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# GOVERNANCE FROM BELOW A Theory of Local Government With Two Empirical Tests<sup>1</sup>

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#### Abstract

I examine decentralization through the lens of the local dynamics that it unleashes. The national effects of decentralization are simply the sum of its local-level effects. Hence to understand decentralization we must first understand how local government works. This paper proposes a theory of local government as the confluence of two quasi-markets and one organizational dynamic. Good government results when these three elements – political, economic and civil – are in rough balance, and actors in one cannot distort the others. Specific types of imbalance map into specific forms of government failure. I use comparative analysis to test the theory's predictions with qualitative and quantitative evidence from Bolivia. The combined methodology provides a higher-order empirical rigor than either approach can alone. The theory proves robust.

**Keywords:** local government, civil society, democratic theory, good governance, decentralization,  $Q^2$  (Q-squared), Bolivia

**JEL**: D71, H41, H42, H72, O18

## 1. Introduction

Over the past few decades decentralization has become one of the most debated policy issues throughout both developing and developed worlds. It is seen as central to the development efforts of countries as far afield as Chile, China, Guatemala and Nepal. And in the multiple guises of subsidiarity, devolution and federalism it is also squarely in the foreground of policy discourse in the US, UK and EU. But surprisingly, there is little agreement concerning the effects of decentralization in the empirical literature. Optimists (e.g. Ostrom *et al.* 1993, Putnam 1993, World Bank 1994, UNDP 1993) argue that decentralization can make government more responsive to the governed by "tailoring levels of consumption to the preferences of smaller, more homogeneous groups" (Wallis and Oates 1988, 5). Pessimists (e.g. Crook and Sverrisson 1999, Samoff 1990, Smith 1985, Solnick 1996) dispute this, arguing that local governments are too susceptible to elite capture, and too lacking in technical, human and financial resources, to produce a heterogeneous range of public services that are both reasonably efficient and responsive to local demand. But neither side has been able to win over the other with convincing empirical evidence.

Consider the broadest surveys of decentralization experiences. In their wide-ranging 1983 survey, Rondinelli, Cheema and Nellis note that decentralization has seldom, if ever, lived up to expectations. Most developing countries implementing decentralization experienced serious administrative problems. Although few comprehensive evaluations of the benefits and costs of decentralization efforts have been conducted, those that were indicate limited success in some countries but not others. A decade and a half later, surveys by Piriou-Sall (1998), Manor (1999) and Smoke (2001) come to cautiously positive conclusions, but with caveats about the strength of the evidence in decentralization's favor. Manor ends his 1999 study noting that "while decentralization . . . is no panacea, it has many virtues and is worth pursuing", though the evidence in favor is "incomplete". Smoke asks whether there is empirical justification for pursuing decentralization and finds the evidence mixed and anecdotal. The lack of progress is striking.

Under closer examination this inconclusiveness is less surprising. Empirical work on decentralization can be divided into two broad groups: Qualitative (small sample) work, and Quantitative (large sample) work. The former (e.g. Blanchard and Shleifer 2000, Eaton 2004, Parker 1995, Slater 1989, Treisman 1999, and

Weingast 1995) focus usually on a single country, or develop comparisons between a small set of countries, relying primarily on descriptive and qualitative evidence. This analysis is often careful, deep and nuanced. But the methodology implies low levels of generality and an excess of variables over observations, making it difficult to control for exogenous factors. On the other hand, quantitative studies (e.g. de Mello 2000, Fisman and Gatti 2000, Huther and Shah 1998, Rodden and Wibbels 2002, and Zax 1989), benefit from the high degree of generality, consistency and empirical transparency that statistical approaches provide. But they necessarily suffer problems with the quantification of nuanced concepts, and data comparability across diverse countries (or regions). The combination of such methodological difficulties with the widely varying definitions of "decentralization" adopted by different countries, often followed by poor or incomplete implementation of whatever definition is chosen (Boone 2003), goes a long way toward explaining why empirical studies of both types have been unable to pin down its effects clearly.

I attempt to overcome these difficulties through a blend of qualitative and quantitative evidence that focuses on a single country, Bolivia, where decentralization was clearly defined and vigorously pursued. By combining deep insight into the causes of government quality in two extreme cases of municipal performance, with national results from all of the country's municipalities, we can approach the elusive goal of an explanation that has both generality and deep understanding. We can avoid problems of cross-country comparison (e.g. institutions, political regimes, idiosyncratic shocks) while still benefiting from the formal rigor of large-N studies. And we can retain a central focus on complex, nuanced explanatory factors — such as accountability, trust, and political entrepreneurialism — that are hard to treat with quantitative data alone. By bringing a large and varied amount of information to bear on a clearly defined problem, we hope to solve it.

I argue that the "outputs" of decentralization are simply the aggregate of local-level political and institutional dynamics. This is a significant departure from the bulk of the decentralization literature, which treats it as an essentially national phenomenon. This paper argues the opposite. Decentralization is a single reform that sets into motion a large number of largely independent local processes. Its effects are simply the sum of the effects of these local dynamics, which – as Wibbels (2003) has pointed out – inevitably diverge as

much as local conditions do. To understand decentralization we must first understand how local government works,<sup>3</sup> and in particular when it works well and when badly.

Hence this paper proposes a theory of local government that integrates a variety of well-established insights on the role of elections and lobbying in democratic politics with more recent ideas about civic organizations and social linkages. The model provides a structure in which economic interests, political actors, and civic organizations interact to make policy decisions. I derive predictions based on local characteristics, and then test them twice, first with qualitative, and then quantitative, evidence. Bolivia is particularly deserving of study because reform there consisted of a large change in policy at a discrete point in time. The data available are of surprising scope and quality for a country so poor, and include information on the political, social and civic, economic, institutional, and administrative characteristics of all of Bolivia's municipalities.

I define decentralization as the devolution by central (i.e. national) government of specific functions, with all of the administrative, political and economic attributes that these entail, to democratic local (i.e. municipal) governments which are independent of the center within a legally delimited geographic and functional domain.<sup>4</sup> The rest of the paper is organized as follows. Section 2 develops a theory of local government and derives predictions. Section 3 presents the qualitative methodology and discusses the quality of government in two extreme cases of local government performance. Section 4 tests the theory's predictions via close analysis of the economic, political and civic dynamics at work in each district. Section 5 tests whether the theory can explain the policy outputs of all Bolivian municipalities, using econometric models of public investment. Section 6 concludes.

# 2. A Theory of Local Government

#### 2.1 Economy, Politics, Society

Elections do not establish a contract (explicit or implicit) between government and governed, nor do they set a specific policy agenda. This is due to two problems: political contracting, and cycling. The former, emerging from the incomplete contracts literature (e.g. Hart 1995, Hart and Moore 1990), refers to the impossibility of writing a comprehensive platform that links politicians' actions to voters' policy preferences.

Specific responses to all possible contingencies cannot be contracted for the simple reason that all possible contingencies cannot be foreseen. The latter, well-known problem of cycling in multidimensional space (Condorcet 1785, Dodgson 1884, Black 1948, Mueller 1989) further limits elections' ability to convey information with anywhere near enough detail to inform specific policy decisions (Verba et al. 1993). Hence elections serve instead to allocate control over governing institutions to the "team" (Downs 1957) most trusted by voters. Elections are about the allocation of power – power to take future decisions that affect society's welfare.

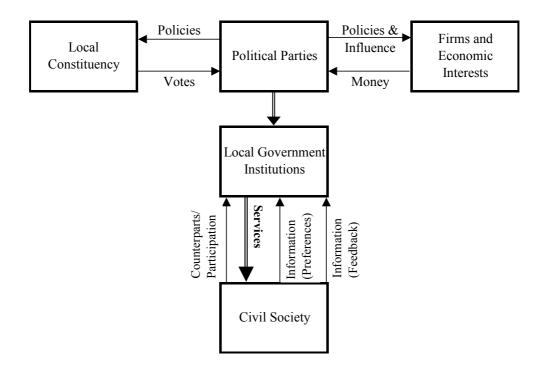
In this setting, local government is a hybrid. Its function is to produce local services and policies at the intersection of two quasi-market relationships and one organizational dynamic. Thus local government occurs at the confluence of two distinct forms of social interaction. Political parties and politicians are at the center of both quasi-markets. The first of these occurs between parties and individual voters. Following Schlesinger (1984), this can be thought of as the primary, or retail, political market in which parties exchange ideas and declarations of principle for votes; parties compete with promises and ideas to attract voters, who vote for the party or candidate that inspires the most confidence. Such exchange is intrinsic to the nature of democracy.

The second market connects parties to private firms, producer associations, and other economic and issue-oriented interest groups. Following the pressure group politics work of Bentley (1908), Finer (1997) and Truman (1951), it can be thought of as a secondary, or wholesale, political market in which specific policies or entire policy bundles, as well as broader influence over legislators and the policy-making process, are sold to interest groups in exchange for money. The rationale for this market is derivative but compelling: even where they are all-volunteer organizations, political parties require resources to fund election campaigns and sustain party operations. And firms are interested in a continuing influence over government decisions and the policy environment in which they operate (Kitschelt 2000). Such wholesale exchanges, combined with gifts from the faithful, are how parties finance themselves.<sup>5</sup> Ben-Zion and Eytan (1974), Palda and Palda (1985), Poole and Romer (1985) and many others, have tested the relationship between campaign contributions and policy-making empirically, with positive results.

The second form of social interaction in local government involves civil society conceived as a collectivity or set of collectivities – as opposed to atomized individuals – and their relationship with the institutions of government. Where governance is concerned, local civil society operates as a complex of organizations. These aggregate preferences and represent community needs, mediate community participation in the production of certain services, facilitate social expression and the assertion of local identity, and enforce political accountability on the institutions of government. It is not useful to conceive of this interaction as a quasi-market, either internally or in its dealings with government, as its dynamics are not founded on buying and selling. It is rather a set of social organizations that generate their own norms of behavior and responsibility organically, and over time may develop stores of trust and credibility that enhance capacity, or may not (Putnam 1993, 2000).

