The workings of fiscal federalism is an important concern in Latin American policy circles. Many discussions center on the tension between the proclaimed virtues of decentralization and the threat of macroeconomic mismanagement. The most common recommendation arising from these discussions is for the decentralization of microeconomic management combined with the centralization of or fiscal rules for macroeconomic management. We believe such conventional wisdom to be too simplistic. The macro- and microeconomic issues are too intertwined and the historic political legacies too strong for simple, universal recipes to have any bite. We therefore argue for a more nuanced approach, using fiscal federalism in Argentina as our case.

All specialists on the subject consider Argentine fiscal federalism to be very inefficient. The country’s tax allocation and spending authorities and its system of intergovernmental transfers do not correspond to any economic criteria, and they provide all sorts of perverse incentives and obstacles for sound economic policies. In this paper, we examine the many inefficient features of Argentine fiscal federalism by applying and expanding an approach developed by Spiller and Tommasi, who view public policies

*Tommasi is with the Universidad de San Andrés, the Centro de Estudios para el Desarrollo Institucional (CEDI), and the Fundación Gobierno y Sociedad. Saiegh is with New York University, the Centro de Estudios para el Desarrollo Institucional (CEDI), and the Fundación Gobierno y Sociedad. Sanguinetti is with the Universidad Torcuato Di Tella.

We acknowledge the valuable comments and suggestions of Roberto Steiner, Ernesto Stein, Mauricio Cárdenas, Andrés Velasco, and participants of the Economía panel at the LACEA meeting in Rio de Janeiro, October 2000.

1. See, for instance, Burki, Perry, and Dillinger (1998); Perry and Webb (2000).
2. See, for instance, Aizenman (1998); FIEL (1993); Porto (1990); IDB (1997); World Bank (1996); Schwartz and Liukisla (1997).
as the outcome of political transactions. They argue that the nature and characteristics of the observed policies are conditioned by the rules of the political game under which those transactions are made. Hence, policy recommendations should be aimed not at the level of policy reform, but rather at the level of institutional reform, with emphasis on political institutions.

Our approach diverges from the predominant discussions of fiscal federalism in Latin America. The literature tends either to ignore political economy considerations while providing economic recipes or to advocate policy rules (constraining subnational borrowing, for instance). Rules are often violated, however, and they are dominated by improvements in the governance structure of the federal policymaking process. To put it in terms of the political economy literature, we advocate a discussion of rules versus improved political governance.

It is worth noting that different countries might generate similar inefficiencies. Some of the problems of fiscal federalism in Argentina that we analyze in this paper are also found in Brazil and Colombia. A rich comparative analysis of several countries’ institutions and outcomes is needed, but this first requires a detailed microanalytical understanding of the workings of the polities, which was beyond the time frame of this study. Also, the source and, most importantly, the solution to these problems might vary from case to case.

The paper is organized as follows. The next section summarizes some key features and deficiencies of the Argentine federal system. We then present a theory that explains the features of public policies as determined by the rules of the game under which actors engage in political transactions. The theory predicts that environments that do not facilitate cooperative intertemporal exchanges will generate policies that are fairly inefficient and awkward from an economic point of view. The paper then applies the theory to the characteristics of Argentine fiscal federalism. The following section provides some evidence to support the claim that the rules of the political game in Argentina do not facilitate efficient intertemporal exchanges. The final two sections present our specific recommendations for institutional and policy reform in Argentina and a more general recommendation on how to tackle reforms in federal fiscal finances.

Key Features of Fiscal Federalism in Argentina

This section presents several stylized facts regarding the workings of fiscal federalism in Argentina. We start with a background description of some basic institutional features, including the division of expenditure and tax responsibilities between the national and provincial jurisdictions, the resulting level of vertical fiscal imbalance, and how this imbalance has been addressed through intergovernmental transfers. We then briefly describe some provincial fiscal institutions, such as the existence of formal limits for provincial borrowing and the legal status of provincial state banks. This institutional description is followed by a look at the behavior of national and provincial finances in recent years. The evidence indicates that the fiscal relation across provincial governments and between them and the national authorities has been subject to opportunistic behavior and lack of coordination. The resulting inefficient outcomes have not only compromised the fiscal and macroeconomic stability of the country as a whole, but also had negative effects on the provision of some basic public goods.

The Institutional Structure of the Argentine Fiscal System

Argentina is a federal country. The Constitution gives a great deal of responsibility in terms of expenditure and tax decisions to the subnational units, the Provinces. Regarding expenditures, the only activities that are of the exclusive competence of the national authorities are those associated with defense and foreign affairs. In the areas of economic and social infrastructure, the national government shares responsibility with the provinces, while the latter have exclusive competence in primary education and local (municipal) organization and services. The Constitution defines a broad area of public services for which national and provincial authorities can both supply public goods at the same time, though the tendency in the
last two decades has been for the national government to decentralize the
direct operation of these services to the provinces. Thus the provinces are
currently in charge of most of the social expenditure (for example, basic
education, health services, poverty programs, social security, and housing)
and also economic infrastructure (such as roads, ports, the environment, and
natural resources). The national government conserves a significant regu-
latory power in many of these areas and directly manages many programs
within these sectors, such as social security, income support to the poor, and
complementary educational programs subsidizing the poorest schools.

This decentralization process has given Argentina one of the most
decentralized public sectors in Latin America. Subnational governments
are responsible for almost 50 percent of total consolidated public sector
expenditures and more than two-thirds of public sector expenditures
(excluding pensions).6

On the tax side, the Argentine Constitution establishes that the national
government has exclusive jurisdiction over taxes on foreign trade. The
provinces and the national authority can both use indirect taxes to finance
their expenditures. Finally, direct taxes are, in principle, the exclusive jurisdic-
tion of provincial governments, although the Constitution allows the
national government to use direct taxes on a temporary basis under spe-
cial circumstances (specifically, whenever the defense, common safety or
general welfare of the state so require). All powers not explicitly dele-
gated to the national government remain with the provinces.

Despite the ample faculties that provincial authorities have on tax deci-
sions, in practice the provinces have delegated to the national government
the task of administering most of the important taxes, including personal
and corporate income taxes, taxes on consumption (namely, value added
tax, as well as some specific duties), and taxes on wealth. This delegation
of authority encompasses not only the collection of these taxes, but also
the determination of tax rates, tax bases, and other regulatory aspects.
The provinces directly control taxes on gross production, real estate, and
cars, together with a duty applied to contracts. Given the expenditure
decentralization indicated above, this level of tax centralization has
resulted in a high degree of vertical fiscal imbalance. In 1999, for example,

6. See Piffano 1998; IDB 1997. Brazil and Colombia also present a significant degree
of expenditure decentralization (45.6 and 39.0 percent, respectively; see IDB, 1997). Nev-
evertheless, Argentina’s expenditure decentralization stands as an outlier when evaluated
within the context of the country’s vertical fiscal imbalance, its system of intergovernmental
transfers, and the borrowing autonomy of provincial states.
56 percent of provincial expenditures, on average, was financed through transfers from a common pool of national taxes, while only 44 percent was financed directly from provincial revenues (see figure 1). The country demonstrates a high variation around this 44 percent weighted average.7 Nine of the twenty-three provinces finance less than 20 percent of their spending with their own resources.8

7. The simple average is just 23 percent, because the larger provinces (such as Buenos Aires) tend to have smaller imbalances.

8. Argentina’s weighted average for the vertical fiscal imbalance is not atypical by Latin American standards. For example, the Latin American average was estimated to be around 52 percent in 1995 (see IDB, 1997). This high degree of vertical fiscal imbalance, however, affects provincial incentives in fiscal matters differently in other countries. Many Latin American countries with a higher vertical fiscal imbalance are unitary, rather than federal, countries. This gives the central government much stricter control over the actions of sub-national entities. In many of these countries, for example, the subnational entities have very restricted autonomy in terms of borrowing. More generally, member states in a federation have a high degree of political autonomy, and they have the political clout at the national level to pursue provincial interests. This issue is discussed in detail later in the paper.
Argentina addresses this large vertical fiscal imbalance through a complex system of intergovernmental transfers. The most important element is the tax-sharing regime (or coparticipation), which is the process by which the collected taxes are reallocated to the provinces. This coparticipation regime received constitutional status in the reformed Constitution of 1994; the reforms included a mandate to enact a new law by 1996, but this requirement has not yet been fulfilled. Thus the current legislation regulating the coparticipation regime is still Law 21548, issued in 1988. That law establishes that the federal government retains 42 percent of these taxes, while 57 percent is distributed among the provinces and the remaining 1 percent is set aside to finance unforeseen crises in the provinces.

The law also sets the percentages of the secondary distribution, and it is supplemented by several other laws regulating the distribution and destination of some specific taxes that finance a set of predetermined activities. Some of the main features of the 1988 coparticipation scheme prevail today, despite numerous changes and adjustments. One of the main changes was to allow the national government to make certain deductions from the general fund prior to complying with coparticipation requirements, that is, to redirect toward other purposes part of the tax revenue originally earmarked for the tax-sharing pool. In 1992 and 1993, for instance, the national government was able to achieve a 15 percent reduction of the amount to be shared with the provinces, in order to finance the growing deficit of the pension system. Another important change was to provide some fixed-sum transfers and a minimum transfer guarantee to the provinces. The decentralization of many educational and health services after 1992 also affected the reallocation of funds, as the process was financed by a transfer equivalent to the estimated cost of the services transferred. These various reforms thus introduced new types of transfers besides coparticipation per se. Additionally, a variety of special channels link some fraction of specific taxes to specific, often economically unrelated spending purposes. Figure 2 depicts the so-called federal fiscal labyrinth of Argentina.

Within Argentina’s federal structure, all levels of government are generally permitted to borrow both domestically and abroad. Both levels of government borrowed extensively in the 1980s, reflecting the weak fiscal management of the period. In addition, both levels accumulated sizable

9. In practice, these funds, called national treasury contributions (ATNs), are distributed at the discretion of the national executive office, through the Ministry of the Interior.

10. Argentina had the highest level of borrowing autonomy in Latin America in the 1990s (see IDB, 1997).
Further above Arg $650 million distributed proportionally.

PROVINCE OF BUENOS AIRES
Up to Arg $650 million annually, monthly distributed.

PROVINCES EXCEPT FOR BUENOS AIRES

PROVINCE OF BUENOS AIRES
Further above Arg $650 million distributed proportionally.

EXCISE TAXES AND OTHER COPARTICIPATED TAXES

INCOME TAXES
Of which Arg $580 million annually.

PERSONAL ASSETS TAXES

VAT

FEDERAL ADMINISTRATION

FUEL TAXES
Gas, diesel, kerosene, and products that are comprised of hydrocarbons that qualify as fuels.

