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Politics, Institutions, and Public-Sector Spending in the Argentine Provinces

Mark P. Jones, Pablo Sanguinetti, and Mariano Tommasi

This chapter contributes to the growing literature on the political and institutional determinants of fiscal outcomes by studying the behavior of public spending in the Argentine provinces since the return to democracy in 1983. Argentina is a federal republic with 23 provinces, and provincial finances play an important role in the overall fiscal picture of the country, with approximately 50 percent of total government expenditures occurring at the subnational level. The Argentine provinces possess a considerable amount of diversity in terms of their party systems, executive-legislative relations, and fiscal behavior, making Argentina an ideal laboratory for this type of study.

We begin in section 6.1 with a description of a vitally important aspect of Argentina's fiscal structure: its degree of vertical imbalance, by which a very large proportion of provincial spending is financed out of a common pool of tax revenues. Section 6.2 summarizes our theoretical approach, which emphasizes the common-property view of fiscal politics. Section 6.3 presents the main hypotheses, and section 6.4 contains the empirical analysis of the political determinants of provincial spending. Section 6.5 briefly studies the effect of budget institutions on provincial fiscal outcomes, while section 6.6 provides some concluding remarks.

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6.1 Argentina's Federal Fiscal Structure

The Argentine constitution establishes that the federal government will employ tariffs on foreign trade to finance its expenditures, while provinces will finance themselves through taxes on production and the consumption of specific goods. Over time however, for both economic and political reasons, the national government became the main agent responsible for the collection of all taxes at the provincial level. The process by which these taxes, once collected, are then reallocated to the provinces has been the source of numerous conflicts and modifications.1 Argentina's first national tax-sharing agreement (the Ley de Coparticipación Federal) dates from 1934.² Periodically, new laws have been written to regulate this distribution. The current law dates from 1988. Under this law the federal government retains 42 percent of these taxes, while 57 percent is distributed among the provinces, with the remaining 1 percent set aside to finance unforeseen crises in the provinces. The law also establishes the percentages of the secondary distribution and is supplemented by several other laws regulating the distribution and destination of a few specific taxes that finance a set of predetermined activities.

Argentina is the most decentralized country in Latin America in terms of public spending, with approximately 50 percent of total public spending occurring at the subnational level (Stein, Talvi, and Grisanti, chap. 5 in this volume). At the same time, Argentina has a high degree of vertical fiscal imbalance. During the period under analysis (1985–95, excluding 1989), an average of 80 percent of provincial expenditures were financed from the Ley de Coparticipación Federal (along with other transfer mechanisms), while an average of only 20 percent were financed from provincial revenues. The data in table 6.1 demonstrate that all of the country's 23 provinces on average financed less than half of their expenditures with provincial revenues, and nearly three-fourths financed less than one-fourth. Most of the transfers from the federal government are done on behalf of a delegation of tax authority from the provinces, in such a way that the use of 71 percent of the transfers is left to the discretion of the provincial governments (the remaining 29 percent of the transfers is earmarked for specific activities).

6.2 The Effect of Political and Institutional Variables on Public-Sector Spending: The Common Property Approach

We view the provincial fiscal accounts as the outcome of a multiagent game. The key players in our game are politicians interested in providing net benefits

^{1.} For an analysis of Argentine fiscal federalism see Porto 1990.

^{2.} These tax-sharing agreement laws define the share of taxes to be transferred from the central government to the provinces (i.e., the primary distribution) and the way in which these funds are to be allocated among the provinces (i.e., the secondary distribution).

| Table 6.1 | Percentage of Provincial Expenditure Financed with Provincial |
|-----------|---|
| | Revenues, 1985–95 |

| Province | Percentage | |
|---------------------|------------|--|
| Buenos Aires | 49 | |
| Santa Fé | 40 | |
| Córdoba | 36 | |
| Mendoza | 31 | |
| La Pampa | 30 | |
| Entre Ríos | 27 | |
| Neuquén | 20 | |
| Salta | 20 | |
| Tucumán | 20 | |
| Río Negro | 19 | |
| Tierra del Fuego | 19 | |
| Jujuy | 18 | |
| San Luis | 18 | |
| Chubut | 15 | |
| Misiones | 14 | |
| San Juan | 12 | |
| Santa Cruz | 12 | |
| Corrientes | 11 | |
| Chaco | 11 | |
| Santiago del Estero | 9 | |
| La Rioja | 7 | |
| Catamarca | 6 | |
| Formosa | 5 | |
| 23-province average | 20 | |

Source: Secretaría de Hacienda, Ministerio de Economía, Obras, y Servicios Públicos, República Argentina.