Local government depends on the relationships that collectively comprise civil society to elicit information necessary to the policy-making process, judge the efficacy of previous interventions, and plan for the future (Bardhan 1996). Politicians also depend on these relationships to gauge public satisfaction with their performance between elections. The organizational dynamic of civil society is thus intrinsic to the process of local governance. Figure 1 illustrates how civil society combines with the political markets described above to give rise to local government. In this diagram, the political parties which are most successful in competing for votes and resources win control of government institutions. These institutions then enter into a separate, more complex interaction with civic organizations that features varying degrees of feedback and social participation.

Figure 1: A Model of Local Government



# 2.2 Local Characteristics, Local Dynamics

Now consider how the quasi-markets for policies and influence interact. Figure 1 suggests a political analogue of the neoclassical argument that open and competitive markets lead to efficient resource allocations. Where a municipality's economic landscape is dominated by an economic hegemon, that hegemon can increase the efficiency of its political finance by focusing resources on the success of a single party. Competing parties will find it difficult to finance their activities, and may be actively undermined by an abusive hegemon. Monopsony in the provision of political funds thus encourages monopoly in the party system.

In an open and competitive local economy, by contrast, a variety of economic actors with competing interests will tend to support a variety of political expressions. This in turn promotes a vigorous local politics, in which competition spurs policy innovation as parties vie to win both votes and financial backing.

Innovation happens when parties actively canvass local society, identifying pockets of voters, currents of opinion, or particular interests that are under-represented, and propose policies that respond to these and other changing voter needs. Policy innovation of this sort can be termed political entrepreneurship. As we shall see

below, vigorous local polities are characterized by a greater diversity of ideas and policy proposals competing for public favor, and hence a broader representation of the public's needs.

A direct result of this is improved public accountability for government officials, as opposition parties continuously search for advantage over their rivals. By contrast, the reduction in competition that characterizes political monopoly reduces the level of oversight that local government institutions are subject to, and may well leave sectors of the population unrepresented and effectively disenfranchised. Where an economic hegemon and a dominant political party collude abusively, the entire local governance system can be deformed to perverse ends, as happened in Viacha.

If a competitive party regime is the first condition of a local politics with accountability and broad representation, the second is an open and transparent electoral system. This refers to rules and mechanics of the electoral process, which serve to encourage or discourage the political engagement of the citizenry. These can have a decisive effect on turnout, and hence political outcomes, and so should be open, neutral and transparent. Systemic reforms which increase the transparency and ease of voting serve to increase participation by making voting both feasible and fair. This includes direct measures, such as permitting independent observers to inspect vote counts, as well as indirect measures, such as providing rural citizens with the identity papers needed to register to vote. Voters who are able to reach a polling center and cast a vote will be more likely to do so the less likely it is that results will be misrepresented or distorted by local interests. Such reforms encourage citizens to express their political preferences freely, not just inside the voting booth but outside too. This in turn raises the electoral return to political entrepreneurship.

The insertion of civil society *per se* into the framework occurs after elections have been held, and a given political team has assumed control over the institutions of local government. In order for civil society to provide useful oversight and a feedback mechanism for the governing process, it must be able to identify a specific failing of local policy at the community level, formulate a coherent demand or complaint, and transmit it upwards to a level where it is advocated convincingly to policy-makers. Such abilities are not culturally or organizationally specific, and thus a wide variety of societies are likely to have them. But they will share four general traits that facilitate these tasks.

The first is simply the ability to communicate, often across large areas and ethnically diverse groups.

The second is norms of trust and responsibility, both within and across communities as well as across time.

Where community leaders do not comply with their duties of leadership and advocacy, government will not reap the information it needs to right policy mistakes. Communities must then trust leaders farther up the hierarchy to accurately represent their interests before government, and leaders must trust that their information is correct. And civic leaders at the municipal level must then actively pursue communities' demands, if government is to be held accountable by communities.

The third trait is a minimum level of human capital amongst civic leaders such that those at the municipal level are able to interact productively with local government. This involves both cooperating with elected officials to advance policy goals, and opposing their decisions in such a way as to modify their actions. The fourth trait is a minimum level of resources required to carry out these activities. Even if civic officials are unpaid, there remain unavoidable, non-trivial transaction costs associated with their activities.

In order for local government to be effective, it is important that the market relationships and logic of social representation described above counterbalance each other, and none dominate the others. A stable tension between the three elements creates a self-limiting dynamic in which the impulses and imperatives of interest groups can be contained within the bounds of political competition, and do not spill into the machinery of government nor erupt as civil strife. This is equivalent to allowing the economic, political and civic conditions outlined in the model above to obtain. Breaking this tension, on the other hand, can hobble government. Where the market for policies/votes is weak or missing, government will tend to be undemocratic; where the market for political influence is weak, underfunded parties may be unable to canvass voter opinion effectively, and government may be insensitive to economic conditions; and where society's civic organizations are weak, government will be lacking in information, oversight and accountability.

To state the problem another way, assume political agents are distributed along a continuum between "good" and "bad" extremes. What are the characteristics of municipalities where bad politicians gain control of public institutions? and where and why do good politicians prevail? Corrupt political agents will have far more opportunities to enrich themselves in municipalities where government oversight and accountability are

crippled by economic monopoly, distorted political competition or deep-set social antagonisms. In districts where a stable tension between the economic, political and civil obtains, politicians will face strong incentives to satisfy voters' needs. Bad political agents will dedicate themselves to other pursuits or leave.

In the interplay between these three factors, the market for influence has the advantage of being a continuous process of exchange in which the priorities of economic interests are constantly brought to policy-makers' attention. By contrast, the electoral dynamic is binding on local governors only intermittently at elections. This lower periodicity is balanced however by the severity of the potential consequences – the ejection of politicians from power. These imperatives are therefore somewhat balanced.

Under usual circumstances civil society is at a disadvantage. Despite having the most pervasive network of the three, the instruments which civic leaders can deploy to influence policy define the extremes of costs and consequences. In one hand they carry the relatively inexpensive tool of public complaint and admonishment, including encouraging the grass-roots to vote in a particular way. But experience indicates that this tool is weak against well-financed politicians with strong incentives to continue along a particular course. In the other hand society carries the threat of demonstrations and civil disobedience, culminating in civil revolt. This instrument is powerful indeed, but also very costly to deploy, and is only an effective threat when levels of social discontent are high.

The genius of Bolivian decentralization was to include civil society explicitly in the local governance process via Oversight Committees (OCs – see below). This additional instrument allows Bolivian society to level the playing field between the competing logics of market and representation intrinsic to local government. But in doing so it increases the premium on social trust and responsibility, and the coherence of social organizations, which enable civil organizations to effectively represent their interests before government.

## 3. Local Government at the Extremes: Charagua vs. Viacha

# 3.1 Methodology

The model would appear to be a complete description of the local political economy. But is it useful for explaining government performance? Our first test uses detailed qualitative evidence from two extreme

cases of local government performance in Bolivia. These emerge from a broader study, involving six months of field work in nine municipalities chosen to broadly represent Bolivia in terms of size, region, local economy, rural vs. urban setting, and cultural and ethnic characteristics. In each of these, a small research team conducted a systematic program of semi-structured and unstructured interviews of public and private leaders, key informants, and citizens at the grass-roots level. Interviews were carried out in the main city/town and throughout rural catchment areas. The majority of the interviews by number were with members and spokesmen of grass-roots organizations.

But let us first quickly review the institutional framework of local government in Bolivia. The Law of Popular Participation (LPP) stipulates that municipal councilmen be elected from party lists in single-constituency elections. The council then elects the mayor indirectly from the top vote-getters. Bolivia's European-style, fragmented political culture, grafted onto an American-style presidential system, ensures that most municipal (and national) governments are coalitions.<sup>6</sup>

The third institution of local government is the oversight committee (OC), composed of grass-roots representatives, who propose projects and oversee municipal expenditure. OCs provide an alternative and continuous channel for representing popular demand in the policy-making process. Once elected, OC members name one of their own president, whose legal status is comparable to the mayor's. The OC's power lies in its natural moral authority, as well as its ability to freeze central transfers to local government if it judges that funds are being misused, effectively paralyzing the latter. Oversight committees thus comprise a parallel, corporatist form of social representation similar to an upper house of parliament, enforcing accountability on the mayor and municipal council.

We turn now to a detailed examination of the best and worst municipalities I found in Bolivia — Charagua and Viacha — based on 77 interviews with 111 respondents. I focus on the extremes of municipal performance in order to place in stark relief the systematic differences in decision-making that characterize each, leading to their very different outcomes. Charagua is an object lesson in the proper operation of the local government model outlined above, and hence we begin there.

#### 3.2 Charagua

Located in the scrub grass and low twisted bushes of Bolivia's arid Chaco, Charagua's 60,000 km² make it larger than Costa Rica and twice the size of Belgium. One-eighth of its inhabitants live in Charagua town, with the rest scattered across 80 indigenous and rural communities. The economy is based on agriculture, cattle-ranching and a teacher-training college. Only cattle-ranching achieves a respectable scale, with a few families raising huge herds on tens of thousands of hectares. Most of Charagua's agricultural sector is pre-modern – communal lands farmed by Guaraní peasants who break the earth with their traditional stick method. The population of Charagua is overwhelmingly Guaraní. Townsfolk think of themselves as either white or mestizo, in strict opposition to Guaraní peasants. The town has no industry and little commerce. Its public services greatly surpass those of surrounding communities.

By mid-1997 Charagua had acquired a reputation for being well run. The mayor came top in a departmental ranking. "He is a very good administrator," said the Social Investment Fund's regional head. "He has a very good image – even people from rival parties recognize this." Councilmen were also judged hard-working, honest and effective, and villagers were pleased with the outcome of their work.