ENERGY TAX

IMPORT–EXPORT DUTIES

CHARGE ON INSURANCE PREMIA

REGIONAL TARIFF COMPENSATION FUND

RURAL ELECTRIFICATION FUND (FEDEI)

INFRASTRUCTURE PROJECTS FUND

ROAD FUND

NATIONAL HOUSING FUND (FONAVI)

EDUCATION FUND

REINSURANCE INSTITUTE (INDER)

RURAL ELECTRIFICATION FUND (FEDEI)

STATISTICAL TAX

INCOME TAXES
Of which Arg $580 million annually.
arrears on payments for wages and pensions, purchases, and debt service. In the 1990s, the federal government tried to consolidate those arrears; the clearance operation added up to 9 percent of 1995 gross domestic product (GDP).\footnote{In many provinces, the provincial constitution imposes restrictions on the government’s ability to borrow (see Sanguinetti and Tommasi, 1997). Some jurisdictions require an extraordinary legislative majority to approve new debt; they also impose restrictions on the level of indebtedness and the use of debt. In most provinces, however, these restrictions are very mild, and specified quantitative limitations are rarely binding (see Sanguinetti and Zentner, 2000). Consequently, borrowing limits have no significant effect on the fiscal behavior of the provinces (Jones, Sanguinetti, and Tommasi, 1998). The effectiveness of rules for subnational indebtedness is also quite limited in Colombia, in spite of what, from a purely economic perspective, looks like a fairly sophisticated control system: Echevarría, Rentería, and Steiner (2000) show that seventeen out of twenty-seven departments and thirteen out of twenty-six departmental capitals are actually in the red. We argue below against the use of rules in the absence of an adequate governance structure for ensuring their enforcement.}

Until the mid-1990s, the legal status of most provincial state banks made them very dependent on the provincial executive power, and consequently they acted as captive sources of financing. The provincial government banks essentially operated as the central bank of each province: they provided funds to the provincial governments on demand and, in turn, received rediscounts from the Central Bank.\footnote{For example, those rediscounts amounted to over 2 percent of annual provincial spending in the period 1983–90.} Given their portfolio of bad assets (largely resulting from lending to provincial governments), provincial banks were among the prime candidates for restructuring and consolidation. The restructuring process accelerated when the so-called tequila crisis—which started in Mexico in 1994 and hit Argentina in 1995—induced a run against most provincial financial institutions. As of mid-1999, only six provincial banks remained in the hands of the provincial public sector.

Argentina shows a relatively high degree of expenditure decentralization, vertical fiscal imbalance, and borrowing autonomy, even with respect to developed nations. The presence of these institutional features has been shown to create negative incentives for provincial administration by inducing a common pool problem and by causing provincial authorities to behave opportunistically.\footnote{Jones and others (2000).} The following account of the fiscal outcomes of provincial government must therefore be understood, in part, as a consequence of the incentives generated by the institutional features. Later sections of the paper explain these institutional features and the resulting fiscal behavior in terms of the federal political game and institutions.
**Resulting Problems**

The recent evolution of federal finances in Argentina, in particular those associated with provincial governments, is a subject of much concern. Provincial deficits and debts have been rising at a worrisome pace, compromising not only macroeconomic stability, but also the financing of basic public goods. Below we summarize the major deficiencies in the workings of federal finances in Argentina.

**HIGH DEFICITS, INCREASING INDEBTEDNESS, AND PROCYCLICAL FINANCES OF PROVINCIAL GOVERNMENTS.** Table 2 shows the total income, total expenditure, and resulting deficit for the aggregate of all the provinces for the period 1991 to 1999. Throughout the period, provincial authorities ran continuous deficits, which on average were significant relative to both their own total revenues and the deficit of the national government. The aggregate provincial deficit was equal to or larger than that corresponding to the central authorities through 1994. Though this tendency changed after 1995, the provincial fiscal disequilibria still explain

### Table 1. Latin American Decentralization: Institutional Features for Selected Countries

<table>
<thead>
<tr>
<th>Institutional feature</th>
<th>Argentina</th>
<th>Brazil</th>
<th>Colombia</th>
<th>Mexico</th>
<th>Venezuela</th>
<th>OECD a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure decentralization</td>
<td>49.3</td>
<td>45.6</td>
<td>39.0</td>
<td>25.4</td>
<td>19.6</td>
<td>34.9</td>
</tr>
<tr>
<td>Vertical fiscal imbalance</td>
<td>56.0</td>
<td>33.0</td>
<td>38.0</td>
<td>61.0</td>
<td>83.0</td>
<td>42.0</td>
</tr>
<tr>
<td>Borrowing autonomy</td>
<td>3.0</td>
<td>2.9</td>
<td>2.0</td>
<td>1.8</td>
<td>1.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>


a. Average for member countries of the Organization for Economic Cooperation and Development.

### Table 2. Federal Finances in Argentina, 1991–99

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Provincial Governments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total income</td>
<td>14.9</td>
<td>21.8</td>
<td>25.5</td>
<td>27.4</td>
<td>26.7</td>
<td>29.1</td>
<td>32.6</td>
<td>33.1</td>
<td>32.1</td>
</tr>
<tr>
<td>Total expenditures</td>
<td>16.3</td>
<td>22.4</td>
<td>27.3</td>
<td>29.6</td>
<td>29.9</td>
<td>30.2</td>
<td>32.7</td>
<td>34.8</td>
<td>34.9</td>
</tr>
<tr>
<td>Surplus/deficit</td>
<td>-1.4</td>
<td>-0.6</td>
<td>-2.1</td>
<td>-2.4</td>
<td>-3.5</td>
<td>-1.7</td>
<td>-1.3</td>
<td>-2.2</td>
<td>-3.3</td>
</tr>
<tr>
<td>Surplus/deficit (as % of total income)</td>
<td>-9.3</td>
<td>-2.7</td>
<td>-8.1</td>
<td>-8.6</td>
<td>-13.0</td>
<td>-5.9</td>
<td>-4.2</td>
<td>-6.7</td>
<td>-10.4</td>
</tr>
<tr>
<td><strong>National government</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surplus/deficit</td>
<td>-4.9</td>
<td>0.8</td>
<td>0.8</td>
<td>-2.2</td>
<td>-4.8</td>
<td>-7.7</td>
<td>-4.2</td>
<td>-5.2</td>
<td>-8.7</td>
</tr>
</tbody>
</table>

*Source: Susbsecretaria de Programación Regional.

a. Does not include income from privatizations.

Percent of total revenue

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal District</td>
<td>−11.4</td>
<td>−21.8</td>
<td>−4.8</td>
<td>2.8</td>
<td>−0.3</td>
<td>−8.7</td>
<td>−3.1</td>
<td>12.5</td>
<td>−2.8</td>
</tr>
<tr>
<td>Buenos Aires</td>
<td>−16.4</td>
<td>4.5</td>
<td>0.5</td>
<td>−3.9</td>
<td>−3.5</td>
<td>−5.7</td>
<td>−7.8</td>
<td>−14.3</td>
<td>−9.5</td>
</tr>
<tr>
<td>Catamarca</td>
<td>−2.2</td>
<td>−4.2</td>
<td>−20.6</td>
<td>−25.1</td>
<td>−16.6</td>
<td>−17.8</td>
<td>−2.9</td>
<td>−1.1</td>
<td>−0.7</td>
</tr>
<tr>
<td>Chaco</td>
<td>−3.4</td>
<td>−6.2</td>
<td>−8.7</td>
<td>−7.9</td>
<td>−16.5</td>
<td>−8.7</td>
<td>−9.6</td>
<td>−21.7</td>
<td>−8.7</td>
</tr>
<tr>
<td>Chubut</td>
<td>−12.9</td>
<td>−10.2</td>
<td>−33.1</td>
<td>−42.9</td>
<td>−17.0</td>
<td>−23.5</td>
<td>−21.3</td>
<td>−12.1</td>
<td>−16.8</td>
</tr>
<tr>
<td>Córdoba</td>
<td>−16.0</td>
<td>−8.3</td>
<td>−21.6</td>
<td>−18.6</td>
<td>−19.1</td>
<td>8.2</td>
<td>2.3</td>
<td>−5.4</td>
<td>−0.6</td>
</tr>
<tr>
<td>Corrientes</td>
<td>−6.1</td>
<td>−2.7</td>
<td>−1.4</td>
<td>−14.1</td>
<td>−11.3</td>
<td>1.1</td>
<td>−9.3</td>
<td>−8.2</td>
<td>−10.1</td>
</tr>
<tr>
<td>Entre Ríos</td>
<td>−6.2</td>
<td>−7.5</td>
<td>−4.3</td>
<td>−7.2</td>
<td>−21.5</td>
<td>−0.3</td>
<td>−2.2</td>
<td>4.5</td>
<td>5.6</td>
</tr>
<tr>
<td>Formosa</td>
<td>−23.5</td>
<td>−10.7</td>
<td>−32.9</td>
<td>−27.3</td>
<td>−24.4</td>
<td>−7.0</td>
<td>−15.8</td>
<td>−11.0</td>
<td>−3.9</td>
</tr>
<tr>
<td>Jujuy</td>
<td>−7.2</td>
<td>10.3</td>
<td>−16.7</td>
<td>−24.1</td>
<td>−37.6</td>
<td>−20.1</td>
<td>−5.8</td>
<td>−8.4</td>
<td>−14.8</td>
</tr>
<tr>
<td>La Pampa</td>
<td>5.0</td>
<td>5.8</td>
<td>−6.5</td>
<td>−8.3</td>
<td>−16.8</td>
<td>−5.2</td>
<td>3.8</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>La Rioja</td>
<td>−2.1</td>
<td>−13.7</td>
<td>−2.3</td>
<td>−4.2</td>
<td>−2.1</td>
<td>8.3</td>
<td>11.2</td>
<td>4.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Mendoza</td>
<td>4.6</td>
<td>−1.6</td>
<td>−15.3</td>
<td>0.7</td>
<td>−27.3</td>
<td>−37.7</td>
<td>−5.7</td>
<td>−5.8</td>
<td>−17.3</td>
</tr>
<tr>
<td>Misiones</td>
<td>−3.3</td>
<td>−8.1</td>
<td>−17.2</td>
<td>−12.8</td>
<td>−26.8</td>
<td>−9.6</td>
<td>−12.1</td>
<td>−17.8</td>
<td>−3.6</td>
</tr>
<tr>
<td>Neuquén</td>
<td>−4.9</td>
<td>−8.2</td>
<td>−27.9</td>
<td>−16.3</td>
<td>−28.5</td>
<td>−0.2</td>
<td>2.4</td>
<td>−8.5</td>
<td>−10.4</td>
</tr>
<tr>
<td>Río Negro</td>
<td>−9.7</td>
<td>−10.9</td>
<td>−59.3</td>
<td>−28.2</td>
<td>−43.2</td>
<td>−26.0</td>
<td>−12.9</td>
<td>−11.9</td>
<td>−7.0</td>
</tr>
<tr>
<td>Salta</td>
<td>−19.6</td>
<td>−9.5</td>
<td>−3.4</td>
<td>−7.1</td>
<td>−15.6</td>
<td>−2.4</td>
<td>−10.6</td>
<td>−1.3</td>
<td>3.7</td>
</tr>
<tr>
<td>San Juan</td>
<td>−12.0</td>
<td>4.1</td>
<td>−16.3</td>
<td>−46.2</td>
<td>−42.7</td>
<td>−5.9</td>
<td>−3.2</td>
<td>−2.9</td>
<td>−4.8</td>
</tr>
<tr>
<td>San Luis</td>
<td>9.5</td>
<td>11.6</td>
<td>8.5</td>
<td>−2.6</td>
<td>0.8</td>
<td>22.1</td>
<td>23.4</td>
<td>19.8</td>
<td>3.7</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>−19.3</td>
<td>12.9</td>
<td>−0.6</td>
<td>−9.6</td>
<td>−7.6</td>
<td>3.3</td>
<td>−0.9</td>
<td>−12.9</td>
<td>−8.1</td>
</tr>
<tr>
<td>Santa Fe</td>
<td>−0.7</td>
<td>7.3</td>
<td>1.9</td>
<td>−0.1</td>
<td>−11.3</td>
<td>−2.0</td>
<td>2.8</td>
<td>−14.7</td>
<td>−7.5</td>
</tr>
<tr>
<td>Santiago del Estero</td>
<td>−7.6</td>
<td>−6.4</td>
<td>−16.0</td>
<td>−12.0</td>
<td>−3.8</td>
<td>7.1</td>
<td>8.5</td>
<td>6.7</td>
<td>7.9</td>
</tr>
<tr>
<td>Tierra del Fuego</td>
<td>−5.2</td>
<td>−3.6</td>
<td>−5.7</td>
<td>−7.6</td>
<td>−20.4</td>
<td>−3.8</td>
<td>−11.3</td>
<td>−12.7</td>
<td>−7.3</td>
</tr>
<tr>
<td>Tucumán</td>
<td>−0.2</td>
<td>−5.7</td>
<td>2.6</td>
<td>−10.5</td>
<td>−26.8</td>
<td>−16.7</td>
<td>−6.5</td>
<td>2.2</td>
<td>−3.0</td>
</tr>
<tr>
<td>Total</td>
<td>−9.3</td>
<td>−2.7</td>
<td>−8.1</td>
<td>−8.6</td>
<td>−13.0</td>
<td>−5.9</td>
<td>−4.2</td>
<td>−6.7</td>
<td>−10.5</td>
</tr>
</tbody>
</table>

