## A RENTIER THEORY OF SUBNATIONAL REGIMES

# Fiscal Federalism, Democracy, and Authoritarianism in the Argentine Provinces

By CARLOS GERVASONI\*

SCHOLARS of political regimes have long noticed that the extent to which citizens of democracies enjoy political rights and freedoms varies widely, not only across social cleavages such as class and ethnicity but also across subnational boundaries. From Brazil to India to Russia, countries often show remarkable heterogeneity in the degree to which their subnational units are democratic. During the 1990s several scholars highlighted the existence of subnational authoritarian enclaves within national-level democracies especially in large, heterogeneous, third-wave federations. The matter has received little systematic attention, however, even more than three decades after Dahl called his own neglect of subnational units "a grave omission" in his seminal book.

The coexistence of more and less democratic subnational units within the same national political regime calls for an explanation. Scholars have produced several case studies of subnational regimes in recently democratized federations<sup>3</sup> but little in the way of systematic attempts to explain overall national patterns of variance in the degree of subnational democracy.<sup>4</sup> I present a new theoretical account of such

- <sup>1</sup> O'Donnell 1993; Fox 1994; Diamond 1999; Snyder 1999.
- <sup>2</sup> Dahl 1971, 12.
- <sup>3</sup> Snyder 1999; Chavez 2003; Gibson 2005; McMann 2006.
- <sup>4</sup> For exceptions, see McMann and Petrov 2000; and Lankina and Getachew 2006.

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variance that centers on a rentier understanding of certain forms of fiscal federalism and test it using quantitative evidence from a federal democracy, Argentina.

Drawing on fiscal theories of the state, I posit that differences in subnational regimes are to a large extent explained by the magnitude and origin of their fiscal resources: low levels of democracy are to be expected where subnational states enjoy plentiful central government subsidies and have a weak tax link with local citizens and businesses. Unlike national states, which can afford to give up taxation and live off rents only under very special circumstances—as is the case with oilrich nations—subnational units often receive generous national subsidies and collect only modest tax revenues of their own. The relative size of central government transfers tends to be particularly large for less developed or less populated provinces,5 because they are often favored by intergovernmental revenue-sharing arrangements. Rentierism in this context is not geographically determined by resource wealth but politically created by the rules of fiscal federalism. In a nutshell: central government redistribution of revenues collected in the wealthier and/ or demographically larger provinces to the poorer and/or smaller ones makes the governments of the latter relatively rich vis-à-vis their societies and fiscally independent from their constituents. These rentier subnational states, like their resource-based national counterparts, are likely to sustain less democratic regimes because incumbents can rely on their privileged fiscal position to restrict political competition and weaken institutional limitations on their power.

#### THEORIES OF SUBNATIONAL DEMOCRACY

Scholarship on subnational regimes has generally either drawn on the robust body of structural national-level theories, especially modernization, or emphasized agency-based explanations specific to subnational contexts. The well-documented and extensively theorized national-level correlation between development and democracy<sup>6</sup> eventually made its way down to provinces and regions. Several works have associated subnational democratic deficits with structural socioeconomic characteristics such as poverty or low levels of urbanization and economic development.<sup>7</sup>

 $<sup>^{\</sup>rm 5}\,{\rm I}$  use the word "province" to refer to subnational units in general.

<sup>6</sup> Lipset 1959; Jackman 1973; Przeworski and Limongi 1997; Boix and Stokes 2003; Acemoglu et al. 2008.

<sup>&</sup>lt;sup>7</sup> O'Donnell 1993; Linz 1994; McMann and Petrov 2000.

A second structural national-level theoretical tradition (of particular relevance for the argument advanced here) considers democracy to be at odds with economic statism. From Hayek, to Dahl, Sartori, and Diamond, Linz, and Lipset,8 prominent scholars have called attention to the deleterious effects that government "monopoly . . . over socioeconomic sanctions"9 and "centralized state control over the economy"10 have on political freedoms. A study of what is arguably the most consequential recent democratic reversal, that of Russia, identifies economic statism (and oil wealth) as among the main culprits. 11 A subnationalspecific development in this tradition is the "economic autonomy" approach, which has been used to explain regional regime differences in Russia and Kyrgyzstan. 12 Its basic insight is that "the ability to make a living independent of the state is critical to the practice of democracy."13 Economically autonomous citizens are more likely to engage in politics and challenge authorities, thus creating conditions favorable for democracy. Conversely, where the state dominates economic opportunities, individuals will rationally acquiesce. In McMann's account, economic autonomy in these post-Soviet subnational units is a function of structural factors such as geography and development and of contingent economic policy choices made by local rulers. As I elaborate below, economic autonomy appears to be a key mediating mechanism between fiscal causes and regime effects in the Argentine provinces as well. However, the explanation I emphasize—fiscal federalism-based rentierism—is causally prior to economic autonomy and may affect subnational regimes through other intermediate causes.

Other structural national-level theories of regimes have had less of an impact at the subnational level. Cultural theories that link democracy to deeply rooted elite and mass attitudes<sup>14</sup> and to certain colonial or religious traditions have been applied to subnational settings—most famously by Putnam<sup>15</sup>—but not to subnational regimes. Institutional approaches which suggest that democracy's chances of survival depend on the design of governmental institutions<sup>16</sup> have not had a significant impact on the study of subnational regimes, either because the grand institutional design is generally constant across subunits or because to

<sup>8</sup> Hayek 1944; Dahl 1971; Sartori 1987; Diamond, Linz, and Lipset 1995.

<sup>&</sup>lt;sup>9</sup> Dahl 1971, 50.

<sup>&</sup>lt;sup>10</sup> Huber, Rueschemeyer, and Stephens 1993, 74.

<sup>11</sup> Fish 2005.

<sup>12</sup> McMann 2006.

<sup>13</sup> McMann 2006, 4.

<sup>&</sup>lt;sup>14</sup> Diamond 1999.

<sup>15</sup> Putnam 1993.

<sup>&</sup>lt;sup>16</sup> For example, Linz 1994.

the extent that there is variance in other institutions—such as electoral rules—they are hypothesized to be partly endogenous.<sup>17</sup> Institutions may correlate with levels of democracy because the latter affects the former. Theories that emphasize transnational influences such as the diffusion of ideas and foreign aid to promote democracy have only recently, by Lankina and Getachew, begun to be applied to the study of subnational democratization.

Subnational-specific approaches to political regimes have tended to focus on agency rather than structure. They especially emphasize the interactions between national and provincial authorities. 18 Recent theoretical work has argued against the unreflective resort to nationallevel frameworks to analyze subnational regimes.<sup>19</sup> Unlike countries, provinces are nonsovereign polities. National authorities possess and regularly use formal and informal powers to strengthen, weaken, or even remove subnational incumbents. The latter, however, also command significant political resources—often including loyal representatives in the national legislature—that they use to obtain support or fend off threats from the central government. As the establishment and maintenance of subnational authoritarianisms depend heavily both on the actions (or lack thereof) of national governments and on the success of subnational incumbents' strategies to maximize "boundary control," "autonomy," and "leverage," subnational-specific theories privilege actors, choices, and processes over economic, institutional, cultural, or other structural factors.20

#### FISCAL AND RENTIER THEORIES OF DEMOCRACY

The argument I propose draws on fiscal theories of the (typically national) state and also contains an important subnational-specific element in that the key explanatory variable lies in the interactions—specifically the fiscal interactions—between national and subnational governments. If, as fiscal theories posit, the nature, origin, and size of states' revenues are key to explaining political outcomes,<sup>21</sup> then it is plausible that differences in fiscal federalism—which organizes the way subnational governments are financed—lead to differences in subnational regimes.

At the highest level of abstraction, my argument is an instance of "state-society balance theories," which conceive of regime type as a

<sup>&</sup>lt;sup>17</sup> Calvo and Micozzi 2005.

<sup>&</sup>lt;sup>18</sup> Key 1949; Snyder 1999; Gibson 2005.

<sup>&</sup>lt;sup>19</sup> Gibson 2008.

<sup>&</sup>lt;sup>20</sup> Gibson 2008.

<sup>&</sup>lt;sup>21</sup> Bates and Lien 1985; Levi 1988; Karl 1997; Moore 2004; Smith 2008; Morrison 2009.

function of the balance of power between elites in control of the state (who wish to stay in power and exercise it as freely as possible) and societal actors (who wish to achieve power or limit that of the incumbent).<sup>22</sup> Balance theories make explicit the reasonable and widespread assumption that rulers accept democratic limitations on their power only when the "costs of repression" are higher than the "costs of toleration."<sup>23</sup> Although this approach is often framed in terms of modernization, which is seen as furthering the power of nonelites,<sup>24</sup> it is intrinsically more general—factors other than modernization affect the political resources available to state elites and societal challengers. The nature of these resources is not always clearly specified, but it is uncontroversial that the control of economic assets is a fundamental one.<sup>25</sup>

Rentier theories of democracy can be seen as a special case of the state-society balance and fiscal approaches, in which the state dominates society because of its easy access to significant economic resources that are independent from broad domestic taxation. Empirical evidence from oil-rich and mineral-rich nations provides support for this variant of the resource curse thesis. 26 The explanatory logic of the rentier state literature can (and, I argue, should) be extended beyond natural resources. In the same way that arguments and findings about oil apply more generally to other similar mineral commodities,<sup>27</sup> one can go still higher up Sartori's ladder of abstraction by thinking of resource rents as a special case of fiscal rents, that is, revenues accruing to a state from an external source, that do not depend on broadly taxing the domestic economy, and that are not necessarily proportional to its size.<sup>28</sup> Resource rents, then, should be placed in the same analytical category as rents based on unconditional foreign aid<sup>29</sup> or fiscal federalism. Incumbents who collect any of these fiscal rents enjoy the political benefits of spending without facing the political costs of taxing.

<sup>&</sup>lt;sup>22</sup> Dahl 1971; Huber, Rueschemeyer, and Stephens 1993.

<sup>&</sup>lt;sup>23</sup> Dahl 1971, 15-6.

<sup>&</sup>lt;sup>24</sup> Huber, Rueschemeyer, and Stephens 1993.

<sup>&</sup>lt;sup>25</sup> Heller 2000 uses a balance argument to explain the successes of democracy in the Indian state of Kerala.

<sup>&</sup>lt;sup>26</sup> Ross 2001; Jensen and Wantchekon 2004; Smith 2004; Ulfelder 2007. These findings do not go unchallenged. For alternative views on rentier state theories, see Herb 2005; and Dunning 2008.

<sup>&</sup>lt;sup>27</sup> Ross 2001.

<sup>&</sup>lt;sup>28</sup> For similar efforts to create broader concepts that subsume resource rents, see Smith 2008; and Morrison 2009. Smith's "unearned resources" and Morrison's "nontax revenue" are similar although not identical to the concept of fiscal rents. For example, the latter includes only income originating outside the polity, while nontax revenue also encompasses domestic income such as fees paid by residents to state-owned enterprises. For a detailed discussion of the concept of fiscal rents, see Gervasoni 2009.

<sup>&</sup>lt;sup>29</sup> Several recent works stress the parallels between resource rents and foreign aid and consider the possibility of a negative impact of aid on democracy, for example, Therkildsen 2002; Moore 2004; Smith 2008; and Morrison 2009.

If a province's fiscal revenues are mainly derived from the general taxation of businesses and workers, the power of the state is limited by its dependence on the consent of economic actors, and its revenues are of necessity roughly proportional to the size of the private economy. In a polar-opposite situation, rentier provinces have access to revenues coming from sources largely independent from broad taxation, and these revenues can be very large vis-à-vis the domestic economy. Under such conditions the state is by far the main source of wealth. If, in addition, incumbents can spend rents discretionally, they might use them to pay high salaries to many civil servants, award hefty procurement contracts, finance extensive clientelism, and dominate the media advertising market, all of which decrease the incentive for social actors to oppose the incumbent.