Decentralization had increased municipal resources by some 6500% year-on-year, and yet the funds appeared to be well-spent. Local government had managed to keep operating costs to just 4% of total budget. National government audits concurred (Secretaría Nacional de Participación Popular 1997).

As did our research. Primary evidence abounds that local government in Charagua was of high quality. At a time when public disaffection with Bolivian politicians was high, dozens of hours of interviews with authorities and citizens from all walks of life produced not a single accusation of official corruption.

Grass-roots respondents from all over Charagua reported satisfaction with their local government, and felt that their concerns were being addressed. Working in concert with the municipal council and the OC, the mayor had implemented an investment planning system which authorities and villagers alike agreed was transparent, equitable, and highly participative. Projects resulting from this process pleased citizens because they responded to real needs and incorporated local concerns from the start. A wide range of public officials and

business and civic leaders agreed that municipal authorities were well-meaning and effective, and the quality of the services provided was high.

The foundation of good local government in Charagua was a political covenant in which the center-left *Movimiento Bolivia Libre* (MBL) party allowed the Guaraní People's Association (APG) to choose its candidates and write important parts of its platform in exchange for Guaraní votes in municipal elections. The covenant was a success, and allowed the MBL – which had never done well in Charagua – to quadruple its share of the vote (Corte Nacional Electoral) and occupy the mayor's office.

The deeper background to Charagua's municipal dynamics is a Guaraní cultural renaissance which began in the early 1980s. Having survived Spanish colonialism for over three centuries, the Guaraníes succumbed throughout the 1800s to a potent mix of Christian conversion, land accumulation by cattle ranchers, and government annexations, all backed by the repression of the Bolivian army (Albó 1990, 19-22). With their spears and arrows the Guaraníes were no match for the firearms of the state, and at Kurujuky in 1892 an indigenous uprising led to a massacre which almost destroyed the Guaraní community. Kurujuky cast Guaraníes onto the margins of society, where they survived as indebted slaves confined to vast estates, or subsistence farmers in isolated rural communities. They spent the better part of a hundred years in material and spiritual deprivation, a once proud and bellicose people lost in a sort of collective amnesia triggered by defeat (Medina 1994, 19-30).

The 1980s witnessed a re-birth of Guaraní consciousness and Guaraní pride. The APG was formed in 1986-7 to coordinate Guaraní affairs, foment cooperation amongst communities, and articulate Guaraní interests. It essentially built upward levels of representation and voice onto existing Guaraní institutions of community self-government. The moment was ripe – aided by consensual decision-making and high levels of solidarity amongst Guaraníes, the APG flourished and quickly established a central role throughout the Guaraní world from mundane community tasks to regional and national affairs.

#### 3.3 Viacha

Viacha squats under the fierce altiplano sun, a large rural municipality with a dusty, medium-sized city in one corner. By Bolivian standards it is wealthy, home to numerous textile and construction-related firms, as

well as a large bottling plant of the *Cervecería Boliviana Nacional* (CBN), Bolivia's largest brewery.

Municipal income is higher and more broadly based than most Bolivian cities. Yet by mid-1997 Viacha was a troubled town. After three consecutive electoral victories, the populist *Unión Cívica de Solidaridad (UCS)* party had lost its sheen in a hail of accusations of corruption and incompetence. Dozens of communities' investment requests went unsatisfied, yet the 1996 budget underspent by Bs.2 million. The participative planning process broke down as the city became polarized between groups supporting the mayor and those demanding his resignation.

Primary evidence from personal testimony, municipal accounts, and facts on the ground confirm that local government was of very poor quality. The institutions of government varied between ineffective and fully corrupt, producing policy outputs that were unsatisfying to local voters. There is substantial evidence that Mayor Callisaya was inadequate as a manager. He expanded his payroll by over 100% without significantly increasing the municipality's administrative ability or technical skills. And he squandered huge sums of money on pet projects, like an unfinished, over-budget municipal coliseum; a high, twisting playground slide whose main panels soon began to fall off, threatening children with severe injury; and an expensive municipal sewerage system which exploded, throwing feces onto the streets of the city. Public officials, municipal councilmen, and even the mayor's political boss testified to Callisaya's corruption, and a national audit of municipal accounts charged him with malfeasance. The mayor's example spread throughout his administration, forming a web of corruption that enveloped the municipality.

Across the hall from the mayor's office, the municipal council readily admitted scarce knowledge of their own responsibilities, and displayed no interest in finding out. Respondents from across Viachan society considered them unsophisticated, unresponsive and easily manipulable. Increasingly their loyalties belonged to just one party. When opposition representatives began to question municipal policy, the UCS hired them and members of their family, and the criticism stopped. The situation of the OC was more dire. Viacha suffered two OCs – OC1, the "official" OC recognized by local and national governments, was uninformed and inert. Its president, recently arrived from distant Potosí, was unaware of the financial details of projects he had approved, and ignorant of basic facts like how many people the municipality employed, or how much it

sent per year. Almost no one in the city knew who he was. The opposition OC2, by contrast and despite the mayor's efforts, was considerably more active and well-informed. Unrecognized by the national and local state, however, and excluded from official deliberations, OC2 was ultimately powerless to intervene.

The eructions of Viachan politics occur within a broader tide of urban migration which flows around and through the city. Perched on the edge of the La Paz-El Alto metropolis, Viacha is the first stop for many peasants fleeing the subsistence agriculture of the altiplano. Some move on but others stay, pushing the city's adobe neighborhoods farther and farther outwards. They take little pride in the traditions of a city that defines itself in opposition to the countryside; they stay, having found jobs in the capital, because the living is cheap.<sup>9</sup>

# 4. A Qualitative Test

Now abstract away from the proximate causes of government performance in order to understand the deeper currents at work in each. This section uses the theoretical tools developed above to analyze the contrasting fortunes of Viacha and Charagua. In so doing, we test how well the model can explain municipal performance.

#### 4.1 The Local Economy

The economic differences between Charagua and Viacha are huge. In Viacha, the CBN played the role of monopsonistic, abusive provider of finance to the local political system. Even though the brewery comprised a considerably smaller share of the local economy than Charagua's ranchers, its single-minded exploitation of its resources and distribution network, combined with skillful political tactics, allowed it to dominate the city's political life to a remarkable degree. With fiercely partisan aggression, the CBN rallied its workers to man political rallies where beer was given away, mounted integrated ad campaigns for politics and beer, and pushed political propaganda through its distribution network. And it bribed, hired or intimidated other party leaders so as to neutralize opposition. Beneath this lay a simple strategy designed to capture votes and promote the UCS-CBN brand. And so it generated, at least for a time, a political monopoly in which the UCS won elections repeatedly as the price of dissent rose.

By contrast, Charagua's ranchers favored of a more diverse approach better suited to a pluralistic group of businessmen. Unlike the CBN, they were an association of entrepreneurs who did not face identical business conditions, and accordingly did not act politically or commercially with a single will. Cattle ranchers contributed to, and could be found in, all of Charagua's political parties. In this way they encouraged competition in the political system, and created conditions whereby entrepreneurship could flourish. In business also, ranchers helped Guaraní farming communities to drill wells, and gave non-members technical and veterinary assistance. And when their rivals won power, the ranchers found an accommodation.

#### **4.2 Local Politics**

Consider systemic issues first. In the 1980s and '90s Bolivia enacted a number of national reforms which improved the transparency, secrecy, and independent oversight of the voting process. Additional reforms simplified voter registration, increased the number of rural polling stations, and greatly extended rural literacy programs (especially amongst women). Their collective effects were a broad increase in voter registration and participation. Charagua provides a case study of this process. Registered voters increased by 72 percent between the 1993 and 1995 elections, and suffrage rose 139 percent.

The impact of these reforms were greatly multiplied by the decentralization program which followed soon after. The LPP redrew municipal boundaries so as to bring rural areas into the municipal system, and then devolved significant resources and political responsibility to them. Whereas before rural dwellers voted, if at all, for cantonal officials who had neither resources nor political power, now fully-fledged municipal governments with real authority were at stake. The prospect of controlling them drove political parties into the countryside in search of votes. The prospect of benefiting from them pushed villagers and farmers into municipal politics, and into the voting booth.

The reforms which opened politics to a new electorate also promoted fairness and openness. The old methods of bribery and intimidation could no longer be counted on. Proof is that an attempt to bribe an ADN councilman to confirm the MNR candidate as mayor failed because, given electoral transparency, the transaction would have been apparent and would have exposed the ADN to the voters' wrath. In this political aperture, the parties that underwent comparable openings benefited most, and those which attempted

to carry on as before suffered. Thus the MBL, previously irrelevant in Charagua, struck a deal with the APG and captured the majority of new votes, while the MNR lost its pre-eminence and was thrown out of government.

The process was very different in Viacha. Although voter registration also increased, Viacha's gain of 22% was an order of magnitude lower than Charagua's. This reflected the fact that Viacha's politics remained closed to the concerns and priorities of the rural majority. This, in turn, was mostly due to the CBN, and in particular to the head of the local bottling plant, Juan Carlos Blanco. Blanco, a swearing bear of a man, threw all of the CBN/UCS' resources behind the effort to deliver large local majorities. He took the fused politics-and-beer strategy to comical lengths, and bribed and intimidated opposition parties into a meek submission.

The lamentable consequence was that the legal-electoral reforms detailed above were insufficient to counter the CBN-UCS' capture of local government. Under normal conditions, political competition and openness could be expected to catalyze a cleansing of the political system. But a substantive political choice is required for this mechanism to operate, and in Viacha there was none. The local political system was uncompetitive, unrepresentative and incapable of innovation. Voters offered a "choice" of the UCS or toothless, dormant alternatives eschewed politics altogether and dropped out of the system. Political oversight of government fell away, and the municipality became deeply corrupt.