Note: Data from 1989 are excluded. For more information, see note 15 in the text.

to their constituencies. A substantial portion of these local or particularistic benefits are financed out of a common pool of taxes (current or future).

This common-property approach to fiscal politics was pioneered by Weingast, Shepsle, and Johnsen (1981), and extended by others such as Inman and Fitts (1990), Chari and Cole (1995), Campos and Pradhan (1996), and Velasco (1998). As is the case with any common resource, there is an overutilization of national wealth. Political economists know this process as "universalism," while the popular term in the United States is "pork-barrel politics." In some versions, this generates suboptimal aggregate outcomes from the point of view of the political actors (e.g., legislators). In others, the outcome is suboptimal

^{3.} The term "universalism" comes from Weingast (1979). The discussion in the text draws from Inman and Fitts (1990).

from the point of view of citizens due to fiscal illusion (Weingast, Shepsle, and Johnsen 1981), or to principal-agent problems in the relation between the people and their representatives (Tommasi 1998).⁴

We emphasize the common-pool problem at two levels, corresponding to the federal fiscal organization of Argentina described in the previous section. On the one hand, every province sees the aggregate national (present and future) taxing capacity as a common resource. On the other, each provincial legislator sees the provincial (and national) taxing capacity as a common resource. Political factors (such as the relations between the president and provincial governors and divided versus unified government) and budget institutions (such as costly borrowing procedures) act to exacerbate or mitigate the underlying problem.

In this chapter we focus on the impact of political factors on provincial public spending.⁵ We emphasize spending and not provincial revenues because there are two countervailing forces in terms of the impact of politics on provincial fiscal revenues.

First, there is the standard "size" effect emphasized by Weingast, Shepsle, and Johnsen (1981), under the assumption of a balanced budget. This leads to the prediction that certain institutional configurations lead to higher spending and higher taxes than do other configurations. Second, as we emphasize below, in the Argentine case there are negative externalities across provinces that lead provincial governments to overspend and undertax (in the spirit of what Inman and Fitts [1990] call "tax expenditures"). Combining these two effects, we obtain clear-cut predictions from institutional and political variables to expenditure outcomes, while the implications for provincial revenues will depend on which effect dominates.

Within the common-pool view, individuals and institutions elected by regional representation (e.g., governors within the context of the nation, and legislators within the context of the province) have a greater tendency to act as free-riders on the collective good of fiscal prudence than individuals and institutions chosen from more encompassing constituencies (e.g., the president within the context of the nation and the governor within the context of the province). As stated before, we emphasize this hypothesis at two levels: in terms of the behavior of each province vis-à-vis the consolidated national fiscal accounts, and in terms of the provincial legislatures vis-à-vis the provincial executive branches.

^{4.} Tommasi (1998) argues that agency slack is necessary for the suboptimality of fiscal outcomes. Otherwise, elected representatives should be able to reach an agreement on optimal fiscal policy. This pushes the collective action problem to the level of the citizens, via their control of elected officials.

^{5.} In Jones, Sanguinetti, and Tommasi 1997a we focus on fiscal deficits.

6.3 Determinants of Provincial Public-Sector Spending: Three Hypotheses

Taking into consideration fiscal arrangements in Argentina, as well as the common-property approach just described, we develop three hypotheses regarding the political determinants of public-sector spending in the Argentine provinces. The first two hypotheses are tied to the partisan affiliation of the provincial governor. The third hypothesis is linked to the effect of the presence of divided versus unified government on fiscal behavior.

6.3.1 The Partisan Relationship between the Governor and the President

Within our common-pool view, the president, who is elected by a national constituency and who is held primarily responsible for macroeconomic outcomes, will have better incentives for fiscal conservatism than each provincial government. This should be especially the case in a country such as Argentina, where the vertical imbalance is severe (Stein, Talvi, and Grisanti, chap. 5 in this volume), with the provinces on average receiving nearly four-fifths of their revenue from the federal government.

