likely to receive grants. Second, time until property inspection has decreased nearly monotonically, suggesting that the program is increasing in intensity. Finally, there are important shifts in application processing just prior to the two national referendums on constitutional amendments to allow indefinite presidential reelection. Individuals who applied for land in the lead-up to the 2007 vote

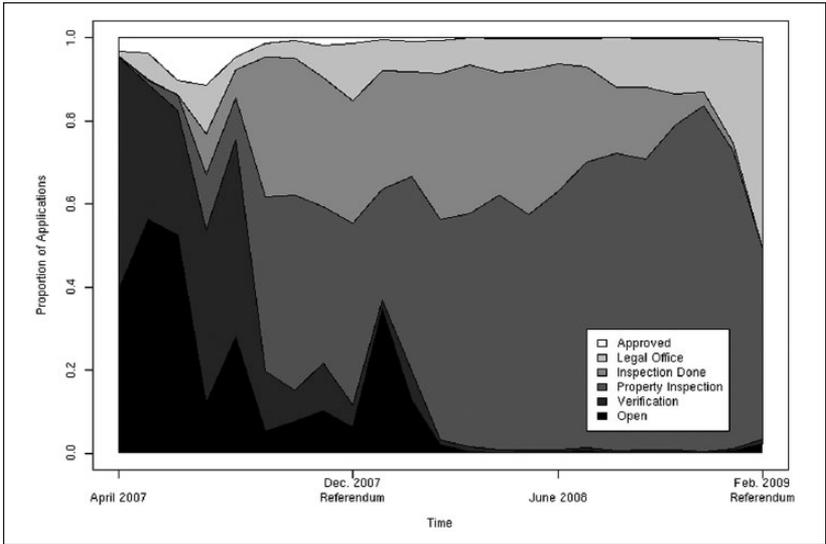


Figure 1. Application status of land applicants, 2007-2009.

are much more likely to have had their desired property inspected by INTI than earlier applicants. Individuals who applied for land only a few months before the 2009 referendum are more likely to have had their applications expedited through the legal review stage just prior to approval.

Because the majority of land applications remain in the bureaucratic process and may either be processed successfully or denied, these observations are right censored. A logit model of whether or not an applicant has received land does not account for the fact that many land applications are still being processed and may result in grants. One way to address this issue is to use conditional (fixed effects) logit models that group individuals not only by voting center but also by risk sets, which in this case are the time in years of application for land.²¹ This approach is analogous to survival analysis with shared frailty between individuals of the same voting center (Box-Steffensmeier & Jones, 2004). I use this approach to analyze both beneficiaries as well as which individuals have had their applications advance to the legal review stage, which is only one step removed from becoming a beneficiary. Although these applications have not been fulfilled, they represent the most likely next round of beneficiaries. This analysis has the additional advantage that whereas the proportion of beneficiaries is relatively small (5%), the rate of reaching the legal review stage is considerably higher at 15% of applicants.

Table 4. Who Benefits? Logit Analyses of the Role of Political Preferences and Governors in Receiving a Land Grant or Legal Review of Application.

	Voting center–application time fixed effects			
	DV: Land beneficiary		DV: Legal review	
	Model 1	Model 2	Model 3	Model 4
Age	0.001 (0.002)	0.003* (0.002)	0.002*** (0.001)	0.000 (0.001)
Misiones	0.101** (0.051)	0.093* (0.051)	0.025 (0.020)	0.029 (0.020)
Loyalist in Chávez state	0.315** (0.142)	0.323** (0.145)	0.191*** (0.062)	0.201*** (0.062)
Loyalist in opposition state	-0.325** (0.128)	-0.330** (0.131)	-0.203*** (0.055)	-0.210*** (0.055)
Opposition in Chávez state	0.156 (0.110)	0.156 (0.110)	0.091** (0.045)	0.110** (0.045)
Opposition in opposition state	-0.213** (0.096)	-0.184* (0.097)	-0.060 (0.040)	-0.084** (0.041)
Carta Agraria		0.406*** (0.093)		0.009 (0.044)
Permanency rights		0.755*** (0.097)		0.161*** (0.045)
Title registration		-0.186 (0.120)		0.670*** (0.045)
Voting center–application time fixed effects	Yes	Yes	Yes	Yes
Observations	33,826	33,826	204,171	204,171

Estimations conducted on full sample of land applicants. Standard errors clustered by voting center. Baselines for political variables are petition non-signers who applied for land in the same time period within a given voting center, where the governor's political affiliation corresponds to the state where the voting center is located. DV = dependent variable.

