THE REDISTRIBUTIVE EFFECTS OF CENTRALIZATION AND DECENTRALIZATION ACROSS SUBNATIONAL UNITS

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Abstract: Several scholars have argued that decentralization benefits states and munici-palities, granting them more autonomy for managing their budgets and more resources to deliver their services. Others have questioned this assertion, claiming that decentraliza-tion makes subnational units more fiscally dependent on central governments. This arti-cle argues that the fiscal impact of decentralization must be differentiated across states. It theoretically specifies and empirically demonstrates which states benefit during periods of decentralization and centralization. It argues that powerful presidents who centralize resources have imposed greater costs on more developed and fiscally independent dis-tricts (which prefer to administer their own resources and can be serious challengers to presidential power), thus relying mainly on support from less developed and more fiscally dependent provinces, which prefer more redistribution. I present empirical evidence for Argentina (1983–2004), a developing federation with strong governors and high cross-regional inequality, and discuss some implications for comparative studies on the topic.

Do all provinces or states benefit from periods of decentralization? Do all sub-national units bear the same costs during times of centralization? If not, which ones are benefited or affected the most? The answers to those questions, I argue, depend on the coalitions that are built between presidents and governors to pass centralizing or decentralizing reforms. Partisan and structural divisions among subnational units affect these coalitions.

Several scholars have argued that decentralization policies benefit subnational units by granting them more autonomy and leverage in managing their budgets and more resources to deliver (more efficiently than the central government) the services for which they are responsible (Tiebout 1956; Musgrave 1959; Oates 1977), by limiting the intervention of the central government in the economy (Bren-nan and Buchanan 1980), and by making markets more competitive and efficient (Weingast 1995; for a review, see Rodden 2006, 16–19; Treisman 2007, 11–15).

Others have questioned these assertions, raising concerns about the (across-the-board) benefits of decentralization, claiming that it can make subnational units more fiscally dependent on and vulnerable to central governments (Rondinelli, Nellis, and Cheema 1983; Prud'homme 1995; Bird, Freund, and Wallich 1995; Falleti 2003) or create negative consequences for fiscal stability, administrative efficiency, and economic growth (Remmer and Wibbels 2000; Treisman 2000; Tommasi, Saiegh, and Sanguinetti 2001; Rodden and Wibbels 2002; Rodden, Eskeland, and Litvack 2003).

This article aims to move this debate one step forward, arguing that we have to differentiate the fiscal impact of decentralization policies across subnational units. As Gibson, Calvo, and Falleti (2004, 247) claim, "[a] perspective that explains centralization (or decentralization) in federal systems exclusively as an outcome of conflicts between actors defined as a 'central government' and 'the subnational governments' obscures the enormous impact that these outcomes have for the balance of power between the subnational units of a federation." The core contribution of this study is that it theoretically specifies and empirically demonstrates which provinces benefit in fiscal terms and which bear greater costs when presidents centralize or decentralize. The main argument is that powerful presidents who centralize resources have tended to impose greater costs on more developed and fiscally independent districts (those with more contributive capacity), which can also be more serious challengers to presidential power. Centralizing presidents build political support for these reforms by relying mainly on less developed provinces, which prefer more redistribution and are more fiscally dependent on the central government; presidents impose fewer costs on these provinces and compensate them more widely.

Decentralization policies have three main dimensions: political, fiscal, and administrative.[1] In this study, I focus only on fiscal decentralization because this dimension has the greatest variation across time and across subnational units,[2] and because comparable fiscal data are available for a relatively long period of time. When I refer to the "benefits" that provinces receive, I am referring to the net amount of fiscal transfers (or the share of total transfers) they receive at a particular moment in time, controlling for inflation, the amount of revenue they can collect autonomously, and the services they have to deliver.

I develop this argument and present empirical evidence for Argentina, a federal country with high cross-regional economic inequality, provinces with diverse factor endowments (Wibbels 2005a, 172), and some of the strongest governors in Latin America.[3] This makes Argentina a relevant study case for exploring the dynamics of distributive struggles among units of the federation.

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1. Fiscal decentralization is the transfer of fiscal resources and the possibility of counting on subnational funds, raised subnationally or transferred from the central government, to manage a budget (Montero and Samuels 2004, 7). Administrative decentralization is the transfer of administrative powers to deliver services and the capabilities to decide which institutional structures support those services. Political decentralization is the establishment or reestablishment of democratically elected subnational governments (Willis, Garman, and Haggard 1999, 8; Falleti 2003, 2005).

2. The other two dimensions of decentralization do not experience enough variation (administrative) or do not change at all (political) for the case analyzed here during the period under study.

3. Factor endowments are "the underlying attributes (population, geography, soil, rainfall, temperature, etc.) that figure centrally in the nature of economic production in a region. These factoral characteristics are assumed to fundamentally inform the interests of elites" (Wibbels 2005a, 166).

I briefly analyze the state of research in the following section. On the basis of some limitations in the literature, I then put forward my main theoretical claims, together with the hypothesis and the alternative arguments. In the third section, I present empirical results based on data from Argentina from its transition to democracy in 1983 to 2004, and I analyze some key historical events during that period. To finish, I present some conclusions and discuss the comparative implications of the study.

STATE OF RESEARCH

Some of the literature on this topic has, in general, assumed that provinces and states are relatively homogeneous units, both politically and structurally. As Wibbels (2005b, 9) claims, "Much of the existing research on federalism is focused on relations between central governments and the regions *as a whole*, despite the fact that regions within federations vary significantly in their political interests." Hence, when presidents transfer funds, they give resources to an "average" subnational unit.[4] In this article, I argue that we need to disaggregate provinces according to a structural (and a partisan) dimension in order to give more precision to our understanding of the relations (and tensions) between provinces and the federal government.

The literature on centralizing reforms in federal countries has stressed the role of leadership (Samuels and Mainwaring 2004), political institutions' support of presidential authority and executives' reform attempts (Willis, Garman, and Haggard 1999; Garman, Haggard, and Willis 2001), fiscal crises and the weakening of subnational leaders (Abrucio 1998), the concentration of (legislative) powers in hands of the federal executive (to pass legislative reforms in general) (Figueiredo and Limongi, 2000), and the historical struggles between presidents and governors (Díaz-Cayeros 2006). Wibbels (2005a, 164) argues that some studies have noted the importance of coalitions (in his study at the time of the constitution's formation), but rarely are those coalitions explicitly identified as regional or geographic in nature. Gibson (1997) and Gibson and Calvo (2000, 32) include a regional dynamic to their argument when they claim, "Structural reforms were concentrated primarily on economically developed regions of the country, while public spending and patronage in economically marginal but politically overrepresented regions sustained support for the governing party." Despite their contributions, no work has, to my knowledge, brought into the analysis the role of coalition building at the subnational level according to regional leaders' preferences regarding centralization and redistribution.[5] Here, I argue that provincial leaders do not have identical preferences regarding centralization and decentralization and that these differences are crucial for understanding reform coalitions.

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4. O'Neill's (2003, 2005) work, for instance, can be considered a partial exception to this.

5. In economics, several authors have studied the political incentives of countries to unite or separate (for a review, see Bolton and Roland 1996). These authors explore the effects of individuals' income and their intensity of preference for redistribution over fiscal policies across countries and the political costs of unification.

Several analyses examine the distribution of resources among provinces in Argentina and the fiscal implications of that distribution (Núñez Miñana and Porto 1983; Cetrángolo and Jiménez 1995, 1996, and 2004; Jones, Sanguinetti, and Tommasi 2000; Tommasi, Saiegh, and Sanguinetti 2001; Tommasi 2002; Porto 2003b). Others have addressed this specific issue from a historical perspective, describing processes that led to transfers or to the centralization of resources and services (Pírez 1986; Chiaramonte 1993; Porto 2003a, 2004; Eaton 2001, 2004; Cetrángolo and Jiménez 1995, 1996; Llach 2007). Despite their relevance, there is still little in these works about the main factors that affect the distribution of funds among provinces.