Source: Subsecretaría de Programación Regional.

a large part of the consolidated fiscal imbalance. The decline in the consolidated provincial deficits after 1995, especially in 1996 and 1997, is mainly the result of reductions achieved in few large jurisdictions, including Córdoba and Mendoza. Many provinces continued to carry very high deficits that represented more than 15 percent of their total revenues (see table 3).

The accumulation of deficits was reflected in increasing debt. In the aggregate, the provinces’ level of indebtedness grew from 40 percent of total revenues in 1994 to 53 percent in 1999 (see table 4). This average value, however, is very much influenced by the behavior of a few large provinces. In particular, the province of Buenos Aires launched an aggressive program in 1997 to reduce its debt obligations, which fell from 40 per-
cent of total resources in 1996 to 14 percent in 1997.\textsuperscript{14} In contrast, the level of debt grew steadily in provinces such as Río Negro, Corrientes, and Tucumán, reaching values well beyond 100 percent of total revenues in 1999 (see table 5).

The growing deficits and the accumulation of debt were the result of significant increases in expenditures induced by rapid rises in total provincial resources during the period of strong economic growth that followed the implementation of the convertibility plan in 1991 (see table 2). Thus between 1991 and 1994, expenditures almost doubled while current income increased at slower pace, which raised the deficit. This behavior was replicated, though somewhat more moderately, during a second expansionary wave that took place between 1996 and 1998. This highly procyclical fiscal policy had negative consequences when the cycle changed its sign. When the tequila crisis hit the Argentine economy in 1995, for example, the provinces had a hard time finding sources to finance both current deficits and their debts. A similar, though again more moderate, phenomenon occurred in 1999, when Argentina entered a sharp recession following the Brazilian devaluation. The significant rise in deficits and debt in those years should not be considered a sign of greater access to financing. As table 6 indicates, a significant part of this additional financing was forced on suppliers and, most importantly, public employees: some provinces accumulated arrears of up to six months in payments of public salaries. Figure 3 illustrates the procyclical behavior of Argentine provincial finances.

\textsuperscript{14} This was achieved mainly through the significant reduction of the provincial obligations with the provincial state bank. For details, see Sanguinetti and Zentner (2000).

<table>
<thead>
<tr>
<th>Year</th>
<th>In billions of dollars</th>
<th>Percent change</th>
<th>As percent of GDP</th>
<th>As percent of total income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>11.1</td>
<td>\ldots</td>
<td>4.3</td>
<td>40.6</td>
</tr>
<tr>
<td>1995</td>
<td>14.6</td>
<td>31.1</td>
<td>5.7</td>
<td>54.6</td>
</tr>
<tr>
<td>1996</td>
<td>15.6</td>
<td>7.4</td>
<td>5.8</td>
<td>53.8</td>
</tr>
<tr>
<td>1997\textsuperscript{a}</td>
<td>14.8</td>
<td>-5.3</td>
<td>5.1</td>
<td>45.4</td>
</tr>
<tr>
<td>1998</td>
<td>15.8</td>
<td>6.5</td>
<td>5.3</td>
<td>47.7</td>
</tr>
<tr>
<td>1999</td>
<td>18.6</td>
<td>17.7</td>
<td>6.5</td>
<td>58.0</td>
</tr>
</tbody>
</table>

Source: Subsecretaría Programación Regional.

\textsuperscript{a} The decrease in the stock of debt in 1997 is mainly due to the reduction of debt by the province of Buenos Aires, which canceled an obligation with Banco de la Provincia de Buenos Aires.
### TABLE 5. Provincial Debt, 1994–99

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal District</td>
<td>50.4</td>
<td>46.5</td>
<td>40.2</td>
<td>40.3</td>
<td>34.5</td>
<td>27.3</td>
</tr>
<tr>
<td>Buenos Aires</td>
<td>37.8</td>
<td>36.9</td>
<td>40.3</td>
<td>14.3</td>
<td>16.3</td>
<td>23.5</td>
</tr>
<tr>
<td>Catamarca</td>
<td>78.8</td>
<td>63.3</td>
<td>79.9</td>
<td>76.3</td>
<td>77.6</td>
<td>88.3</td>
</tr>
<tr>
<td>Chaco</td>
<td>76.6</td>
<td>80.6</td>
<td>68.0</td>
<td>94.5</td>
<td>108.4</td>
<td>146.9</td>
</tr>
<tr>
<td>Córdoba</td>
<td>46.7</td>
<td>65.4</td>
<td>50.0</td>
<td>48.8</td>
<td>44.0</td>
<td>51.9</td>
</tr>
<tr>
<td>Corrientes</td>
<td>89.3</td>
<td>111.8</td>
<td>114.8</td>
<td>104.9</td>
<td>128.5</td>
<td>150.4</td>
</tr>
<tr>
<td>Entre Ríos</td>
<td>41.7</td>
<td>57.4</td>
<td>50.2</td>
<td>44.8</td>
<td>50.7</td>
<td>62.3</td>
</tr>
<tr>
<td>Formosa</td>
<td>68.3</td>
<td>132.9</td>
<td>129.8</td>
<td>116.9</td>
<td>120.3</td>
<td>141.1</td>
</tr>
<tr>
<td>Jujuy</td>
<td>42.1</td>
<td>86.0</td>
<td>99.7</td>
<td>113.9</td>
<td>107.2</td>
<td>124.1</td>
</tr>
<tr>
<td>La Pampa</td>
<td>0.0</td>
<td>7.9</td>
<td>18.7</td>
<td>16.6</td>
<td>15.5</td>
<td>15.5</td>
</tr>
<tr>
<td>La Rioja</td>
<td>120.3</td>
<td>90.7</td>
<td>85.2</td>
<td>72.3</td>
<td>74.2</td>
<td>74.8</td>
</tr>
<tr>
<td>Mendoza</td>
<td>21.5</td>
<td>103.5</td>
<td>83.5</td>
<td>111.1</td>
<td>65.0</td>
<td>90.3</td>
</tr>
<tr>
<td>Misiones</td>
<td>42.6</td>
<td>90.6</td>
<td>74.3</td>
<td>84.4</td>
<td>88.0</td>
<td>122.8</td>
</tr>
<tr>
<td>Neuquén</td>
<td>7.5</td>
<td>31.3</td>
<td>33.9</td>
<td>31.7</td>
<td>40.7</td>
<td>62.3</td>
</tr>
<tr>
<td>Río Negro</td>
<td>61.1</td>
<td>107.6</td>
<td>108.2</td>
<td>121.7</td>
<td>126.3</td>
<td>158.7</td>
</tr>
<tr>
<td>Salta</td>
<td>37.9</td>
<td>73.1</td>
<td>63.1</td>
<td>59.9</td>
<td>61.9</td>
<td>74.3</td>
</tr>
<tr>
<td>San Juan</td>
<td>51.5</td>
<td>79.8</td>
<td>67.2</td>
<td>53.6</td>
<td>57.1</td>
<td>83.5</td>
</tr>
<tr>
<td>San Luis</td>
<td>0.0</td>
<td>3.9</td>
<td>12.4</td>
<td>17.2</td>
<td>16.8</td>
<td>16.5</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>16.3</td>
<td>25.0</td>
<td>11.9</td>
<td>6.1</td>
<td>21.4</td>
<td>41.4</td>
</tr>
<tr>
<td>Santa Fe</td>
<td>18.1</td>
<td>24.8</td>
<td>23.3</td>
<td>23.8</td>
<td>36.1</td>
<td>45.4</td>
</tr>
<tr>
<td>Santiago del Estero</td>
<td>26.4</td>
<td>49.9</td>
<td>59.6</td>
<td>45.1</td>
<td>42.9</td>
<td>33.3</td>
</tr>
<tr>
<td>Tierra del Fuego</td>
<td>7.3</td>
<td>36.2</td>
<td>41.3</td>
<td>43.4</td>
<td>45.6</td>
<td>70.2</td>
</tr>
<tr>
<td>Tucumán</td>
<td>61.0</td>
<td>74.3</td>
<td>105.3</td>
<td>105.5</td>
<td>96.6</td>
<td>116.5</td>
</tr>
</tbody>
</table>

Total                | 40.2  | 54.1  | 53.3  | 44.9  | 47.1  | 58.0  |


**BAILOUTS.** In several cases, the federal government had to undertake rescue operations to finance the unsustainably high provincial deficits. As documented in Nicolini and others, these bailout operations took various forms in the 1990s, and they did not always imply the direct transfer of money to the provincial authorities.15 Between 1992 and 1994, the federal government provided financial assistance to seven provinces that were going through fiscal and financial difficulties.16 In all

TABLE 6. Composition of Aggregate Provincial Debt

<table>
<thead>
<tr>
<th>Year</th>
<th>Billions of dollars</th>
<th>Percent of total debt</th>
<th>Billions of dollars</th>
<th>Percent of total debt</th>
<th>Billions of dollars</th>
<th>Percent of total debt</th>
<th>Billions of dollars</th>
<th>Percent of total debt</th>
<th>Billions of dollars</th>
<th>Percent of total debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>5.33</td>
<td>0.37</td>
<td>0.22</td>
<td>0.01</td>
<td>1.49</td>
<td>0.10</td>
<td>4.30</td>
<td>0.30</td>
<td>3.24</td>
<td>0.22</td>
</tr>
<tr>
<td>1996</td>
<td>6.24</td>
<td>0.40</td>
<td>0.35</td>
<td>0.02</td>
<td>1.77</td>
<td>0.11</td>
<td>3.50</td>
<td>0.22</td>
<td>3.79</td>
<td>0.24</td>
</tr>
<tr>
<td>1997</td>
<td>4.64</td>
<td>0.31</td>
<td>1.59</td>
<td>0.11</td>
<td>2.33</td>
<td>0.16</td>
<td>2.90</td>
<td>0.20</td>
<td>3.37</td>
<td>0.23</td>
</tr>
<tr>
<td>1998</td>
<td>5.24</td>
<td>0.33</td>
<td>1.80</td>
<td>0.11</td>
<td>3.03</td>
<td>0.19</td>
<td>2.54</td>
<td>0.16</td>
<td>3.17</td>
<td>0.20</td>
</tr>
<tr>
<td>1999a</td>
<td>5.59</td>
<td>0.33</td>
<td>1.89</td>
<td>0.11</td>
<td>3.23</td>
<td>0.19</td>
<td>2.86</td>
<td>0.17</td>
<td>3.18</td>
<td>0.19</td>
</tr>
</tbody>
</table>


a. Includes debt with the national government.
b. As of June of 1999.