Rentier provinces, then, approach "the least favorable circumstances" for competitive politics, that is, a situation in which "violence and socioeconomic sanctions are exclusively available to the government and denied to the opposition."30 Heavy federal subsidies are likely to induce the "spending effect," that is, the use of "budgets that are exceptionally large and unconstrained" to "reduce dissent."31 When the provincial state dominates the local economy, social actors are less autonomous and less politically demanding. The independent bourgeoisie, middle classes, or working classes that macrosocial analyses often see as driving movements toward democracy<sup>32</sup> are typically weak in such statedependent economies. In fact the causal arrow is often inverted in rentier states: classes are to a large extent shaped and even created by distributive policies aimed at generating support for the regime.<sup>33</sup> In the rentier Argentine provinces the largest classes are public employees bureaucrats, teachers, policemen—and informal or unemployed workers receiving some kind of provincial support. A similar logic applies to provincial civil society organizations: just as in oil-rich states, "the fact that most of the GNP is made of government expenditure practically ensures that few or no alternative groupings will develop."34

Rentier economic and political macrostructures produce predictable individual-level consequences. Theory and evidence from other contexts suggest that, when the state controls most attractive jobs and other economic opportunities, individuals tend to acquiesce,<sup>35</sup> while

<sup>&</sup>lt;sup>30</sup> Dahl 1971, 51, emphasis added.

<sup>&</sup>lt;sup>31</sup> Ross 2001, 333–34.

<sup>&</sup>lt;sup>32</sup> Moore 1966; Huber, Rueschemeyer, and Stephens 1993.

<sup>33</sup> Chaudhry 1994, 18-19.

<sup>&</sup>lt;sup>34</sup> Luciani 1990, 77.

<sup>35</sup> McMann 2006.

careerist activists and politicians join the incumbent party.<sup>36</sup> Evidence I present below suggests that individual economic autonomy calculations are paramount in Argentina's rentier provinces: faced with an economically dominant state, citizens who would otherwise voice criticism or back opposition parties end up either openly supporting the provincial administration or prudently refraining from expressing dissent. Those who are exceptionally motivated to endure the costs of opposition or who are shielded from those costs (for example, because they have an independent source of income) are hard pressed to find supporters, donors, and media coverage. This logic also applies to the many business people (including, critically, media owners) who depend heavily on government contracts, subsidies, and tax exemptions.<sup>37</sup>

Two other pathways from rentierism to subnational regime type may complement economic autonomy mechanisms. The first relates to the alleged taxation-representation link<sup>38</sup> and to the regime consequences of the low levels of taxation typical of rentier states:<sup>39</sup> large federal subsidies allow provincial incumbents to tax their constituents lightly, thereby decreasing the incentives and power of the latter to demand a share of political power. The state's fiscal autonomy vis-à-vis individuals and businesses significantly increases the political power of incumbents, who do not need to engage in debilitating political battles to extract revenue from local economic actors. The second is the "repression effect":40 rents can be used to finance an apparatus of internal political intelligence and repression, as has been documented in the case of at least one Argentine province. 41 Although, for reasons I explain below, massive and overt repression is uncommon, rentier provincial states can at times administer finely targeted and inconspicuous forms of repression.

These hypothesized macrostructural factors and their microfoundations involve both demand-side and supply-side effects.<sup>42</sup> Classes, groups, and individuals who depend on the provincial budget and enjoy light taxation are, ceteris paribus, less likely to press demands for representation and accountability. To the extent that such demands do arise, a rich and fiscally independent state is likely to be especially effective at buying off or punishing politically troublesome constituents.

<sup>36</sup> Greene 2007.

<sup>&</sup>lt;sup>37</sup> Asociación por los Derechos Civiles and Open Society Justice Initiative 2005; Cao 2005.

<sup>&</sup>lt;sup>38</sup> Moore 2004; Ross 2004.

<sup>&</sup>lt;sup>39</sup> Luciani 1990; Ross 2001.

<sup>40</sup> Ross 2001.

<sup>&</sup>lt;sup>41</sup> Dargoltz, Gerez, and Cao 2006.

<sup>&</sup>lt;sup>42</sup> Ulfelder 2007, 997.

The specific avenues through which fiscal rents are converted into political hegemony may in fact vary across countries, across provinces, and over time. Several recent works have emphasized either "widespread disagreement as to the causal mechanisms" or the "variety of mechanisms" and "strategies" by which rents undermine democracy. I surmise that structure is behind the often-found statistical association between rentierism and authoritarianism, while agency is more important in determining the connecting mechanisms. It may be that the leaders of rentier polities share fundamental preferences for unlimited power and thus inevitably yield to the temptation to use their fiscal muscle to satisfy them; but they may do so in different ways because of different instrumental preferences or exogenous constraints. Agency may dominate the "how" even if structure dominates the "what."

Only recently have fiscal theories been applied at the subnational level. Hoffman and Gibson show that higher levels of central government transfers and foreign aid lead to lower efficiency in local governments in Africa. <sup>46</sup> Goldberg, Wibbels, and Mvukiyehe test rentier theories in the American states, finding that resource dependence is associated with lower levels of electoral competition. <sup>47</sup> Several works have studied the consequences of Argentina's fiscal federalism for economic reform, <sup>48</sup> patronage spending, <sup>49</sup> and provincial electoral support for the president's party. <sup>50</sup> Building on this scholarship, in the next sections I (1) show how certain intergovernmental revenue sharing rules give rise to rentier subnational states and (2) provide evidence that fiscal federalism rents are detrimental to subnational democracy (and account for wide interprovincial regime differences in Argentina) in the same way that natural resource rents appear to undermine national democracy.

#### FISCAL FEDERALISM AS A SOURCE OF SUBNATIONAL RENTIERISM

Fiscal federalism creates rentier situations when subnational units receive central government transfers in amounts well above what their own taxing efforts could obtain (and, less frequently, when they are given control over natural resource rents). As the Argentine case described

<sup>&</sup>lt;sup>43</sup> Goldberg, Wibbels, and Mvukiyehe 2008, 507.

<sup>&</sup>lt;sup>44</sup> Jensen and Wantchekon 2004, 821.

<sup>&</sup>lt;sup>45</sup> Morrison 2009, 107-8.

<sup>&</sup>lt;sup>46</sup> Hoffman and Gibson 2005.

<sup>&</sup>lt;sup>47</sup> Goldberg, Wibbels, and Mvukiyehe 2008.

<sup>&</sup>lt;sup>48</sup> Gibson and Calvo 2000; Remmer and Wibbels 2000.

<sup>&</sup>lt;sup>49</sup> Calvo and Murillo 2004; Remmer 2007.

<sup>50</sup> Gélineau and Remmer 2005.

below illustrates, two fairly common features of intergovernmental revenue-sharing schemes result in subnational rentierism, especially in economically small subunits: (1) high fiscal vertical imbalances (that is, national transfers as a percentage of total subnational revenues), and (2) redistribution of revenues in favor of economically smaller units (especially if, as it is often the case, there are large differences in the economic size of the provinces).

Imagine a country where the smallest province, La Renta, contains only 1 percent of the population. Imagine all taxes are collected by the national government but provinces are in charge of expensive policies (such as education). Provincial expenditures, then, are financed by hefty national transfers. Finally, imagine that revenue-sharing rules favor La Renta, so that instead of a (population proportional) 1 percent share of national transfers, it receives 4 percent. This implies a loss of just 3 percent of total transfers for the other provinces, but a huge fiscal subsidy for La Renta's rulers.

Argentina's fiscal federalism approaches this ideal model. Most taxes are collected by the federal government, which takes a portion for its own financing and distributes the rest among the provinces. The provincial share has grown significantly since tax sharing was established in 1934. By the 1990s Argentina had the second highest proportion of subnational spending (after India) among nine large federations analyzed by Wibbels<sup>51</sup>—with provinces accounting for more than 40 percent of total public expenditures.<sup>52</sup> Most revenues are levied in the economically larger districts (such as Buenos Aires and Córdoba) and then redistributed through a complicated system that strongly benefits the less populated and more overrepresented provinces<sup>53</sup> but not the poorer ones.<sup>54</sup> The political logic at work is clear: Argentina has the most malapportioned senate in the world and also a high degree of malapportionment in the lower chamber,55 so demographically small "low-maintenance" provinces<sup>56</sup> that are heavily overrepresented in both legislative chambers are ideally placed to obtain favorable treatment when fiscal federalism institutions are renegotiated and when discretionary federal funds are allocated. Although the 1934 revenue-sharing scheme basically distributed transfers to the provinces according to the share of tax revenues collected in their territories, several reforms under

<sup>&</sup>lt;sup>51</sup> Wibbels 2005.

<sup>&</sup>lt;sup>52</sup> Inter-American Development Bank 1997.

<sup>&</sup>lt;sup>53</sup> Gibson, Calvo, and Falleti 2004.

<sup>&</sup>lt;sup>54</sup> Remmer and Wibbels 2000.

<sup>55</sup> Samuels and Snyder 2001.

<sup>&</sup>lt;sup>56</sup> Gibson and Calvo 2000.

Presidents Perón, Frondizi, and Lanusse made the system much more redistributive in favor of the low-population provinces outside the central Pampas region.<sup>57</sup> Figures 1a and 1b show how federal transfers per capita<sup>58</sup> during the current democratic period are largely independent of poverty levels but strongly associated with demographic size. Poverty<sup>59</sup> explains less than 1 percent of the variance of annual per capita transfers in the 1992–95 period, while the reciprocal of population<sup>60</sup> explains 83 percent.<sup>61</sup> Santa Cruz may have far better social indicators than Chaco, but because of its minuscule population, it receives a much higher level of federal transfers per adult.

Although in many countries subnational spending is to a significant extent financed by the central government, Argentina's fiscal vertical imbalance is particularly high,62 reaching approximately 60 percent in the 1990s. 63 All of the provinces except Buenos Aires finance more than half of their budgets through federal transfers, and, strikingly, eight of them cover approximately 90 percent of their outlays with central government revenues.64 Equally important, the bulk of this money the so-called coparticipación federal and some other federal funds—is transferred by statute with no strings attached. Other smaller transfers have specific destinations, typically public works such as housing and electrical infrastructure. 65 Wibbels estimates that between 88.6 percent and 98.1 percent of 1989-97 federal transfers were automatic, and between 64.4 percent and 80.9 percent were automatic and unconditional.66 (Earmarked transfers may also contribute to rentier effects because they are somewhat fungible and because public works are an excellent avenue for providing jobs and contracts to local constituents.) A recent study of the level of discretion characterizing all transfer programs used since 1983 emphasizes that coparticipación federal is strictly automatic and therefore useless for building presidential coalitions, and concludes that, all programs considered, "the Argentine president enjoys absolute discretion over a small share of federal transfers."67 The

<sup>&</sup>lt;sup>57</sup> Diaz-Cayeros 2006.

 $<sup>^{58}</sup>$  As described in the "Operationalization" subsection, I constructed this variable using the adult (eighteen and older) population in the denominator.

<sup>&</sup>lt;sup>59</sup> Measured as the percentage of residents with "unsatisfied basic needs," a census-based poverty

 $<sup>^{60}</sup>$  The reciprocal transformation fits the data considerably better than the logarithmic transformation.

<sup>&</sup>lt;sup>61</sup> Similar results are obtained for the other four-year periods between 1983 and 2003.

<sup>62</sup> Wibbels 2005.