* $p < .10$. ** $p < .05$. *** $p < .01$ (two-tailed).

Table 4 presents the results. Models 1 and 2 indicate very similar results to Models 5 and 6 of Table 3 both substantively and statistically. The negative sign in the Model 1 and 2 coefficients for individuals who signed the recall petition and vote in opposition strongholds signifies that even when taking into account the INTi processing time of applications for these individuals, they have a reduced likelihood of becoming a beneficiary relative to petition non-signers in opposition-held states. As in Table 3, Chávez supporters in

states with pro-Chávez governors are more likely to receive land grants than non-signers in pro-Chávez states, whereas Chávez supporters in states with opposition governors are less likely to become beneficiaries.

The dependent variable in Models 3 and 4 is whether or not an application has reached the legal review stage. While this is not a final decision on an individual's application—the central INTi office in Caracas must still approve the reviewed application—it is one step short of becoming a beneficiary. Nearly 21,500 applications have reached this stage, suggesting that the reform process is moving forward. The results of the political variables in Models 3 and 4 are largely similar to those in Models 1 and 2. Chávez supporters in states with pro-Chávez governors are more likely to reach the legal review stage than petition non-signers in pro-Chávez states. Chávez supporters in opposition-held states, by contrast, are less likely to reach this stage than non-signers in those states. Individuals who signed the recall petition and vote in opposition strongholds have a reduced likelihood of reaching the legal review stage. Although the coefficient is just short of statistical significance in Model 3 ($p = .13$), it is negative and significant in Model 4, indicating that these individuals are less likely to reach legal review. In contrast to Models 1 and 2, however, opposition individuals in states with pro-Chávez governors are more likely to reach legal review. Furthermore, the magnitude of the coefficients on the political variables is somewhat attenuated in Models 3 and 4 relative to Models 1 and 2. These differences highlight the importance of the final centralized decisions on applications by INTi.

Robustness to Endogeneity

Is it possible that the estimates in Tables 3 and 4 suffer from endogeneity bias? Although receiving land cannot affect political preferences as recorded in Maisanta because the recall petition was signed *before* the land reform law was amended in 2005, it is possible there could be endogeneity if individuals who are good candidates for land reform were more likely to sign the petition supporting Chávez. There may also be omitted variable bias if some individual, within-voting center factor such as profession or insertion into social networks affects both political preferences and the likelihood of receiving a land grant in a systematic way not captured by the controls included. In a similar fashion, there may also be measurement error that biases the results. Misiones, for instance, may imperfectly proxy for income, and the “noise” may be correlated with both political preferences and receiving land. To address these concerns, I turn to an IV approach designed to capture the exogenous variation in political preferences.

Table 5. Who Benefits? IV Estimates of the Role of Political Preferences and Governors in Receiving a Land Grant or Legal Review of Application.