#### 4.3 Civil Society

The conspicuous differences between Viacha and Charagua extend to the social arena as well. In Charagua the Guaraní majority form a large network of rural villages with homogeneous social characteristics and self-governing community structures. Townspeople, the other important group, had their own organizational structures, but proved pragmatic and willing to work with the Guaraní majority.

By contrast, Viachan civil society is a heterogeneous mix of groups with strong and divergent identities and a long history of mutual antagonism, marked by episodic outbreaks of violence. Rural Viacha is divided between the Machaqas in the west and the remainder, closer to the city. The former is a distinct region where the Aymará language predominates and communities are organized into traditional, pre-Columbian *Ayllus* and *Mallkus*. The latter see themselves as more modern, speak a mixture of Spanish and Aymará, and

base their social organization on the peasant union's general secretariats. Rural and urban worlds collide in the city's markets and peri-urban areas, and in adjacent rural communities, and the resulting frictions lead inevitably to social tensions.

It is easy to see why civil society was a significant benefit to local government in Charagua, and a significant liability in Viacha. Charagua benefited from a highly structured and coherent civil organization in which communication was fluid and norms of trust and responsibility strong. Through it civic and municipal authorities found it easy to stay in touch with local demand at the village level, as well as mobilize support for collective efforts. By promoting local authorities up through its hierarchy, the APG developed its own leaders internally. In Viacha, by contrast, civil society was functionally broken. Its constituent parts did not trust each other, and in many cases could not speak to each other. Government travesties in the countryside went unreported in the city, where civil authorities of all extractions ignored village requests. Civic leaders with proven effectiveness at the village level were overwhelmed by the scale and pressures of municipal government. With no budget of their own, and depending on official generosity for their sustenance in the city, they were easily neutralized as independent actors by government authorities. In Charagua, a civil society which functioned organically essentially took over local government and made it work. In Viacha, society was a bubbling cauldron of resentment and discontent, composed of people so mutually suspicious of each other as to make social oversight virtually impossible.

It is instructive to note that Charagua, while in some ways more homogeneous than Viacha, is itself a heterogeneous society, with its minority white, Mennonite, Quechua and Aymara populations. Even with a well-functioning APG, it would have been feasible for Guaraní politicians to assume authority and ignore or exploit rival ethnic groups. That they did not must in part be due to enlightened leadership. But it is also due to the value of fairness in such a district. The fact that Guaraníes form a majority of the population implies that the question of how to allocate public investment is essentially a problem of how to share out municipal resources amongst themselves. An investment scheme that produced unequal distributions would lead to strife amongst the Guaraníes, an outcome they would seek to avoid. Allocations that were fair amongst Guaraní

communities but systematically lower for minority groups might be technically feasible, but would alienate *criollo* townspeople, along with the technical and financial resources they controlled.

In Olson's (2000) terms, there existed in Charagua an "encompassing interest" – i.e. one whose incentives were consistent with the growth of the collectivity. Viacha, on the other hand, had no encompassing interest, only narrow interests which sought to exploit power for the short-term gain of narrowly-defined groups. This explains why the role of history varies so much between the two districts. For centuries both had suffered from state oppression, extremes of inequality, and periodic outbursts of civil violence. Charagua's history was if anything more repressive and more cruel than Viacha's, leaving a potentially deeper reservoir of resentment. And yet it is in Charagua that the victims of oppression were able to overcome their past sufficiently to reach an accommodation with the urban elite, whereas in Viacha lingering social tensions contributed to government breakdown. In Charagua the group that stood to benefit most from government had an encompassing interest in its success. In Viacha, groups that lacked such interest fought for and abused municipal power to the point of disaster.

#### 4.4 Summary and Postscript

Now apply the model directly. Charagua's political market was dominated by the rural Guaraní population, while economic power was overwhelmingly concentrated in cattle-ranchers' hands. But Charagua's civic organizations were also mostly run by the majority Guaraníes through the APG, an organization as structured and disciplined as it is legitimate in the eyes of most residents. There was thus a tension between competing sources of power in Charagua, which resulted in balanced government with substantial social participation.

In Viacha, monopoly in the market for political finance allowed the CBN/UCS to snuff out competition in the local political system. Civil society was divided along ethnic and historical lines, riven with hostilities and mistrust, which rendered its organizations incapable of cooperation, and so unable to engage with government institutions in any substantive way. Local government was thus crippled. Having mastered the quasi-market dynamics which give rise to government, the UCS was able to perpetuate its corrupt and

ineffective rule in the absence of any countervailing forces which might have moderated it or demanded accountability.

The model thus provides a succinct, coherent explanation of government quality in both districts. Its completeness is underlined by the final, extra-systemic denouement in Viacha. In late March of 1997, following a series of town meetings that aired their grievances, the people of Viacha rose up against their mayor. On March 22<sup>nd</sup> a crowd of several hundred people marched through town, and then massed in the central square opposite Callisaya's office, loudly and angrily denouncing him. A few days later he resigned. In the process of entrenching itself, the CBN/UCS had so comprehensively distorted the local political system that only a massive external shock could break its hold. The UCS had taken voters for fools, and the voters had had their revenge.

# 5. A Quantitative Test – National Evidence

The model appears to work well at a small-N level of analysis. But does it have more general implications? We turn now to a large-N database in search of broader support. If, as argued above, the outcomes of decentralization really are just the aggregation of the hundreds of local processes that it sets into motion, then the theory should also help us understand the national results of decentralization in Bolivia. Faguet (2004) shows that decentralization caused important policy changes in Bolivia: public investment shifted from economic infrastructure to social services and human capital formation, and resources were distributed much more equally across space. Faguet finds further evidence that local government was more responsive to local needs, but does not explain how this came about. Can our model explain these outcomes?

#### 5.1 Methodology

We test the model's predictions with an original database that marries investment data for all of Bolivia's municipalities during the decade 1987-1996 with a rich set of indicators of local institutional and decision-making characteristics. My theory explains local policy outcomes in terms of the interplay between economic, political, and civil society forces, and proposes that good government requires a stable tension between all three. Hence the econometric test that follows seeks to explain municipal policy outputs – in this

case investment decisions – as a function of specific indicators of (i) competition in the local economy; (ii) openness and entrepreneurialism in local politics; and (iii) the strength and resilience of civic organizations.

An ideal test of the theory would use a measure of good government as the dependent variable. But there is no obvious natural measure, and constructing one for Bolivia's 311 municipalities is operationally fraught. So I use local investment decisions instead.

I separate municipal investment flows by sector, and for each sector estimate the model

$$G_{m} = \alpha E_{m} + \beta P_{m} + \gamma C_{m} + \zeta S_{m} + \eta Z_{m} + \varepsilon_{m}, \qquad (1)$$

where G is aggregate investment per capita in the public good, E is a scalar measure of private sector dynamism, P is a scalar of political disaffection and protest (i.e. *stagnant, uncompetitive* politics – the opposite of entrepreneurialism), C is a scalar of civil society's strength and organization, S is a scalar or (usually) vector of the existing stock of public goods of that type (variously defined) at an initial period, and Z is a vector of demographic, regional, and institutional controls, all subscripted by municipality. My use of the E, P, C and Z terms follows Bergstrom and Goodman (1973), and Rubinfeld, Shapiro and Roberts (1987) within the context of the available data; my use of the S term follows Faguet. Compared to them, I use a richer set of indicators across all four terms, including measures of local regime type and decision-making processes.

In order to compare like with like and smooth natural discontinuities, I sum investment flows during 1992-93<sup>14</sup> for central government, and 1994-96 for local government, and run cross-sectional regressions. I assume that E, P, C, S and Z are constant over these five years. I reduce the large number of potential E, P, C and Z variables to a manageable and conceptually coherent set through principal component analysis. This produces one indicator each for E, P and C, and seven dimensions of Z. The E, P and C indicators are summarized in figure 2 (and explained in detail in the appendix).

Figure 2: Interpretation of Key PCVs			
Interpretation - Variable increases in li order of importance, where applicable (s			
PCV Group	for details)		
Private Sector	Dynamism of the local private sector		
Political Disaffection/Protest	Electoral abstention, null and anti-government votes		
Civil Institutions	Strength of local civil institutions and organizations		

The main coefficients of interest are  $\alpha$ ,  $\beta$  and  $\gamma$ , corresponding to the economic, political and civic factors that underpin local governance. There is no reason to expect any of these three determinants to be systematically positive or negative across different sectors. To the contrary, signs are likely to vary with sector. On the other hand, the model underlines the importance for effective government of a *tension* between these factors. Hence I interpret significance in these terms, plus differing signs – without predicting which will be positive and which negative – as strong national support for the theory. Significant coefficients of the same sign would imply that the structure given above is misspecified; and the absence of significance would imply that the entire model is wrong. Lastly, I use coefficient  $\zeta$  to characterize central and local investment patterns according to need, where "need" is defined as the marginal utility arising from a particular type of public service, N=U'(g). This is based on an assumption of the decreasing marginal utility of a public service as the level of provision of that service increases. Hence need falls as the stock of g rises, and vice versa.

#### **5.2 Results**

I examine investment patterns in health, education and urban development, three important sectors which together account for 64 percent of all local investment. I present separate models of investment under central and local government in order to explain decisions under each regime. For the sake of comparability, I estimate pre-decentralization models with the same E, P, C and Z variables used for the post-decentralization models. But it is the detail in the latter that interests us most, given that the local dynamics theorized above did not exist before 1994 by definition. Interpreting the magnitude of PCV coefficients is extremely difficult, hence I focus on the significance of coefficients, and their signs.