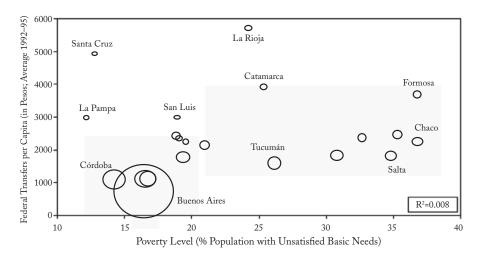
<sup>63</sup> Inter-American Development Bank 1997; Tommasi, Saiegh, and Sanguinetti 2001.

<sup>&</sup>lt;sup>64</sup> Tommasi, Saiegh, and Sanguinetti 2001.

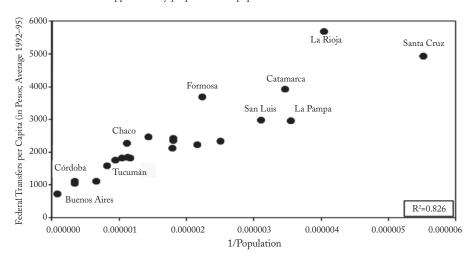
<sup>65</sup> Gordin 2006.

<sup>66</sup> Wibbels 2005.

<sup>&</sup>lt;sup>67</sup> Bonvecchi and Lodola 2009, 3–4.



(a) Federal Transfers per Capita by Poverty Level<sup>a</sup> Circle size approximately proportional to population



(b) Federal Transfers per Capita by Population

Figure 1
The Determinants of Federal Transfers (1992–95)

Index of Discretionality of Intergovernmental Transfers, developed by the Inter-American Development Bank, classifies Argentina as one of the Latin American countries with the lowest levels of discretion, in terms of both amount and distribution. My own analysis of official data is consistent with these sources: Pearson correlations for the variable *Federal Transfers* (see details in the "Operationalization" subsection below) among the five gubernatorial periods between 1983 and 2003 range from 0.931 to 0.997 (all p-values=0), revealing a very high level of stability in the shares of federal money going to each province. Finally, it should be noted that, in addition to federal resources and their own tax revenues, some provinces also collect natural resource rents in the form of royalties for oil, gas, and minerals extracted in their territories.

Thus, Argentina's revenue-sharing rules provide some provincial incumbents with guaranteed fiscal resources much larger than those that their tax bases could afford. In these districts, which Argentine scholars aptly call "provincias fiscales," 69 the public sector concentrates a very high proportion of employment and GDP, and therefore of opportunities for economic advancement. In provinces like Catamarca, La Rioja, and Santa Cruz there are approximately 1.2 public employees for each private employee (whereas the ratio for Buenos Aires and Córdoba is 0.36). 70 In the mid-1990s federal transfers represented approximately 55 percent of La Rioja's gross geographic product net of transfers (but only about 5 percent of that of Buenos Aires). 71 Even if they lack valuable natural resources, these are truly rentier subnational states.

Argentina is especially appropriate for testing the fiscal approach against the main alternative, modernization. Its peculiar strain of fiscal federalism—combining large vertical imbalances with redistribution based on population—results in significant cross-provincial variance in rentierism that is not correlated with modernization indicators (as shown in Figure 1a). Variable and often large rentier effects that are orthogonal to development levels constitute an ideal context for the estimation of the independent explanatory power of these two factors.

#### CONCEPTUALIZING AND MEASURING SUBNATIONAL DEMOCRACY

I focus on two key dimensions of political democracy for which data are available: contestation, which is central to all definitions, 72 and con-

<sup>&</sup>lt;sup>68</sup> Inter-American Development Bank 1997, 169-70.

<sup>&</sup>lt;sup>69</sup> Cao, Francés, and Vaca 1997.

<sup>&</sup>lt;sup>70</sup> Author's calculation based on data from the 2001 population census.

<sup>&</sup>lt;sup>71</sup> Author's calculation based on Ministerio de Economía y Producción 2006 and CEPAL 2007.

<sup>&</sup>lt;sup>72</sup> Dahl 1971; Alvarez et al. 1996.

straints on the power of the government, a critical component of liberal or "protective" understandings of democracy.<sup>73</sup> Other important aspects of democracy, such as respect for civil rights, cannot be incorporated because of the unavailability of comparable data for all provinces.

The least democratic subnational units within national-level democracies are generally not especially closed and repressive. These regimes—in Argentina and elsewhere—have elections (often reasonably free), real opposition parties represented in the legislature, and nontrivial levels of freedom of speech. Because they are embedded in a national democracy, subnational authorities are constrained in the extent to which they can restrict political rights. The national legitimacy of democracy and the constitutional powers afforded to federal authorities to guarantee it in the provinces give governors strong reasons to avoid blatantly authoritarian practices, which easily attract national media attention, hurt their prospects in national politics, and increase the likelihood of a federal intervention.<sup>74</sup> Moreover, the fact that people can easily leave the province makes unbearably oppressive forms of authoritarianism ultimately self-defeating.

Some provincial regimes, then, combine democratic institutions that are not just a façade with practices that are clearly if subtly authoritarian. They are well conceptualized by the recent literature on (national) hybrid regimes. The definitional traits of "illiberal democracies," "competitive authoritarianisms," and "electoral authoritarianisms" describe the less democratic Argentine provinces—as well as other subnational regimes around the world" —more accurately than the traditional concept of "authoritarianism." Moreover, the causal logic at work is similar: just as national hybrid regimes exist to a large extent because of the need to avoid overt authoritarianism in the face of strong international pressure for democratization, authoritarian subnational elites come under intense national pressure to sustain minimal levels of democracy.

Under such an incentive structure rulers generally resort to subtle means to restrict democracy. Elections are held and ballots are counted

<sup>73</sup> Held 1987.

<sup>&</sup>lt;sup>74</sup> The Argentine constitution assigns congress and the president the power to remove provincial authorities. "Guaranteeing the republican form of government" is one of the few causes for such federal interventions, which have taken place in four provinces since 1983: Catamarca (1990), Tucumán (1991), Corrientes (1991 and 2000), and Santiago del Estero (1993 and 2004).

<sup>&</sup>lt;sup>75</sup> Zakaria 1997.

<sup>&</sup>lt;sup>76</sup> Levitsky and Way 2002.

<sup>&</sup>lt;sup>77</sup> Schedler 2006.

<sup>&</sup>lt;sup>78</sup> McMann 2006.

<sup>&</sup>lt;sup>79</sup> Linz 1975.

fairly, but incumbents massively outspend challengers; the local media are formally independent but are bought off to bias coverage in favor of the ruling party; dissidents are not jailed, just excluded from coveted public jobs. It is precisely the incentives to behave stealthily that make these undemocratic practices difficult to measure. Their effects on political outcomes, however, are more amenable to empirical observation. In choosing between objective and subjective measures of democracy,80 the difficulty of producing valid and reliable assessments of such practices makes objective electoral and institutional indicators more appealing. Widespread undemocratic practices should increase the probability of extended stints of single-party rule, unusually large electoral majorities for incumbents, overwhelming executive control of the legislature, no term limits, and so forth. Regime type is not defined by any of these traits in particular, but, following the logic of "effect indicators,"81 they should reflect changes in the underlying level of democracy. This is the reasoning behind the common argument that no country in which incumbents win more than 60 or 70 percent of the votes or seats is likely to be a democracy.<sup>82</sup> If democracy requires "an opposition that has some chance of winning office as a consequence of elections,"83 provinces like Formosa or San Luis, where the same party has controlled the governorship for seven consecutive terms since 1983—often obtaining over 70 percent of the vote—are less democratic than Entre Ríos or Mendoza, where different parties have alternated in office, and where incumbents have seldom obtained more than 50 percent of the vote.

The index Subnational Democracy, which I use to operationalize the dependent variable, includes two indicators of electoral competition—
Executive Contestation and Legislative Contestation—and three indicators of power concentration in the incumbent—Succession Control, Legislature Control, and Term Limits. 84 Measures of electoral contestation have long been used to operationalize democracy at both the national 85 and the subnational level 86 and have been shown to be highly correlated with mainstream subjective indices of political rights and freedoms. 87

<sup>80</sup> Bollen and Paxton 2000.

<sup>81</sup> Bollen and Lennox 1991.

<sup>82</sup> Przeworski 1991; Alvarez et al. 1996; Vanhanen 2000.

<sup>83</sup> Alvarez et al. 1996, 5.

<sup>&</sup>lt;sup>84</sup> Vote and seats figures are from the Dirección Nacional Electoral and the Atlas Electoral de Andy Tow, at http://www.mininterior.gov.ar/elecciones, and http://andy.towsa.com, respectively.

<sup>85</sup> Alvarez et al. 1996; Vanhanen 2000.

<sup>86</sup> Hill 1994; Beer and Mitchell 2006.

<sup>87</sup> Coppedge 2005.

Given the very tight causal relationship between substantive freedom and competitive elections, selectoral contestation measures have usually been understood as effect indicators. They may also be reasonable "causal indicators," given the mounting evidence that vigorous electoral competition leads to higher national and subnational government responsiveness and, in the case of the Argentine provinces, to democracy-enhancing independent judiciaries. 1

Executive Contestation measures the extent to which there are real chances for the opposition to defeat the governor's party. It is simply one minus the proportion of the valid vote won by the incumbent party or coalition in the (first round of the) elections for governor. 92 The higher the incumbent's share, the lower the level of underlying competition. Given that ballot-box stuffing and vote miscounting have not been significant problems in Argentina, very large electoral majorities for the incumbent typically reflect highly uneven playing fields in the preelection period. The fact that sometimes electoral authoritarian regimes fail to obtain such majorities<sup>93</sup> should be interpreted as an effect of contingent events (for example, an exogenous economic crisis hurting the incumbent) that introduce random noise but do not affect the indicator's systematic component. Ceteris paribus, very unfair political playing fields result in unusually good electoral outcomes for the incumbent. The inevitable measurement error introduced by contingent events is reduced both by their nonsystematic nature (which results in unbiased—if less precise—statistical inferences) and by the combination of the indicators into an index. A popular alternative electoral measure—the effective number of parties—is invalid, as uncompetitive party systems can have higher scores than competitive ones.94

Legislative Contestation is one minus the proportion of the vote won by the governor's party or coalition in the elections for the legislature (lower house in the case of bicameral provinces). Succession Control measures the extent to which the incumbent succeeds in keeping the governorship in a given election. It is coded low (=1) if the governorship is captured by the opposition, medium (=2) if the incumbent

<sup>88</sup> Schedler 2005.

<sup>89</sup> Bollen and Lennox 1991.

<sup>90</sup> Besley and Burgess 2002; Griffin 2006; Hobolt and Klemmensen 2008.

<sup>&</sup>lt;sup>91</sup> Chavez 2003.

<sup>92</sup> Most provinces have a first-past-the-post electoral system. A few do conduct runoff elections.

<sup>93</sup> Levitsky and Way 2002.