Source: Ministerio de Economía, Subsecretaría de Programación Regional.
of these cases, financial aid involved the transfer of national treasury bonds available at the federal level at that moment. The provinces obtained the required resources by selling those bonds in secondary markets. These funds represented a significant proportion of the financial needs of the jurisdictions: the loans granted during 1994 alone covered 89.5 percent of the financial needs of these provinces in that year. When we include the loans made to Corrientes in 1992 and to Santiago del Estero in 1993, the total amount of resources that was handed out reached $800 million.

Another type of bailout occurred with the transfer to the national government of some of the provincial pension systems. One of the main sources of deficits in the affected provinces was their state provincial pension systems, which generated large deficits due to poor mechanisms for collecting revenues and overly generous benefit payments. Between 1994 and 1996, therefore, the national authorities took direct responsibility for operating the provincial pension regimes in eleven provinces, merging them with the national system. As a consequence, the national government had to assume a significant fiscal cost given the disequilibria that were found ex post in those regimes. Though cost of the bailout was originally calculated at about $500 million a year in 1996, the actual cost jumped to $1500 million in 1998.

**POOR LOCAL TAX COLLECTION.** At the root of the financial difficulties facing many provincial governments are poor performances in provincial tax collection. This is associated with weak local tax agencies, which lack updated information on tax bases and other key variables. Tax compliance is thus very low. There are no good estimations of tax evasion in provincial tax systems, but the data presented in table 7 suggest that some jurisdictions are not doing their best to strengthen their local sources of income. The table shows estimates of total tax income on provincial GDP for 1999, together with income from royalties (paid on the exploitation of natural resources) and other nontax resources. The average provincial tax revenue is about 4.5 percent, but the provinces demonstrate a strong variation around this average. This can be taken as an unjustified difference in tax effort if there are no significant disparities in the tax system across provinces (in terms of, for example, tax decentralization) and also no major differences in nontax sources of income. The data in the table thus indicate that provinces such as Chaco, Corrientes, Formosa, Jujuy, Misiones, and, notably, La Rioja are well below the average in terms of tax collec-
tion, and this is not justified by the existence of any other significant provincial source of income.

**POOR NATIONAL TAX COLLECTION.** Compliance with the nationally collected value added tax, which is the main revenue source for the consolidated public sector, is estimated to be 55 percent. In contrast, other Latin American countries have considerably better compliance rates: Chile, 80 percent; Colombia, 72 percent; and Uruguay, 70 percent. We cannot pin all the responsibility for this poor tax compliance on the federal fiscal system, but many observers believe that the current regime is part

of the explanation because it virtually eliminates any incentive for the provincial authorities to cooperate in the collection of pooled taxes. 18

**INEFFICIENCIES IN THE FISCAL MIX.** The fact that some taxes are shared and others are not has led the federal government to make some inefficient decisions. As Tanzi argues, this leads to situations in which non-shared taxes acquire greater weight in the tax system, even when they are less efficient. 19 National taxes on labor, for example, are considered to be too high for a country suffering very high unemployment. In 1999, Argentina was among the countries with the largest tax wedge between gross labor cost and net wages, surpassed only by France (see figure 4). Taxes on labor as a proportion of total payroll payments were above

18. Why pay the political cost of using local police to close down businesses that fail to pay taxes if there is no connection whatsoever between how much each province collects and how much it receives out of pooled taxes? There have even been episodes of local citizens and local authorities ganging up against the national tax collector.

40 percent and were higher than the average of both industrialized and Latin American economies.

At the provincial level, there is an excessive reliance on the turnover tax, which is the largest source of provincial own revenue. While the turnover tax is easy to collect, it is a cascading tax that constitutes a drag on enterprise cost, fosters inefficient vertical integration, benefits imports over domestic products, increases the cost of exports, has a tax base that competes with the federal value added tax, and makes it difficult to audit interprovincial transactions.

INDUSTRIAL PROMOTION REGIMES AND COMPETITION FOR TAX REVENUES. The noncooperative behavior among provincial governments has also affected the collection of national taxes, even though the provinces do not directly administrate those taxes. This has occurred through very generous and poorly controlled regimes for industrial promotion. Under these regimes, exemptions from major national taxes can be allocated to industries and other activities established in certain regions of the country. The two more important regimes are those established for the provinces of Catamarca, La Rioja, San Luis, and San Juan, on one hand, and Tierra del Fuego, on the other. The national government has recently received enormous pressure to extend the regimes to other provinces, especially for nonindustrial activities such as forestry and tourism. This regional policy has been a significant source of lost opportunity for revenues that has only recently begun to be quantified and somewhat controlled. The magnitude of the benefits is important, especially in the case of the five indicated provinces, because they allow the provinces to postpone payment of value added taxes for a period of up to fifteen years. In practice, these regimes generate a form of tax competition between the favored regions (involving national taxes), in that the province has the authority to select projects. A huge amount of national resources has been directed to these regions as a result. For the fiscal year 2000, the figure is estimated to be around $1.8 billion. The federal tax authority estimates that the fiscal cost of the system will amount to nearly $8 billion between 1992 and 2010, when many of the benefits expire.

TRANSFERS AND INEFFICIENCIES IN THE PROVISION OF LOCAL PUBLIC GOODS. Federal transfers redistribute resources across provinces without clear criteria. As already indicated, the secondary distribution is

based on fixed coefficients established by law without any justification. Consequently, the distribution of federal transfers cannot respond to variations in the level of demand for public services either across provinces or across time in a given province. In the area of basic education, for example, many provinces witnessed a strong increase in the rate of enrollment in the 1990s. Although provincial governments increased in real terms the amount they spent on education, it was not enough to maintain the level of expenditure per student (see figure 5). In fact, in jurisdictions such as Neuquén, Río Negro, Catamarca, San Juan, and Tierra del Fuego, expenditure per student fell at a significant rate. Though this evidence alone does not indicate a significant reduction in the quality of education, it signals that the federal system is not providing a stable financing for critical public goods such as basic education.22 This is all the more

---

22. Even the presence of specific transfers for basic education designed and administered by National Ministry of Education didn’t seem to help to make provinces to maintain or increase the level of expenditure in primary education. As it is shown in Nicolini and others (2000), once we control for other factors that determines provincial expenditure in basic education, there is a negative and significant relation ship between provincial expenditure in education and national transfers. Thus provincial administrations use the national resources as substitute for their own financing.
critical considering that the Argentine Constitution explicitly demands that federal transfers aim to ensure equal development opportunities and quality of life across the country.

**The Political-Transactions Theory**

This section outlines a theory that explains features of public policies as the outcome of political transactions, which are conditioned by the prevailing rules of the game (that is, by the incentives and constraints that political actors face). This political-transactions approach to fiscal federalism constitutes a considerable advance over the analysis encountered in the existing literature, which emphasizes coordination and common pool problems in decentralized fiscal settings. That literature does not explain under what circumstances those rules or federal fiscal institutions will emerge as a result of the federal political game. To address this shortcoming, we construct a theoretical framework that describes fiscal institutions and fiscal outcomes in a federation as endogenously generated by certain political institutions and variables, which define the scope for intergovernmental political exchanges.

We analyze the workings of federal systems (including fiscal federalism) as a game, in which the players are the constituent subnational units and some relatively independent national political actors. The latter group is incorporated because a national government is, in part, constituted by representatives of the subnational units. The exact details of that representation, as well as the incentives of the independent national actors, will vary depending on constitutional rules, electoral systems, certain characteristics of the party system, and so forth. For simplicity, think of the main independent national actor as the president of the country.

A federal system can be characterized by the allocation of policy jurisdictions across units (the central government and each local government), by the decisionmaking rules for those policies assigned to the central government (such as the rules of the national legislative process and the electoral connection to provincial governments), and by the explicit or implicit decisionmaking rules for those issues that inevitably fall in a gray area

---

23. Spiller and Tommasi (2000b) suggest the general framework that we apply here to fiscal federalism.

24. See Velasco (1998); Aizenman (1998); Jones and others (2000).
requiring collective decisions. The latter includes decisions about chang-
ing the jurisdictional allocations.

At a given point in time, a federal country will inherit a set of jurisdict-
tional allocations and decisionmaking rules, and the federal (fiscal) game
will take place under those conditions.25 The game is one in which the
players have to make collective decisions and also take individual actions.
Collective decisions are made in different arenas, namely, the national
Congress and explicit intergovernmental agreements (for example, the
decision to decentralize some educational service from the national gov-
ernment to the provincial governments or a new tax-sharing agreement).
The outcome of the collective decision will take the form of a contract,
such as laws in the case of Congress or fiscal pacts or other federal agree-
ments in the case of intergovernmental agreements. Individual actions
include decisions such as government spending or government borrowing
by a particular unit in any given period, as well as pairwise agreements
between, say, the national government and a particular provincial govern-
ment. They also include investment decisions, such as a provincial gov-
ernment’s decision to invest in developing sophisticated technologies to
acquire information on the tax bases in the province or the decision to
pay the short-term political cost of fiscal adjustment.26 Decisions and
actions result in payoffs for each of the players. If we apply the logic of
transaction cost economics, we can characterize these decisions and
actions by their duration, reversibility, fungibility, and the temporality of
their payoffs.

The environment is, in part, a repeated game, but with some stochastic
features (that is, it is a dynamic game.) We can simplify the stochastic
environment as being subject to two types of shocks: economic shocks
coming from international markets, policy decisions in other countries,
technological changes, diseases, natural disasters, social and demographic
changes, and so forth; and political shocks that represent shifts in the rel-
ative political power of the players (unrelated to changes in fundamental
variables). Examples of political shocks include the fact that the national
president is a native of a particular province or the particular realization

25. Iaryczower, Saiegh, and Tommasi (1999) describe an endogenous process for the
establishment of the original contract (i.e., the Constitution) and the subsequent dynamics.