More recent efforts in this line of research include the work of Gibson, Calvo, and Falleti (2004, 174) and Porto and Sanguinetti (2001). These authors analyze the impact of provincial overrepresentation in the federal congress on the territorial distribution of grants and public spending by the federal government. Territorial overrepresentation (a relatively time-invariant variable) seems to account for some general patterns in the distribution of public spending across states or for explaining comparative statics (Thelen and Steimo 1992). However, static (time-invariant) institutional variables cannot explain changes over time in the distribution of funds across and within states. We still need more dynamic factors that account for these changes. I concentrate on the exchanges between federal and provincial executives to do this.[6]

Calvo and Murillo (2005) found that territorial overrepresentation has an impact on the provincial expenditure share financed by the federal government and the relative revenue-sharing ratio. But they went beyond this conclusion and included a more dynamic variable: the parties' share of the votes in each province. They found that "Peronist controlled provinces received higher levels of federal funding for their local expenditures and a larger share of revenue-shared resources than those controlled by the representatives of the [Unión Cívica Radical–Frente País Solidario] Alianza" (Calvo and Murillo 2005, 217). Despite their contributions, some questions raised by this work still remain unanswered; for example, have all provinces ruled by the president's coalition party received the same proportion of transfers? The previously mentioned argument does not take into consideration structural differences among provinces, but there may be theoretical reasons to include this dimension.

PRESIDENTIAL AND GUBERNATORIAL PREFERENCES

Presidents want to stay in power and increase the power they have; they want to be reelected if possible (if not, they want to appoint their preferred presidential candidates) and to gain prestige as well as public support. To do that and to implement their reform agenda, they need to construct political support and

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6. I also indirectly explore the role of legislative politics by including overrepresentation in the Chamber of Deputies in the empirical analysis. To explore voters' and interest groups' preferences in the formation of policy decisions, see Persson and Tabellini (2000, chapters 6–7).

governing coalitions. Presidents can mobilize legislators and governors to gain their political support by delivering collective or selective incentives (Panebianco 1988). Although I recognize the relevance of ideology or partisan identity and ideas in mobilizing support, I focus here on the distribution of material goods—fiscal resources, to be more precise—as selective incentives to activate supporters and craft political coalitions.

Governors want to fulfill the functions they are responsible for, be reelected (if that is constitutionally possible), and further their political careers. They compete with presidents over access to public funds and try to make the most of the relationship between resources from the national coffers and the functions for which they are responsible. To accomplish their goals, fulfill their functions, and advance their careers, governors, in general, want more resources. But governors may have different preferences on how to gain access to those resources. These preferences depend on their districts' structural characteristics, such as taxing capacity, fiscal autonomy, and main economic activities. Provincial executives from more developed states with greater taxing capacity prefer to tax and administer their own wealth rather than having a central government in charge of collecting and distributing it to other subnational units (for a similar claim, see Beramendi 2007, 785).[7] They would prefer a relatively weak central government to prevent redistribution to less developed regions.[8] They also benefit from a weaker central government, because they may have more leverage and influence in extracting resources (as well as other privileges or concessions) from the government on a one-to-one basis. On the contrary, less developed and more fiscally dependent provinces prefer a central government capable of extracting resources from richer districts and redistributing wealth to them.[9] They prefer subnational units with less fiscal authority in relation to tax collection (rather than spending, an area in which they would rather have more leeway), to prevent stronger units from having greater autonomy.[10]

7. I decided to include tax autonomy (or authority) in this discussion to stress why less developed provinces do not have it as a first-order preference, as the more developed provinces do. This discussion has implications for provincial preferences in the centralization of the federal government. In the empirical analysis, though, I focus only on the distribution of fiscal transfers for the reasons mentioned in the beginning of this article.

8. Some economists claim that, in Argentina, governors do not want taxing powers because they are not willing to assume the political cost of collecting taxes (Ávila 2006). These economists argue that all governors prefer transfers to collecting their own revenues. However, this argument misses an important point, which is how favorable governors are to redistribution. I argue that they have very different preferences according to the structural conditions of their districts. Therefore, some governors still prefer to administer their own wealth, despite the costs of doing it, rather than finance other districts' budgets.

9. In Wibbels's (2005a, 169) words, "the distribution of wealth across regions . . . influences the degree to which there are regional demands for redistribution."

10. For Gibson and Falleti (2004, 227, 230–231), once the Argentine federation was created, and "having first experienced subordination to Buenos Aires province . . . [,] coalitions of weaker provinces fought for a strong and autonomous central government to check the union's most powerful province. . . . Buenos Aires, on the other hand, . . . advocated peripheralization (i.e., decentralization) when faced with the prospect of a central government with autonomous powers." Eaton (2004, 85) makes an identical claim. For a similar argument applied to the Brazilian case, see Carvalho (1993, 63); Rezende (2001); Souza (1997, 71–72, 80–82).

STRATEGIES OF EXECUTIVES

Having established the main actors' preferences, in this section I discuss the different strategies presidents and governors would develop in situations of fiscal centralization or decentralization. There are theoretical reasons to expect that when presidents centralize, they do not impose equal costs on all provinces. If presidents have to make the political decision to curtail funds allocated to subnational units, they would rather reduce transfers to those provinces with a greater share of provincial resources in relation to federal transfers and to those ruled by strong opposition governors. I expect this to be the case for two main reasons. The first one is structural: more developed and fiscally autonomous provinces oppose centralization (they prefer decentralization and fiscal autonomy). But presidents may count on support from provinces with poor factor endowments, few taxable resources, and more fiscal dependency on the central government, if they promise redistribution. Less developed provinces may also support centralization if revenues are extracted mainly from more developed and fiscally independent units. These more developed districts have more fiscal (or contributive) capacity for coping with reductions. Presidents would rather not impose substantial reductions in funds on poorer provinces, which tend to struggle to cope with their spending needs. If presidents impose large costs on those provinces, they may trigger protests; social turmoil may escalate and eventually demand more costly federal action. Furthermore, less developed and more fiscally dependent districts face greater costs than the richer districts if they decide to oppose the central government.

The second reason is based on a double political motivation. On the one hand, strong opposition governors from large and relatively developed states can be potential challengers to presidents, and federal executives may prefer to have them under their control. Presidents can count on support from less developed districts in this regard. On the other hand, we can expect that presidents prefer loyal governors not to pay large costs for diminishing federal transfers (as they would rather keep them within their coalition of supporters).

I assume that two crucial conditions for a decentralization process are a weak president and a profound fiscal crisis.[11] When presidents are weak and governors are powerful, and when fiscal crises pressure subnational executives, governors are more likely to press the central government to increase transfers (González 2008). All governors have incentives to access more resources. However, not all of them have the same capacity to extract those resources from the central government (i.e., extractive capacity). Governors from more populated, developed, and fiscally autonomous provinces may have a greater ability to influence decisions by the president. These governors control a greater share of votes and are economic powers in the federation. Moreover, the costs they face in cases of conflict with the central government are lower than costs for more dependent and less developed districts.

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11. A critical motivation for governors to change the distribution of resources is solving their collective action problems and coordinating against the central government.

Finally, not all governors have the same motivation to extract resources from the central government's coffers. Opposition governors have more incentives to obtain funds from national authorities with fewer concerns about the central government's fiscal capacity to attend to their demands. Hence, strong opposition governors from more populated, developed, and fiscally autonomous provinces are more likely to receive more resources from the central government when the president is politically weak and the fiscal context is unfavorable.

Main Hypothesis

The main hypothesis is that, during centralizing reforms, presidents impose greater costs on and reduce transfers to more developed and populated provinces that have a greater share of provincial resources in relation to federal transfers (those with more contributive capacity) and to those ruled by strong opposition governors. Presidents are more likely to build political support for centralizing reforms by relying mainly on less developed and more fiscally dependent provinces. These districts would support a stronger central government if there were more redistribution. They would be more likely to receive more redistributive and compensatory resources and to face lower costs with respect to centralizing reforms. The underlying political and fiscal conditions for these reforms are a strong president, weaker governors, and a fiscal crisis.

Under decentralization, strong opposition governors from more developed, populated, and fiscally autonomous provinces (those with more extractive capacity) are more likely to receive more resources from the central government. The conditions for these reforms taking place are powerful governors, weaker presidents, and critical fiscal contexts.