 $<sup>^{94}</sup>$  For example, ENP is 2 in a very competitive race with two parties getting 50 percent of the vote each, but 2.06 in a clearly uncompetitive one in which one party gets 67 percent, and three other parties just 11 percent each.

governor is succeeded by a copartisan who is neither a relative nor a close political ally, and high (=3) if the governor is reelected or a relative or close political ally is elected. These scores reflect the idea that party rotation in power and, to a lesser extent, alternation within the ruling party are likely to indicate a higher underlying level of democracy than continuous control of the governorship by a single person.<sup>95</sup> Legislature Control is the proportion of the (lower house) seats won by the party or coalition of the incumbent governor in a given election. 96 This figure is to some extent a function of Legislative Contestation, but it also depends on partially endogenous electoral rules, which several supermajority-seeking governors have reformed since 1983 to produce large proincumbent biases in the vote-seat relationship.<sup>97</sup> In the same vein, Term Limits assumes that in less democratic districts governors will succeed in reforming provincial constitutions to scrap term limits. 98 This variable is coded 0 if the constitution prohibits the immediate reelection of the governor, 1 if it permits only one immediate reelection, 2 if it allows two consecutive reelections, and 3 if it does not limit reelections. All indicators are measured at the election that marks the end of every four-year gubernatorial term, that is, those of 1987, 1991, 1995, 1999, and 2003.99

To establish whether the conceptually independent dimensions of contestation and power concentration in the incumbent are also empirically independent, I factor analyzed the five indicators and found only one significant factor, which accounts for a much larger proportion of the variance than the second (eigenvalues are 3.11 and 0.18, respectively). Given this clear unidimensionality, *Subnational Democracy* is defined as the scores of the first factor (reversing signs to make higher values correspond to more democracy). The minimum value (–2.61) corresponds to the province of La Rioja in 1991, when, facing no term limits, the governor was reelected with 78.7 percent of the vote, while his party obtained 76.1 percent of the legislative vote, and fifteen of

 $<sup>^{95}</sup>$  Executive rotation is a key element of Alvarez et al.'s (1996, 5) democracy index: "whenever in doubt, we classify as democracies only those systems in which incumbent parties actually did lose elections."

<sup>&</sup>lt;sup>96</sup> The index *Subnational Democracy* gives provinces low scores only when *incumbents* obtain very large electoral and legislative majorities. Unlike Vanhanen's (2000) *contestation*, which views any large majority as less democratic, I consider, in the spirit of Alvarez et al. 1996, that a handily defeated incumbent is an expression of healthy levels of democracy.

<sup>97</sup> Calvo and Micozzi 2005.

<sup>98</sup> Reelection was forbidden in all provinces in 1983; many have allowed it since then.

<sup>&</sup>lt;sup>99</sup> A few provinces do not follow this electoral schedule.

<sup>&</sup>lt;sup>100</sup> The absolute values of the factor loadings for the electoral indicators range between 0.89 and 0.93; for *Succession Control* and *Term Limits* they are 0.59 and 0.53, respectively.

<sup>&</sup>lt;sup>101</sup> Factor scores have a mean and standard deviation of approximately 0 and 1, respectively.

the sixteen seats at stake. Table 1 presents descriptive statistics for *Subnational Democracy* and its five components for all the provinces in the period 1983–2003. Readers familiar with Argentine politics will not be surprised to learn that the least democratic provinces since 1983 have been La Rioja, San Luis, Formosa, Santa Cruz, and Santiago del Estero.

Because it applies to a relatively small number of institutionally similar polities, the Subnational Democracy index is more fine tuned than the necessarily simple objective measures designed to cover all the world's countries over many decades. 102 I illustrate this point by applying the Alvarez et al. dichotomous index to the Argentine provinces: eleven of the twenty-two provinces existing in 1983 turn out to be "dictatorships" because the incumbent party has never been defeated in gubernatorial elections. (By way of comparison, forty-nine of fifty U.S. states had at least one rotation in the party controlling the governorship between 1983 and 2003.) As Alvarez and his coauthors indicate, however, their measure systematically errs on the side of coding real democracies with dominant parties as dictatorships. This type of error seems likely in the cases under consideration, given that the eleven "dictatorships" range from San Luis, where the same family has controlled the governorship since 1983 (and runs the only relevant local newspaper), winning elections with up to 90 percent of the vote, to Río Negro, where four different governors have been elected with a maximum of 48.6 percent of the vote. Not surprisingly, San Luis has been described as authoritarian by countless academic and journalistic studies, 103 while such a characterization has never been applied to Río Negro. The Subnational Democracy index does make graded differences between provinces dominated by one party within a reasonably democratic context and those in which a hegemonic party is a prominent expression of a low level of democracy.

### Data, Model Specification, and Statistical Analysis

The sample includes observations for the twenty-two Argentine provinces existing at the time of the transition to democracy and for each of the five four-year gubernatorial terms between 1983 and 2003.<sup>104</sup>

<sup>&</sup>lt;sup>102</sup> For example, Alvarez et al. 1996; Vanhanen 2000.

<sup>103</sup> Wiñazki 1995; Chavez 2003.

<sup>&</sup>lt;sup>104</sup> The actual number of observations is not 110 but 102, due to missing data and the impossibility of calculating the dependent variable for elections at the end of federal interventions (where there is no incumbent seeking to stay in power).

TABLE 1
THE INDEX OF SUBNATIONAL DEMOCRACY AND ITS COMPONENTS:
SUMMARY STATISTICS BY PROVINCE

	Subna Demo		Executive Contestation	Legislative Contestation		Legislature Control	Term Limits	
	Mean	SD	Mean	Mean	Mean	Mean	Mean	N
La Rioja	-1.90	0.71	0.31	0.34	2.8	0.86	3	5
San Luis	-1.28	0.87	0.29	0.50	3	0.69	3	3
Santa Cruz	-0.86	0.77	0.40	0.44	2.8	0.67	1.4	5
Formosa	-0.83	0.97	0.40	0.40	3	0.61	1.2	5
Sgo. del Estero	-0.69	0.31	0.44	0.44	2.75	0.67	0.25	4
Catamarca	-0.30	0.12	0.47	0.48	2.75	0.55	2.25	4
La Pampa	-0.18	0.20	0.48	0.50	3	0.55	0.6	5
Neuquén	-0.09	0.47	0.48	0.52	2.4	0.55	0.6	5
Jujuy	-0.07	0.44	0.49	0.50	2.4	0.54	1	5
Santa Fe	0.00	0.27	0.50	0.51	2.2	0.56	0	5
Misiones	0.01	0.26	0.50	0.50	2.4	0.53	0.8	5
Salta	0.15	0.93	0.52	0.56	2.2	0.55	0.6	5
Córdoba	0.28	0.57	0.52	0.60	2.4	0.51	1	5
Chubut	0.30	0.80	0.52	0.54	1.8	0.49	0.6	5
Buenos Aires	0.31	0.41	0.53	0.58	2.2	0.51	0.6	5
Corrientes	0.32	0.25	0.54	0.55	2.33	0.51	0	3
Río Negro	0.33	0.43	0.58	0.59	2.8	0.55	0.8	5
Chaco	0.56	1.38	0.55	0.58	2	0.45	0.6	5
Entre Ríos	0.59	0.56	0.55	0.56	1.4	0.46	0	5
Mendoza	0.96	0.99	0.60	0.63	2	0.41	0	5
Tucumán	1.03	0.91	0.66	0.61	2	0.43	0	4
San Juan	1.24	1.23	0.66	0.65	1.5	0.37	1	4

Because observations are generated every four years, this data set avoids the artificial inflation of significances associated with panel data with more frequent (for example, yearly) time periods.<sup>105</sup>

#### **OPERATIONALIZATION**

The measure for fiscal federalism rents is annual federal transfers per adult (eighteen or older) averaged over the four years of each gubernatorial term (*Federal Transfers*). <sup>106</sup> (Transfers as a percentage of provincial GDP would be a reasonable alternative indicator, but GDP figures are available only for the 1993–2000 period and use different base years than the fiscal data.) I include all transfers from the center: *coparticipación* 

<sup>105</sup> Wilson and Butler 2007.

<sup>&</sup>lt;sup>106</sup> All fiscal data come from Ministerio de Economía y Producción 2006.

funds, other statutory but earmarked transfers like FONAVI (housing), and the highly discretionary Aportes del Tesoro Nacional. Resource rents are operationalized as the four-year average of per adult oil, gas, and mining revenues accruing to the provincial government (Resource Rents). To measure level of development I use the first component of a principal components analysis performed on the illiteracy rate, the infant mortality rate, and the percentage of the population with unsatisfied basic needs, 107 reversing signs for consistency (*Development*). 108 Political culture is a difficult variable to operationalize. Survey-based cultural indicators are available for only some of the provinces. Census data, however, provide an indirect way of measuring what is generally considered Argentina's main cultural cleavage: that between the "traditional" regions marked by early Spanish colonization and a strong Catholic heritage and the "cosmopolitan" regions where massive European immigration in the late nineteenth and early twentieth centuries recast the cultural makeup. To tap this dimension I use the percentage of the provincial population born in Europe according to the national census of 1914—conducted during the heyday of immigration to Argentina (Culture).

As subnational-specific theoretical approaches emphasize, the national government can help or undermine the efforts of provincial incumbents to restrict democracy. Presidents routinely try to strengthen their allies and weaken their opponents in the provinces. I control for this factor through a dummy variable in which provincial administrations of the same party as the president are coded one (*Presidential Copartisan*). As the support of the president is more valuable when she is popular, I interact this variable with presidential approval in national opinion polls (*Presidential Popularity*). <sup>109</sup> I also include a dummy variable (*National Leader*) marking the few elections in which a governor or former governor who belongs to his/her province's incumbent party runs for the presidency (as Governor Kirchner of Santa Cruz did in 2003) or is the president (as former Governor Menem of La Rioja was in 1991). Emotional identification with a local leader of national prominence may strengthen a province's incumbent party. <sup>110</sup>

#### ESTIMATION

Estimation has to take into account the panel nature of the data. Given the relatively small T, dynamic models with lagged dependent variables

 $<sup>^{107}</sup>$  When data for this and other indicators are not available for an election year, I use the linear interpolation between the two most recent years for which figures do exist.

<sup>&</sup>lt;sup>108</sup> The first component explains 86.3 percent of the total variance.

<sup>109</sup> Data for this variable come from Ipsos-Mora y Araujo national public opinion surveys.

<sup>&</sup>lt;sup>110</sup> Summary statistics for all variables are available from the author upon request.

—including error correction models—are not advisable.<sup>111</sup> One possibility is to use subject-specific estimators, like random effects and fixed effects, which handle unit heterogeneity and within-unit correlation by using the repeated observations to generate different intercepts for each cross-sectional unit.<sup>112</sup> Because the fixed-effects estimator relies on within-case variance only, its use is inadvisable for a data set that is dominated by cross-sectional variance and that includes several time-invariant or "sluggish" independent variables. Random-effects models are better suited for the data at hand, assuming that the random constants and the independent variables are uncorrelated.<sup>113</sup> Given the high sensitivity of panel data analysis to estimation choices,<sup>114</sup> I check the robustness of the results by rerunning the main models using alternative estimators.

#### RESULTS

The random-effects estimates are presented in Table 2. Model 1 strongly supports the fiscal rents hypothesis: larger per adult transfers from the federal government are associated with less democracy. Their effect is highly significant and substantively important: in the 1996–99 period, for example, Buenos Aires received an average of 765 pesos per adult per year—the country's lowest—while, at the other end, La Rioja obtained 6,219 pesos; model 1 predicts that, other things being equal, La Rioja will have 2.4 fewer units (that is, standard deviations) in the Subnational Democracy index than Buenos Aires. I reestimated model 1 replacing this index with each of the five indicators used to construct it (results shown in Appendix 1). These models, all of which confirm the high significance of Federal Transfers, are simpler to interpret, as their coefficients are expressed in familiar units. 115 Thus, for example, La Rioja in 1996–99 would have been expected to obtain, ceteris paribus, 26.2 fewer percentage points than Buenos Aires in both Executive and Legislative Contestation and 30.5 more percentage points than Buenos Aires in Legislature Control. That is, very large differences in fiscal federalism rents are associated with very large regime differences. Contrary to expectations, Resource Rents does not have a significant effect on subnational democracy. In light of the strong impact of Federal Transfers, this negative finding suggests either that the low

<sup>&</sup>lt;sup>111</sup> Beck 2001.