26. The difference between actions and investments relates to the temporal flow of pay-
offs associated with the given policy. For the sake of brevity, we speak of them generically
as actions, except when we specifically want to emphasize investments.
of a powerful coalition in Congress that is able to trade support for some national legislation in exchange for federal funds. This type of political uncertainty could be modeled by some variation of the random recognition rule used in the legislative bargaining models pioneered by Baron and Ferejohn.\textsuperscript{27}

To focus the discussion, we now describe a game between two provinces, \(i = A, B\). Each player tries to minimize

\[
\sum_{t=0}^{\infty} \delta^t E[L_i(y_t, \theta_t)],
\]

where \(\delta \in [0,1]\) is a discount factor measuring patience and \(L_i(\cdot)\) is a loss function that depends on the collectively chosen policy \(y\) and the economic shock \(\theta\), identically and independently distributed over time, with \(E(\theta) = 0\). For simplicity, let

\[
L_i(y_t, \theta_t) = [y_t - (y_i + \theta_t)]^2.
\]

The fact that \(y_A \neq y_B\) captures the elements of conflict, while the fact that everybody’s preferred policy responds in the same direction to \(\theta\) captures the common interest, or economic efficiency.\textsuperscript{28} Further assume that \(y_B = -y_A > 0\).

In each period, after the random shock \(\theta_t\) occurs, the policy \(y_t\) is elected through a collective choice mechanism. For simplicity, assume that a coin is flipped to randomly choose which player gets to be the dictator for the period, with a probability of 1/2. That is,

\[
\mu_t = i = A, B,
\]

with a probability of 1/2. \(\mu_t = i\) implies that player \(i\) decides \(y\) in period \(t\).\textsuperscript{29}

\textsuperscript{27} Baron and Ferejohn (1989).

\textsuperscript{28} As an example of these reduced-form policy preferences, imagine a policy aiming to tax and provide a public good. Richer (poorer) players will want lower (higher) taxes, but everybody would increase (decrease) his desired level of public goods in periods in which those goods are cheaper (more expensive). See Cukierman and Tommasi (1998a, 1998b) and Personn and Tabellini (2000) for other examples that could deliver this type of reduced-form policy preferences.

\textsuperscript{29} This is a very simplified version of several richer collective decisionmaking mechanisms, such as those in Alesina (1988); Baron and Ferejohn (1989); Dixit, Grossman, and Gul (2000).
Assume, furthermore, that there is an initial period (zero) in which, by unanimity, players can make some agreements (that is, they can sign some contracts). The set of feasible contracts constitutes another exogenous feature of the institutional environment, which affects the type of policies that emerge in equilibrium. Also, the set of feasible contracts depends on the nature of the issues in question—whether the economic shocks are observable and verifiable, for instance.

Define a first-best utilitarian benchmark as

$$
\text{(4)} \quad \text{Min} \sum_{t=0}^{\infty} \delta^t E[L_0(y_t, \theta_t) + L_0(y'_t, \theta'_t)].
$$

Given our assumptions, equation 4 simplifies to

$$
\text{(5)} \quad \text{Min} \sum_{t=0}^{\infty} \delta^t E(y_t - \theta_t)^2,
$$

such that the first-best policy is $y_t = y^*(\theta_t) = \theta_t$ for all $t$.

Result 1: the first-best policy is a function of the realization of economic shocks, but it is independent of the realization of political shocks.

We now analyze the solution to the noncooperative game. The one-shot Nash equilibrium has $y_t = y_{\mu_t} + \theta_t$. In a repeated game, the infinite repetition of one-shot Nash is, of course, an equilibrium.

Result 2: In a noncooperative equilibrium, the policy chosen each period—unlike the first-best policy—depends on the realization of the political random variable $\mu$.

This equilibrium generates the following present value of expected utility for each player:

$$
\text{(6)} \quad V^* = \frac{1}{2} [0 + (2y_0)^2] + \delta V^* = \frac{2y_0}{1 - \delta}.
$$

To expedite the analysis, we focus on the possibility of the most cooperative behavior, which is supported by the harshest punishment strategy of permanent reversion to noncooperation. This is the strategy (S1) for both $i$:

$$
\text{(7)} \quad y_i = \theta_i = \theta_t, \text{ and}
$$
For both players, the payoff along the equilibrium path of cooperation is

\[ V^* = \frac{y^2}{1 - \delta}. \]

To verify whether this strategy pair constitutes an equilibrium, we have to consider the value of an opportunistic deviation to \( y_{i, t} + \theta t \). Such deviation would move the game to noncooperation forever, leading to the value

\[ V^D = 0 + \delta V^N = \frac{\delta}{1 - \delta} 2y^2. \]

Comparing the loss functions \( V^* \) and \( V^D \) leads to the conclusion that cooperation can be sustained if \( \delta \geq \frac{1}{2} \).

Result 3: The first-best can be attained if \( \delta \) is large enough (that is, when players have long horizons).

More generally, the possibility of sustaining cooperation depends on a number of factors, including the number of players, as well as the parameters that characterize a richer decisionmaking procedure than the one assumed in equation 3.

Consider now what might transpire in the previous stage of the game. If complete, enforceable contracts are feasible, the players will establish contracts on first-best policies. More realistically, the features of the resulting policies generally depend on the set of feasible contracts. Suppose, for instance, that agreements can be enforced, but that the realization of economic shocks is not verifiable. In that case, the players cannot establish economic state–contingent contracts, but they can agree on simple rules. In the simple example, the best such rule is to fix \( y_t = 0 \) for all \( t \). This delivers an expected loss of

\[ V^u = \sum_{t=0}^{\infty} \delta^t E(y_t + \theta)^2 = \frac{y^2 + Var(\theta)}{1 - \delta}. \]
Obviously this is inferior to the first-best, namely, $V^0 > V^*$. The discretionary cooperative equilibrium is preferable to a rigid rule. Whenever the game delivers cooperation at a later point, a rigid rule will not be used.

Result 4: For a high $\delta$, the players will not restrict themselves to rigid rules; they will prefer a more liberal collective decisionmaking process, so as to have the capacity to respond to economic shocks that require policy adjustment.

A comparison of the rigid rule and the noncooperative case demonstrates that $V^N > V^0$ if $(y_B)^2 > Var(\theta)$. Given that $y_B$ is a measure of the intensity of the conflict of interests and $Var(\theta)$ is a measure of the volatility of the economic environment, we obtain the following result:

Result 5: Given a limited capacity to self-enforce cooperative agreements, rigid policy rules (which are not responsive to the economic environment) will be chosen if the conflict of interests is large compared to the volatility of the economic environment.\(^{30}\)

This result can be expanded into a more general statement of the relation between the degree of enforceability and the nature of the policies generated:

Result 6: A low capacity to enforce intertemporal political exchanges will lead to either too much policy volatility in response to politics (that is, instability of political agreements) or policies that are too rigid and not responsive enough to the economic environment (that is, lack of adaptability).

This very simple exercise thus shows that when self-enforcement is feasible, policies will be efficient: they will be flexible enough to accommodate changing economic and social realities, but they will not be subject to political opportunism. On the other hand, when the transactions environment does not foster cooperation, the resulting system will feature excess policy volatility in response to political shocks, as well as some policy rigidities built in as protection against political opportunism.

**Adding Explanatory Variables**

So far the discussion has centered on the discount factor as the variable explaining the possibility of political cooperation. We can modify the description of the game in several dimensions that will be relevant for mapping the theory to institutional environments. The extensions fall

\(^{30}\) Notice that this result is similar to the standard rules-versus-discretion result in monetary policy. See, for instance, Rogoff (1987); Persson and Tabellini (2000, chap. 17).
into two groups: those that expand the set of possible commitment (or enforcement) technologies and those that enlarge the set of opportunities for cheating.

Regarding enforcement technologies, one possibility mentioned above is implementing policy rules. An alternative mechanism which, if available, might alleviate the impact of political conflict is delegation, as described in the literature on central banks and regulatory agencies. Under certain conditions, political actors can delegate the implementation of their policy agreements to an independent bureaucracy. This supposed technocratic panacea is obviously complicated by many practical problems, but if those problems are not too severe, or if they could be moderated by design, some amount of delegation can improve the noncooperative discretionary outcome. In the simplified model, the optimal form of delegation would be to delegate policy forever to an individual with preferences as in equations 1 and 2, but with preference parameter \( y_i = 0 \). An additional enforcement technology which might be available is some sort of impartial umpire capable of enforcing certain agreements (for example, an independent court).

The possibility of political cooperation and, hence, of efficient public policies is increased by the availability of some such enforcement technologies. Precisely the opposite result obtains if the game is complicated by the introduction of opportunities for cheating. Such opportunities include asymmetric information about economic shocks and the possibility of some actors undertaking unobservable actions ex post that reshape the distribution agreed on in the centralized bargaining process.\(^31\) The more feasible these actions are, the higher the probability of a break-up in cooperation and of short-sighted policies.

Furthermore, some institutional arenas are better structured than others in terms of promoting self-enforcement or institutionally-based enforcement. In different polities, key political agreements are negotiated in arenas with different degrees of institutionalization.\(^32\) Such factors affect enforceability and hence the qualities of the resulting policies.

\(^31\) An example of the latter is the national executive office having discretion over the geographical allocation of funds for given programs, which provides an opportunity for overriding the distribution determined through tax-sharing agreements and other central negotiations (fiscal pacts). That is indeed the case in Argentina (Radics and others, 1999; Strasser, 1999).

\(^32\) We argue later that the weakness of the Argentine national Congress (itself a consequence of exogenous determinants) has moved some key negotiations to arenas that are far less equipped for intertemporal enforcement.
Enriching the Action Space

We argued above that the set of explanatory politico-institutional variables could be expanded beyond the discount rate to include many determinants of the quality of the transactions environment. The action space can similarly be enriched to capture other relevant features of policies and the policymaking process. One such extension would be to enrich the intertemporal properties of policies: rather than being chosen anew every period, policies could be carried over and linked across periods for technical reasons (building a bridge today provides utility over several periods), legal reasons (a law is in place until changed by another law), or economic reasons (present fiscal actions have future effects through intertemporal budget constraints). This richer policy space will give rise to additional implications. One possibility is that welfare-improving policy reforms might not be undertaken in a bad transactions environment.33

Another extension would be to include not only collective decisions but also individual policy actions, including the policy actions of each provincial government, as well as other “individual” political actions, such as cutting a side deal with the national government. Those actions could be characterized by their impact on the present and future payoffs for the actors undertaking them and for the other players. From there, further implications of the transactions environment for the properties of public policies could be obtained. For the sake of brevity, we summarize some of those implications in the following proposition. If the transactions environment does not foster cooperation, then the institutional structure will exhibit the following characteristics: too much opportunism, leading to volatile collective decisions (which are too responsive to political shocks) and noncooperative individual actions; economically inefficient choices aimed at preventing such opportunism (for example, rigidly distributing rents before the realization of economic uncertainty); failure to implement certain desirable policy reforms; and underinvestment in capacities, which lowers the quality of the policies generated.