Main Variables

The main dependent variable is the total transfers from the central government to the provinces. Total transfers are divided into legally mandated funds regulated by the coparticipation law[12] and other legally mandated transfers from the central government.[13] Second, I include transfers made from the central gov-

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12. In Argentina, the core of legally mandated transfers is allocated through the coparticipation law, which determines the taxes that go into the common pool of resources to be shared by the national government and the provinces, the percentage distribution of those resources between the central government and the provinces (primary distribution), and the criteria for determining the percentage share of each provincial portion of the primary distribution (secondary distribution) (Jones, Sanguinetti, and Tommasi 2000, 308). After the 1935 law, the main criterion for distribution among provinces was population. The 1988 reform introduced provincial coefficients for secondary distribution based on the percentages that provinces received during previous years and some distributive notions negotiated ad hoc among provinces. This law has been modified by several others that add complexity to the system (Porto 2003a, 52). Coparticipation transfers are crucial for most provinces, as they represent an average of 69 percent of all federal transfers (1983–2004), 42 percent of total provincial tax revenue, and 35 percent of total provincial revenues.

13. Some of the most important are the revenues collected from gas taxes shared with the provinces (to finance housing and infrastructure) and revenues shared from specific taxes not included in co-

ernment through federal ministries, which are not regulated by specific laws (other than the approved budget law for the year).[14] Third, I incorporate discretionary transfers from the federal executive to the provinces (called contributions from the National Treasury, or Aportes del Tesoro Nacional, ATNs).[15] Transfers are reported in thousands of pesos, constant values (according to the Combined Price Index, base year 1994 = 1). Presidents have different degrees of discretion in distributing funds (Bonvecchi and Lodola 2011): legally mandated transfers are more difficult to manipulate, and presidents need congressional approval if they want to alter them. Discretionary transfers can be easily manipulated, and transfers from the federal government through its ministries fall somewhat in between. Finally, I also take into account the total share of expenditures at the subnational level in relation to the total expenditures of the government. This is a commonly used indicator to measure fiscal transfers or fiscal decentralization (Escobar-Lemmon 2001, 32; Rodden 2006, 27).

The key independent variables are the partisan powers of the president and the governors. To measure the partisan powers of the president, I use Coppedge and Mejía's (2001) index of partisan powers.[16] To determine the partisan power of governors, I constructed an original index composed by two main dimensions: (1) the power of governors in their districts, which includes electoral support (share of votes) for the governor in the province and the degree of legislative control the governor has over the province (coded as 1 where the main party in the legislature and the party of the governor are the same; coded as 0 otherwise), as well as the governor's party share of seats in the state legislature; and (2) the influence governors can exert over the federal government, or how politically linked governors are to the federal government. Here, I include a dummy variable for cases in which presidents and governors are in the same governing coalition (coded as 1 where they are politically allied and 0 otherwise). The index is a composite measure of the aforementioned shares and dummies.[17]

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participation revenues to finance decentralized services. On average, these transfers represent more than a third of total federal transfers, 18 percent of total provincial tax revenue, and 15 percent of total provincial revenue (1983–2004).

14. In Argentina, the federal executive can reallocate budget items approved by Congress, making use of the so-called executive extraordinary powers. Initially created as an extraordinary measure, President Kirchner reformed article 37 of the Financial Administration Law (No. 24,156) in August 2006 to institutionalize this controversial law.

15. The president can allocate ATNs at his or her discretion in deciding the amount and destination of the funds. The ATN fund was created out of 1 percent of total coparticipation funds, as regulated by the 1988 coparticipation law, but later reforms increased this amount (Cetrángolo and Jiménez 1997, 16). The ATNs represented an average of 11 percent of coparticipation transfers for the period 1985–2004. After the 1988 law (and until 2004), discretionary transfers represented an average of 1.28 percent of coparticipation transfers (data from the National Direction for Fiscal Coordination with the Provinces, Ministry of Economy).

16. Coppedge and Mejía (2001, 7) calculate partisan powers taking into account the percentage of congressional seats that the president can count on (including the size of the president's party or coalition and party discipline) to vote in favor of his or her typical bill. The values this can take vary from 0 to 1; observed values range between .6 and .87, with a mean value of .76 and a standard deviation of .099.

17. These dummies contribute .5 points to the index when coded as 1, to balance the effect of each measure. I assume that the following factors all weigh equally in the index: a 50 percent share of votes received by the governor; a 50 percent share of the seats in the state legislative body controlled by the

The third independent variable is the fiscal balance of the national government—total income minus total expenditure, as a percentage of gross domestic product; data from the Economic Commission for Latin America and the Caribbean (CEPAL/ECLAC 1997, 2005) (values range between –7 and 3.6; mean value = –2.02; standard deviation = 2.69)—and the fiscal balance of each province (difference between total income and total spending, as reported by the Ministry of Economy; I use a dummy for provincial fiscal deficits, coded as 1 in the case of deficits and 0 otherwise). Changes in federal transfers do not seem to be empirically associated with fiscal deficits.[18] Despite this, I also include changes in income per capita to test the argument with a measure of economic performance in which transfers are not a part.

In structural terms, we can classify districts according to their demography, development level, factor endowments, and fiscal capacity. Here, I use a series of control variables: population, per capita income, poverty, provincial tax revenue as a share of total provincial revenues, and federal transfers as a share of total provincial revenues. I construct a simplified classification of provinces according to their structural characteristics. First, I divide the federation into two main regions, similar to Gibson (1997) and Gibson and Calvo (2000). I labeled these "Central Pampas" and "less developed interior provinces."[19] I include dummy variables for each of these two categories and for the different regions of the country.[20] In a second step, I classify provinces on a continuum according to the values they take on a series of key variables (I replace proper names with variables; Przeworski and Teune 1970): population, fiscal capacity, and development level. In the partisan dimension, governors can be either from the president's governing party (or coalition) or from the opposition.[21]

Alternative Models

According to the legal determinants (of the coparticipation law), we should expect more transfers, especially legally mandated ones, the larger the population, the lower the district's average income per capita (legal determinants model), and the larger the number of poor people in the province (redistributive model).

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governor's party; whether the main party in the legislature is the party of the governor; and whether the president and governor are in the same governing coalition. The maximum possible value in this variable is 3 and the minimum is 0; the minimum observed value is .6, the maximum is 2.7, the mean is 1.78, and the standard deviation is .39.

18. Pairwise correlations between transfers and national or provincial deficits (as percentage of gross domestic product) are very low: –0.079 and –0.032, respectively.

19. The Central Pampas region includes the provinces of Buenos Aires, Córdoba, Santa Fe, and the federal capital. The less developed interior provinces include the other twenty provinces. I avoid calling them metropolitan or peripheral, as I consider *periphery* a controversial term. Leaving pejorative implications aside, Entre Ríos (and perhaps San Luis, La Pampa, or Tucumán) could arguably be considered part of several regions.

20. Coded 1 for the Pampas, 2 for the Northeast, 3 for Cuyo, 4 for the Northwest, 5 for Mesopotamia, and 6 for Patagonia.

21. Another theoretical possibility is for a state or province to be neutral, but in reality no cases are included in this third category.

Some scholars have claimed that more overrepresented provinces are more likely to receive more funds (Gibson and Calvo 2000; Porto and Sanguinetti 2001; Samuels and Snyder 2001a, 2001b; Snyder and Samuels 2004; Gibson, Calvo, and Falleti 2004; Calvo and Murillo 2005). This is so because the costs for presidents of gaining support in Congress from those districts are lower in terms of the returns on each peso transferred than in larger districts (Gibson 1997). To examine institutional arguments, I use the degree of overrepresentation of each district as measured by Calvo and Murillo (2005) (values range between .64 and 19.12; mean value = 1.96; standard deviation = 2.19). More overrepresented districts should receive more fiscal transfers (static institutional model).

Presidents may also transfer more money during election years to forge electoral support during their campaigns. If that is the case, we should expect transfers to increase during election years. This argument may be inserted into a broader literature on the relation between elections and increases in public spending (Nordhaus 1975, Rogoff 1990; for Brazil, see Ferreira and Bugarin 2007; for Argentina, see Jones, Sanguinetti, and Tommasi 2000). I account for electoral arguments by including a dummy variable for electoral years (electoral model).