The Argentine president has many instruments at his or her disposal with which to coerce provincial governments into behaving more in line with national fiscal objectives. We posit that, when the provincial governor is from the president's political party, the president has additional coercive resources stemming from his/her role as president of the political party (de jure and/or de facto) combined with the relatively high level of party discipline (stemming in large part from the high level of partisan control over the nomination process, the use of closed lists to elect legislators, and the high value of the party label) in Argentina's political parties.⁶

HYPOTHESIS 1. Provinces where the governor is from the same political party as the president have lower per capita public-sector spending.

This hypothesis could also be rationalized on the basis of Aizenman 1998, where the fiscal behavior of local authorities is determined as a game that includes n local governments, plus the central government. The central government uses some strategic variables in order to induce cooperative play from the local governments, as a way to mitigate the common-pool problem. Aizenman's model assumes that the electoral fortunes of governors are jointly tied to aggregate fiscal performance. It would be natural to extend his model to a multiparty environment, in which the electoral fortunes of governors from the president's party are more tied to aggregate macroeconomic performance than those of the opposition.⁷

For a discussion of the distribution of power within the Argentine political parties see Jones 1997.

^{7.} We thank Osvaldo Schenone for bringing this point to our attention.

6.3.2 The Role of Ideology

Alt and Lowry (1994) demonstrate that in the U.S. states which political party controls the state government has an important influence on fiscal outcomes. For Alt and Lowry, the driving force behind this salient finding is the differential policy preferences of Democrats (high spending, high taxes) and Republicans (low spending, low taxes). Within their framework, political configurations and institutions move the actual outcome closer to one of the preferred points. Similar partisan differences in spending patterns among parties due to "ideology" have been detected in OECD countries by Kontopoulos and Perotti (chap. 4 in this volume).

In the Argentine context, we hypothesize that partisanship has an important influence on fiscal behavior, but that this influence does not stem from partisan ideological differences (as is the case in the United States). Instead, partisanship's salient effect is the product of the partisan linkage between the president and the provincial governors, combined with the relatively high degree of influence that the Argentine president has over fellow party members (e.g., governors). This influence contrasts quite markedly with the very weak level of control exercised by the U.S. president over same-party state governors.

Between 1983 and 1995 Argentine politics was dominated by two major national political parties: the Partido Justicialista (PJ) (i.e., the Peronist Party) and the Unión Cívica Radical (UCR).8 In addition to these two national parties, provincial political parties, which effectively compete in only one province, have played a significant role in several provinces as either the dominant or number two party.

To our knowledge, we are the first to test for fiscal policy differences between Argentina's two national political parties. Historically, the PJ has been classified as a working-class party, while the principal base of UCR support has been identified as the middle class. This characterization, however, is somewhat misleading given the catchall and federal nature of the PJ and UCR, combined with the noteworthy policy shift that has taken place since 1989, during which time the governing PJ of President Carlos Menem implemented a series of far-reaching market-oriented reforms. In any event, it is our intuition that the key "political" variable is the one explained in section 6.3.1, and we hypothesize that the PJ and UCR will not show different inclinations to tax and spend, and thus that the partisan affiliation of the governor will have no significant independent effect on the level of provincial per capita public-sector spending.

^{8.} Over the past decade the UCR has, however, experienced a marked decline in its electoral support, leaving the PJ as the only Argentine party with a significant presence in all of the country's 23 provinces and federal capital.

Hypothesis 2. Provinces governed by Peronist and Radical governors do not differ in their level of per capita public-sector spending.

6.3.3 Divided Government

One of the most prominent political factors hypothesized to influence fiscal behavior is the presence or absence of divided government (Alt and Lowry 1994; Cox and McCubbins 1997; McCubbins 1991; Poterba 1994). In theory, we would expect budget deficits to be larger under divided than under unified government, due to the greater difficulties faced by the executive in getting his/her budget through the legislature. Under unified government the governor is more likely to be able to rely on a solid partisan contingent in the legislature approving his/her budget. This is particularly the case in systems where the level of party discipline is relatively high.

The U.S. and European literature has tended to emphasize the role of divided government in preventing fiscal adjustment following adverse shocks (e.g., Alt and Lowry 1994; Poterba 1994). The related mechanism, which we emphasize in this chapter, is that within each province governors have better incentives than the legislature for fiscal prudence, and unified government facilitates the governor's job. This follows, at a different level, the same logic emphasized in hypothesis 1.

HYPOTHESIS 3. Provinces where there is divided government have higher per capita public-sector spending than provinces where there is unified government.