	DV: Land beneficiary		Voting center–application time fixed effects	
	Model 1	Model 2	DV: Land beneficiary	DV: Legal review
			Model 3	Model 4
Age	0.008** (0.004)	0.002 (0.003)	0.033*** (0.006)	0.006*** (0.002)
Misiones	-0.268 (0.220)	-0.861*** (0.196)	-1.557*** (0.521)	-0.755*** (0.190)
log(Rural population)	0.013 (0.019)	-0.045*** (0.017)		
Poverty rate	0.010 (0.008)	0.045*** (0.007)		
Loyalist in Chávez state	3.222*** (1.094)	3.492*** (0.745)	4.392** (1.841)	5.591*** (0.731)
Loyalist in opposition state	-2.654** (1.300)	2.768*** (0.899)	-6.726*** (2.181)	-1.584* (0.821)
Opposition in Chávez state	1.552 (1.055)	1.365 (1.027)	2.641 (1.633)	4.953*** (0.631)
Opposition in opposition state	-4.278** (1.687)	-4.625*** (1.574)	-21.820*** (3.847)	-9.538*** (1.401)
Chávez Governor Baseline	-1.552*** (0.309)	-1.251*** (0.314)		
Time in application		0.443*** (0.012)		
Carta Agraria		0.369*** (0.103)	0.164 (0.108)	-0.064 (0.047)
Permanency rights		0.168 (0.117)	0.261 (0.203)	-0.100 (0.077)
Title registration		-1.142*** (0.163)	0.430* (0.232)	0.969*** (0.087)
Stage I IV for loyalist (log number of voters)	0.068** (0.034)	0.088*** (0.033)	0.150*** (0.032)	0.150*** (0.032)
Stage I IV for opposition (log foreigners)	-0.052*** (0.008)	-0.054*** (0.008)	-0.028*** (0.007)	-0.028*** (0.007)
Voting center–application time fixed effects	No	No	Yes	Yes
Observations	122,196	122,196	33,826	204,171

Estimations conducted on full sample of land applicants. Standard errors clustered by voting center. Baselines for political variables in Models 1 and 2 are petition non-signers in states with opposition governors. Baselines for political variables in Models 3 and 4 are petition non-signers who applied for land in the same time period within a given voting center, where the governor's political affiliation corresponds to the state where the voting center is located. DV = dependent variable.

* $p < .10$. ** $p < .05$. *** $p < .01$ (two-tailed).

A valid IV must satisfy the exclusion restriction: The instrument must be correlated with the dependent variable in the first-stage regressions, whether an individual is a loyalist or whether an individual is an opposition member, but not correlated with the error term of a second-stage regression, where receiving land is the dependent variable. Because individuals could sign a petition in support of Chávez to recall opposition politicians, sign a separate petition against Chávez, or sign neither petition, we must identify instruments for both loyalists and opposition individuals and estimate two first-stage regressions across the IV models.

One potential candidate for an instrument for whether an individual signed to recall opposition officials is the number of registered voters at their voting center. Larger voting centers are more politically important, and thus the PSUV is likely to dedicate more resources to mobilization efforts such as petition drives via its organization *Comando Maisanta*. Yet given the central organization of INTi and large numbers of land applicants from across the country, voting center size is unlikely to have any direct impact on actually receiving benefits. Because the effects of voting center size on signing a petition for Chávez are likely to decline at higher levels, voting center size is logged.

To capture the exogenous variation in whether an individual signed the petition to recall Chávez, I use the number of foreign citizens within their voting center. Opposition individuals are less likely to be immediately close to foreigners because they are less likely to live close to government installations and foreign interests (e.g., consulates, embassies, businesses). Government and foreign installations such as consulates are less likely to locate in neighborhoods where residents strongly oppose Chávez. Furthermore, those who work in these installations and may therefore want to live close by are less likely to be strong Chávez opponents (Jatar, 2006). Finally, given the harassment of selected foreign firms that are more likely to employ opposition members, the remaining more successful companies (e.g., those that collaborate with *Petróleos de Venezuela, S.A. [PDVSA]*) are more likely to be located in areas with higher support for Chávez. At the same time, given how land is granted to individuals, there is no obvious reason why being registered at a voting center with fewer foreigners should directly reduce the likelihood of receiving land. As with voting center size, I log the measure of foreigner presence.

Although the exclusion restriction is fundamentally untestable, the log number of registered voters and the log number of foreigners are statistically insignificant when used in estimating a regression model for receiving land. This provides some limited evidence that these instruments pass the exclusion restriction from an empirical perspective (for a similar approach, see, for

example, Eichengreen & Leblang, 2008). Nonetheless, it remains possible that selection into political preferences could still be driven by unobserved factors (e.g., social capital or exposure to media). As with any IVs analysis, this would be problematic if these factors were linked to the outcome variable and instruments.

Table 5 presents the second-stage IV results. Model 1 is specified similarly to Model 1 of Table 3, where voting center fixed effects are not included and the dependent variable is whether or not an individual receives a land grant. The first-stage instruments are the log number of registered voters at an individual's voting center in the equation predicting support for Chávez and the log number of foreigners in an individual's voting center in the equation predicting opposition.²² The results conform to theoretical expectations: Voting center size is strongly positively associated with whether an individual is a loyalist, and foreigner presence is strongly negatively linked to whether an individual is an opposition member. The predicted values from the first-stage regressions are used for Loyalist and Opposition in the second-stage regression displayed in Model 1.