We argue that the Argentine case is characterized by a poor environment for intertemporal political transactions, leading to the above results. This translates into many of the observed (and difficult to reform) inefficient features of fiscal federalism. The problem of an inadequate transactions envi-

33. See Sturzenegger and Tommasi (1998) for a summary of some such results in the political economy of reform.
The environment is magnified in the Argentine case by the high degree of national-provincial interdependence (that is, by the large size of the gray area).

The next section maps the above results onto the characteristics of Argentina’s fiscal federalism. The following section then presents evidence to support the claim that the environment for federal political transactions is not conducive to efficient intertemporal trades.

**Mapping the Theory onto the Features of Fiscal Federalism in Argentina**

This section describes a political and institutional context characterized by a combination of: lack of incentives in national legislators, excessive interference by provincial leaders in national policymaking, and the ability of the national executive office to alter agreements via budgetary discretion and other means. This combination of features produces a trading environment that is not conducive to the agreement on and enforcement of efficient policies and reforms, with serious consequences for the workings of fiscal federalism.

Some of the stylized facts of fiscal federalism in Argentina described earlier can be understood as the result of this logic. We provide below a series of examples, organized around the theoretical results of the previous section.

**Opportunism**

Opportunism is reflected in noncooperative individual actions and in volatile decisions in the national arena. Noncooperative actions are those individual actions that negatively affect the payoffs of other players. The high deficits and provincial debts clearly indicate opportunistic behavior on the part of provincial authorities. This behavior generates inefficiencies through the negative externalities generated in credit markets. Similarly, the poor provincial tax effort has negative reverberations for other provinces through the bailout mechanism. The lack of provincial cooperation with regard to fostering better collection of national taxes also reflects opportunistic behavior.

The frequently observed unilateral agreements through which a province receives some special favor from the national government represent another
form of noncooperative actions in the game among provinces. In this case, the behavior is fostered by institutional features that grant such discretion to the president—or to the national legislature in the case of many industrial promotion regimes. This last mechanism is also associated with the volatility of the provincial allocation of federal spending, including tax exemptions. Nicolini and others show that the allocation of national treasury contributions to the provinces were affected by political variables in each period.\textsuperscript{34} Nicolini, Sanguinetti, and Sanguinetti further show dramatic shifts in the amount of transfers from the national Ministry of Education to the different provinces; these shifts cannot be explained through standard demand variables, which move quite slowly in the case of education.\textsuperscript{35}

**Economically Inefficient Choices**

Inefficient choices, both at the individual level and in the collective realm, are often made to protect against the possibility of future opportunism. The highly procyclical behavior of provincial finances can be understood as an indirect result of opportunistic behavior. Provinces do not have incentives to save in good times because they may fear that on doing so, they would obtain a smaller share of federal fiscal resources. This is consistent with the evidence on bailouts and with the level of discretion and lack of transparency that affect the design of federal transfers. Provinces can extract extra resources from the federal government by being in financial difficulties.\textsuperscript{36}

The inefficiencies in the input mix of public production, with excessive public employment in many provinces, might also be seen as a mechanism for increasing political leverage in order to obtain central funds. Excessive public employment is an economically inefficient action that imposes some intertemporal rigidities, since it is harder to fire people than to postpone or suspend purchases of other inputs.\textsuperscript{37}

Many more rigidities are embedded in the collective agreements, generically know as fiscal pacts. They include many instances (for example, in 1992, 1993, 1999, and 2000) in which provinces have been guaranteed a floor on transfers, independent of tax collection. The very mechanism of

\textsuperscript{34} Nicolini and others (2000).
\textsuperscript{35} Nicolini, Sanguinetti, and Sanguinetti (2000).
\textsuperscript{36} Nicolini and others (2000); Jones, Sanguinetti, and Tommasi (2000).
\textsuperscript{37} This practice is comparable to cash hiding in public enterprises (Savedoff and Spiller, 1999).
the tax-sharing law is another source of rigidity, as it specifies fixed co-efficients on a given set of taxes for each province and for the national government rather than making the distribution of funds a function of the determinants of the relevant spending needs. Some of the fairly restrictive mandates of the 1994 Constitution can be interpreted in the same light.

Failure to Implement Desirable Policy Reforms

The inability to effect the required intertemporal transactions is part of the explanation of several inefficiencies of the Argentine tax system. Imagine that the economic authorities consider it appropriate to reduce payroll taxes, due to high unemployment. Given a tight fiscal situation, the potential reduction in revenues has to be compensated by an increase in other taxes. If payroll taxes are nonshared national taxes while most of the taxes that have to be increased are shared ones (as is the case in Argentina), this tax reform would require the provinces to compensate the national government in order for the latter to maintain previous levels of spending. Given the obvious uncertainties about the exact amount of extra shared revenues to be generated, however, together with the incentives for strategic misrepresentation of those estimates, the provinces are likely to resist paying such a compensation (unless they were able to write complete contracts). This is not a fictional scenario. It happened in Argentina in 1998, and similar problems have occurred in relation to other national taxes, such as import duties, export taxes, and the inflation tax.

The same problem lies behind the inability to implement many of the provincial tax reforms outlined in the 1992 and 1993 fiscal pacts. In particular, compliance has been weak on those associated with the reformulation or elimination of the gross income tax (or turnover tax). The following description by Schwartz and Liuksila is particularly telling:

Tax reform was clearly the centerpiece of the second fiscal pact. Provinces adhering to the pact committed themselves to eliminating stamp taxes on checking accounts, taxes on the transfer of fuel, gas and electricity and, most important, phasing out the provincial turnover tax. . . .

38. Nicolini, Sanguinetti, and Tommasi (1999) show that the current system performs poorly as a mechanism of sharing risk against shocks to tax bases.
40. Lack of compliance is so widespread that the 1999 accord calls for the “fulfillment of the tax reforms agreed on in the 1993 fiscal pact.”
Initially, the provinces were slow to join this second pact, largely because of the revenue implications of the tax reforms, particularly the initial stipulation to abolish the provincial turnover tax before June 1995. While the provinces were free to replace the turnover tax with other taxes, many have not yet done so.

Overall, there is no easy short-term alternative for replacing the provincial turnover tax.

Other alternatives for improving provincial revenue would be beneficial in the long run, but would not yield short-term results. Similarly, improving real state taxation would require substantial initial efforts, including, for example, improving property mapping and property registries; providing better and more consistent application of valuation techniques; improving the exchange of information between local tax offices, and property registries.

The announcement in December 1993 that federal payroll taxes levied on employers would be reduced, depending on region and sector, in those provinces participating in the second pact, increased pressure on provincial governments to join. By May 1994, all but one provincial legislature had ratified the second fiscal pact, and most had taken at least some initial steps toward implementation. Also the provinces were given a minimum revenue guarantee and some other guaranteed fixed payments that provided a floor of federal transfers equivalent to about 4.5 percent of GDP annually.

The second fiscal pact clearly shows the “horse-trading” that is involved in implementing structural reforms of the system of fiscal federalism. It came at the expense of making payroll taxes an explicit instrument of regional and sectoral policies, and contributed to the growing social security deficit.41

This example illustrates the government’s inability to negotiate inter-temporal trades that have the nature of investments, namely, up-front costs and a later stream of benefits that could be appropriated. It seems that the extant federal governance structure of Argentina cannot support such trades.

Underinvestment in Capacities

The previous subsection refers to the inability to undertake what might be thought of as collectively beneficial investments. Underinvestment also occurs with regard to individually beneficial investments, in comparison to what would be the norm in a fully decentralized context. For example, provincial tax agencies lack the personnel, technology, and information to effectively discharge their duties. This situation results from underinvestment as a strategy to ward off the potential opportunism of other players: if a province raises its capacity to collect taxes, it is less likely to benefit from future bailouts.

Intergovernmental Politics in Argentina

In every federal polity, national and subnational jurisdictional boundaries are established in the Constitution. Constitutional provisions usually specify the assignment of policy responsibilities between the central government and the lower tiers of the federation. The spheres of government authority in federal systems are seldom unambiguous, however. In reality, federal arrangements constitute a complex intermixing of powers and responsibilities between the national and subnational governments. Furthermore, these boundaries are not permanent: over time, conflicts over the proper interpretation of the national/subnational jurisdictional boundaries usually occur.

These dynamics call for a continuous interaction between the different levels of government, sometimes to police each other’s boundaries, sometimes to adjust the constitutional allocation of power to a changing reality, and sometimes to establish joint responsibility over certain matters. That is, sometimes this interaction entails conflict between the constituent units of the federation, and sometimes it requires cooperation to attain mutual benefits. Thus the assignment of policy responsibilities is not unambiguous or frozen, and intergovernmental interactions will always take place.

These interactions can take very different forms in more or less institutionalized environments. In Argentina, for example, as in almost every federation, intergovernmental relations are often carried out informally through various means of direct communications (that is, by letter or telephone) between ministers, officials, and representatives of different levels of government. This day-to-day management of intergovernmental affairs is complemented by the maintenance of certain councils where national and subnational ministers meet to discuss and coordinate policy in areas of nonexclusive jurisdiction, such as health, education, and social programs.42

Finally, adjusting the distribution of power between the national and subnational governments to political and economic changes sometimes requires an additional mechanism for concerted action, such as a formal intergovernmental agreement. These agreements usually take the form of

42. These councils include the Consejo Federal de Inversiones (Federal Council on Investment), the Consejo Federal de Educación (Federal Council on Education), and the Consejo Inter-Ministerial de Infraestructura (Inter-Ministry Council on Infrastructure).
treaties, compacts or memorandums of understanding. The federal fiscal pacts of 1992, 1993, and 1999 in Argentina are good examples. In terms of content, such agreements might formalize the intention of the different levels of government to adopt a particular policy and establish the procedure for implementing it administratively, without the need for legislation. Another type of agreement between the different levels of government in a federation might ensure that their respective legislatures adopt a law whose terms they have already agreed on.43

The review of the different mechanisms for intergovernmental relations makes clear, then, that the different levels of government can coordinate their actions in a variety of ways. What is most important for the present analysis is the fact that the various informal mechanisms and even the written undertakings between governments within a federation, such as pacts and treaties, have an uncertain legal effect. That is, many of these agreements do not create legal obligations. The value of intergovernmental agreements therefore depends on the ability of the different parties to enforce whatever they have agreed on. Countries differ widely in this regard.

The enforcement problem is thus a crucial one. To begin with, these interactions are bound to be quite complex. Intergovernmental negotiations involve numerous political actors with very different interests, including presidents, legislators, subnational politicians, and so forth. This creates several coordination problems. In general, as Inman and Rubinfeld note, cooperation between the different levels of government will be difficult to achieve in the context of incomplete and asymmetric information.44 These authors further argue that beneficial intercommunity agreements might be overlooked if proper enforcement mechanisms are not available.

For the purposes of analysis, then, intergovernmental agreements can be differentiated not by the mechanism that is employed, but by their enforceability. In this sense, the overall institutional environment in which these negotiations are carried out—and not just the mechanisms through which intergovernmental relations occur—is crucial to understanding why in some countries the different levels of government strike mutually beneficial bargains and in others they do not.