6.3.4 Other "Domestic" Political Variables

Other political variables are also hypothesized to influence public-sector outcomes. Bicameral (as opposed to unicameral) legislatures and larger legislatures (i.e., with more legislators), for example, are expected to result in higher levels of public-sector spending (Gilligan and Matsusaka 1995). Unfortunately, a bicameralism dummy variable and a variable that measures the size of the legislature (i.e., the number of legislators) are highly collinear with the provincial fixed-effects variables that we employ and are thus not included in this analysis. In future work, we will use other procedures (in particular substantively meaningful cross-sectional control variables) that will allow us to measure the independent effect of these and other variables, which at the intraprovince level are for the most part invariant across time.

^{9.} This "level" effect also is emphasized in Alesina et al. 1996, and is the one that derives naturally from the work of Weingast, Shepsle, and Johnsen (1981) and Velasco (1998).

6.4 Empirical Analysis

6.4.1 Data and Variables

We employ a reduced-form model to analyze the determinants of per capita provincial public-sector spending. ¹⁰ The model is a reduced form of a system of equations used in Jones, Sanguinetti, and Tommasi 1997b and includes in the reduced form all of the independent variables utilized in the original revenue equation. The reduced form for provincial revenue was also analyzed, but as expected, there is no significant impact of the political variables on revenues.

We conduct this analysis using a pooled cross-section of the 23 Argentine provinces from 1985 to 1995. Out of the potential population of 253 provincial years (23×11), a total of 39 years are excluded, leaving a final analysis population of 214.¹¹

In the analysis our dependent variable is annual per capita public-sector spending in the province (excluding interest payments). As is the case with all of our monetary variables, the values are expressed in constant 1991 Argentine pesos. The range for this variable is 279 to 4,886, while the mean and standard deviation are 994 and 696 respectively.

The basic economic (fiscal) model, subject to Argentine data limitations, employs the following control variables: NATIONAL TRANSFERS, ENERGY CONSUMPTION, UNEMPLOYMENT, LAGGED PRIMARY DEFICIT, along with variables measuring cross-sectional and temporal effects.

The variable NATIONAL TRANSFERS measures the amount of transfers per capita (in 1991 pesos) received by the province from the national govern-

- 10. The purpose of our study is to analyze the effect of political factors on provincial public-sector spending. As such, our units of analysis are the provincial years, with all provincial years weighted equally. If our goal were to analyze the determinants of aggregate fiscal outcomes in Argentina, then we would give more weight to those provinces where the most spending occurs. However, as this is not our goal, we do not include any weighted regression results in our analysis. We have run these regressions, which provide results that are relatively similar to those presented here, although of course they are in large part reflecting the variables' effects in the province of Buenos Aires, which accounts for 43 percent and 58 percent of the respective combined 23-province population and gross industrial production.
- 11. Twenty-two provincial years are excluded due to problems surrounding the coding of one of our influential variables for the year of 1989 (for more information see note 15). Six provincial years are excluded because during those years the province was under federal intervention. Four provincial years are excluded due to the lack of unemployment data. Seven years (1985–91) are excluded from the province of Tierra del Fuego, which, as a national territory, was under direct federal government control until nearly 1992. Tierra del Fuego achieved provincial status in 1990, but did not have a locally elected government until mid-December of 1991. The Federal Capital, Argentina's 24th district, was under direct federal government control between 1983 and 1996 and is therefore excluded from the analysis.
- 12. For more information on the sources of the data used here, see Sanguinetti and Tommasi 1997
- 13. Following the adoption of the Law of Convertibility in 1991, the Argentine peso has been fixed at par with the U.S. dollar.

ment during the year. As explained in Jones, Sanguinetti, and Tommasi 1997b, it was included in the structural system alongside the (endogenous) provincial own fiscal revenues. The values for this variable range from 99 to 3,738, with a mean of 731 and a standard deviation of 566.

ENERGY CONSUMPTION is our proxy for provincial GDP, for which annual data for the entire population do not exist. The variable is measured as the number of megawatts per capita consumed in the province during the year. It ranges from 0.30 to 10.07, with a mean of 1.39 and a standard deviation of 1.79.

UNEMPLOYMENT is the percentage of the workforce that was unemployed in the province's capital city during the year. ¹⁴ The level of unemployment during this period ranged from 1.00 to 19.35, with a mean level of unemployment of 7.49 and a standard deviation of 3.47.