METHOD AND RESULTS

I test the effects of the different models first by using ordinary-least-squares (OLS) regressions. Second, because the data are cross-sectional and time serial, I also perform a regression taking into consideration random and fixed effects by generalized least squares (GLS) to correct for heteroskedasticity. With time series it is also sensible to execute a first-order autocorrelation correction. I run a Prais-Winsten regression—iterated estimates—to correct for first-order autoregressive errors. Finally, to avoid overconfidence in the standard errors using GLS, I perform an OLS regression with panel-corrected standard errors (Beck and Katz 1995).

Tables 1 to 4 display regression results. The empirical evidence seems to support the main theoretical claims. Powerful presidents have tended to reduce transfers to all provinces (models 1–4), which confirms previous findings (González 2008).[22] However, empirical results seem to confirm our theoretical expectations that centralizing presidents have not imposed equal costs on all provinces. As anticipated, they have imposed greater costs on governors from more developed, economically complex, and less fiscally dependent districts (i.e., districts with larger contributive capacity). First, I separate provinces into the central pampas and the less developed interior districts. Results indicate that for a 1 percent increase in their partisan power, federal executives tended to reduce more transfers to relatively more developed and populated provinces (1.03 percent versus 0.75 percent; models 5 and 6). In addition, presidents seem to have redistributed discretionary funds and selectively compensated provinces for reductions in federal transfers.

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22. In model 3, the dependent variable is the expenditure share of subnational units. Because the variation in the dependent variable ranges between 0 and 1, I transformed it to a log ratio. Coefficients are robust and significant at $p = .001$; therefore, substantive results hold.

Table 1 Regression Results for Total Federal Transfers and Expenditure Share

Variables	Model 1 Total federal transfers (ln)	Model 2 Total federal transfers (ln)	Model 3 Expenditure share	Model 4 Total federal transfers (ln)
Partisan powers of the president (ln)	−.575*** (.189)	−.996*** (.275)	−3.27*** (.388)	−.627*** (.247)
Partisan powers of governors (ln)	.317*** (.078)	.158** (.066)	3.72*** (.929)	—
National deficit (continuum; lagged)	.065*** (.010)	—	—	.014 (.013)
Partisan powers of the president × Deficit (lag)	—	—	—	.094*** (.021)
Population (ln)	.550*** (.016)	.597*** (.024)	−.006 (.033)	.426*** (.020)
Income per capita (ln)	−.088*** (.031)	—	−.033 (.063)	−.298*** (.037)
Change in Income per capita (ln)	—	.017 (.021)	—	—
Constant	6.51*** (.337)	5.97*** (.024)	40.41*** (1.83)	9.52*** (4.10)
R^2	0.89	0.81	0.42	0.78
Adjusted R^2	0.89	0.80	0.40	0.77
N (number of cases)	199	173	119	240

Note: Standard errors in parentheses. In models using natural logarithms (ln = natural log) (also called log-log model, or log-linear models) slope coefficients (ß) measure the elasticity of the dependent variable (Y) with respect to the independent (X). They can be interpreted as the percentage change in the dependent variable (Y) per 1 percent change in the independent variable (X).
*$p < .10$; **$p < .05$; ***$p < .01$ (two-tailed tests).

In doing so, they have benefited less developed provinces in greater proportion than the more developed ones (models 7 and 8).[23]

In a second step, I differentiate provinces by replacing proper names with variables, and results hold. Provinces that are less dependent on federal transfers (models 9 and 10), with greater average income per capita, and that rely more on regionally collected revenues have paid greater costs during periods of centralization. Substantive results also hold for discretionary transfers. Provinces that are less dependent on federal transfers (models 11 and 12), with a greater share of regionally collected revenues, and greater average income per capita have received fewer discretionary transfers per capita during periods of centralization.[24]

Why would presidents centralize overall transfers and compensate less developed provinces using discretionary transfers? One possible answer, drawing on

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23. The R^2 for these latter two regressions is relatively low (11 percent and 21 percent), but it is much larger than the explanatory power of population (4.8 percent), a key predictor of coparticipation transfers.
24. I do not report all the models here in order to simplify the presentation.

Table 2   Regression Results for Total per Capita Federal Transfers and Discretionary Transfers, by Region

Variables	Model 5 Total federal transfers (ln) for Pampas	Model 6 Total federal transfers (ln) for less developed interior	Model 7 Discretionary transfers (ATNs per capita) for Pampas	Model 8 Discretionary transfers (ATNs per capita) for less developed interior
Partisan powers of the president (ln)	−1.039** (.500)	−.750*** (.189)	.171* (.113)	.392** (.198)
National deficit (continuum; lagged)	.136*** (.026)	.074*** (.010)	—	—
Population (ln)	.637*** (.050)	.404*** (.033)	−.037** (.018)	−.265*** (.054)
Income per capita (ln)	−1.473*** (.092)	−.141** (.061)	−.072** (.034)	.065 (.100)
Constant	13.45*** (.956)	8.88*** (.662)	1.09*** (.340)	3.45*** (1.075)
R^2	0.91	0.78	0.15	0.23
Adjusted R^2	0.90	0.77	0.11	0.21
N (number of cases)	50	100	65	130

Note: Standard errors in parentheses.
$*p < .10; **p < .05; ***p < .01$ (two-tailed tests).

the theoretical argument here, is that presidents end up centralizing resources (that is what they prefer in contexts of fiscal crisis) but compensating less developed and more fiscally dependent provinces to gain their support during the reform process. These provinces are more likely to support centralization than are more developed provinces, as long as they receive redistributive transfers in exchange. Moreover, the decision to oppose or conflict with the president is more costly for them than for more fiscally independent districts. Presidents favored less developed provinces by transferring to them discretionary funds that governors could use in an unrestricted manner. Anticipating that they would have to face centralization and possible reductions in transfers, these provincial executives may have preferred compensation that allowed them some discretion in allocating new funds over centralization, no compensation, and conflict with the president.

The partisan dimension appears to be relevant. For a 1 percent increase in their partisan power, presidents tended to reduce more funds to opposition governors than to allied governors (.9 percent versus .6 percent, controlling for population and income per capita; $p < .05$ and $p < .01$, and $R^2 = .60$ and .69, respectively).

Fiscal crises also seem to be important. A one-point increase in the deficit

Table 3 Regression Results for Total Federal Transfers and Discretionary Transfers, by Provincial Fiscal Dependency

Variables	Model 9 Total federal transfers (ln) for more fiscally dependent provinces[a]	Model 10 Total federal transfers (ln) for less fiscally dependent provinces[b]	Model 11 Discretionary transfers (ATNs, per capita) for more fiscally dependent provinces[a]	Model 12 Discretionary transfers (ATNs, per capita) for less fiscally dependent provinces[b]
Partisan powers of the president (ln)	−.652*** (.155)	−.876* (.596)	.584*** (.207)	.322* (.184)
National deficit (lag)	.064*** (.008)	.091*** (.031)	—	—
Population (ln)	.468*** (.038)	.362*** (.038)	−.194*** (.037)	−.072*** (.015)
Income per capita (ln)	−.564*** (.099)	−.095*** (.032)	−.087* (.050)	−.114*** (.439)
Governor-president allied	—	—	−.199*** (.039)	−.011 (.039)
Constant	12.02*** (1.041)	7.78*** (.434)	2.86*** (.676)	1.60*** (.641)
R^2	0.80	0.81	0.28	0.19
Adj. R^2	0.79	0.80	0.27	0.16
N (number of cases)	96	144	182	122

Note: Standard errors in parentheses.
*$p < .10$; **$p < .05$; ***$p < .01$ (two-tailed tests).
[a]More fiscally dependent provinces are those whose transfer dependence is above the mean.
[b]Less fiscally dependent provinces are those whose transfer dependence is below the mean.

measured as a continuous variable (i.e., smaller deficits or larger surpluses) produces a .07 percent increase in overall fiscal transfers (model 1). If we include changes in income per capita as a measure for economic crises, substantive results do not change, although the variable is not statistically significant (model 2). Powerful presidents under fiscal crises have tended to centralize resources and reduce federal transfers. But powerful presidents under fiscal bonanza have been more likely to increase them (model 4). Provincial fiscal crises also seem associated with increases in federal funds. Provinces under fiscal deficits have received .27 percent more total transfers from the central government ($p < .01$, but the adjusted R^2 is low, at .02).