<sup>&</sup>lt;sup>112</sup> Hsiao 2003.

<sup>113</sup> Hsiao 2003.

<sup>114</sup> Wilson and Butler 2007.

 $<sup>^{115}</sup>$  This gain in interpretability comes at the price of a higher level of measurement error, as single-indicator measures are less precise than those based on several indicators.

Table 2
The Determinants of Subnational Democracy, 1983–2003
(Random-Effects Models)

					Model 5	
	Model 1	Model 2	Model 3	Model 4	(G2SLS) <sup>a</sup>	Model 6
Federal Transfers	00044***	00045***	00046***	00045***	00047***	
	(.00009)	(80000.)	(.00009)	(.00012)	(.00012)	
Resource Rents	00000					
	(.00012)					
Development	0100					0154
	(.0134)					(.0134)
Logged GGP p/c		0988				
		(.2216)				
Culture	.0094					.0130*
	(.0086)					(.0079)
Presidential Copartisan	.2016	.1935				.0421
	(.3967)	(.3937)				(.4038)
Presidential Popularity	.0053	.0052				.0100*
	(.0057)	(.0057)				(.0058)
Presidential Copartisan $\times$	0129*	0124*	0081***	0081***	0081***	0131*
Presidential Popularity	(.0071)	(.0071)	(.0024)	(.0025)	(.0025)	(.0073)
National Leader	6831**	7378**	7094**	7044**	7123**	6824**
	(.3076)	(.3043)	(.2948)	(.2960)	(.3006)	(.3148)
Population (Reciprocal)				-13,738		
				(93,333)		
Public Employees per						0234***
1,000 Inhabitants						(.0049)
Constant	1.564	1.857	1.288***	1.288***	1.316***	2.026**
	(.9649)	(1.917)	(.2272)	(.2315)	(.2971)	(.994)
Overall R <sup>2</sup>	.454	.447	.438	.438	.438	.431
Rho	.179	.120	.214	.228	.190	.146
Observations	102	102	102	102	102	102

<sup>\*</sup> p < 0.10, \*\*\* p < 0.05, \*\*\* p < 0.01; entries are unstandardized regression coefficients; standard errors in parentheses

incidence of resource revenues in the Argentine provinces makes their effects too small to be captured statistically or, alternatively, that there is something in the nature of those rents that makes them less consequential for subnational regimes.

Strikingly, the level of development has no significant effect (and the wrong sign). *Culture* is also indistinguishable from zero. The three

<sup>&</sup>lt;sup>a</sup> Federal Transfers instrumented by Population (reciprocal), Presidential Copartisan × Presidential Popularity, and National Leader.

coefficients associated with the interaction between *Presidential Copartisan* and *Presidential Popularity* indicate that subnational democracy is likely to suffer under a governor from the same party as a popular president (an effect that increases with *Presidential Popularity*). Likewise, a negative and significant coefficient obtains for the variable identifying elections in which the governor runs for president or rides on the coattails of a former governor of the same party who runs for (or is the) president.

The null finding for *Development* is contrary to theoretical expectations and national-level evidence. I reran model 1 alternatively using each of the three measures included in the *Development* index (illiteracy, infant mortality, and unsatisfied basic needs). The three resulting coefficients are indistinguishable from zero (p-values between 0.41 and 0.71) and have the wrong sign (results not shown). Model 2 uses an alternative measure, CEPAL's (2007) per capita gross geographic product (GGP) estimates. As these data are available for the 1993–2000 period only, I project the 1993 figures back to 1987—the first year in which the dependent variable is observed—and the 2000 figures forward to 2003. Following national functional-form findings, these estimates are logged (*Logged GGP p/c*). The coefficient for the new measure in model 2 (where previously insignificant variables are dropped) is again negative and not significant.

Because models 1 and 2 suffer from considerable multicollinearity (mean VIF=3.48 and 3.76, respectively)—arising mainly from the interaction between Presidential Copartisan and Presidential Popularity—model 3 drops the main terms of the interaction (as well as the insignificant development and culture measures). Constraining these terms to zero is reasonable given that models 1 and 2 are far from rejecting the null hypotheses. That is, the data support the theoretically plausible hypotheses that the public standing of the president has no effect when a province is controlled by an opponent and that copartisanship with the president does not undermine democracy if he or she is very unpopular. In model 3 mean VIF plummets to 1.07, which allows for a more efficient estimation of the remaining coefficients. Federal Transfers and National Leader remain practically unchanged. The coefficient for the interaction term becomes somewhat smaller, but its significance increases substantially (p-value=0.001), confirming that the capacity of governors affiliated with the president's party to restrict democracy strengthens as presidential approval grows. The fact that both

<sup>116</sup> Jackman 1973.

the presidential interaction and *National Leader* maintain consistently significant coefficients confirms previous findings that national politics is important in explaining the political fate of Argentine provincial incumbents.<sup>117</sup>

Sensitivity analysis reveals that these statistical findings are very robust. This is especially the case for the variable of paramount theoretical significance: the coefficient for *Federal Transfers* is not only very stable across all models in Table 2 but also strikingly robust, both in size and significance, to many and diverse alternative estimation techniques (see Appendix 2).

#### ENDOGENEITY: Spurious and Simultaneous Causality

The strong, highly significant, and robust statistical association between fiscal federalism rents and subnational democracy is consistent with the fiscal argument put forward above, but, as is the case with any result based on observational data, it could suffer from endogeneity bias if either spurious or simultaneous causality were present.

Spuriousness would occur if an omitted variable explained both rents and regimes. A factor that could plausibly render the rents-democracy association spurious is demographic size. Figure 1b reveals a tight relationship between population and transfers. One could hypothesize—in a Madisonian vein—that sparsely populated provinces with more homogenous societies tend to produce less democratic regimes. Model 4 in Table 2 adds the reciprocal of population as a predictor. The new variable is far from statistical significance, while the coefficient for *Federal Transfers* remains practically unchanged. Almost identical results obtain when population is entered linearly or logarithmically and when it is replaced by overrepresentation in the national legislature (results not shown).<sup>118</sup>

Endogeneity bias would also arise if causality ran, at least partially, from subnational democracy to fiscal rents. Such a thesis clashes with the plausible argument that national incumbents will not allocate funds to uncompetitive districts where electoral outcomes are unlikely to be affected. Nevertheless, it has been argued that less competitive provincial regimes result in poorer fiscal performance, which in turn could lead to greater assistance from the federal government. It might also be argued that presidents send more resources to the less democratic

<sup>&</sup>lt;sup>117</sup> Remmer and Gélineau 2003; Gélineau and Remmer 2005; Gibson 2005.

<sup>&</sup>lt;sup>118</sup> Overrepresentation is the ratio of a province's share of all national legislators to its share of the country's adult population.

<sup>&</sup>lt;sup>119</sup> Wibbels 2005.

<sup>&</sup>lt;sup>120</sup> Remmer and Wibbels 2000.

<sup>&</sup>lt;sup>121</sup> Gordin 2006.

provinces in the hope of affecting national elections: in exchange for federal funds governors would use their electoral leverage in favor of the national incumbent. Academic accounts of the determinants of Argentina's distribution of tax revenues, however, are inconsistent with the "regimes-drive-rents" thesis. They conclude that provincial shares are a function of legislative overrepresentation, 122 population size, 123 the proportion of each province's national legislative delegation controlled by the president's party, 124 and, for discretionary transfers, party disharmony between national and subnational governments, 125 not of the nature of subnational regimes. Historical accounts of the evolution of Argentina's fiscal federalism institutions do not even consider levels of subnational democracy as one of the factors influencing decisions over distribution. Moreover, as discussed above, provincial shares of federal transfers are for the most part a function of fixed statutory coefficients and have in fact been very stable since 1983. All of this casts doubt on the possibility that federal transfers are endogenous.

I provide an additional check against simultaneity bias through an instrumental-variable estimator. A very reasonable instrument is the reciprocal of population. We know from Figure 1b that it is highly correlated with Federal Transfers. At the same time, there is no conceivable way subnational regimes can cause the territorial distribution of the population, which is largely driven by exogenous historical, economic, and geographic factors. Moreover, model 4 shows that the conditional effect of 1/population on subnational democracy is essentially zero. Population, highly correlated with Federal Transfers and clearly exogenous, is an ideal instrument. I rerun the model using the random-effects generalized two-stage least squares (G2SLS) estimator. 127 Model 5 (Table 2) shows that results hardly change with respect to the random-effects models 1-3. The estimate for Federal Transfers is negative and in fact slightly larger in absolute value. Due to the lower efficiency of 2SLS estimators the associated standard error is bigger, but even so the coefficient remains highly significant. In sum, theoretical considerations and several streams of historical and statistical evidence indicate that causality runs from fiscal rents to provincial regimes, not in the reverse direction.

<sup>122</sup> Gibson, Calvo, and Falleti 2004.

<sup>&</sup>lt;sup>123</sup> Remmer and Wibbels 2000.

<sup>124</sup> Gélineau and Dubé 2005.

<sup>125</sup> Gordin 2006.

<sup>126</sup> Eaton 2004; Porto 2004; Diaz-Cayeros 2006.

<sup>&</sup>lt;sup>127</sup> Also known as the Balestra and Varadharajan-Krishnakumar estimator. Unlike OLS, two-stage least square estimators are consistent in the presence of endogenous regressors.

#### Causal Mechanisms

Theory and previous evidence suggest that a paramount causal mechanism through which rents harm democracy is the "spending effect," or the use of plentiful public expenditures to finance patronage and thus fence off democratization. Evidence on the impact of resource dependence in the U.S. states is consistent with this mechanism: rents "allow officials to buy public support and build patronage networks," which in turn stunt "the development of a viable opposition and related democratic institutions." McMann's concept of economic autonomy focuses on the microfoundations of this macrocausal chain: where lavish public spending provides incumbents with powerful financial carrots and sticks, economically vulnerable citizens tend to support them or withdraw from political participation. <sup>130</sup>

Consistent with McMann's findings for several post-Soviet regions, qualitative evidence from Argentina suggests that low levels of economic autonomy are largely responsible for low levels of provincial democracy. Media accounts of politics in rentier provinces routinely give economic autonomy interpretations for their suspect democracies: an investigation of Santa Cruz (after La Rioja the province with the most public employees per capita) reports a climate of media self-censorship and public acquiescence, which is attributed to the fear of losing stateprovided benefits. 131 Gibson suggests that authoritarianism in Carlos Juarez's Santiago del Estero was buttressed by his "control over a vast patronage machine, funded by central government transfers," adding that this machine "dwarfed all other economic activities in the province," to the extent that "[o]ver 87 percent of the economically active population was employed by the provincial government."132 Local scholars provide a similar interpretation of the *Juarista* regime, stressing the enormous relative size and the political use of the provincial payroll. 133 A study of the rule of law in San Luis observes, in the same vein, that the provincial economy "depends heavily on federal tax revenues," which in turn have permitted Adolfo Rodríguez Saá (who along with his brother has controlled the province since 1983) "to maintain the vast public works projects that have kept the population dependent on

<sup>&</sup>lt;sup>128</sup> Ross 2001

<sup>&</sup>lt;sup>129</sup> Goldberg, Wibbels, and Mvukiyehe 2008, 495.

<sup>130</sup> McMann 2006.

<sup>131</sup> Mochkofsky 2003.

<sup>&</sup>lt;sup>132</sup> Gibson 2005, 122–23. This figure is considerably higher than that reported in official data on provincial public employment (Ministerio de Economía y Producción 2006). Gibson cites a newspaper estimate that probably takes into account indirect forms of employment through welfare programs.