The results for the political variables are consistent with those of Table 3. Chávez opponents in states held by anti-Chávez governors are significantly less likely than non-signers to receive land, as are pro-Chávez individuals in states with opposition governors. By contrast, pro-Chávez individuals in states with PSUV governors are significantly more likely to receive land. Petition non-signers in states with PSUV governors, as captured by the Chávez Governor Baseline, are less likely to receive land than non-signers in opposition states. The magnitude of the coefficients on these variables also increases substantially over those in Model 1 of Table 3, suggesting that the true effect of political preferences on receiving land grants is higher than that estimated in Table 3. The probability of pro-Chávez individuals in states with PSUV governors receiving land is increased by 22% over the baseline, whereas that for pro-Chávez and opposition individuals in states with opposition governors is reduced by an estimated 20% and 16%, respectively. Model 2 of Table 5, which introduces controls for the time in application and the type of grant applied for as in Model 3 of Table 3, yields similar results to Model 1, although the coefficient for pro-Chávez individuals in opposition states is now positive.

Models 3 and 4 of Table 5 present the second-stage results of a set of conditional fixed effects logit models that, as in Table 4, group individuals both by voting center and by the length of time they have been in the application process. Because these models implicitly control for factors that do not vary within voting centers or application times, the variables for poverty, rural population, and time in application drop from the first- and second-stage

regressions. For the same reason, the first-stage regressions must be run without voting center fixed effects to estimate the instruments. Model 3 is specified similarly to Model 2 of Table 4, with receiving a land grant as the dependent variable, and Model 4 is specified similarly to Model 4 of Table 4, where the dependent variable is reaching the legal review stage. The results are consistent with Table 4 results and the IV results of Models 1 and 2 in Table 5, and the political variables are again higher in magnitude and statistical significance.

Whose Applications Are Effectively Denied

Whereas Tables 3 to 5 analyze the determinants of successfully receiving a land grant or reaching the legal review stage, what determines whether an applicant is outright rejected by INTi? If Chávez supporters in states with pro-Chávez governors are more likely to receive grants, then their applications should also be less likely to be rejected. Anti-Chávez petition signers in states with opposition governors should more often have their land applications rejected. Unfortunately, the data used here do not indicate outright rejection of an application. However, Figure 1 is strongly suggestive of differential outcomes in the application process. A number of applications have languished in the early stages of the process, particularly among earlier applicants. Many of these applicants have not even had property inspections, indicating that INTi is still revising the applicant's basic information. One could consider that applicants who remain in the "open" or "verification" stage despite having applied before the December 2007 referendum have had their applications effectively rejected.

Table 6 analyzes applicants who have been in INTi's system for more than 15 months.²³ The dependent variable is coded "1" for those individuals whose application is in the "open" or "verification" stage and "0" for those who have passed beyond this stage. The results are presented first without and then with voting center fixed effects. Individuals are not grouped by time of application because the analysis is already restricted to those with applications open more than 15 months. Model 1 includes the variables for both pro- and anti-Chávez petition signers. Applicants who have long failed to advance beyond the early stages are significantly less likely to be Chávez supporters and more likely to be Chávez opponents. Models 2 and 3 consider the interaction between the political affiliation of individuals and their state governors. Whereas Tables 3 to 5 indicate that Chávez supporters in states with pro-Chávez governors are more likely to receive grants, Table 6 indicates that these individuals are significantly less likely to have their applications effectively rejected. By contrast, Chávez opponents in states with

Table 6. Who Benefits? Logit Analyses of the Role of Political Preferences and Governors in an Application Failing to Advance Toward Benefits.