LAGGED PRIMARY DEFICIT is the provincial primary deficit per capita (in 1991 pesos), incorporating transfers on the revenue side, in the province during the previous year. It ranges from -289 (i.e., a surplus of 289 pesos per capita) to 550 (i.e., a deficit of 550 pesos per capita).

To test our three hypotheses we examine the effect of four political variables on the level of per capita provincial public-sector spending. PRESIDENT'S PARTY measures the partisanship of the governor in relation to that of the president. All years during which the governorship of a province was held by a member of the president's party are coded 1, while all other years are coded 0. During the period 1985–88 all provinces governed by the UCR are coded 1, while all others are coded 0. During the period 1990–95 all of the provinces governed by the PJ are coded 1 while all others are coded 0. In the analysis population of 214, 109 of the provincial years (51 percent) are coded 1. Of these 109 years, 86 come from the PJ administration of President Carlos Menem (1989–95), while the remaining 23 come from the UCR administration of President Raúl Alfonsín (1983–89).¹⁵

The second and third variables measure the partisan affiliation of the governor. For the variable UCR GOVERNOR, a 1 is assigned if the province was governed by a member of the UCR during the year being coded. For the variable PROVINCIAL PARTY GOVERNOR, a 1 is assigned if the province was governed by one of the country's center-right provincial parties (i.e., Acción Chaqueña in Chaco, the Movimiento Popular Fueguino in Tierra del Fuego, the Movimiento Popular Neuquino in Neuquén, the Pacto Autonomista Liberal in Corrientes, the Partido Bloquista in San Juan, and the Partido Renovador de

^{14.} Two exceptions are the provinces of Buenos Aires and Santa Fé, from which more than one city is included.

^{15.} On July 8, 1989, President Carlos Menem assumed office, five months prior to the date (December 10) on which the official transfer of power from President Raúl Alfonsín was constitutionally scheduled to take place. This early transfer occurred due to the severe economic, political, and social crisis facing the country. This year is excluded from the analysis as it is not possible to adequately code it for the PRESIDENT'S PARTY variable.

Salta in Salta). Both of these variables are measured as differences from the years in provinces that were governed by a PJ governor. Of the 214 provincial years included in the analysis, 141 were under a PJ governor, 39 under a UCR governor, and 34 under a provincial party governor.

The fourth variable is DIVIDED GOVERNMENT. Divided government is defined here as a situation in which the governor's party lacks a majority of the seats in the single house in unicameral systems and in both houses in bicameral systems. ¹⁶ We classify as unified government all other cases. ¹⁷ Years in which divided government existed are coded 1, while years in which there was unified government are coded 0. Of the 214 provincial years, divided government was present in 42 (18 percent), with unified government in the remaining 172 (82 percent).

Finally, included in the analysis are cross-sectional (i.e., provincial; 22 total) and temporal (i.e., year; 10 total) fixed-effects variables. For reasons of space the estimated coefficients and standard errors for these variables are not included in table 6.2.

6.4.2 Analysis

Table 6.2 provides the results of our analysis of the determinants of per capita public-sector spending in the Argentine provinces between 1985 and 1995. The first equation includes the four control variables along with the cross-sectional and temporal fixed-effects variables. The second equation retains the variables in the first equation, and adds the PRESIDENT'S PARTY and DIVIDED GOVERNMENT variables. Finally, the third equation adds the UCR GOVERNOR and PROVINCIAL PARTY GOVERNOR variables. The analysis below concentrates on the unrestricted equation (3).

The results in table 6.2 provide strong support for hypothesis 1. PRESI-DENT'S PARTY has a prominent inverse effect on the level of per capita provincial public-sector spending. The estimated coefficient in equation (3) indicates that, all other things being equal, a province where the governor is from the same party as the president spends 65 pesos per capita less than a province where the governor is from an opposition party.

This finding supports our view, based on the common-pool theory, that governors who are copartisans of the president spend less than other governors. It also highlights the value of the common-pool theory, especially when analyzing units within a context where there is a severe vertical fiscal imbalance.

Hypothesis 2 is also supported to a considerable extent by the results in table 6.2. The weak positive result for UCR GOVERNOR indicates that, holding

^{16.} Like Alt and Lowry (1994), we consider 50 percent a majority.

^{17.} It would be possible to produce a finer classification. For instance, the case in which the governor faces opposition in both chambers may be a stronger form of divided government than the case in which he/she has a majority in one of the chambers ("split government" versus "split legislature" in the terminology of Alt and Lowry [1994]). We, however, have only seven instances of a split legislature in our population of 214.