<sup>&</sup>lt;sup>133</sup> Dargoltz, Gerez, and Cao 2006, 33–34.

the government for jobs and housing and therefore subdued."<sup>134</sup> Analyses of the politics of rentier provinces also contain frequent references to the high dependence of local businesses and media outlets on the provincial budget. <sup>135</sup> The mass media in Formosa, La Rioja, and Santa Cruz, for example, are singled out for their "enormous dependence on official publicity."<sup>136</sup> Analysts are in near unanimous agreement that economic dependence on the state is a politically consequential fact of life in rentier provinces.

Interviews carried out by the author and a team of research assistants with local social scientists and political journalists in several provinces during 2006 and 2008 produced a wealth of responses highlighting economic autonomy mechanisms in rentier provinces. Typical answers to questions about how free citizens were to criticize the governor or to attend protest demonstrations were: "Public employees did not participate in opposition marches out of fear" (Santiago del Estero); "People are afraid, because 80% of the economically active population depends on the state one way or the other" (La Rioja); "the domestic economy is very fragile, everybody owes something to the public administration, and this makes defeating the incumbent at the polls very difficult" (Catamarca); "It depends directly on the economic relationship that the citizen has with the government: those who receive welfare (planes sociales) . . . are not free" (San Luis). All of these quotes come from provinces that are both among the top recipients of federal money and among the least democratic (see Table 1). Provinces at the other extreme did not produce any answers of this type. Respondents either did not mention economic autonomy issues or explicitly indicated that they were not a problem: "There is no punishment for public employees in the opposition" (Mendoza). The evidence is equally strong with respect to the economic dependence of the local media. When local academic and journalistic experts on the politics of the four provinces most benefited by fiscal federalism rents (Catamarca, Formosa, La Rioja, and Santa Cruz) were asked how frequently official publicity money was selectively distributed to punish critical journalists, twenty-three out of thirty-four (or 67.6 percent) replied "quite" or "very" frequently; only one of fifteen experts (or 6.7 percent) on the four provinces receiving the least federal support (Buenos Aires, Córdoba, Mendoza, and Santa Fe) provided either of these answers. <sup>137</sup> Local newspapers, tele-

<sup>134</sup> Chavez 2003, 433.

<sup>135</sup> Wiñazki 1995, 53-54; Cao 2005, 109; Trocello 2008, 270.

<sup>&</sup>lt;sup>136</sup> Ruiz 2009, 5, author's translation.

<sup>&</sup>lt;sup>137</sup> These figures come from the Survey of Experts on Provincial Politics that the author conducted in 2008 with support from the National Science Foundation (award number 0719658).

vision stations, and radios in rentier provinces cannot thrive purely on private ads, and therefore incumbents use their publicity budgets to obtain favorable media coverage. In nonrentier provinces, the weight of official publicity in the income of media organizations is much smaller, making the practice of withdrawing it to squelch criticism less effective.

Does the statistical evidence confirm the message of the case studies and interviews presented above? Available data on provincial public employees permit a partial test. The relative size of the provincial payroll has been used as an indicator of subnational patronage in Argentina and has been shown to be a positive function of federal transfers. 138 Theory and evidence from other federations provide additional support for a causal link between central government transfers and subnational public employment. 139 The regression analysis in Table 3 models (provincial) Public Employees per Thousand Inhabitants 140 as a function of the rentier independent variables, development level (which according to Wagner's law should lead to larger governments), and the log of population (to allow for economies of scale in the public sector). Federal Transfers and Resource Rents have, as expected, positive and highly significant effects on the size of the provincial bureaucracy after controlling for Development (which contrary to expectations appears to lead to smaller payrolls) and *Population* (which produces the expected strong and highly significant negative coefficient). 141 These four variables explain 80 percent of the wide cross-provincial and cross-temporal variance in payroll size.

If economic dependence on the state is a mediating mechanism between rentier fiscal federalism arrangements and provincial regimes, then the relative size of the provincial bureaucracy should be negatively associated with Subnational Democracy even after controlling for alternative explanations, an expectation confirmed by the highly significant coefficient for Public Employees per Thousand Inhabitants (model 6 in Table 2). The results of this mediation analysis are summarized in Figure 2.

A second likely mediating mechanism is the "taxation effect":142 large federal subsidies allow provincial rulers to tax their constituents lightly, thus decreasing the incentives and power of the latter to demand a share of political power. To test this mechanism I ran a media-

<sup>138</sup> Calvo and Murillo 2004; Remmer 2007.

<sup>139</sup> Gimpelson and Treisman 2002.

<sup>&</sup>lt;sup>140</sup> Data from Ministerio de Economía y Producción 2006.

<sup>141</sup> The two rentier coefficients are of comparable magnitude, suggesting that rents are converted into public jobs at similar rates regardless of their source.

<sup>&</sup>lt;sup>142</sup> Ross 2001.

TABLE 3
THE DETERMINANTS OF THE RELATIVE SIZE OF PROVINCIAL PAYROLLS (RANDOM-EFFECTS MODELS)

	,
Federal Transfers	.0043***
	(.0012)
Resource Rents	.0057***
	(.0014)
Development	206*
•	(.123)
Population (log)	-10.64***
1	(1.78)
Constant	199.8***
	(23.9)
Overall R <sup>2</sup>	.80
Rho	.48
Observations	109

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01; entries are unstandardized regression coefficients; standard errors in parentheses

tion analysis using the percentage of current revenues that originate in provincially collected taxes averaged over each four-year term (Own Taxes) to measure the strength of the tax link between the provincial state and taxpayers. Both Federal Transfers and Resource Rents have the expected negative and statistically significant effects on Own Taxes (while Development is positive and significant). However, when Own Taxes is included—together with public employment—in a model to predict Subnational Democracy, its coefficient is basically zero, while Public Employees per Thousand Inhabitants remains substantially unchanged (results not shown). These mediation analyses suggest that causality in the Argentine provinces flows at least partially through the spending (but not the taxation) effect.

In sum, both the qualitative and the statistical evidence are consistent with a causal mechanism that at the macrolevel emphasizes the effects of heavy public spending and at the microlevel stresses the economic autonomy (or lack thereof) of the provincial population. Subnational democracy languishes where the ruled depend economically on the rulers.

#### Conclusion

Building on fiscal and rentier approaches to the state, I have argued that the origin and size of a subnational unit's fiscal resources have sig-

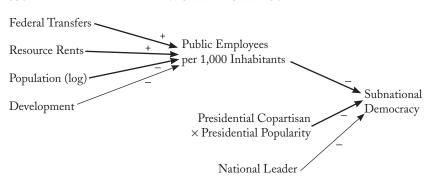


Figure 2
The Rentierism-Economic Autonomy-Democracy Causal Chain<sup>a</sup>

nificant regime consequences. Evidence from Argentina suggests that differences in subnational democracy are to a large extent explained by a type of rentierism originating in central government redistribution of tax revenues among provinces. Governors in command of plentiful fiscal federalism rents appear to use their financial muscle to minimize their constituents' economic autonomy and, ultimately, to weaken democratic contestation and institutional constraints on their power.

This argument expands the rentier state logic in two directions. First, it shifts the focus up the ladder of abstraction from resource rents to fiscal rents. Beyond some obvious differences, rents based on natural resources, central government transfers, foreign aid, or anything else share key characteristics: they all bestow on incumbents fiscal resources that do not require wide taxation and that have the potential to be much larger than what such taxation could yield. Rentier incumbents appear to be a threat to democracy regardless of the specific source of their revenues. Oil and other natural resources have undoubtedly been a highly relevant and fruitful starting point, but comparative politics should now work toward a more general theory of rentierism. Second, the argument shifts the focus down by applying this more general understanding of rentierism to subnational regimes, an empirical domain that scholars have only recently tackled and that fiscal theories have for the most part neglected.

The findings I have presented are likely to apply beyond Argentina. The two features that create the conditions for fiscal federalism

<sup>&</sup>lt;sup>a</sup> Arrows represent regression coefficients with p-values<0.05. The plus and minus signs indicate the direction of the statistical association. Thicker arrows highlight substantively larger coefficients.

to breed rentierism (high fiscal vertical imbalances and redistribution of national revenues in favor of economically smaller units, especially when coupled with large differences in the subunits' economic size) are relatively common across the world. Rentier provinces in all likelihood outnumber rentier nations. Even in countries where the first-layer subnational units are largely self-sufficient, rentier governments often exist at lower levels. Canada's "First Nations," for example, combine large vertical imbalances with small populations and favorable federal fiscal treatment. Like several Argentine provinces, First Nations depend on central government transfers for over 90 percent of their revenues. Not surprisingly, recent research has traced the governance and accountability problems of these communities to their extremely weak taxation and high dependence on federal money.<sup>143</sup>

Fiscal federalism rules also may result in rentierism when they give subnational units control over abundant natural resources. Consider Canada again. One of its ten provinces, Alberta, enjoys large resource rents (its tar sands constitute one of the world's largest oil production sites). From a rentier perspective it should not be surprising that Alberta's politics is unusually uncompetitive: the Progressive Conservative party has ruled continuously for thirty-eight years, comfortably winning eleven consecutive elections and usually obtaining more than 70 percent of the seats in the legislative assembly. Recent analyses have attributed this striking level of political dominance to resource wealth. A statistical and qualitative study of the U.S. states similarly finds a causal link between natural resource dependence and weak political competition. Its

Contrary to much theory and national-level evidence, development does not explain subnational democracy in Argentina. In fact evidence from other countries is consistent with this finding: poor states, from India's Kerala<sup>146</sup> to Brazil's Piauí and Roraima,<sup>147</sup> often achieve higher levels of democracy than their richer counterparts. A recent statistical analysis finds no significant association between wealth and democracy in Russia's regions.<sup>148</sup> One possible interpretation is that the expected modernization effects may not hold in subnational contexts because the proposed causal logics operate only nationally. For example, theo-

<sup>143</sup> Graham and Bruhn 2008.

<sup>144</sup> Nikiforuk 2008.

<sup>&</sup>lt;sup>145</sup> Goldberg, Wibbels, and Mvukiyehe 2008.

<sup>&</sup>lt;sup>146</sup> Heller 2000.

<sup>&</sup>lt;sup>147</sup> Montero 2007.

<sup>&</sup>lt;sup>148</sup> McMann and Petrov 2000.

ries stressing the potential losses the rich face under democracy<sup>149</sup> are unlikely to apply to subnational units because it is national governments that typically have the power to implement expropriations and progressive tax reforms. Economic elites should not be particularly inclined to conspire against subnational democracies. A second interpretation would see the null finding as confirming that the development-democracy statistical association is spurious, as both variables are in fact caused by historical divergences in institutional arrangements.<sup>150</sup> Future research should aim to jointly test the fiscal rents and modernization hypotheses in other empirical domains to establish whether the findings presented in this article are generalizable beyond Argentina.

Fiscal federalism arrangements that result in large vertical fiscal imbalances have been associated with macroeconomic maladies such as fiscal deficits and inflation. Thus, Argentina's tax-sharing system may partly explain its proverbial history of economic crashes and even its sharp pattern of regional economic inequalities (as transfers favor the demographically smaller provinces, not the poorer ones). I have presented evidence that its strain of fiscal federalism also has the perverse consequence of financing the survival of less-than-democratic provincial elites who stay in power indefinitely by establishing hybrid regimes. The findings of this article may help point the way toward the design of institutions of fiscal federalism that jointly maximize macroeconomic stability, regional equality, and subnational democracy.

### Appendix 1 Regression Results with Single-Indicator Measures of Subnational Democracy

Table 4 presents the results of the reestimation of model 1 in Table 2 using each of the five indicators included in the index *Subnational Democracy* as the dependent variable. The results from Table 2 are reproduced in the first column to facilitate comparisons. To make coefficients more readily interpretable, the indicators expressed as proportions (*Executive Contestation*, *Legislative Contestation*, and *Legislature Control*) were converted to percentages.