#### Health

Private sector and civil institution variables are significant in both models of local government, with different signs. This indicates a tension between these two forces – where each is present, it successfully lobbies local government to increase/decrease health investment. The political protest variable is insignificant. Need variables are significant in both models. Investment rises with indicators of need, although in the neediest municipalities there appears to be a poverty trap. Thus, investment increases with the malnourishment

rate,<sup>15</sup> and is also higher where public facilities and those run by public insurers are used intensively. But investment is lower where the proportion of the population that receives no health care is high. I interpret this to mean that local government responds to demand for local health services, as well as to indicators of poor public health. But where very few health care services exist, people may be ignorant about their benefits and not demand health investment, leading local government to invest less. Investment is also progressive in economic terms – health investment increases as wealth and income fall, and as family size and poverty measures rise. This is the opposite of the usual pattern, where wealthier municipalities invest more.

**Figure 3 Health** (dependent variable: per capita investments in health)

` '	Model				
	Local	Central			
Independent Variable	I	II	III		
Demographic, Regional and Institutional Controls?	YES	YES	YES		
Private Sector PCV1	-0.00178 **	-0.0021 **	-0.0756 *		
	(-2.022)	(-2.363)	(-1.868)		
Political Protest Vote PCV1	-0.00079	-0.0015	-0.2397		
	(-0.801)	(-1.390)	(-1.620)		
Civil Institutions PCV1	0.001614 **	0.00159 **	0.1199 **		
	(2.488)	(2.401)	(2.336)		
Economic PCV1	-0.00161 ***	-0.0014 ***	0.13094 **		
	(-2.940)	(-2.698)	(2.441)		
Economic PCV3	0.002195 **	0.00224 **	0.12294 *		
	(2.020)	(2.022)	(1.695)		
Health Care, Min. Health %	0.000181 **		-0.0004		
	(2.513)		(-0.048)		
Health Care, Public Insurance %	0.000451 **	0.00033 *			
	(2.272)	(1.807)			
Health Care, None %	-0.00027 *	-0.0003 **	0.01593		
	(-1.673)	(-1.935)	(1.138)		
Health Care, NGO & Church %			0.03638 *		
			(1.860)		
Malnutrition Rate (Low)	0.000384 *	0.00039 *	0.01531		
	(1.881)	(1.850)	(1.068)		
Local Health Authority	-0.00188	-0.0021			
	(-0.527)	(-0.557)			
Needs-Training Interacted	-0.00013		-0.0055		
	(-1.323)		(-0.839)		
constant	-0.00075	0.00731	-2.0193 ***		
	(-0.107)	(1.312)	(-3.020)		
sigma	0.016517	0.01674	0.87899		
	(4.482)	(4.561)	(5.080)		
$\chi^2$	60.84	53.17	43.23		
Prob>χ²	0.0000	0.0001	0.0019		
N	259	259	265		

Tobit estimation with robust standard errors; z-stats in parens.

PCVn = nth pricipal component variable

<sup>\*, \*\*, \*\*\* =</sup> coefficients significant at the 10%, 5% and 1% levels.

Central government behaved differently. Of the five indicators of need used to estimate central investment, only one – the percentage of households using NGO or church-run health facilities – is significant in one of the models.<sup>16</sup> Its positive sign indicates that investment increased where private (i.e. non-public<sup>17</sup>) medical facilities already exist, which in Bolivia is where public facilities are also in abundance.<sup>18</sup> This implies an increasing geographic concentration of infrastructure. The insignificance of the other four indicators implies that central government investment was insensitive to need, or at most weakly regressive.

#### Education

As in health, local government investments rise where civil institutions are stronger, and fall where the private sector is dynamic and organized. This signals the existence of a healthy tension amongst the key groups that underpin local governance, with different groups lobbying for the sorts of investment that interest them most. Investment also rises with two measures of illiteracy, implying that local government is sensitive to local needs. The presence of local health authorities is also significant here, but now positive as we would expect. Lastly, investment rises as wealth and income fall, making local education investment economically progressive.

Central investment in education is not related to need. Interestingly, the presence of a local educational authority caused investment to fall under central government. This suggests that the center went perversely out of its way to deny resources to those districts where sectoral authorities operated.

Figure 4
Education (dependent variable: per capita investments in education)

	Model				
	Loca	Local			
Independent Variable	I	II	I		
Demographic, Regional and Institutional Controls?	YES	YES	YES		
Private Sector PCV1	-0.0054 **	-0.0054 **	0.00024		
	(-2.012)	(-1.995)	(0.144)		
Political Protest Vote PCV1	-0.0003	-0.0004	-0.0185 **		
	(-0.142)	(-0.193)	(-2.198)		
Civil Institutions PCV1	0.00338 **	0.00344 **	0.00865 **		
	(1.986)	(2.033)	(2.459)		
Economic PCV1	-0.0017 *	-0.0017 *	0.00462		
	(-1.695)	(-1.718)	(1.489)		
Economic PCV3	0.00161	0.00173	-0.0007		
	(0.997)	(1.105)	(-0.184)		
Illiteracy Rate (Adult)	0.00058 *		0.0003		
	(1.958)		(0.462)		
Illiteracy Rate (Over-15s)		0.0006 *			
		(1.766)			
Local Education Authority	0.0089 *	0.00867 *	-0.027 *		
	(1.810)	(1.777)	(-1.803)		
Needs-Training Interacted 1	1.7E-05		8.2E-05		
	(0.197)		(0.409)		
constant	0.02294 **	0.02208 *	-0.086 **		
	(1.978)	(1.705)	(-2.452)		
sigma	0.03645	0.03647	0.05658		
	(13.13)	(13.20)	(4.674)		
$\chi^2$	34.74	34.47	32.20		
$\text{Prob} > \chi^2$	0.0102	0.0073	0.0208		
N	269	269	276		

Tobit estimation with robust standard errors; z-stats in parens.

PCVn = nth pricipal component variable

# **Urban Development**

Very few municipalities received any investment in urban projects before 1994, with only 24 non-zero observations. To compensate for lost degrees of freedom, I reduce the number of explanatory variables by dividing the  $\mathbf{Z}$  vector into two subvectors,  $\mathbf{Z}^1$  and  $\mathbf{Z}^2$ , and estimate

$$G_{m} = \alpha E_{m} + \beta P_{m} + \gamma C_{m} + \zeta S_{m} + \eta^{1} Z_{m}^{1} + \varepsilon_{m} \qquad \text{and} \qquad (1')$$

$$G_{m} = \alpha E_{m} + \beta P_{m} + \gamma C_{m} + \zeta S_{m} + \eta^{2} Z_{m}^{2} + \varepsilon_{m}. \tag{1''}$$

<sup>\*, \*\*, \*\*\* =</sup> coefficients significant at the 10%, 5% and 1% levels.

Figure 5
Urban Development (dependent variable: per capita investments in urban development)

				ici	ıtral	
	Local	l	_			
Independent Variable	I	II	I	I'	II	II'
Demographic, Regional	YES	YES	YES	YES	YES	YES
and Institutional Controls?			TES		TES	
Private Sector PCV1	0.013894 **	0.01357 **		-0.0704		-0.032503
	(2.080)	(2.011)		(-0.958)		(-0.671)
Political Protest Vote PCV1	-0.00542 **	-0.00575 **		-0.4303 **		-0.355542 *
	(-2.022)	(-2.319)		(-2.114)		(-1.867)
Civil Institutions PCV1	0.002936	0.00291		0.11442 *		0.13407 **
	(1.000)	(0.910)		(1.839)		(2.096)
Economic PCV1	0.003124 ***	0.00357 ***	-0.0043	-0.0232	-0.022875	-0.076259
	(2.759)	(3.061)	(-0.099)	(-0.361)	(-0.536)	(-1.262)
Economic PCV3	-0.00477 ***	-0.00449 **	-0.0954	0.11492	-0.100634	0.064183
	(-2.777)	(-2.561)	(-0.965)	(0.879)	(-1.117)	(0.570)
Sports Facilities per capita +	9.555442 ***		-1989.9	-1240.5		
(1994)	(3.473)		(-0.841)	(-0.327)		
Solid Waste Disposal sites	135.2504 **		-1620.1	-32251 *		
(Landfills) per capita (1994)	(2.002)		(-0.464)	(-1.744)		
Museums per capita (1994)	40.59828 *		-376.88	-2326.5		
	(1.869)		(-0.378)	(-0.705)		
Markets per capita (1994)	0.186157 **		-41.835	-647.89		
	(2.517)		(-1.033)	(-1.119)		
Commercial & Recreational		0.19468 *			-3.537725	-19.14046
Infra. (aggregate, per cap 1994)		(1.920)			(-0.804)	(-0.919)
Needs-training interacted	17.92777 **			118.697		
	(2.158)			(0.074)		
constant	0.048671 ***	0.04817 ***	-1.6378 ***		* -1.741311	*** -1.751355 ***
	(9.671)	(8.904)	(-3.341)	(-2.704)	(-3.102)	(-2.571)
sigma	0.034031	0.0339	0.72378	0.65308	0.75333	0.712665
	(11.265)	(11.225)	(4.185)	(2.802)	(4.170)	(2.721)
$\chi^2$	92.31	83.09	56.89	54.63	51.15	43.76
$Prob>\chi^2$	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
N	245	244	273	257	269	255
· · · · · · · · · · · · · · · · · · ·			•		•	

Tobit estimation with robust standard errors; z-stats in parens.

PCVn = nth pricipal component variable

Under decentralization, all five variables of need are significant and positive. This implies a regressive pattern, in which local government invests less where existing infrastructure is scarce. The economic variables, significant and strongly regressive, tell a similar story: investment rises as wealth and income rise, and falls where poverty is greater. As we would expect, investment rises with the number and dynamism of private sector firms, which I ascribe to firms lobbying for the type of projects (i.e. contracts) that benefit them. It is notable that the variable for political disaffection and protest is significant and negative. Given the overall pattern of investment, this implies that voters are successful in at least partially reducing resource flows to a

<sup>+</sup> Defined as other than football fields, multi-use courts and coliseums

<sup>\*, \*\*, \*\*\* =</sup> coefficients significant at the 10%, 5% and 1% levels.

sector in which investment is generally regressive and largely benefits firms. This describes a healthy local political economy in which different interests compete for resources, and – crucially – voters and non-business interests can affect policy decisions. Urban development is one of the most important categories of municipal investment post-1994, and hence this is a significant result.