Table 6.2 Determinants of Provincial Public-Sector Per Capita Spending

| Independent Variables | Equation (1) | | Equation (2) | | Equation (3) | |
|---------------------------|--------------------------|-------------------|-----------------------|-------------------|-----------------------|-------------------|
| | Estimated Coefficient | Standard Error | Estimated Coefficient | Standard Error | Estimated Coefficient | Standard Error |
| National transfers | 0.795** | (0.051) | 0.801** | (0.051) | 0.788** | (0.049) |
| Energy consumption | 17.040 | (36.995) | 30.120 | (37.665) | 47.325 | (36.709) |
| Unemployment | 0.138 | (3.190) | -0.349 | (3.168) | 0.256 | (3.057) |
| Lagged primary deficit | 0.316** | (0.073) | 0.295** | (0.073) | 0.224** | (0.073) |
| President's party | | | -39.844* | (17.758) | -65.411** | (18.514) |
| Divided government | | | -23.550 | (18.201) | -23.374 | (17.845) |
| UCR governor | | | | | 18.853 | (25.247) |
| Provincial party governor | | | | | -129.840** | (33.163) |
| Constant | 363.780** | (62.096) | 371.490** | (61.635) | 387.410** | (60.258) |
| Adjusted R ² | 0.978 | | 0.979 | | 0.980 | |
| Degrees of freedom | 177 | | 175 | | 173 | |
| N | 214 | | 214 | | 214 | |

Note: White-type standard errors are employed.

*Significant at the .05 level for a two-tailed test.

^{**}Significant at the .03 level for a two-tailed test.

other factors constant, there is no noteworthy difference in per capita spending between provinces that were governed by a member of the UCR and provinces that were governed by a member of the PJ.

The only noteworthy difference (which was not included in hypothesis 2) that exists is that between provinces that were led by a provincial party governor and those that were led by a PJ governor (or a UCR governor). Holding other factors constant, provinces run by a provincial party governor spent significantly less (130 pesos per capita) than provinces run by a PJ governor. This is an interesting finding that we plan to explore in future work.

The results in table 6.2 provide no support whatsoever for hypothesis 3. Not only does the presence of divided government fail to lead to a significant increase in per capita spending, but the negative estimated coefficient indicates that the presence of divided government actually reduces spending, albeit not at a significant level.

A possible explanation for the weak effect of the presence or absence of divided government on spending could be that whereas previous studies of this effect have analyzed governments with relatively closed fiscal environments (e.g., countries or the U.S. states), the Argentine provinces exist within an environment where there is a severe fiscal imbalance between the national and provincial governments. This fiscal imbalance in turn shifts the key determinant of provincial spending from intraprovincial factors to interprovincial factors, since the lion's share of potential revenues is located at the national level. Within this environment intraprovincial politics (e.g., divided government) is much less relevant for provincial fiscal behavior than is the interprovincial game between the provinces (as unitary actors) and the federal government.¹⁸

6.5 Fiscal Institutions and Provincial Public-Sector Spending

Alesina et al. (1996), Hallerberg and von Hagen (chap. 9 in this volume), von Hagen (1992), and von Hagen and Harden (1994) have emphasized the prominent effect that budgetary institutions have on fiscal behavior. Unfortunately, in Argentina there was little intraprovince budgetary institutions variance between 1985 and 1995. It was therefore not possible to include in our previous models a variable measuring the provinces' fiscal institutions.

However, given the potential relevance of budgetary institutions to provincial public-sector spending, as well as this volume's concern with budgetary institutions, we briefly analyze the link between budgetary institutions and spending in this section. Following a procedure similar to von Hagen (1992)

^{18.} Future studies should explore the prediction that divided government at the subnational level would be a significant determinant of fiscal behavior only when vertical fiscal imbalances are small. See Stein, Talvi, and Grisanti, chap. 5 in this volume; and von Hagen and Eichengreen 1996 for further speculation on the interaction of vertical fiscal imbalances with fiscal politics more generally.

| Variables | Estimated Coefficient |
|---|-----------------------|
| Bivariate Regression (1). Fiscal Institutionalization Index and | -0.004 |
| provincial fixed-effects coefficients (from equation [3]) | (0.006) |
| Bivariate regression (2). Fiscal Institutionalization Index and | |
| average per capita provincial public-sector expenditures | -0.003 |
| (for 1985–95) | (0.002) |
| Bivariate regression (3). Fiscal Institutionalization Index and | -0.772 |
| average per capita deficits (for 1985-95) | (0.022) |