When governors are powerful (and presidents are weak), federal executives have increased (or have been compelled to increase) transfers to subnational units

Table 4 Regression Results for Total Federal Transfers (per Capita), According to Provincial Dependency on Federal Transfers and Own Revenues

Variables	Model 13 Total federal transfers (ln) for less fiscally dependent provinces[a]	Model 14 Total federal transfers (ln) for more fiscally dependent provinces[b]
Partisan powers of governors (ln)	.323***	.056*
	(.097)	(.036)
Population (ln)	.685***	.479***
	(.028)	(.027)
Income per capita (ln)	.381***	−.068*
	(.070)	(.037)
Constant	1.22*	7.43***
	(.701)	(.474)
R^2	0.83	0.73
Adj. R^2	0.83	0.72
N (number of cases)	149	160

Note: Standard errors in parentheses.
*$p < .10$; **$p < .05$; ***$p < .01$ (two-tailed tests).
[a]More fiscally dependent provinces are those whose transfer dependence is above the mean.
[b]Less fiscally dependent provinces are those whose transfer dependence is below the mean.

(models 1 to 3).[25] Despite this, not all governors received the same proportion of transfers when they were powerful. The more favored districts were those ruled by powerful governors from less fiscally dependent provinces (models 13 and 14) and those with a greater share of their own revenues.[26] Weak presidents seem to have had more trouble checking the power of strong governors from central provinces.[27]

Partisan considerations also mattered. On average, allied governors received more transfers than the opposition (.8 versus .4 percent for each percentage-point increase in the partisan power of the governors, controlling for the usual

25. To have a single measure for gubernatorial partisan powers for each year, I calculated the yearly average of the index for all provinces and regressed it to expenditure share. Despite this gross simplification, results seem to confirm theoretical expectations.

26. I do not report all the models to simplify the presentation.

27. It is also less costly for large provinces to run deficits and engage in mismanagement because they can more effectively press the central government to bail them out. Large provinces can threaten the central government with triggering a large national crisis; thus, they may have more power to blackmail federal authorities than smaller districts do. I owe this comment to a reviewer.

variables; $p < .01$; $R^2 = .91$ and .87, respectively). I also checked how relevant the electoral competition in the district was for explaining changes in the dependent variable (Magaloni, Díaz-Cayeros, and Estévez 2007) by including the percentage of the vote that the major opposition party received in the election. This variable is statistically insignificant and moves in the opposite direction than expected. I tested the effect of the incumbent's share of the vote, and this variable was robust and significant, thus supporting the relevance of gubernatorial partisan power.

Some tests were performed to check the robustness of the results. The findings are consistent with the original results, and substantive conclusions do not change when using GLS, Prais-Winsten regression to account for autocorrelation in the data, or OLS regression with panel-corrected standard errors (Beck and Katz 1995).[28]

Results also confirm expectations from the legal determinants model. The variation in total transfers explained by the legal determinants in the coparticipation formula (population and income per capita) is 64 percent. If I include the key variables in the model and control for legal determinants, the explained variation in the dependent variable increases to 89 percent (model 1). In the case of ATNs, population and income per capita explain .5 percent of the variation; including the main variables, this increases to 28 percent (models 11 and 12). Population and income per capita show modest changes across time, and they are poor for accounting for changes in other funds apart from those that are legally transferred.

There is empirical support for some institutional arguments. More overrepresented districts receive more transfers per capita. A one-point increase in the overrepresentation index is associated with a .17 percent increase in per capita federal transfers and a .24 percent increase in per capita discretionary transfers (both significant at $p <. 01$; adjusted $R^2 = .27$ and .14, respectively). Static institutional variables are also poor for accounting for changes across time and within provinces. If the argument is correct, overrepresented provinces should always receive more funds, as any president (strong or weak, in fiscal bonanza or in fiscal crisis) would get "cheap" political support from them. But that does not seem to be the case in the empirical analysis: overrepresented provinces tend to receive more support from centralizing presidents.

Last, there is contradictory evidence regarding transfers during election years. Overall transfers to subnational units (log) increase during electoral contests (beta coefficient $= .12$; $p = .05$; the adjusted R^2 is low, at .005). But discretionary funds appear to diminish under those conditions.

REDISTRIBUTIVE EFFECTS AFTER THE TRANSITION TO DEMOCRACY

In this section, I present a brief historical account on the distributive effects of centralization and decentralization, focusing on periods of significant change in the distribution of fiscal transfers. The key periods I discuss are the decentraliz-

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28. I did not find important problems for multicollinearity. Also, the F-test is significant, and the individual coefficients are relatively large in magnitude and statistically significant.

ing changes implemented during the administration of Raúl Alfonsín in 1988 and the centralizing reforms during Carlos Menem's administration in 1993–1994.

Once the 1973 revenue-sharing law expired in December 1984, no legal framework regulated transfers until 1988. The president and opposition governors disagreed over the taxes to be shared and the percentages that each level of government should receive, and neither of them had enough political resources to pass (or impose) a new law.[29] The federal government distributed tax revenues to the provinces through ATNs, on the basis of ad hoc political negotiations (Pírez 1986, 64–65; Eaton 2004, 146).

Having discretion and some political power, Alfonsín reduced the total expenditure share of subnational units from 39 percent to 29 percent during his first year in office. In doing so, he mainly affected more developed districts, especially Buenos Aires. This province's share of total federal transfers decreased from 26 percent to 18 percent between 1983 and 1985 (see figure 1). For Porto (2003a, 45), Alfonsín "produced a notable redistribution, fundamentally from Buenos Aires . . . to intermediate and developing provinces." Cetrángolo and Jiménez (1996, 14) reach the same conclusion in analyzing the evolution of ATNs: "The more developed [provinces] (fundamentally the Federal Capital and Buenos Aires) lost part of their share in relation to the less developed [provinces]." The federal capital's shares decreased from 5 percent to 2 percent between 1983 and 1985. Córdoba, Santa Fe, and Mendoza suffered less dramatic reductions. On the contrary, less developed provinces increased their total shares from 54 percent to 62 percent during the same period (figure 2).

The political gridlock came to an end after the 1987 legislative and gubernatorial elections. The Partido Justicialista (PJ) gained more representatives and took over additional provincial governments, controlling sixteen governorships (the Radical Party or Unión Cívica Radical, or UCR, and provincial parties each won only in three provinces). The political weakness of the president was combined with a severe fiscal crisis. Under those conditions, opposition governors coordinated against the central government to receive more resources, pressing Congress to approve a new revenue-sharing law in 1988. Through this law (No. 23,548), governors added new taxes to the revenue pool and increased the provincial share of federal revenues to 56.66 percent, the highest since coparticipation was created in 1935.

The provinces that benefited most were those capable of exerting more pressure on the weakened president. Buenos Aires increased its share of total transfers by more than 10 percent in only two years (from 18 percent to 20 percent between 1987 and 1989). Altogether, the four more developed districts increased their share of federal revenues from 37 percent in 1987 to almost 40 percent in 1990.[30] For less developed provinces, this share decreased from 63 percent to 60 percent (reaching 58 percent in 1994) (figures 1 and 2).

29. The Radical president had a slight majority in the Chamber of Deputies, but the Partido Justicialista (PJ) controlled the Senate.