	Model 1	Model 2	Model 3	Voting center fixed effects		
				Model 4	Model 5	Model 6
Age	0.011*** (0.001)	0.011*** (0.001)	0.003* (0.001)	0.013*** (0.002)	0.013*** (0.002)	0.005** (0.002)
Misiones	-0.212*** (0.063)	-0.246*** (0.062)	-0.174** (0.071)	-0.235*** (0.069)	-0.241*** (0.069)	-0.178** (0.074)
log(Rural population)	-0.019* (0.011)	0.038*** (0.012)	0.032** (0.012)			
Poverty rate	-0.007** (0.003)	-0.006** (0.003)	0.001 (0.003)			
Loyalist	-0.437*** (0.072)			0.050 (0.085)		
Opposition	0.347*** (0.041)			0.163*** (0.049)		
Loyalist in Chávez state		-1.371*** (0.131)	-1.376*** (0.142)		-0.493*** (0.177)	-0.481** (0.194)
Loyalist in opposition state		0.451*** (0.102)	0.650*** (0.116)		0.378*** (0.142)	0.425*** (0.158)
Opposition in Chávez state		-0.076 (0.089)	0.058 (0.096)		-0.030 (0.116)	0.035 (0.127)
Opposition in opposition state		0.392*** (0.075)	0.209** (0.084)		0.186* (0.102)	0.087 (0.112)
Chávez Governor Baseline		-0.461*** (0.078)	-0.709*** (0.089)			
Time in application			-0.065*** (0.012)			-0.175*** (0.017)
Carta Agraria			1.224*** (0.129)			0.757*** (0.155)
Permanency rights			1.432*** (0.139)			0.699*** (0.167)
Title registration			3.548*** (0.141)			3.331*** (0.173)
Voting center fixed effects	No	No	No	Yes	Yes	Yes
Observations	23,890	23,890	23,890	14,666	14,666	14,666

Dependent variable: Application still in opening stage after more than 15 months. Estimations conducted on a set of land applicants in INTI's application system for more than 15 months. Standard errors clustered by voting center. Baseline for political variables is petition non-signers in Model 1 and petition non-signers in states with opposition governors in Models 2 and 3. Baseline for political variables in Model 4 is petition non-signers within a given voting center. Baselines for political variables in Models 5 and 6 are petition non-signers within a given voting center, where the governor's partisan affiliation corresponds to the state where the voting center is located.

* $p < .10$. ** $p < .05$. *** $p < .01$ (two-tailed).

opposition governors are more likely to be effectively rejected, as are pro-Chávez individuals in these states. As expected, the coefficient for time in application is negative: Individuals are more likely to have passed from these phases the longer their application has been under review. The results of Models 4 to 6, which introduce voting center fixed effects to control for unobserved local heterogeneity, are largely similar to those of Models 1 to 3. In sum, Table 6 further confirms the findings in Tables 3 to 5.

The Table 6 findings notwithstanding, there are still many loyalists who will ultimately be denied due to the large number of applicants and overwhelming demand for land. Other findings from the literature (e.g., Penfold, 2007), as well as the positive coefficients for Misiones in the Table 2 models, suggest that many of these loyalists are likely rewarded through other social programs. Furthermore, the government may gain some political leverage over these loyalists while their applications are in the system, as occurred in Mexico's land reform program (see, for example, Albertus, Diaz-Cayeros, Magaloni, & Weingast, 2015).

Scope Conditions: Distributive Politics in Federal Electoral Regimes

The theory elaborated here could be applied to a host of cases beyond Venezuela. Federal states represent a clear lower bound for the theory's applicability, though it may also apply where the center's costs of executing a national-level program across geographically disparate locales are prohibitively steep and where gains in targeting accuracy due to local knowledge are sufficiently high. This section briefly presents comparative data on federal states where subnational politicians both have the capacity to play a key role in distributive networks and actually do so in non-programmatic, clientelistic ways.

A recent data collection effort by Kitschelt (2013) provides some of the best quality cross-country indicators of clientelism, despite inherent measurement difficulties. The study covers 88 countries that had at least a modicum of open party competition in the 5 years prior to 2008 and at least 2 million inhabitants. Most relevant here is an aggregate index of clientelistic targeting effort to attract voters and the businesses they work for by providing them with material inducements. The index runs from virtually no clientelistic targeting (a value of 5) to minor (10), moderate (15), and extremely high (20) targeting efforts.