<sup>&</sup>lt;sup>149</sup> Boix 2003; Acemoglu and Robinson 2006.

 $<sup>^{\</sup>rm 150}$  Acemoglu et al. 2008.

<sup>&</sup>lt;sup>151</sup> Rodden and Wibbels 2002.

Table 4
The Determinants of Subnational Democracy and Its Components, 1983–2003
(Random-Effects Models)

	Dependent variable					
	Subnational Democracy	Executive Contestation	Legislative Contestation	Legislative Control	Succession Control	Term Limits
Federal Transfers	00044***	0048***	0048***	.0056***	.00027***	.00048***
	(.00009)	(.0012)	(.0009)	(.0014)	(.00009)	(.00009)
Resource Rents	00000	00014	00037	.00044	00005	00021*
	(.00012)	(.00164)	(.00126)	(.00182)	(.00012)	(.00012)
Development	0100	2029	.0878	.0554	.0069	.0716***
•	(.0134)	(.1788)	(.1419)	(.2031)	(.0134)	(.0126)
Culture	.0094	.1235	.0481	1266	.0005	0308***
	(.0086)	(.1187)	(.0875)	(.1268)	(.0084)	(.0093)
Presidential Copartisan	.2016	.4352	2.21	-4.54	400	289
-	(.3967)	(4.92)	(4.62)	(6.39)	(.421)	(.305)
Presidential Popularity	.0053	.0458	.1059	0855	00017	.0023
1 ,	(.0057)	(.0704)	(.0671)	(.0924)	(.0061)	(.0043)
Presidential Copartisan ×	0129*	1035	1637*	.2361**	.0072	.0045*
Presidential Popularity	(.0071)	(.0878)	(.0838)	(.1154)	(.0076)	(.0054)
National Leader	6831**	-10.18***	-4.66	10.13**	1082	.5307*
	(.3076)	(3.84)	(3.55)	(4.92)	(.3246)	(.2400)
Constant	1.56	-25.28**	-46.01***	39.90**	1.29	-5.07***
	(.965)	(12.71)	(10.34)	(14.72)	(.971)	(.8862)
Overall R <sup>2</sup>	.454	.402	.437	.392	.133	.581
Rho	.179	.267	.075	.110	.109	.476
Observations	102	102	102	102	102	102

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01; entries are unstandardized regression coefficients; standard errors in parentheses

#### Appendix 2 Sensitivity Analysis

Four additional estimators are reasonable alternatives to random effects: OLS with panel-corrected standard errors (PCSE),<sup>152</sup> generalized estimating equations (GEE),<sup>153</sup> the "between" estimator, and fixed effects. I present PCSE estimates modeling disturbances as an autoregressive process of order one (AR1) and GEE results for two correlation structures: autoregressive of order one, which is appropriate to accommodate temporally dependent processes, and unstructured (Unst.), which estimates each correlation from the data without constraints, thereby guar-

<sup>152</sup> Beck and Katz 1995.

<sup>&</sup>lt;sup>153</sup> Zorn 2001.

TABLE 5 RANDOM-EFFECTS, OLS+PCSE, GEE, BETWEEN, AND FIXED-EFFECTS ESTIMATORS								
	Random	PCSE	GEE	GEE	Between			

	Random	PCSE	GEE	GEE	Between	Fixed
	Effects	(AR1)	(AR1)	(Unst.)	Estimator	Effects
Federal Transfers	00046***	00047***	00048***	00046***	00040***	00039**
	(.00009)	(.00005)	(.00008)	(.00007)	(.00012)	(.00018)
Presidential Copartisan ×	0081***	0081***	0081***	0088***	0075	0078***
Presidential Popularity		(.0019)	(.0024)	(.0023)	(.0066)	(.0027)
National Leader	7094**	7366***	6776**	6316**	-1.772**	5247
	(.2948)	(.2569)	(.2852)	(.2736)	(.8082)	(.3264)
Constant	1.288*** (.2315)	1.320*** (.1101)	1.324*** (.2020)	1.263*** (.1828)	1.214*** (.3352)	1.118*** (.4110)
Observations	102	102	102	102	102	102

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01; entries are unstandardized regression coefficients; standard errors in parentheses

anteeing that results are not driven by unreasonable assumptions about the correlation structure. The "between" and the fixed-effects estimators are very conservative alternatives, given that they fully disregard time-series and cross-sectional variance, respectively. Table 5 presents the results for model 3 (from Table 2) estimated through these alternative techniques (the random-effects results are reproduced in the first column).

The estimates are remarkably robust: the coefficient of *Federal Transfers* has practically the same magnitude and is highly significant across all models. Even the conservative "between" and fixed-effects estimators, which by design produce less precise coefficients, confirm the high significance of fiscal federalism rents.

#### REFERENCES

Acemoglu, Daron, Simon Johnson, James Robinson, and Pierre Yared. 2008. "Income and Democracy." *American Economic Review* 98, no. 3: 808–42.

Acemoglu, Daron, and James Robinson. 2006. *Economic Origins of Dictatorship and Democracy*. New York: Cambridge University Press.

Alvarez, Michael, Jose A. Cheibub, Fernando Limongi, and Adam Przeworski. 1996. "Classifying Political Regimes." *Studies in Comparative International Development* 31, no. 2: 3–36.

Asociación por los Derechos Civiles and Open Society Justice Initiative. 2005. Buying the New: A Report on Financial and Indirect Censorship in Argentina. New York: Open Society Institute.

Bates, Robert, and Da-Hsiang Lien. 1985. "A Note on Taxation, Development, and Representative Government." *Politics and Society* 14, no. 1: 53–70.

- Beck, Nathaniel. 2001. "Time-Series-Cross-Section Data: What Have We Learned in the Past Few Years?" *Annual Review of Political Science* 4: 271–93.
- Beck, Nathaniel, and Jonathan Katz. 1995. "What to Do (and Not to Do) with Time-Series Cross-Section Data." *American Political Science Review* 89, no. 3: 634–47.
- Beer, Caroline, and Neil Mitchell. 2006. "Comparing Nations and States: Human Rights and Democracy in India." *Comparative Political Studies* 39, no. 8: 996–1018.
- Besley, Timothy, and Robin Burgess. 2002. "The Political Economy of Government Responsiveness: Theory and Evidence from India." *Quarterly Journal of Economics* 117, no. 4: 1415–51.
- Boix, Carles. 2003. *Democracy and Redistribution*. Cambridge: Cambridge University Press.
- Boix, Carles, and Susan C. Stokes. 2003. "Endogenous Democratization." World Politics 55, no. 4 (July): 517–49.
- Bollen, Kenneth, and Richard Lennox. 1991. "Conventional Wisdom on Measurement: A Structural Equation Perspective." *Psychological Bulletin* 110, no. 2: 305–14.
- Bollen, Kenneth, and Pamela Paxton. 2000. "Subjective Measures of Liberal Democracy." *Comparative Political Studies* 33, no. 1: 58–86.
- Bonvecchi, Alejandro, and Germán Lodola. 2009. "The Dual Logic of Intergovernmental Transfers: Territorial Coalition Building in Argentina." Paper presented at the meeting of the Latin American Studies Association, Rio de Janeiro, June 11–14.
- Calvo, Ernesto, and Juan P. Micozzi. 2005. "The Governor's Backyard: A Seat-Vote Model of Electoral Reform for Subnational Multiparty Races." *Journal of Politics* 67, no. 4: 1050–74.
- Calvo, Ernesto, and María V. Murillo. 2004. "Who Delivers? Partisan Clients in the Argentine Electoral Market." *American Journal of Political Science* 48, no. 4: 742–57.
- Cao, Horacio. 2005. "El Sistema Político Regional de las Provincias Periféricas Durante los '90." *Realidad Económica* 216: 95–118.
- Cao, Horacio, Mónica Francés, and Angel Vaca. 1997. "Empleo Público en las Provincias Rezagadas." *Aportes para el Estado y la Administración Gubernamental* 8: 89–104.
- CEPAL. 2007. *Dinámica Productiva Provincial*, at http://www.eclac.org/argentina/noticias/paginas/4/10424/PartPcial.xls. Accessed September 3, 2007.
- Chavez, Rebecca Bill. 2003. "The Construction of the Rule of Law in Argentina: A Tale of Two Provinces." *Comparative Politics* 35, no. 4: 417–37.
- Chaudry, Kiren Aziz. 1994. "Economic Liberalization and the Lineages of the Rentier State." *Comparative Politics* 27, no. 1: 1–25.
- Coppedge, Michael. 2005. "Defining and Measuring Democracy." Working paper 2. IPSA/CIDE Committee on Concepts and Methods, at http://www.concepts-methods.org/
- Dahl, Robert. 1971. Polyarchy: Participation and Opposition. New Haven: Yale University Press.
- Dargoltz, Raúl, Oscar Gerez, and Horacio Cao. 2006. *El Nuevo Santiagueñazo:* Cambio Político y Régimen Caudillista [The New Revolt in Santiago del Estero: Political Change and Bossist Regime]. Buenos Aires: Biblos.

- Diamond, Larry. 1999. *Developing Democracy: Toward Consolidation*. Baltimore: Johns Hopkins University Press.
- Diamond, Larry, Juan Linz, and Seymour M. Lipset. 1995. "Introduction: What Makes for Democracy?" In Larry Diamond, Juan Linz, and Seymour M. Lipset, eds., *Politics in Developing Countries: Comparing Experiences with Democracy*. Boulder, Colo.: Lynne Rienner Publishers.
- Diaz-Cayeros, Alberto. 2006. Federalism, Fiscal Authority, and Centralization in Latin America. New York: Cambridge University Press.
- Dunning, Thad. 2008. *Crude Democracy: Natural Resource Wealth and Political Regimes*. Cambridge: Cambridge University Press.
- Eaton, Kent. 2004. Politics beyond the Capital: The Design of Subnational Institutions in South America. Stanford, Calif.: Stanford University Press.
- Fish, Steven. 2005. Democracy Derailed in Russia: The Failure of Open Politics. Cambridge: Cambridge University Press.
- Fox, Jonathan. 1994. "Latin America's Emerging Local Politics." *Journal of Democracy* 5, no. 2: 105–16.
- Gélineau, François, and Sébastien Dubé. 2005. "Bringing the Legislators Back In: The Political Determinants of Intergovernmental Transfers in Argentina, 1983–2001." Paper presented at the annual meeting of the American Political Science Association, Washington, D.C., September 1–4.
- Gélineau, François, and Karen Remmer. 2005. "Political Decentralization and Electoral Accountability: The Argentine Experience 1983–2001." *British Journal of Political Science* 36, no. 1: 133–57.
- Gervasoni, Carlos. 2009. "Fiscal Federalism as a Source of Rents: Subnational Rentier States and Democracy in Argentina." Paper presented at the annual meeting of the American Political Science Association, Toronto, September 3–6.
- Gibson, Edward L. 2005. "Boundary Control: Subnational Authoritarianism in Democratic Countries." *World Politics* 58, no. 1 (October): 101–32.
- ——. 2008. "Subnational Authoritarianism and Territorial Politics: Charting the Theoretical Landscape." Paper presented at the annual meeting of the American Political Science Association, Boston, August 28–31.
- Gibson, Edward, and Ernesto Calvo. 2000. "Federalism and Low-Maintenance Constituencies: Territorial Dimensions of Economic Reform in Argentina." *Studies in Comparative International Development* 35, no. 3: 32–55.
- Gibson, Edward, Ernesto Calvo, and Tulia Falleti. 2004. "Reallocative Federalism: Legislative Overrepresentation and Publics Spending in the Western Hemisphere." In Edward Gibson, ed., *Federalism and Democracy in Latin America*. Baltimore: Johns Hopkins University Press.
- Gimpelson, Vladimir, and Daniel Treisman. 2002. "Fiscal Games and Public Employment. A Theory with Evidence from Russia." World Politics 54, no. 2 (January): 145–83.
- Goldberg, Ellis, Erik Wibbels, and Eric Mvukiyehe. 2008. "Lessons from Strange Cases: Democracy, Development, and the Resource Curse in the U.S. States." *Comparative Political Studies* 41, no. 4–5: 477–514.
- Gordin, Jorge. 2006. "Intergovernmental Fiscal Relations, 'Argentine Style." *Journal of Public Policy* 26, no. 3: 255–77.
- Graham, John, and Jodi Bruhn. 2008. "In Praise of Taxes: The Link between