30. Central government spending in more developed provinces increased from 15 percent to 25 percent between 1988 and 1990.
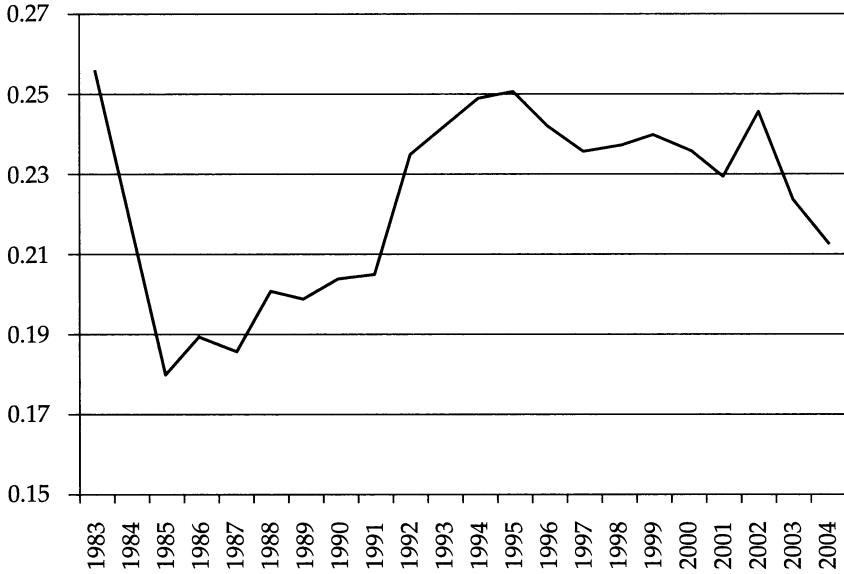
Figure 1 Share of Revenue, Province of Buenos Aires (1983–2004, in Percentages)
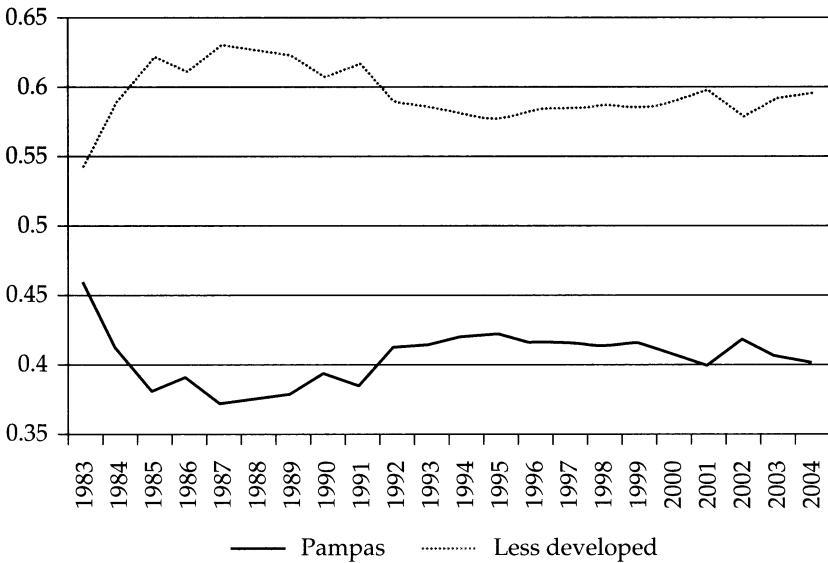*Source:* Author's calculations based on data from DNCFP-Mecon.

Figure 2 Share of Revenue, Central Pampas and Less Developed Provinces (1983–2004, in Percentages)
Source: Author's calculations based on data from DNCFP-Mecon.

Alfonsín abandoned the government six months before the end of the legal mandate. The 1988 coparticipation law was one of several factors that contributed to a chaotic economic and political situation. Menem had a majority in the Senate and controlled the largest delegation in the lower chamber (by constructing majorities with the support of third parties). He also received special powers under the 1989 economic emergency and state reform laws. Despite this and the critical economic and fiscal context in which he assumed office, Menem could not pass a new coparticipation law. But he was powerful enough to negotiate important changes that affected fiscal transfers to the provinces. Menem transferred health and education services to the provinces, compelling them to pay for those services. This reform reduced pressures on the national deficit (Dillinger and Webb 1999, 16–17; Porto 2003a, 53) but seriously affected provinces' fiscal autonomy (Eaton 2004; Falleti 2005). The total cost of the transferred services was $1.2 billion per year (*Diario de Sesiones*, December 5–6, 1991, 5310, 5320) and as established by Law No. 24,049, they were financed with a share of provincial coparticipation funds. Moreover, this law authorized the central government to withdraw 15 percent of the total coparticipation to finance the pension system and $43.8 million per month to distribute among provinces with financial problems (Porto 2003a, 53) (these issues were negotiated during the first fiscal pact, signed on August 12, 1992).

Total transfers to the provinces increased as a result of economic growth and higher tax collection after the 1991 stabilization program (from $14.7 billion in 1990 to $25.1 billion in 1992), and the federal government used that increase during the negotiations. But the decentralization of education and health services demanded a substantial increase in provincial spending, and no new legally mandated transfers to the provinces helped finance these functions. As a result, total provincial spending increased almost 70 percent, from $39.3 billion in 1991, before the decentralization of new functions, to $57 billion in 1994, after the fiscal pacts. The total provincial deficit increased by 220 percent (from $1.2 billion to $6.4 billion between 1992 and 1995) and the provincial debt by 316 percent (from $3.1 billion to $9.8 between 1993 and 1995). In 1991, the provinces could finance 42 percent of their total spending with coparticipation transfers; this share dropped to 27 percent in 1995.

Less developed districts offered support to the president not only because the president imposed smaller adjustment costs to them or because they were cheaper to buy (Gibson and Calvo 2000) but also because they received large redistributive compensations. Menem transferred a large proportion of discretionary funds to the core of less developed northeastern and northwestern provinces: $57 in ATNs per capita each year, compared to $3 per capita transferred to the central provinces.[31] The central government's spending in the provinces followed a similar pattern of distribution: Menem allocated $209 per capita each year to the less developed districts, compared to $18 per capita transferred to the central provinces.

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31. Among the provinces that benefited most was La Rioja (Menem's home province), which received an average of 30 percent of total ATNs during the period 1989–1999, despite having less than 1 percent of the country's total population.

The total share of those transfers to more developed provinces plummeted from 54 percent to 28 percent between 1990 and 1991. Only the northwestern provinces increased this share, from 26 percent in 1988 to 39 percent in 1991.

Governors from less developed provinces were the first to back the presidential initiative to decentralize education and health services without any increase in transfers (Falleti 2003, 146–148). These governors paid a cost (new services to deliver without new funds), but instead of opposing the president and being forced to sign the agreements anyway, they negotiated the transfer of services in exchange for discretionary compensatory resources. This allowed them to have more funds for political purposes in the present, deferring the costs of the reforms and driving their districts to greater imbalances in the longer run.

The more developed provinces opposed the decentralization agreements because they were seriously affected by them. The financial impact of the transfer was greater in the largest province, Buenos Aires: it had 30 percent of all the decentralized schools, and it was compelled to equalize the salaries of former national and provincial teachers (whose wages were lower than those of former national teachers) (Falleti 2003, 149). The governor of this province was the last to sign the agreements with the national government, in December 1993. Later fiscal records may indicate why: total provincial spending in Buenos Aires increased from $9.9 billion in 1991 to $15.5 billion in 1994, the year after implementation of the decentralization process. The fiscal balance went from a $554 million surplus in 1992 to a $587 million deficit in 1994 (even after a compensatory fund that Buenos Aires received to sign the agreement, created by the president in 1992).

CONCLUDING REMARKS

Powerful governors from more developed provinces have had more leverage in negotiations and have faced lower costs when in conflict with the federal executive. Also, presidents have been less able to check their power. All governors have systematically pressed the central government for more resources, but when presidents cannot contain them, the most powerful ones have had more leverage to extract a greater share of revenue.

Nevertheless, powerful presidents in Argentina have tended to centralize fiscal resources when fiscal crises pressured them, imposing cuts on all provinces. But not all of them paid the same costs. Governors from less developed and more fiscally dependent provinces faced lower cuts and received more compensation funds in exchange for the political support they provided to the president's centralizing reforms.

This study has presented some empirical evidence indicating that not only the partisan dimension or the static institutional variables are important in the federal distribution of funds. Structural differences among regions are also crucial because they affect political actors' preferences regarding centralization and decentralization, and because more fiscal dependency increases governors' costs of conflicting with the president. This may be an important issue to consider when studying federations with strong governors, such as Argentina and Brazil. But it may also be relevant in other federal and even some unitary states with elected

subnational politicians (e.g., Colombia, Bolivia) where the central government needs to build territorial support for reforms. Some subnational actors may have preferences aligned to a president willing to strengthen the central government, whereas others may radically oppose these reforms. This study's framework may be valuable as long as regional leaders are elected, and especially in countries with strong regional asymmetries. Therefore, it may help us understand federal dynamics in cases such as Venezuela, despite the recent erosion of governors' autonomy. Subnational preferences based on structural cleavages may be irrelevant only in countries in which the central government has substantial leverage in nominating governors or mayors, such as in recent developments in Russia.