Urban development is the only sector in which central government seems to have invested progressively in terms of need. But only one of the five indicators of need is significant in one of the models, and hence the evidence is weak. Economic variables are not significant.

#### **5.3 Summary**

Measures of private sector dynamism, uncompetitiveness in the political system, and the strength and organization of civil society are important for explaining policy decisions across the three sectors. Local firms successfully lobby for lower investment in health and education in districts with a vigorous private sector in order that more resources may be devoted to urban development, a sector which offers them many more lucrative contracts than training farmers or refurbishing schools. And civil organizations, representing civil society via neighborhood organizations, rural syndicates and other grass roots groups, succeed in getting local government to increase investment in health and education, their areas of presumed highest priority. The fact that the variable for political disaffection and protest enters negatively in the model of urban development, where investment is strongly regressive both economically and in terms of need, suggests a healthy picture of local democracy in which voters are able to influence local government through both their civil institutions and the electoral mechanism. Where local government works well, even the poorest citizens have voice and may participate in the policy debate, providing an effective counterweight to the power of private firms and government's own politico-bureaucratic interests.

The evidence further shows how decentralization changed the policy regime from one where central government at best ignored local needs, and perhaps even exacerbated them, to one where local government invests more where need is greater. Central investments appear blind to need in education and urban development, and may have been regressive in health. Local governments, by contrast, invest progressively in terms of need in health and education. The fact that local investment was *economically* progressive in health

and education as well increases confidence in these findings. Given the overall results, a sensitivity of local government to real local needs is not surprising. The competitive interplay of economic, political and civic forces ensures that politicians are well informed about social preferences. And binding mechanisms exist to ensure accountability.

# 6. Conclusion

Qualitative information set out above provides rich and convincing evidence that our theory can indeed explain the quality of government in Viacha and Charagua. Quantitative evidence from the universe of Bolivian municipalities constitutes a less detailed, but much more extensive and general argument that the model can explain municipal behavior throughout the country. By weaving the two strands together, we can achieve a higher-order empirical test of the theory than either alone can achieve.

The theory proposes that local government occurs at the intersection of two quasi-market relationships and one organizational dynamic. The quality of municipal decision-making is intimately bound up with the nature of competition amongst local economic actors, the openness and competitiveness of local politics, and the coherence and organizational capacity of civil society. Effective, accountable government relies on a rough balance between these three elements, each a form of local power. Where one element is compromised in some way, the dynamics that feed into local decision-making become unbalanced, and local policy will suffer a variety of deformations.

Hence we saw how in Viacha a dominant CBN, acting as monopsonistic provider of finance to the local party system, was able to stamp out political competition, ultimately driving voters away from the polls. A mutually suspicious civil society divided between urban and rural, and again between traditional and modern peasant communities, lacked the organizational capacity to counter this pernicious influence. And so local government became unaccountable, ineffective and corrupt. In Charagua, by contrast, heterogeneous cattle ranchers comprised a competitive private sector, which nurtured competition and entrepreneurialism in politics. This led to political accountability, and hence responsive, equitable policies, themselves informed and abetted by a coherent and highly organized civil society given shape in the APG.

In less detail, but on a much larger scale, these results are mirrored nationwide. A test of policy-making in all of Bolivia's municipalities shows the importance of a competitive local economy, an open and entrepreneurial local politics, and the strength and resilience of civic organizations, in explaining patterns of municipal investment in the three most important sectors. And the coefficients' signs point to a healthy tension amongst competing political actors, each pressing public officials for the sorts of investment that benefit them most. In districts where civic organizations are strong, municipalities spend more on health and education.

These are also districts where indicators of need are strongest, implying that civic groups lobby for what they need most. Where there is a dynamic private sector, by contrast, municipalities tend to invest less in education and health, and more in urban development — by nature a sector of more expensive, capital-intensive projects.

But this last tendency is checked through the political system, where disaffection and protest serve to drive invested amounts back down.

The combination of qualitative and quantitative evidence provides support for the model of local government set out above that is not only analytically deep and detailed, but also broad. The model holds not only for two obscure towns, but for the whole of Bolivia. Indeed, it is crucial for understanding the effects of decentralization more generally. The 1994 reform made government more responsive by re-directing public investment to areas of greatest need, and more equitable by shifting resources towards poorer districts. How precisely did it achieve these things?

Decentralization worked by creating local authorities beholden to local voters. Through this it opened the institutional space in which local economic, political and civil dynamics could directly affect policy. It put real power over public resources in the hands of ordinary citizens throughout the national territory. This changed not only the form of government in Bolivia, but also its substance. Before 1994, the relatively few central officials stationed beyond national and regional capitals had little incentive to concern themselves with local demands. Career success was determined by ministerial fiat unrelated to local outcomes in distant districts. Business interests and the rich might eventually hope to gain some favors from the center, but ordinary citizens' ordinary concerns received little hearing. After 1994, the fate of local officials was made

dependent on local voters, and voters' welfare dependent in turn on the accountability they were able to impose on their politicians.

As both Viacha and Charagua illustrate, independent civic organizations were important to this change, transmitting information, overseeing politicians' actions, and enforcing accountability. The fact that decentralization engaged thousands of neighborhood councils, peasant communities, *allus* and *mallkus*, which previously had little voice in how their districts were run, was critical to its success nationwide. By locating real resources and political power in municipal institutions, it reached out to all strata of society, offering them the means to improve their lives and concrete incentives to participate.

The experience of decentralization in Bolivia underlines a deeper point which is denied by some of decentralization's foes, but which is nonetheless true. The poor as a rule are ignorant, but they are not stupid. They know what they want, and the things they want are by and large good for them. They can ill afford otherwise. Decentralization succeeded in Bolivia because it created more Charaguas than Viachas. It put significant power and resources in the hands of decent, ordinary people, who then made good choices. Such a conclusion is not hopelessly naïve. It is the essence of democracy.

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#### **Interview List**

#### Charagua

Florencio Antuni Sánchez (a), oversight committee president, interview, Charagua, 1 April 1997.

Florencio Antuni Sánchez (b), oversight committee president, interview, Charagua, 30 October 1997.

Wilfredo Anzoátegui Vaca, hospital director, interview, Charagua, 30 October 1997.

Oscar Hugo Aramayo Caballero, district director of education, interview, Charagua, 4 April 1997.

José Durán, Social Investment Fund finance director, interview, 3 October 1997.

Nelson Egüez Gutiérrez, MNR chief, interview, Charagua, 30 October 1997.

Edgar Gutiérrez Hurtado (a), ADN chief, interview, Charagua, 28 October 1997.

Edgar Gutiérrez Hurtado (b), district officer, interview, Charagua, 28 October 1997.

Juan Carlos Gutiérrez, Cattle Ranchers' Association of the Cordillera president, interview, Charagua, 1 April 1997.

Rolando Gutiérrez, municipal councilman (MNR), interview, Charagua, 2 April 1997.

Dante Hurtado Salse, oversight committee secretary, interview, Charagua, 30 October 1997.

Fernando Muñoz Franco, Social Investment Fund departmental director, interview, Santa Cruz, 31 March 1997.

Eulogio Núñez, CIPCA director (NGO) and municipal adviser, interview, Charagua, 2 April 1997.

Rosario Pantoja de Cuéllar, education center director, interview, Charagua, 4 April 1997.

Pedro Fidel Ribera Caballero, member of the directorate of AGACOR, interview, Charagua, 30 October 1997.

Fr. Luis Roma, parish priest, interview, Charagua, 29 October 1997.

Fr. Gabriel Sequier (Tianou Pirou), parish priest, interview, Izozo, 3 April 1997.

Luis Saucedo Tapia (a), mayor, interview, Santa Cruz, 31 March 1997.

Luis Saucedo Tapia (b), mayor, interview, Charagua, 1 April 1997.

Luis Saucedo Tapia (c), mayor, interview, Charagua, 27 October 1997.

Julián Segundo Chipipi, municipal councilman (MNR), interview, Charagua, 2 April 1997.

Crispín Solano Menacho, municipal councilman (MBL) and ex-oversight committee president, interview, Charagua, 28 October 1997.

Abelardo Vargas Portales, municipal council president (ADN), interview, Charagua, 1 April 1997.

Abelardo Vargas Portales and Abilio Vaca, municipal council president and councilman (ADN and MBL) respectively, interview, Charagua, 28 October 1997.

Roberto Vargas, chief financial officer, interview, Charagua, 30 October 1997.

Lt.Col. Fair Eduardo Villaroel, army garrison commander, interview, Charagua, 2 April 1997.

Community and Grass-Roots Organizations

Acae: Israel Romero Macuendí and Florencio Altamirano, community leader and community member, interview, Acae, 2 April 1997.

La Brecha: Francisco Chávez Flores, Delcio Moreno Candia, Mario Arreaga, Andrés Chávez Flores, Vicente Moreno, and Licelio Cuéllar Martínez, community leader, aid to the *capitanía*, hospital administrator, nursing assistant, school association president and Alto Izozo district deputy, interview, La Brecha, 3 April 1997.

La Brecha: Francisco Chávez, Alberto Rodríguez and Ignacio Álvarez, community leader, adviser to the *capitanía grande*, and community member, interview, La Brecha, 28 October 1997.

Charagua: Walter García Juárez and Jorge Cortez Romero, community association president and community member, interview, Charagua, 3 April 1997.