Table 7 displays the subset of countries from Kitschelt (2013) that have federal systems and score above 10 on the clientelism index, which corresponds to countries where parties make at least a "minor effort" to provide

Table 7. Clientelism in Federal Electoral Regimes, 2008.

Country	Clientelistic targeting index	Level of clientelism	Regime type
Argentina	16.98	High	Democracy
Brazil	15.30	High	Democracy
Czech Republic	10.63	Low	Democracy
India	15.68	High	Democracy
Malaysia	12.30	Medium	Hybrid
Mexico	15.78	High	Democracy
Nigeria	15.05	High	Hybrid
Pakistan	14.20	Medium	Hybrid
Russia	12.86	Medium	Closed dictatorship
Serbia	13.50	Medium	Democracy
South Africa	12.38	Medium	Democracy
Spain	11.34	Low	Democracy
United States	10.10	Low	Democracy
Venezuela	16.99	High	Hybrid

Clientelistic targeting index from Kitschelt (2013). The index runs from virtually no clientelistic targeting (a value of 5) to extremely high (20) targeting efforts. Federal states that score above 10 ("minor effort") are included here. Data on federal systems are taken from Bakke and Wibbels (2006), who classify federal countries as those with an intermediate (between local and national) level of government with non-trivial, independent powers. Data on hybrid (competitive authoritarian) regimes are taken from Levitsky and Way (2010) and otherwise filled in following Donno (2013).

selective inducements. The level of clientelism in these countries is either "low," which I classify as the set of countries that falls into the lower quartile of the index across all countries; "medium," indicating countries between the lower quartile and the moderate clientelistic targeting cutoff; and "high," indicating countries where clientelistic targeting effort is more than moderate. The 11 countries in Table 7 where clientelism is at medium or high levels are "most likely cases" of subnational politicians playing an important role in non-programmatic distributive networks. These are a particularly politically important set of states: They collectively hold a third of the world's entire population.

Table 7 also indicates whether these countries are closed dictatorships, democracies, or hybrid/competitive authoritarian regimes. Hybrid regimes and democracies have greater electoral incentives to pursue clientelistic programs, though democracies may also face greater distributive constraints in some circumstances.

Conclusion

This article contributes to our understanding of distributive politics by developing a theoretical framework on the role of subnational politicians in mediating distributive relations between voters and the central government. It then tests this framework in Chávez's Venezuela, where the central government's politicized targeting of social benefits filters through self-interested state governors. I argue that in distributive programs where intermediary incumbent politicians either directly deliver benefits from the center or indirectly signal how distribution should occur, these subnational politicians become critical gatekeepers in facilitating or disrupting the center's targeting of benefits to constituents. Subnational politicians' effects on net patterns of distribution depend on their partisanship and their degree of autonomy in influencing the distribution of benefits.

Utilizing a dataset on the universe of registered Venezuelan voters and a dataset of all land grant applicants from April 2007 to February 2009, I demonstrate in detail a case in which governors with limited autonomy affect the distribution of benefits that the center targets to core constituents. Pro-Chávez individuals in states with PSUV governors are significantly more likely to receive land than petition non-signers in these states. Pro-Chávez and opposition individuals in states with opposition governors, by contrast, are less likely to receive land, demonstrating the importance of political linkages between state and national officials in distributing reform benefits. Analyses that account for bureaucratic delay, effectively rejected applications, and potential endogeneity support these findings. What emerges is the clearest picture to date of how political bias operates in the government's distributive targeting of Venezuela's massive social programs and the role subnational politicians play in ultimate targeting outcomes.

The findings also underscore the care that needs to be taken in where and how data are gathered for the purposes of testing theories of distributive politics. When the benefits of distributive programs originate from government offices and can be influenced by subnational politicians—a concern salient even for some forms of broker-driven clientelism—sampling respondents across districts to determine voter targeting strategies could yield inferences driven by competing targeting attempts at various levels of government rather than top-down targeting strategies.