These conclusions may contribute to the debate in other areas of research in which the preferences of democratically elected subnational units and their struggles with the central government affect policy and political outcomes.

APPENDIX: VARIABLE DESCRIPTION AND DATA SOURCES

Dependent variables		Source	Years of coverage
Fiscal transfers from the central government		DNCFP, Mecon. In thousands of pesos, constant values (Combined Price Index, base year 1994 = 1)	1983–2004
Discretionary transfers			
Legally mandated transfers (coparticipation)			
Other transfers			
Expenditure share of subnational governments as a percentage of total expenditures		Cuenta de Inversión and DNCFP, Mecon	1993–2004

Independent variables	Indicator	Source	Years of coverage
Partisan power of the president	Index of presidential partisan powers	Coppedge and Mejía 2001	1983–1998
Partisan power of governors	Index of gubernatorial partisan power	Based on Electoral Data from Ministry of Interior.	1983–2008
Fiscal deficit of the national government	Fiscal balance of national government (total income minus total expenditure)	CEPAL/ECLAC 1997/2005; Cuenta de Inversión, Mecon	1987–2004

Independent variables	Indicator	Source	Years of coverage
Provincial fiscal deficit	Fiscal balance of provinces	DNCFP, Mecon	1983–2004
Territorial over-representation	Share of representatives of province i over share of population of province i	Based on the Calvo and Murillo (2005) Formula; Electoral Data from Ministry of Interior	1983–2008

Control variables	Indicator	Source	Years of coverage
Population	Number of inhabitants	National Census, INDEC, Mecon	1983–2007
Income per capita	Gross geographic product divided by population	INDEC, Mecon	1983–2007
Poverty	Percentage of population with "unsatisfied basic needs"	National Census, INDEC, Mecon	1983–2007
Regions (dummies)	*Central Pampas:* Federal district, Buenos Aires, Córdoba, and Santa Fe. *Less developed interior:* The other 20 provinces.		

Note: DNCFP = Dirección Nacional de Coordinación Fiscal con las Provincias; Mecon = Ministry of Economy.

REFERENCES

Abrucio, Fernando Luiz
  1998   *Os barões da federação: Os governadores e a redemocratização brasileira.* São Paulo: Coleção Comentário, Universidade de São Paulo.
Ávila, Jorge
  2006   "Propuesta de federalismo fiscal." Unpublished manuscript, Universidad del Centro de Estudios Macroeconómicos de Argentina.
Beck, Nathaniel, and Jonathan N. Katz
  1995   "What to Do (and Not to Do) with Time-Series Cross-Section Data." *American Political Science Review* 89 (3): 634–647.
Beramendi, Pablo
  2007   "Inequality and the Territorial Fragmentation of Solidarity." *International Organization* 61: 783–820.
Bird, Richard, Caroline Freund, and Christine Wallich
  1995   "Decentralizing Fiscal Systems in Transition Economies." *Finance and Development* 32 (3): 31–34.
Bolton, Patrick, and Gérard Roland
  1996   "Distributional Conflicts, Factor Mobility, and Political Integration." *American Economic Review* 86 (2): 99–104.
Bonvecchi, Alejandro, and Germán Lodola
  2011   "The Dual Logic of Intergovernmental Transfers: Presidents, Governors, and the Politics of Coalition-Building in Argentina." *Publius: The Journal of Federalism* 41 (2): 179–206.

Brennan, Geoffrey, and James M. Buchanan
  1980   *The Power to Tax: Analytical Foundations of a Fiscal Constitution.* Cambridge: Cambridge University Press.
Calvo, Ernesto, and María Victoria Murillo
  2005   "The New Iron Law of Argentine Politics? Partisanship, Clientelism, and Governability in Contemporary Argentina." In *Argentine Democracy: The Politics of Institutional Weakness,* edited by Steven Levitsky and María Victoria Murillo, 207–226. University Park: Pennsylvania State University Press.
Carvalho, José Murilho de
  1993   "Federalismo y centralización en el Imperio Brasileño: Historia y argumento." In *Federalismos latinoamericanos: México, Brasil, Argentina,* edited by Marcello Carmagnani, 51–80, Mexico City: Fondo de Cultura Económica.
CEPAL/ECLAC (Comisión Económica para América Latina y el Caribe / Economic Commission for Latin America and the Caribbean)
  1997   *Economic Survey of Latin America and the Caribbean, 1996–1997.* Santiago de Chile: Comisión Económica para América Latina y el Caribe.
  2005   *Economic Survey of Latin America and the Caribbean, 2004–2005.* Santiago de Chile: Comisión Económica para América Latina y el Caribe.
Cetrángolo, Oscar, and Juan Pablo Jiménez
  1995   *El conflicto en torno a las relaciones financieras entre la nación y las provincias: Primera parte – Antecedentes de la Ley 23.548.* Serie de Estudios 9. Buenos Aires: Centro de Estudios para el Cambio Estructural.
  1996   *El conflicto en torno a las relaciones financieras entre la nación y las provincias. Segunda parte – Desde la Ley 23.548 hasta la actualidad.* Serie de Estudios 10. Buenos Aires: Centro de Estudios para el Cambio Estructural.
  1997   *Aportes del tesoro nacional: Discrecionalidad en la relación financiera entre la nación y las provincias.* Serie de Estudios 21. Buenos Aires: Centro de Estudios para el Cambio Estructural.
  2004   *Las relaciones entre niveles de gobierno en Argentina: Raíces históricas, instituciones y conflictos persistentes.* Serie Gestión Pública 47. Buenos Aires: Comisión Económica para América Latina.
Chiaramonte, José Carlos
  1993   "El federalismo argentino en la primera mitad del siglo XIX." In *Federalismos latinoamericanos: México, Brasil, Argentina,* edited by Marcello Carmagnani, 81–132. Mexico City: Fondo de Cultura Económica.
Coppedge, Michael, and Andrés Mejía Acosta
  2001   "Political Determinants of Fiscal Discipline in Latin America, 1979–1998." Paper prepared for the Latin American Studies Association Congress, Washington, DC, September 5–8.
Díaz-Cayeros, Alberto
  2006   *Federalism, Fiscal Authority and Centralization in Latin America.* Cambridge: Cambridge University Press.
Dillinger, William, and Steven Webb
  1999   "Fiscal Management in Federal Democracies: Argentina and Brazil." Policy Research Working Paper 2121, World Bank, Washington, DC.
Eaton, Kent
  2001   "Decentralisation, Democratisation and Liberalisation: The History of Revenue Sharing in Argentina, 1934–1999." *Journal of Latin American Studies* 33 (1): 1–28.
  2004   *Politics beyond the Capital: The Design of Subnational Institutions in South America.* Stanford, CA: Stanford University Press.
Escobar-Lemmon, Maria
  2001   "Fiscal Decentralization and Federalism in Latin America." *Publius: The Journal of Federalism* 31 (4): 23–41.
Falleti, Tulia G.
  2003   "Governing Governors: Coalitions and Sequences of Decentralization in Argentina, Colombia, and Mexico." PhD diss., Northwestern University.
  2005   "A Sequential Theory of Decentralization: Latin American Cases in Comparative Perspective." *American Political Science Review* 99 (3): 327–346.