Charagua: Omar Quiroga Antelo, neighborhood council president, interview, Charagua, 30 October 1997.

Charagua Station: Abelino Sánchez Ramírez, neighborhood council vice-president, interview, Charagua Station, 30 October 1997.

Copere Brecha: Leoncio Pabaroa and Javier Yupico, interim community leader and ex-leader, interview, Copere Brecha, 29 October 1997.

El Espino: Pablo Carrillo and Marcial Arumbari, community leader and officer, interview, El Espino, 4 April 1997.

El Espino: Paul Carrillo, Ricardo Melgar and Marcial Arumbari, community leader, community member, and community officer, interview, El Espino, 31 October 1997.

Isiporenda: Hilda Ibáñez vda. de Castro and Vidal Durán Sala, community leader and adviser, interview, Isiporenda, 29 October 1997.

Kapiwasuti: Demetrio Caurey and Florencio Altamirano, president of the community irrigation committee and infrastructure officer, interview, Kapiwasuti, 2 April 1997.

Rancho Nuevo: Luis García and Hipólito Sirari Ena, community founder/adviser to the *capitanía*, and community leader, interview, Rancho Nuevo, 28 October 1997.

Taputamí: Josué Aiduare and Florencio Aiduare, community leaders, interview, Taputamí, 2 April 1997.

Yapiroa: Pablo Diego Vaca and David Segundo, community leader and adviser, interview, Yapiroa, 3 April 1997.

#### Viacha

Reynaldo Aguilar, district director of health, interview, Viacha, 10 October 1997.

Celestino Arauz, sub-prefecture general secretary (disputed), interview, Viacha, 9 October 1997.

Juan Carlos Blanco, CBN bottling plant director, interview, Viacha, 16 October 1997.

Edwin Callisaya, mayor, interview, Viacha, 18 March 1997.

José Luis Claros, CBN production supervisor, interview, Viacha, 21 March 1997.

Donato Cuéllar Cusi, Agapito Yujra, Manuel Colque and Carmelo Quispe, municipal councilmen (all UCS), interview, Viacha, 15 October 1997.

Lt.Col. Adolfo Dávila Chacón, 1<sup>st</sup> Division, GADA 231 commander (local army garrison), interview, Viacha, 19 March 1997.

Luis González, Social Investment Fund departmental director, interview and site visits, Viacha, 17 March 1997.

Fr. Justino Limachi, parish priest, interview, Viacha, 16 October 1997.

Gladys Lozano, sub-prefect, interview, Viacha, 17 March 1997.

Maria Luisa Lucuy, district director of education, interview, Viacha, 15 October 1997.

Oscar Alfonso Magnani Meyta and Franklin Carlo Megillanes, district director of education and education technician, interview, Viacha, 21 March 1997.

Rolando Marín Ibáñez, chief financial officer, interview, Viacha, 17 March 1997.

Max Mercado Mozo, federation of neighborhood councils (2) president, interview, Viacha, 11 October 1997.

Carlos Núñez, *Sociedad Boliviana de Cementos* (SOBOCE) financial director, interview, Viacha, 19 March 1997.

Tomás Palacios Rodríguez, Condepa chief, interview, Viacha, 15 October 1997.

Luis Paz, Industrias de Cerámica Paz CEO, interview, Viacha, 15 October 1997.

Huber Quintela Alarcón (a), municipal council president, interview, Viacha, 10 October 1997.

Huber Quintela Alarcón (b), MNR chief, interview, Viacha, 16 October 1997.

Huber Quintela Alarcón and Esteban Ticona, municipal councilmen (MNR and Condepa), interview, Viacha, 18 March 1997.

Remigio Quispe Mendoza, Walter Patzi Paty and Nemesio Mamani Fernández, oversight committee (1) president, federation of neighborhood councils (1) president and federation officer respectively, interview, Viacha, 18 March 1997.

Jorge Rada, chief financial officer, interview, Viacha, 15 October 1997.

Edgar Robles, mayor, interview, Viacha, 10 October 1997.

Antonio Soto, MIR chief, interview, Viacha, 10 October 1997.

Esteban Ticona, municipal councilman, interview, Viacha, 9 October 1997.

Hipólito Tovar, Alejandro Yujra Laura and Rony Morales Quispe, oversight committee (2) president, vice-president and officer, interview, Viacha, 19 May 1997.

Hipólito Tovar and Rony Morales Quispe, oversight committee (2) president and officer, interview and site visits, Viacha, 21 May 1997.

Community and Grass-Roots Organizations

Canton Chama: Severo Guarachi Ramos, community officer, interview, Viacha, 17 May 1997.

District Five: Alicia Rodríguez, women's leader, interview, Viacha, 17 May 1997.

District Six: Gerónimo Colque Velarde, community officer, interview, Viacha, 17 May 1997.

Názacara: Juan Laurel Hinojosa, Dona Francisca Plata de Maldonado, Julio Choque Huanca and Jaime Gómez, community coordinator, community leader, education officer and school director, interview, Názacara, 14 October 1997.

Rosapata: Marcelino Chuy Quenta, Cecilio Plata Flores, Teodoro Casita Ticona and Daniel Mamani Churra, community leader, community education officer, school teacher and school teacher, interview, Rosapata, 14 October 1997.

Santa Ana de Machaqa: Francisco Juliano Paz, community officer, interview, Viacha, 18 March 1997.
Santa Ana de Machaqa: José Quezo Cusi, Lorenzo Julián and Olga Cusi de Julián, community leader, teacher and electoral notary, and *Plan Internacional* liaison, interview, Santa Ana de Machaqa, 23
March 1997.

Titik'ana Tacaca: Genaro Mamani Chiri, Gumercindo Vito Guarachi, Saturnino Tola Mamani, and Doroteo Callisaya Mamani, community leader, district officer, representative to the Federation of Ayllus and indigenous communities of Ingavi Province (FACOPI), and community officer, interview, Titik'ana Takaka, 20 March 1997.

Viacha: Simon Canavi Rojas, community officer, interview, Viacha, 17 May 1997.

Villa Santiago de Chacoma: Eulogio Choque and Valentín Atahuichi Callisaya, cantonal officer and community construction officer, interview, Villa Santiago de Chacoma, 11 October 1997.

#### Appendix – Quantitative Methodology

The surprisingly large amount of information available for Bolivia during the period 1987-1996 demands a strategy for choosing which variables most appropriate for the underlying concepts I wish to test. In particular, a number of measures of interest are present in the dataset as multiple, finely differentiated variables. There are, for example, 16 varieties of capacity-building exercises undertaken by municipalities, and 13 different local actors who assisted in drafting municipal development plans. The challenge is to reduce such groups to one indicator each without loss of information.

My empirical strategy is iterative, and begins by finding the best idiosyncratic model of public investment for each of the ten sectors of interest. I fit the equation

$$G_{m} = \zeta S_{m} + \eta \mathbf{Z} + \varepsilon_{m}, \qquad (A1)$$

separately for central public investment (1991-3) and local public investment (1994-7) where  $G_m$  is aggregate investment per capita in the public good subscripted by municipality,  $S_m$  is a scalar or vector of the existing stock of public goods of that type (variously defined) at an initial period, and  $\mathbf{Z}$  is a vector of socio-economic, demographic, regional, political, institutional, administrative and procedural variables which might affect investment decisions. No income data is available at the municipal level, so I substitute several alternative indicators of income and wealth, for example type of cooking fuel, and housing size, quality and related characteristics.

No constraints across sectors are allowed on the particular variables admissible in  $\mathbf{Z}$ . I use the Huber/White estimator of variance to produce consistent standard errors in the presence of non-identically distributed residuals. This produces ten different models of public sector investment, one for each sector. Individually these models are quite satisfactory, with high  $R^2$  and few variables insignificant. But because of large variation in the specification of the  $\mathbf{Z}$ 

vector, comparison across sectors is problematic. Additionally, on a theoretical level these models would seem to assert that public investment in different sectors happens according to different processes, in which different variables intervene. This is unsatisfying.

In the interest of models of investment that are parsimonious and comparable but do not lose valuable information, I turn to principal component analysis, a data reduction technique in which the objective is to find the unit-length combinations of explanatory variables with the highest variance. Following Maddala (1977), I calculate  $z_1$  to  $z_k$  where z is a linear combination of the x variables,

$$z_1 = a_1x_1 + a_2x_2 + ... + a_Lx_L$$
  
 $z_2 = b_1x_1 + b_2x_2 + ... + b_Lx_L$  etc.<sup>19</sup>

ranked in order of variance, with highest first. Principal component analysis regresses y on  $z_1$ ,  $z_2$ , ...,  $z_k$ , where k < L and z's are constructed so as to be orthogonal. So long as the z's chosen represent combinations of variables that have economic meaning and can be interpreted, this provides a method for estimating parsimonious models with limited loss of information.

I calculate a set of principal component variables (PCVs) based on the raw variables identified in the first stage. I discard all those with low eigenvalues and then find the remaining subset which optimally estimate equation (A1), where **Z** is a vector of PCVs. The eigenvectors associated with each of the PCVs used in this paper are listed below; factor loadings on the raw variables can be read vertically down each column. Detailed interpretations of each PCV follow.