Table 6.3 Provincial Fiscal Institutionalization and Provincial Fiscal Behavior

Note: N = 23. In each bivariate regression the Fiscal Institutionalization Index is the independent variable. The standard errors are reported under the estimated coefficients in parentheses.

for Western European countries and Alesina et al. (1996) for Latin American countries, we utilized the provincial constitutions to construct an index of the level of fiscal institutionalization for the 23 Argentine provinces. ¹⁹ Using a 10-point scale (with 10 being the most fiscally institutionalized, and 0 the least) we coded provinces on the basis of the following six factors: (1) executive strength vis-à-vis the legislature in the elaboration of the budget, (2) the extent of limitations on provincial indebtedness, (3) the ability of the municipalities within the province to borrow money, (4) the autonomy/strength of provincial auditory agencies, (5) the incentives for fiscal prudence in the provincial-municipal tax-sharing agreement, and (6) the presence of promotional subsidies in the constitution. These six indicators were summed to create an index of fiscal institutionalization. This index has a potential range from 0 (least fiscally disciplined) to 60 (most fiscally disciplined). Its actual range is from 13 (Salta) to 45 (Mendoza).

Regression (1) in table 6.3 displays the results of the bivariate regression of the Fiscal Institutionalization Index on the estimated coefficients for the provincial (cross-sectional) fixed-effects variables from equation (3) in table 6.2. The Fiscal Institutionalization Index has a very weak effect on the provincial fixed-effects coefficients. This suggests that the lack of a fiscal institutions variable in our models of per capita provincial public-sector spending has no salient impact on the results that are shown in table 6.2. This premise is bolstered by the finding in regression (2) of table 6.3, where the estimated coefficient indicates that a province's budgetary institutions (i.e., the Fiscal Institutionalization Index) have a very weak effect on its level of per capita provincial public-sector spending during the 1985–95 period.

Finally, while this study does not analyze deficits, due to their importance in this literature we include in table 6.3 the result (see regression [3]) of the

^{19.} Unlike this previous work, our index is based on a coding of written documents, not on reported procedures. For a detailed discussion of the methodology employed to create this index see Jones, Sanguinetti, and Tommasi 1997b.

regression of the Fiscal Institutionalization Index on the average per capita primary deficit in the provinces. The strong and significant estimated coefficient indicates a powerful inverse bivariate relationship between the fiscal institutions employed by the 23 provinces and the size of their per capita deficits, with greater levels of fiscal institutionalization leading to smaller deficits. This result corresponds with our previous work, which found the level of provincial fiscal institutionalization to have a potent effect on provincial fiscal behavior (Jones, Sanguinetti, and Tommasi 1997a). It is also consistent with many previous studies by von Hagen and others that have found budget institutionalization variables to have salient explanatory power for deficits, but not for spending.

6.6 Conclusion

This chapter applies the "political economy" approach to the study of fiscal performance in the Argentine provinces. Using a panel of the 23 provinces for the 1985–95 period, we find support for the common-property approach to fiscal policy. Given a high degree of vertical imbalance (i.e., a lack of correspondence between spending and taxing decisions at the local level), provincial governments tend to overexploit the common resource of national taxation. In this game, the federal government elected by a nationwide constituency has better incentives toward fiscal restraint. Given a relatively institutionalized party system and high degree of party discipline, presidents are able to "induce" lower spending by governors from their political party (thereby internalizing part of the fiscal externality).

The Argentine provinces provide a fertile and relatively unexplored ground for the study of the effects of institutions and politics on economic outcomes. In future work we will pursue three tasks. First, via the use of alternative quantitative methods we will include additional variables that were excluded in this analysis due to collinearity problems. Second, we will explore the fiscal impact of budget procedures in more detail. Third, we will engage in a more refined analysis of the link between institutions and expenditures by disaggregating expenditures in such a way that we will be able to distinguish public goods expenditures from particularistic expenditures.

The goal of this current and future research is to contribute to the improvement of general scholarly knowledge on the effect of political and institutional factors on fiscal behavior as well as to provide a better understanding of the determinants of fiscal outcomes in Argentina. In particular, we hope that this work will be of assistance to those currently engaged in the reform of Argentina's political and economic institutions at the national and provincial levels.

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