Ferreira, Ivan F. S., and Mauricio S. Bugarin
    2007   "Transferências voluntárias e ciclo politico-orçamentário no federalismo fiscal brasileiro." *Revista Brasileira de Economia* 61 (3): 271–300.
Figueiredo, Argelina Cheibub, and Fernando Limongi
    2000   "Presidential Powers, Legislative Organization, and Party Behavior in Brazil." *Comparative Politics* 32 (2): 151–170.
Garman, Christopher, Stephan Haggard, and Eliza Willis
    2001   "Fiscal Decentralization: A Political Theory with Latin American Cases." *World Politics* 53 (2): 205–236.
Gibson, Edward L.
    1997   "The Populist Road to Market Reform: Policy and Electoral Coalitions in Mexico and Argentina." *World Politics* 49 (3): 339–370.
Gibson, Edward, and Ernesto Calvo
    2000   "Federalism and Low-Maintenance Constituencies: Territorial Dimensions of Economic Reform in Argentina." *Studies in Comparative International Development* 35 (3): 32–55.
Gibson, Edward, Ernesto Calvo, and Tulia Falleti
    2004   "Reallocative Federalism: Legislative Overrepresentation and Public Spending in the Western Hemisphere." In *Federalism and Democracy in Latin America,* edited by Edward L. Gibson, 173–196. Baltimore, MD: Johns Hopkins University Press.
González, Lucas
    2008   "Political Power, Fiscal Crises, and Decentralization in Latin America: Federal Countries in Comparative Perspective (and Some Contrasts with Unitary Cases)." *Publius: The Journal of Federalism* 38 (2): 211–247.
Jones, Mark, Pablo Sanguinetti, and Mariano Tommasi
    2000   "Politics, Institutions, and Fiscal Performance in a Federal System: An Analysis of the Argentine Provinces." *Journal of Development Economics* 61 (2): 305–333.
Llach, Lucas
    2007   "The Economic Consequences of Unequal Federalism." In "The Wealth of the Provinces: The Argentine Interior and the Political Economy of Agentina, 1880–1910." PhD diss., Harvard University.
Magaloni, Beatriz, Alberto Díaz-Cayeros, and Federico Estévez
    2007   "Clientelism and Portfolio Diversification: A Model of Electoral Investment with Application to Mexico." In *Patrons, Clients, and Policies: Patterns of Democratic Accountability and Political Competition,* edited by Herbert Kitschelt and Steven I. Wilkinson. Cambridge: Cambridge University Press.
Montero, Alfred P., and David J. Samuels, eds.
    2004   *Decentralization and Democracy in Latin America.* Notre Dame, IN: University of Notre Dame Press.
Musgrave, Richard A.
    1959   *The Theory of Public Finance: A Study in Public Economy.* New York: McGraw-Hill.
Nordhaus, William D.
    1975   "The Political Business Cycle." *Review of Economic Studies* 42 (2): 169–190.
Núñez Miñana, Horacio, and Alberto Porto
    1983   "Distribución de la coparticipación federal de impuestos: Análisis y alternativas." Buenos Aires: Consejo Federal de Inversiones.
Oates, Wallace E., ed.
    1977   *The Political Economy of Fiscal Federalism.* Toronto: Lexington Books.
O'Neill, Kathleen
    2003   "Decentralization as an Electoral Strategy." *Comparative Political Studies* 36 (9): 1068–1091.
    2005   *Decentralizing the State: Elections, Parties, and Local Power in the Andes.* Cambridge: Cambridge University Press.
Panebianco, Angelo
    1988   *Political Parties: Organization and Power.* Cambridge: Cambridge University Press.
Persson, Torsten, and Guido Tabellini
    2000   *Political Economics: Explaining Economic Policy.* Cambridge, MA: MIT Press.

Pírez, Pedro
  1986   *Coparticipación federal y descentralización del estado.* Buenos Aires: Centro Editor de América Latina.
Porto, Alberto
  2003a "Etapas de la coparticipación federal de impuestos." Documento de Federalismo Fiscal 2, Universidad Nacional de La Plata, Argentina.
  2003b "La teoría económica del federalismo fiscal y las finanzas federales." Documento de Federalismo Fiscal 4, Universidad Nacional de La Plata, Argentina.
  2004   "Finanzas públicas subnacionales: La experiencia argentina." Documento de Federalismo Fiscal 12, Universidad Nacional de La Plata, Argentina.
Porto, Alberto, and Pablo Sanguinetti
  2001   "Political Determinants of Intergovernmental Grants: Evidence from Argentina." *Economics and Politics* 13 (3): 237–256.
Prud'homme, Remy
  1995   "The Dangers of Decentralization." *World Bank Research Observer* 10 (2): 201–220.
Przeworski, Adam, and Henry Teune
  1970   *The Logic of Comparative Social Inquiry.* New York: Wiley-Interscience.
Remmer, Karen L., and Erik Wibbels
  2000   "The Subnational Politics of Economic Adjustment: Provincial Politics and Fiscal Performance in Argentina." *Comparative Political Studies* 33 (4): 419–451.
Rezende, Fernando
  2001   "Compensações financeiras e desequilibrios fiscais na federação brasileira." In *Federalismo na Alemanha e no Brasil,* edited by Wilhelm Hofmeister and José Mario Brasiliense Carneiro, 185–200. São Paulo: Konrad Adenauer Stiftung.
Rodden, Jonathan A.
  2006   *Hamilton's Paradox: The Promise and Peril of Fiscal Federalism.* Cambridge: Cambridge University Press.
Rodden, Jonathan, Gunnar S. Eskeland, and Jennie Litvack
  2003   *Fiscal Decentralization and the Challenge of Hard Budget Constraints.* Cambridge, MA: MIT Press.
Rodden, Jonathan, and Erik Wibbels
  2002   "Beyond the Fiction of Federalism: Macroeconomic Management in Multitiered Systems." *World Politics* 54 (4): 494–531.
Rogoff, Kenneth
  1990   "Equilibrium Political Budget Cycles." *American Economic Review* 80 (1): 21–36.
Rondinelli, Dennis A., John R. Nellis, and G. Shabbir Cheema
  1983   "Decentralization in Developing Countries: A Review of Recent Experience." World Bank Staff Working Paper 581, World Bank, Washington, DC.
Samuels, David J., and Scott Mainwaring
  2004   "Strong Federalism, Constraints on the Central Government, and Economic Reform in Brazil." In *Federalism and Democracy in Latin America,* edited by Edward Gibson, 85–130. Baltimore, MD: Johns Hopkins University Press.
Samuels, David, and Richard Snyder
  2001a "Devaluing the Vote in Latin America." *Journal of Democracy* 12 (1): 146–159.
  2001b "The Value of a Vote: Malapportionment in Comparative Perspective." *British Journal of Political Science* 31 (4): 651–671.
Snyder, Richard, and David J. Samuels
  2004   "Legislative Malapportionment in Latin America: Historical and Comparative Perspectives." In *Federalism and Democracy in Latin America,* edited by Edward Gibson, 131–172. Baltimore, MD: Johns Hopkins University Press.
Souza, Celina
  1997   *Constitutional Engineering in Brazil: The Politics of Federalism and Decentralisation.* London: Macmillan.
Thelen, Kathleen, and Sven Steinmo
  1992   "Historical Institutionalism in Comparative Politics." In *Structuring Politics: Historical Institutionalism in Comparative Perspective,* edited by Sven Steinmo, Kathleen Thelen, and Frank Longstreth, 1–32. Cambridge: Cambridge University Press.

Tiebout, Charles M.
    1956   "A Pure Theory of Local Expenditures." *Journal of Political Economy* 64 (5): 416–424.
Tommasi, Mariano
    2002   "Federalism in Argentina and the Reforms of the 1990s." Documento de Trabajo 69, Centro de Estudios para el Desarrollo Institucional, Buenos Aires.
Tommasi, Mariano, Sebastián Saiegh, and Pablo Sanguinetti
    2001   "Fiscal Federalism in Argentina: Policies, Politics, and Institutional Reform." *Economia* 1 (2): 157–211.
Treisman, Daniel
    2000   "Decentralization and Inflation: Commitment, Collective Action, or Continuity?" *American Political Science Review* 94 (4): 837–857.
    2007   *The Architecture of Government: Rethinking Political Decentralization.* Cambridge: Cambridge University Press.
Weingast, Barry R.
    1995   "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Growth." *Journal of Law, Economics, and Organization* 11 (1): 1–31.
Wibbels, Erik
    2005a   "Decentralized Governance, Constitution Formation, and Redistribution." *Constitutional Political Economy* 16 (2): 161–188.
    2005b   *Federalism and the Market: Intergovernmental Conflict and Economic Reform in the Developing World.* Cambridge: Cambridge University Press.
Willis, Eliza, Christopher da C. B. Garman, and Stephan Haggard
    1999   "The Politics of Decentralization in Latin America." *Latin American Research Review* 34 (1): 7–56.