43. Opeskin (n.d.).
44. Inman and Rubinfeld (1997).
In the case of Argentina, the environment for intergovernmental transactions is not the most appropriate. First, the jurisdictional boundaries between the different parts of the federation evolved in a very particular way throughout the twentieth century. Second, intergovernmental agreements are not backed up by the necessary institutions for overseeing their enforcement.

With respect to the allocation of power among the different levels of government, intergovernmental competition and conflict prevail over cooperation in areas of concurrent jurisdiction. Given Argentina’s political and economic instability since the 1930s (including numerous military “interruptions” and high and recurrent inflation), political actors have generally tended to adopt a particularly myopic perspective. Hence, the national and subnational governments have not invested in building intergovernmental institutions, and they have usually attempted to protect their (quite vulnerable) property rights instead of collaborating with one another (either vertically or horizontally).

This historical legacy has deeply affected, for example, the revenue sharing system. Sudden changes that improved the bargaining power of a group of actors led, in some cases, not just to minor adjustments at the margin, but to steep radical changes—and sometimes to the alteration of the rules of the game altogether. Rules that were put in place by civilian governments were subsequently reversed by military regimes, and vice versa. The changes usually involved alterations to the criteria for revenue sharing between the national and the subnational governments, as well as among the latter. When power was concentrated in the national government (mostly during military regimes), the changes were intended to shift the distribution of shared taxes in favor of retention at the national level. Conversely, with the return to democracy, the once-again elected governors engaged in new debates over the distribution of tax revenues in order to reverse the changes that were produced during the previous regime. This usually resulted in modifications to the distribution of shared taxes in favor of the subnational governments as a whole, but each episode also introduced an element of interprovincial redistribution.45

With respect to the enforceability of intergovernmental agreements, key factors include the mutually reinforcing interactions arising from Argentina’s intergovernmental relations and the country’s overall incapacity

to implement efficient intertemporal political exchanges. The combination of a lack of legislative incentives, the disproportionate power held by provincial leaders in national policymaking, and the ability of the president to act opportunistically has deeply affected intergovernmental relations.

**Intergovernmental Bargaining**

A noteworthy feature of Argentine intergovernmental relations is the prevalence of executive federalism, that is, the predominant role of the president and governors in intergovernmental relations.46 Another important feature is the bargaining process that has usually taken place between the different parties. Given Argentina’s political configuration, deals struck between national and subnational leaders can easily be altered at either the legislative or implementation stage. The governors’ influence in national policymaking gives them enough political clout to secure benefits at the expense of the national government or other subnational units. On the other hand, during the process of implementation, the president can easily unravel agreements reached or ratified in the national legislature. Thus these agreements are often reached outside the national legislature, and when feasible, they incorporate very rigid rules in order to prevent their modification.

Several features of the Argentine political game explain why this environment is inadequate for efficient political transactions among jurisdictions.47

**THE SHORT-TERM HORIZON OF ARGENTINE LEGISLATORS.** As long as the legislature serves as an institution that can secure political agreements by reducing uncertainty and transaction costs, the political environment may foster beneficial intercommunity agreements. The U.S. Congress is usually presented in the literature as an illustration of an institution with those characteristics.48 Indeed, as Weingast and Marshall note, its internal organization facilitates the achievement of complex intertemporal agreements among its members.49 This internal organization, in turn, reflects the institutionalization of the U.S. House of Representatives dur-

---

47. This section draws partly on Jones and others (2000).
ing the twentieth century, as membership became more difficult and turnover less frequent.

Argentina’s national legislature is formally very similar to the U.S. Congress. Its actual functioning uncovers striking differences, however. First and foremost, the turnover rate of political actors in general was extraordinarily high throughout the twentieth century. This political instability deeply affected congressional careers, which became brief and discontinuous. Even today, after seventeen continuous years of democratic government (the longest spell since 1930), turnover rates in Congress remain extremely high. Table 8 shows the very low reelection rate of legislators in Argentina compared to other countries.

In this context, it is very difficult to knit intergovernmental agreements when these have a differential intertemporal flow of benefits for the

<table>
<thead>
<tr>
<th>Country</th>
<th>Seeking reelection</th>
<th>Nominated</th>
<th>Reelected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina (1997)</td>
<td>26</td>
<td>67</td>
<td>17</td>
</tr>
<tr>
<td>Brazil (1995)</td>
<td>70</td>
<td>62</td>
<td>43</td>
</tr>
<tr>
<td>Chile (1993)</td>
<td>76</td>
<td>78</td>
<td>59</td>
</tr>
<tr>
<td>Colombia (1990)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>48</td>
</tr>
<tr>
<td>Great Britain (1950–74)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>81</td>
</tr>
<tr>
<td>Italy (1953–72)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>82</td>
</tr>
<tr>
<td>Mexico (1997)</td>
<td>0</td>
<td>n.a.</td>
<td>0</td>
</tr>
<tr>
<td>Panama (1999)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>49</td>
</tr>
<tr>
<td>United States (1996)</td>
<td>88</td>
<td>94</td>
<td>83</td>
</tr>
<tr>
<td>West Germany (1957–76)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>70–75</td>
</tr>
</tbody>
</table>


50. Argentina possesses a presidential form of government with a bicameral legislature whose members are elected in nonconcurrent elections. The Argentine Chamber of Deputies has 257 members who are elected from provinc-wide multimember districts (encompassing the twenty-three provinces and the federal capital) for four year terms. The deputies are elected from closed party lists using the d’Hondt divisor form of proportional representation. One-half of the Chamber is renewed every two years (127 and 130 seats in alternating elections), with every district renewing one-half of its legislators. The Senate is composed of seventy-two members, with every province (and the federal capital) represented by three senators. Prior to the 1994 constitutional reform, all of the country’s provinces and its federal capital were represented by two senators.
different jurisdictions. Tax reform is a good example. Even though there may be some potential losers in the short run, all levels of government can benefit in the long run. However, these type of agreements are difficult to sustain in the Argentine Congress. Given the short-term horizon of most legislators, the probability that the flow of benefits will be curtailed in the future is relatively high, and thus trades go unconsummated.

**Weak Legislators, Powerful Governors.** The brevity of Argentine congressional careers is rooted in the existing electoral rules. To be reelected, legislators must first obtain a spot on the party list. This requirement prevents many legislators from returning to Congress: only one-quarter of incumbent deputies seeking reelection in the 1989–99 period were renominated by their parties (see table 8).\(^51\) The process by which the regional party lists are formed thus largely affects which candidates run on the party list, what order they occupy, and, consequently, their chances of winning. This gives local party leaders the upper hand in the electoral process.\(^52\)

As a result of this system, Argentine governors have a disproportionate amount of power, since they can exert substantial influence through national legislators. Instead of simply being a group of subnational leaders who might potentially seek national office (as in any other federal country), they are continuously involved in national policymaking.\(^53\) Such power in the hands of the subnational governments clearly affects the nature of intergovernmental relations. Negotiations on agreements between national and subnational leaders that require the approval of the national legislature may give rise to opportunism on the part of the subnational governments. Given the legislators’ allegiance to the governors, they may act to hold up national policies in the national legislature or

---

51. See Jones and others (2000) for more detail.

52. Actors other than local party leaders may exercise influence over for the election of Chamber deputies (e.g., the national party organization and the district-level rank-and-file party members). As De Luca, Jones, and Tula (2000) note, however, the decision on whether to hold a primary to select list members usually depends heavily on whether the party controls the governorship at the provincial level. Because governors are likely to bear a disproportionate share of the costs of a divisive primary, they have a strong incentive to arrange a negotiated list of candidates, as well as the means to do so. They are usually able to impose their candidates, co-opt potential opponents, or successfully negotiate an agreement with other party factions.

53. It may seem odd to an American observer that the president often meets with governors to discuss national policies, as this rarely occurs in the United States.
insert into the agreements policies that have nothing to do with intergovernmental relations.

**A Weak Horizontal Separation of Power.** The last two points indicate that congressional representatives are not key actors in the Argentine polity, whether for intergovernmental relations or for anything else, and that subnational leaders exert a disproportionate influence through Congress. Furthermore, the national Congress is not the arena used by the relevant players to hammer out their agreements, because the weak horizontal separation of powers between the president and the national legislature is insufficient to prevent the national government from reneging on the agreements.\(^{54}\)

The weak horizontal separation of power is due, in part, to certain constitutional capacities and practices, to budgetary practices, to the historical political alignment of the Supreme Court with the president, and to the lack of a strong, independent, professional bureaucracy.\(^{55}\) All of these features contribute to the poor institutional environment for the enforcement of interjurisdictional deals.

The legislative practices of the presidency largely evolved out of the history of political instability, which led the executive branch to take responsibility for processes that, in a more stable environment, would have drifted naturally towards the legislature. Another factor was the Constitution itself, including some explicit constitutional capacities as well as a number of gaps and their interpretation.\(^{56}\) We include in this category the fact that the Constitution names the president as the chief of public administration, the fact that the president is endowed with the capacity to “regulate” laws passed by Congress, and more recently the practice of issuing Decretos de Necesidad y Urgencia (Necessity and Emergency Decrees).

With regard to the budget, there have been long periods in Argentine history in which Congress did not meet the deadline for approving the budget sent by the executive office. In times of high inflation, the president did not even bother to send the budget proposal to Congress. This means that in practice the executive branch has operated with a large degree of

---

\(^{54}\) The national legislature plays a key role in balancing intergovernmental relations, with the national legislators serving as the pawns in the masters’ chess game.

\(^{55}\) See Spiller and Tommasi (2000a, 2000b) for details and references on each of these points.

\(^{56}\) These gaps in constitutional interpretation are not independent of the relative weakness of the Argentine Supreme Court.
budgetary discretion. Even in the post-stabilization 1990s, when ex ante budgets began to be approved on time, ex post control was not exercised: the so-called Cuenta de Inversión (Investment Account), which is the ex post budget verification, was not addressed promptly enough to serve as an operational instrument through which Congress could verify the president’s fulfillment of the budget contract. The budgetary process is conducted mostly in the Cabinet, which is the point of entry for pressure from special interests. It is not uncommon for provincial governors to visit different ministers or their secretaries in an attempt to secure favorable treatment for their provinces in national allocations and decisions. Even today, the president continues to have a substantial amount of discretion in the ex post geographical allocation of federal funds.\textsuperscript{57}

This executive bias is further aggravated by another institutional factor: the courts. Argentina’s political instability throughout the twentieth century undermined the ability of the judiciary to place effective restraints on executive action.\textsuperscript{58} Since 1983, the executive office has frequently made unilateral moves on matters previously settled by Congress without being challenged by the courts. Specifically, the president has used his decree authority to “regulate” and alter the content of bills passed by the legislature. Agreements reached or ratified in a particular way in the national legislature can thus be easily unraveled at the implementation stage, through changes in the composition of the national budget. This, of course, limits the incentives to undertake such deals in the first place.