- Taxation and Good Governance in a First Nations Context." Ottawa: Institute on Governance, Aboriginal Governance Publications.
- Greene, Kenneth. 2007. Why Dominant Parties Lose: Mexico Democratization in Comparative Perspective. New York: Cambridge University Press.
- Griffin, John. 2006. "Electoral Competition and Democratic Responsiveness: A Defense of the Marginality Hypothesis." *Journal of Politics* 68, no. 4: 911–21.
- Hayek, Friedrich. 1944. The Road to Serfdom. London: Routledge and Sons.
- Held, David. 1987. *Models of Democracy*. Stanford, Calif.: Stanford University Press.
- Heller, Patrick. 2000. "Degrees of Democracy: Some Comparative Lessons from India." World Politics 52, no. 4 (July): 484–519.
- Herb, Michael. 2005. "No Representation without Taxation? Rents, Development, and Democracy." *Comparative Politics* 37, no. 3: 297–316.
- Hill, Kim Q. 1994. Democracy in the Fifty States. Lincoln: University of Nebraska Press
- Hobolt, Sara B., and Robert Klemmensen. 2008. "Government Responsiveness and Political Competition in Comparative Perspective." *Comparative Political Studies* 41, no. 3: 309–37.
- Hoffman, Barak, and Clark Gibson. 2005. "Fiscal Governance and Public Services: Evidence from Tanzania and Zambia." Paper presented at the annual meeting of the American Political Science Association, Washington, D.C., September 1–4.
- Hsiao, Cheng. 2003. *Analysis of Panel Data*, 2nd ed. New York: Cambridge University Press.
- Huber, Evelyne, Dietrich Rueschemeyer, and John Stephens. 1993. "The Impact of Economic Development on Democracy." *Journal of Economic Perspectives* 7, no. 3: 71–85.
- Inter-American Development Bank. 1997. Latin America after a Decade of Reform: Economic and Social Progress in Latin America, 1997 Report. Washington D.C.: Inter-American Development Bank.
- Jackman, Robert. 1973. "On the Relation of Economic Development to Democratic Performance." *American Journal of Political Science* 17, no. 3: 611–21.
- Jensen, Nathan, and Leonard Wantchekon. 2002. "Resource Wealth and Political Regimes in Africa." *Comparative Political Studies* 37, no. 7: 816–41.
- Karl, Terry. 1997. *The Paradox of Plenty: Oil Booms and Petro-States.* Berkeley: University of California Press.
- Key, Vladimer O. 1949. Southern Politics in State and Nation. New York: A. A. Knopf.
- Lankina, Tomila V., and Lullit Getachew. 2006. "A Geographic Incremental Theory of Democratization: Territory, Aid, and Democracy in Postcommunist Regions." World Politics 58, no. 4 (July): 536–82.
- Levi, Margaret. 1998. Of Rule and Revenue. Berkeley: University of California Press.
- Levitsky, Steven, and Lucan Way. 2002. "The Rise of Competitive Authoritarianism." *Journal of Democracy* 13, no. 2: 51–65.
- Linz, Juan. 1975. "Totalitarian and Authoritarian Regimes." In Fred Greenstein and Nelson Polsby, eds., *Handbook of Political Science*, vol. 3. Reading, Mass.: Addison-Wesley Publishing Company.

- ——.1994. "Presidential or Parliamentary Democracy: Does It Make a Difference?" In Juan Linz and Arturo Valenzuela, eds., *The Failure of Presidential Democracy*. Baltimore: Johns Hopkins University Press.
- Lipset, Seymour M. 1959. "Some Social Requisites of Democracy: Economic Development and Political Legitimacy." *American Political Science Review* 53, no. 1: 69–105.
- Luciani, Giacomo. 1990. "The Rentier State in the Arab World." In Giacomo Luciani, ed., *The Arab State*. London: Routledge.
- McMann, Kelly. 2006. Economic Autonomy and Democracy: Hybrid Regimes in Russia and Kyrgyzstan. New York: Cambridge University Press.
- McMann, Kelly, and Nikolai Petrov. 2000. "A Survey of Democracy in Russia's Regions." *Post–Soviet Geography and Economics* 41, no. 3: 155–82.
- Ministerio de Economía y Producción. 2006. Esquema de Ahorro Inversión Financiamiento (en Valores Constantes), at http://www.mecon.gov.ar/hacienda/dncfp/esquema\_ahorro/esquema\_ahorro.htm. Accessed November 8, 2006.
- Mochkofsky, Graciela. 2003. "El Feudo Austral: Santa Cruz." *La Nación* (Enfoques supplement). January 26: 1.
- Montero, Alfred. 2007. "Uneven Democracy? Subnational Authoritarianism in Democratic Brazil." Paper presented at the meeting of the Latin American Studies Association, Montreal, September 5–7.
- Moore, Barrington, Jr. 1966. Social Origins of Dictatorship and Democracy: Lord and Peasant in the Making of the Modern World. Boston: Beacon Press.
- Moore, Mick. 2004. "Revenues, State Formation, and the Quality of Governance in Developing Countries." *International Political Science Review* 25, no. 3: 297–319.
- Morrison, Kevin. 2009. "Oil, Nontax Revenue, and the Redistributional Foundations of Regime Stability." *International Organization* 63, no. 1: 107–38.
- Nikiforuk, Andrew. 2008. *Tar Sands: Dirty Oil and the Future of a Continent*. Vancouver: Greystone Books.
- O'Donnell, Guillermo. 1993. "On the State, Democratization and Some Conceptual Problems: A Latin American View with Glances at Some Post-Communist Countries." *World Development* 21, no. 8: 1355–69.
- Porto, Alberto. 2004. "Etapas de la Coparticipación Federal de Impuestos: Un Análisis Crítico." In Alberto Porto, dir., *Disparidades Regionales y Federalismo Fiscal*. [Regional Disparities and Fiscal Federalism.] La Plata: Editorial de la Universidad de La Plata.
- Przeworski, Adam. 1991. Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America. Cambridge: Cambridge University Press.
- Przeworski, Adam, and Fernando Limongi. 1997. "Modernization: Theory and Facts." World Politics 49, no. 2: 155-83.
- Putnam, Robert. 1993. Making Democracy Work: Civic Traditions in Modern Italy. Princeton: Princeton University Press.
- Remmer, Karen. 2007. "The Political Economy of Patronage: Expenditure Patterns in the Argentine Provinces, 1983–2003." *Journal of Politics* 69, no. 2: 363–77
- Remmer, Karen, and François Gélineau. 2003. "Subnational Electoral Choice: Economic and Referendum Voting in Argentina, 1983–1999." *Comparative Political Studies* 36, no. 7: 801–21.

- Remmer, Karen, and Erik Wibbels. 2000. "The Subnational Politics of Economic Adjustment: Provincial Politics and Fiscal Performance in Argentina." *Comparative Political Studies* 33, no. 4: 419–51.
- Rodden, Jonathan, and Erik Wibbels. 2002. "Beyond the Fiction of Federalism. Macroeconomic Management in Multitiered Systems." *World Politics* 54, no. 4 (July): 494–31.
- Ross, Michael L. 2001. "Does Oil Hinder Democracy?" World Politics 53, no. 3 (April): 325–61.
- Ruiz, Fernando. 2009. "Indicadores de Periodismo y Democracia en América Latina." Número 11. CADAL y Universidad Austral, at http://www.cadal.org/informes/nota.asp?id nota=3008.
- Samuels, David, and Richard Snyder. 2001. "The Value of a Vote: Malapportionment in Comparative Perspective." *British Journal of Political Science* 31, no. 4: 651–71.
- Sartori, Giovanni. 1987. The Theory of Democracy Revisited. Chatham, N.J.: Chatham House Publishers.
- Schedler, Andreas. 2005. "Patterns of Interparty Competition in Electoral Autocracies." Documentos de Trabajo. División de Estudios Políticos, 173. Mexico, D.F.: Centro de Investigación y Docencia Económicas.
- ——. 2006. "The Logic of Electoral Authoritarianism." In Andreas Schedler, ed., Electoral Authoritarianism: The Dynamics of Unfree Competition. Boulder, Colo.: Lynne Rienner.
- Smith, Alastair. 2008. "The Perils of Unearned Income." *Journal of Politics* 70, no. 3: 780–93.
- Smith, Benjamin. 2002. "Oil Wealth and Regime Survival in the Developing World, 1960–1999." *American Journal of Political Science* 48, no. 2: 232–46.
- Snyder, Richard. 1999. "After the State Withdraws: Neoliberalism and Subnational Authoritarian Regimes in Mexico." In Wayne Cornelius, Todd Eisenstadt, and Jane Hindley, eds., *Subnational Politics and Democratization in Mexico*. La Jolla: Center for U.S.-Mexican Studies, University of California, San Diego.
- Therkildsen, Ole. 2002. "Keeping the State Accountable: Is Aid No Better than Oil?" IDS Bulletin 33, no. 3: 41-49.
- Tommasi, Mariano, Sebastián Saiegh, and Pablo Sanguinetti. 2001. "Fiscal Federalism in Argentina: Policies, Politics and Institutional Reform." *Economía* 1 (Spring): 157–211.
- Trocello, Gloria. 2008. La Manufactura de "Ciudadanos Siervos": Cultura Política y Regímenes Neopatrimonialistas [The Manufacture of "Citizen Serfs": Political Culture and Neopatrimonial Regimes]. San Luis: Nueva Editorial Universitaria-Universidad Nacional de San Luis.
- Ulfelder, Jay. 2007. "Natural-Resource Wealth and the Survival of Autocracy." *Comparative Political Studies* 40, no. 8: 995–1018.
- Vanhanen, Tatu. 2000. "A New Dataset for Measuring Democracy, 1810–1998." *Journal of Peace Research* 37, no. 2: 251–65.
- Wibbels, Érik. 2005. Federalism and the Market: Intergovernmental Conflict and Economic Reform in the Developing World. New York: Cambridge University Press.

- Wilson, Sven, and Daniel Butler. 2007. "A Lot More to Do: The Sensitivity of Time-Series Cross-Section Analyses to Simple Alternative Specifications." *Political Analysis* 15, no. 2: 101–23.
- Wiñazki, Miguel. 1995. El Último Feudo. San Luis y el Caudillismo de los Rodríguez Saá [The Last Fiefdom: San Luis and the Bossism of the Rodríguez Saá]. Buenos Aires: Ediciones Temas de Hoy.
- Zakaria, Fareed. 1997. "The Rise of Illiberal Democracy." Foreign Affairs 76 (November–December): 22–41.
- Zorn, Christopher. 2001. "Generalized Estimating Equation Models for Correlated Data: A Review with Applications." *American Journal of Political Science* 45, no. 2: 470–90.