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Notes

1. Of course, parties can simultaneously pursue both strategies with different goods (Albertus, 2013).
2. See Cox (2009) for a discussion. Several noteworthy exceptions include Gonzalez-Ocantos, de Jonge, Meléndez, Osorio, and Nickerson (2012); Nichter (2008); Stokes (2005); and Stokes, Dunning, Nazareno, and Brusco (2013).
3. For a dissenting view, see Hawkins (2010).
4. Although the data used here are all for the period prior to Chávez’s death, support for or opposition to Chávez remains a key cleavage in Venezuela under Maduro.
5. Individual targeting can also be effective in unconditional distributive programs characterized by partisan bias (e.g., Chen, 2013).
6. This idea has some parallel in the fiscal federalism literature that examines how partisan alignment affects intergovernmental transfers (see, for example, Brollo & Nannicini, 2012; Solé-Ollé & Sorribas-Navarro, 2008).
7. Although I principally focus on clientelism via the manipulation of public programs, the fact that local politicians can also affect how brokers interact with voters (e.g., by restricting party rallies) implies that the theory is not merely limited to government-controlled distributive programs.
8. Although the discussion and Table 1 focus on a center core strategy and a subnational politician core strategy, the link between the center and voters can be interrupted by subnational politicians regardless of the central governing party targeting strategy (core vs. swing), the subnational politician targeting strategy (core vs. swing), and the ideological composition of district voters. Predicted outcomes are driven by a logic analogous to that below. The nature of the Venezuelan case does not therefore limit the scope of the theory.

9. If instead the subnational politician chose to target swing voters in this case, we should observe a swing strategy.
10. An opposition subnational politician who instead attempts to target swing voters in their district in this case would ultimately yield some combination of swing and core targeting.
11. The owner's land title was revoked under Proceeding No. 14-13-0506-0011-RT.
12. The expulsion of squatters ceased with Chávez party (PSUV) governor Francisco Arias Cárdenas' 2012 election.
13. The much smaller pool of swing voters along with the more conditional nature of land grants leads to a different distributive logic to land grants than in the previous Punto Fijo era of land reform from the 1960s to 1990s (see Albertus, 2013).
14. Of the set of land applicants, 22,548 were not registered voters in 2004 and therefore did not appear in Maisanta.
15. Data on applicants are unavailable after February 2009, making it impossible to know whose land applications were denied. Furthermore, data on subsequent beneficiaries do not indicate when an application was submitted, the type of land grant applied for, or when land was granted.
16. To the extent that partisan preferences varied between petition signing and the time of applying for land, and that officials did not solely rely on petition information in inferring partisanship, this should induce noise in the preferences measure and make uncovering a relationship more difficult.
17. Because Maisanta captures Misión participation several years prior to the 2007-2009 land grant data, this variable may suffer measurement error. An IVs analysis below helps address concerns that this error may be correlated with both political preferences and receiving benefits.
18. A random sample is used for the application stage only given the intensive computational requirements of the full database. The applicant sample is also representative of applicants in the areas most subject to reform. Municipal-level rates of the sample applicants and the full set of applicants are correlated at more than 95%. Demographics and *misiones* participation were also highly correlated.
19. The results of Models 1 to 3 are similar when dropping voting centers with no land beneficiaries to mimic the sample in Models 4 to 6, suggesting that the Model 4 to 6 results are not driven by having to drop voting centers with no variation in land grants given the within-estimation.
20. A series of further analyses suggest that distributive benefits are aimed at persuading abstainers to vote rather than rewarding loyal activists or cronies, most likely due to the importance of voter turnout in a polarized environment with few swing voters and variable turnout (see the Online Appendix).
21. Grouping individuals by application month reduces the sample size by more than 90%, introducing concerns with sample selection bias.
22. The F tests on the instruments in the first-stage regressions consistently pass the commonly used threshold separating strong from weak instruments.
23. Results are similar when adjusting this temporal cutoff, for example, to 12 months.

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Author Biography

Michael Albertus is an Assistant Professor of political science at the University of Chicago. His research interests include redistribution, political regime transitions and regime stability, politics under dictatorship, clientelism, and conflict. His first book, *Autocracy and Redistribution: The Politics of Land Reform*, was recently published by Cambridge University Press, and he has also published in journals such as the *British Journal of Political Science*, *Journal of Conflict Resolution*, *Comparative Political Studies*, *Comparative Politics*, and *Economics & Politics*.