PCV Group		Interpretation - Variable increases in listed in order of importance, where applicable
1 Demographic	1	Protestants, atheists (i.e. non-Catholics) and rural dwellers
2	2	Native-language speakers and rural dwellers
3 Economic	1	Wealth and income
4	3	Family size and poverty
5 Training & Capacity-Building	1	Intensity of the local capacity-building efforts undertaken by/for local government
6 Information Technology	1	IT systems - hardware and software
7 Central Government Auditing	1	Audits by, reports to, and information system shared with central government
8 Municipal Administration	1	Robust administrative guidelines and operating procedures, and a strong executive
9	2	Strong, activist municipal council and weak mayor
10 Project Planning	1	Informed project planning which follows consensual and open procedures

# **Eigenvectors and Factor Loadings**

# **ECONOMIC**

# Eigenvectors

Variable	1	3
catvi 10	0.01611	
catvi_10	-0.04421	0.05136
catvi_ii	0.2084	-0.22678
catvi_ii	-0.15851	0.06463
catvi_re	0.06087	-0.04372
cocina	0.06745	0.33713
comb hi	0.21759	-0.24884
comb_lo	-0.21306	0.26048
comb_me	0.00795	-0.19621
comb_otr	0.03941	-0.10044
cuarto1	-0.06973	-0.36405
cuarto2	-0.11508	0.21652
cuarto2f	-0.15519	-0.22
cuarto3	0.05774	0.30183
cuarto4	0.1403	0.16415
cuarto4m	0.20285	0.11295
cuarto5	0.23616	0.04638
dorms1	-0.26864	-0.1017
dorms2	0.23697	0.16318
dorms2f	-0.27588	0.00522
dorms3	0.2747	0.01897
dorms4	0.26493	-0.04564
dorms4m	0.26059	-0.05572
dorms5	0.22596	-0.07148
ecact	-0.1933	0.10251
ecactm	-0.11158	-0.01077
ecdesm	-0.0263	0.04999
ecina	0.19549	-0.09642
ecinam	0.04078	0.0789
ecocum	-0.10776	-0.01538
hogar_ta	0.15305	0.23915
partbru	-0.19109	0.06026
ppdorm2	-0.03901	-0.25241
ppdorm4	0.1756	0.13713
ppdorm5	-0.0338	0.23506

# **TRAINING**

Eigenvectors Variable

Variable	1
capadpe	0.28556
capci1	0.30671
capci2	0.2612
capdis	0.2793
caplemu	0.34451
caporad	0.38803
capprin	0.37869
capprop	0.34559
temacz	-0.14204
temadis	-0.20036
temaorad	-0.22559
temaprop	-0.18667

# INFORMATION TECH.

Eigenvectors

Variable	1
sitotal	0.51744
siotro	0.36119
sisin_ad	0.42748
sisin_ai	-0.27289
sisinidp	0.28173
sicom	0.38812
impresor	0.3385

# **CENTRAL GOVT. AUDITING**

Eigenvectors

Variable	1
fis	0.14973
inejpr_a	-0.03459
inejpr_m	0.22346
inejpr_s	0.04035
sisin_ad	0.29205
sayco	0.59704
sayco_a	0.56841
sayco o	0.39998

#### **DEMOGRAPHIC**

Eigenvectors

Variable	1	2
pobpc.u	-0.16648	-0.51111
pobpc.r	0.1533	0.30239
rel_cato	-0.62433	0.17965
rel_evan	0.58003	-0.13934
rel_ning	0.41205	-0.04415
id_sine	0.21585	0.17824
id_trad	0.0192	0.64723
inmasc	-0.07623	-0.37817

#### POLITICAL PROTEST

Eigenvectors

Variable	1
oficial	-0.19005
margen93	-0.21741
nulo93	0.35565
ausent93	0.60371
ausent95	0.65243

#### PROJECT PLANNING

Eigenvectors

Variable	1
catastur	0.04701
dpoacoor	-0.00839
dpoaotro	-0.07581
epoaham	0.00306
evalres	0.07426
idenalc	-0.00973
idencons	0.0145
idencv	0.09214
idenpdm	0.14818
info_ed	0.53349
info_sa	0.51649
pdm94	0.14019
plan_sye	0.56911
reconu_a	0.24654

# PRIVATE SECTOR

Eigenvectors

Variable	1
eereg_cm	0.61675
eereg_ea	0.56212
eereg_fi	0.55103

# MUNICIPAL ADMINISTRATION

Eigenvectors

Variable	1	2
alc_co	0.14604	0.05317
alc_de	0.11469	0.10791
con_co	-0.17274	0.12842
con_de	-0.14717	0.14487
cuenpu_a	-0.12553	-0.0198
cuenpu_c	0.11299	0.0764
cuenpu_o	0.05624	0.07114
evte_co	0.18976	-0.04196
evte_de	0.18947	0.009
invdir	0.09721	-0.02975
invpub	0.15408	-0.06359
manpro_d	0.18016	0.02777
manpro_u	0.16696	0.04719
otro_co	0.10092	-0.11738
otro_de	0.08356	-0.11557
plieg_ad	0.33515	-0.02376
plieg_ca	0.3401	-0.00287
plieg_pu	0.31971	0.00514
pliego	0.33117	0.01178
progcont	0.15912	0.11538
regcon	0.19798	0.01987
salar_pc	0.27672	-0.08343
salar_co	0.27409	-0.08945
suped_a	-0.01201	-0.43222
suped_c	-0.03946	0.437
supsa_a	-0.07613	-0.42273
supsa_c	0.0346	0.44233
supsa_o	0.05436	0.33874
usmanfun	0.17885	0.05964

# **CIVIL INSTITUTIONS**

Eigenvectors Variable

Variable	1
cv	0.09745
indig2	0.01988
jvec2	0.29229
otbregi	0.4194
otbregi2	0.43286
otbs_e	0.42137
otbs_pj	0.42934
otbsoli	0.42372

#### **Interpretation of PCVs**

**Private Sector:** This PCV rises in the number of private businesses registered locally. I construe it as an indicator of the dynamism of the local private sector.

**Political Disaffection/Protest:** This PCV increases strongly with absent and null votes – a traditional sign of electoral protest in Bolivia – while loading negatively on *oficialista* mayors (i.e. affiliated with the ruling (national) coalition) as well as the 1993 municipal margin of victory. I interpret this as an indicator of political disaffection and protest.

**Civil Institutions:** This is an indicator of the number organizations and institutions of local civil society. It rises in all the variables, especially in the more general measures. I interpret it as a proxy for the strength of local civil institutions.

**Demographic:** PCV1 loads positively and strongly on Protestants and rural dwellers, and negatively on Catholics and urban dwellers. Religion is by far its strongest factor. It also decreases in Spanish-speakers and men. PCV2 loads similarly to PCV1, but here the strongest factors surround the urban-rural divide, as well as native-language speakers, in which it is positive.

**Economic:** PCV1 loads positively on indicators associated with wealth (i.e. stocks) and higher income (flows), and negatively on those that indicate poverty and lower income. It also loads negatively on economically active population and positively on the economically inactive, but at lower values. Thus PCV1 is an indicator of wealth and income, rising in both. PCV3, by contrast, loads negatively on high wealth, positively on low wealth and negatively on economically active women. Significantly, it rises in family size, which is broadly consistent with loading positively on measures of poverty. The two PCVs should thus have opposite signs.

**Training and Capacity-Building:** This variable is a measure of the intensity of capacity-building efforts undertaken by/for local government.

**Information Technology:** This PCV rises in the IT systems – hardware and software (especially software) – at the disposal of each municipality.

**Central Government Auditing:** This variable loads positively on those administrative or reporting processes which constitute some form of external lever of central on local government.

**Municipal Administration:** PCV1 refers to the character of local governance, rising where a strong local executive administers under clear guidelines and regulations, and is (actively) overseen by a strong (i.e. well-paid) council. PCV2 indicates an activist council, whose power comes at the expense of the mayor.

**Project Planning:** This PCV is a straightforward indicator of informed project planning which follows consensual and open procedures.

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- <sup>3</sup> This echoes Scheiner (2005) and Wibbels, who argue persuasively that understanding subnational political competition is key to explaining certain national policy outcomes.
- <sup>4</sup> Eaton (2004) and O'Neill (2003) make compelling cases in favor of definitions that include economic and political elements.

<sup>&</sup>lt;sup>2</sup> Development Studies Institute and STICERD, London School of Economics, Houghton Street, London WC2A 2AE

<sup>&</sup>lt;sup>5</sup> In some countries government is a third source of campaign finance.

<sup>&</sup>lt;sup>6</sup> Hereafter I use "mayor" to refer to the executive branch of local government, including all appointed administrative and technical officials – by far the largest of the three.

<sup>&</sup>lt;sup>7</sup> Dr. Fernando Muñoz Franco, Social Investment Fund departmental director, interview, Santa Cruz, 31 March 1997.

<sup>&</sup>lt;sup>8</sup> Fr. Gabriel Sequier (Tianou Pirou), parish priest, interview, Izozo, 3 April 1997.

<sup>&</sup>lt;sup>9</sup> Luis González, departmental director, Social Investment Fund, interview, Viacha, 17 March 1997.

<sup>&</sup>lt;sup>10</sup> Juan Carlos Blanco, CBN bottling plant director, interview, Viacha, 16 October 1997.

<sup>&</sup>lt;sup>11</sup> Abelardo Vargas Portales, municipal council president (ADN), interview, Charagua, 1 April 1997.

<sup>&</sup>lt;sup>12</sup> Presencia, 22 March 1997.

<sup>&</sup>lt;sup>13</sup> Estimates of crowd size vary from 150-200 according to UCS spokesmen, to 500 according to OC2.

<sup>&</sup>lt;sup>14</sup> I reduce the sample to the period 1992-93 in order to avoid endogeneity. This does not affect the results.

<sup>&</sup>lt;sup>15</sup> Associated in Bolivia much more with nutritional balance than caloric intake, and hence susceptible to simple medical interventions.

<sup>&</sup>lt;sup>16</sup> I omit results from the other two models for brevity.

<sup>&</sup>lt;sup>17</sup> The majority of private health facilities in Bolivia are NGO or church-operated.

<sup>&</sup>lt;sup>18</sup> The Municipal Census (Secretaría Nacional de Inversión Pública y Financiamento Externo 1997) shows that private health facilities are mostly concentrated in municipalities that also benefit from similar public facilities.

<sup>&</sup>lt;sup>19</sup> For further treatment of this topic, see also Greene (1997).