\textit{Weakly Institutionalized Intergovernmental Relations}

In the previous subsection, we argued that the national congressional representatives are not the key long-term players in intergovernmental relations and that the national Congress is not the arena in which the real players (the governors and the president) strike the key bargains. This situation arises because of the lack of sufficient restraints in the national arena to control the president’s opportunistic moves. This begs the question of which, then, is the arena for intergovernmental agreements, and what are the enforcement properties of that arena. The truth is that inter-

\textsuperscript{57} For additional information and references, see Spiller and Tommasi (2000a, 2000b).
\textsuperscript{58} Iaryczower, Spiller, and Tommasi (2000). Similarly, Spiller and Tommasi (2000a) explain how the operational features of the Argentine bureaucracy prevents it from serving as an independent mechanism for enforcing legislative agreements.
governmental relations in Argentina have been carried out in a variety of ways, mostly on an ad hoc basis and in multiple and superimposed political arenas.

Informal mechanisms have dominated, but formal intergovernmental agreements have also been used. A good example of the latter are the federal fiscal pacts: these are intergovernmental compacts hammered out by the national and subnational government executives and ratified by the legislatures of the constituent units (such as the fiscal pacts of 1992 and 1993) and the national legislature (the fiscal pact of 1999). In 1994, important elements related to fiscal intergovernmental relations were included in Argentina’s revised Constitution, which established that a new coparticipation law had to be drafted before 1996, on the basis of agreements between the central government and the provinces. This remains unsolved to date, however.

Aside from these instances of formal negotiation, intergovernmental relations have predominantly been much more informal. For example, in the period 1983–88, when the country was in between coparticipation laws, the allocation of transfers to the provinces was decided on the basis of bilateral agreements negotiated between the federal government and each subnational government.\textsuperscript{59} Since then, many other negotiations and changes to the coparticipation scheme have taken place either in the executive quarters or in ad hoc meetings between the president and the governors. This reflects the separate political power of the national executive office and the provinces and the lack of institutionalization of the mechanisms to carry out these agreements.

This lack of institutionalization in the mechanisms through which intergovernmental relations have been handled has had serious effects on the nature of policymaking in the federal fiscal realm. On the one hand, these arenas do not provide enough institutional grounding, which makes the allocation of policy jurisdictions and federal funds too volatile and generally weakens the enforcement of agreements, as illustrated earlier. On the other hand, in order to eliminate such uncertainty with respect to intergovernmental boundaries and redistribution, these have sometimes been defined very rigidly (in some cases even enshrined in the Constitution), although it would have been more appropriate to leave them open to allow for adaptation to changing circumstances.

\textsuperscript{59} Saiegh and Tommasi (1999).
Recommendations

There is almost absolute consensus among observers and political actors that Argentina should undertake various reforms to its federal fiscal system. Major lending organizations and other specialists have produced many reform proposals seeking to correct several of the problems described above. Despite the potential for efficiency gains, however, these recipes for change have not been followed. Transactional problems—especially the enforceability of the transactions—make the reforms difficult to enact.

We believe, therefore, that a feasible and sustainable reform strategy must center on a higher level of institutional reform. Our proposal is to reform the structure and process of intergovernmental decisionmaking. The spirit of our approach to reform is captured by result 6 of the theoretical model. There we argued that the first-best solution can be attained in a good transactions environment, whereas a bad transactions environment will foster either excess political opportunism or rigid rules. The current conventional wisdom among economists is to combat political opportunism by establishing rigid rules, taking as given the underlying political incentives. We argue, instead, for changing the political governance structure, if possible.

The specific case of Argentina includes several features that lead to a bad transactions environment for fiscal federalism. According to the approach described in this paper, public policies are the outcome of a game whose rules are the overall set of incentives and constraints faced by political actors, in multiple arenas. Reforms are therefore necessary on several fronts if the workings of fiscal federalism are to be improved, together with the general process of policymaking in Argentina. These should include the following:

—electoral reforms to reduce the dependency of national legislators on the local party elite, given that the weakness of national legislators is a key aspect of the poor transactions environment;
—reforms to the instruments of legislative interaction between the president and Congress, which could strengthen the role of national legislators and, more generally, the national Congress;

60. See Acuña and Tommasi (2000) for a similar point in the broader context of reforms needed in Latin America.
—budgetary reforms to curtail executive discretion; and

—institutional reforms to intergovernmental relations, which should aim to improve the institutional environment for federal transactions, as these inevitably involve executive federalism among the national government and provincial authorities.\(^61\)

Iaryczower, Sanguinetti, and Tommasi present a more complete proposal that considers not only the politico-institutional changes (namely, changes affecting governance), but also the complementary reforms in the specific areas of macroeconomic coordination, a new transfer mechanism, and the initial redefinition of the powers of and constraints on tax and spending authorities.\(^62\) None of those individual recommendations stand alone, but rather require the institutional changes to permit a more flexible, yet more credible, federal system. Due to considerations of space, we summarize below only the spirit of the recommendations for changes in the governance structure of fiscal relations.

The reformed Constitution of 1994 calls for a new coparticipation law (article 75, paragraph 2). It explicitly outlines several points that the new law should take into consideration. In light of the argument developed in this paper, those conditions can be understood both as constraints that the actors try to impose on each other to prevent opportunism and as an attempt to enforce some efficient reforms.\(^63\) In particular, the Constitution mandates the creation of a federal fiscal institution (Organo Fiscal Federal) to instrument the law.

This mandate provides a good opportunity to redefine the governance structure of federal fiscal relations. We believe that this constitutionally mandated federal fiscal institution could function as a formal arena in which issues of fiscal federalism could be decided. Such an institution could provide intergovernmental relations with the necessary flexibility to adjust to changing circumstances. A federal fiscal law is an incomplete contract reflecting the political agreement at the time of its creation. If the law specifies a set of specific mechanisms to distribute taxes (in other words, a rule), it will still require continual adjustments to many changing

\(^{61}\) This general strategy is also presented in Spiller and Tommasi (2000a).


\(^{63}\) The Constitution requires that the new law be a ley Convenio, that is, a law that has the support of the national president and all provincial governors and that is then ratified by the national and provincial legislators. This is a way of ensuring unanimity, so that no one is harmed by the reform.
circumstances, as the history of fiscal federalism in Argentina shows. 64 If no explicit change is made to the federal governance structure, the contract will be completed under the default extant governance structure. The features of the extant governance structure, however, are precisely the underlying determinants of the many economic inefficiencies observed in Argentina today. That is why a higher-level institutional change is required, so as to complete the contract with better ex post decision-making procedures. 65

The purpose of the federal fiscal institution, therefore, should be to provide the proper channel for intergovernmental dealings, moving decision-making power away from the national legislature, away from informal and unenforceable deals among political leaders, and especially away from excessive ex post discretion in the hands of the president. This will help to minimize the conflicts among national and regional policies and also help the actors to make decisions in a predictable setting. This should allow them to handle intergovernmental relations more effectively and to adjust policy decisions to changing circumstances.

Changes in the federal decisionmaking procedure, coupled with changes in the transfer system to substantially increase the Wicksellian connection at the margin, will constitute a profound redefinition of fiscal federalism in Argentina. 66 Substantively, it means that the provinces will individually assume greater responsibility and collectively acquire more power in federal decisions.

Concluding Remarks

This paper has analyzed the main factors behind some of the deficiencies present in intergovernmental fiscal relations in Argentina, drawing on a theory that explains the political decisions that give shape to the current system as evolving out of endogenous factors. On the basis of that understanding, we provide recommendations for institutional reform. Although the details of our recommendations are specific to the Argentine case, the

64. Saiegh and Tommasi (1998); Iaryczower, Saiegh, and Tommasi (1999).
65. See Saiegh and Tommasi (2000) for references to the literature on incomplete contracts, which supports this reasoning.
66. The details are in Iaryczower, Sanguinetti, and Tommasi (2000).
paper also carries a more general message. Intergovernmental relations are always incomplete contracts in continuously changing environments. Any reform effort therefore requires an understanding of the nature of the exchanges involved, if it is to foster the design of institutions that are adequate for handling those negotiations.

The paper’s main weakness is the lack of comparative analysis. It is necessary to move beyond the one-point econometrics exercise presented here to build more solid evidence for the theory employed and to derive better policy implications. The methodology is very intensive in institutional detail, however; fully replicating this exercise across several countries was not feasible given the time frame for the project. We hope the paper will encourage other researchers to employ a similar approach in looking at other countries so as to facilitate a rich comparative analysis.

The theory states that the observed properties of policies (including their inefficiencies) are the outcome of a political game in which relevant actors engage in intertemporal political exchanges. The quality of the resulting policies depends on the extent to which the rules of the game facilitate efficient (cooperative) intertemporal exchanges. The task, therefore, is to identify the relevant political actors, the extent to which the rules of the game are conducive to cooperative behavior, the relevant political transactions, and the properties of the “policies” being exchanged.

On extending the comparison to other countries, we expect to find different degrees of inefficiencies in different dimensions. That is, a given political environment can allow efficient transactions in some dimensions and not in others; the particular pattern will vary from political environment to political environment. We also expect to find that while fairly different political systems might generate similar inefficiencies, the solution to these problems will vary from case to case. This is due to the fact that while the model relates certain parameters (including the discount factor, the number of players, and the degree to which players can observe each other’s moves) to the specific properties of policies, an additional link is required to map the exogenous parameters of the model onto actual

67. We use the word policy in a loose sense here, considering that the main point of the paper is that we should focus not so much on policies as on the institutions that constitute the rules of the game under which those policies are chosen.

68. As in transaction cost economics, we have to look at the features of the transaction (Saiegh and Tommasi, 2000).
political rules of the game (such as electoral rules and constitutional features). It is this mapping that is fairly idiosyncratic and, in our opinion, requires a fairly microanalytical and general equilibrium approach. It is therefore not possible to offer easily generalizable policy recommendation. Rather, each case requires a detailed analysis of the crucial determinants of the capacity to forge better political transactions.

Comments

Ernesto Stein: Most of the literature on fiscal federalism, at least the literature written by economists, tends to focus on the immediate causes of the problems observed in the countries studied, such as the rules that govern intergovernmental relations (for example, rules regarding intergovernmental transfers or subnational government borrowing). The approach followed here goes a step further by focusing on the costs of political transactions, suggesting that while these rules may be problematic, they must be seen as the outcome of a broader political game. The approach identifies characteristics of the environment in which this political game takes place as the key determinants of the outcomes of the fiscal federalism system. Policy reform efforts should therefore center on this political transactions environment.

Changing the rules that govern intergovernmental relations, under this approach, would not be sufficient, since the lack of a proper political transactions environment may result in the rules not being enforced. I find this emphasis on the political transactions environment to be very appropriate. Numerous countries have adopted rules that appear to be very reasonable, but they are not enforced or are not effective because of failures in the political environment. The rules for subnational government borrowing in Colombia are a case in point. Colombia has established a system of controls to limit the autonomy of subnational governments to issue new debt. The controls, which are related to indicators of solvency and liquidity, function like traffic lights: if the indicators are in the red light zone, then the government in question loses its borrowing autonomy. In spite of these rules, subnational government debt has increased substantially, and most of the territorial entities in the country are in the red light zone. As a result of the lack of enforcement, Colombia’s subnational governments would appear to have as much respect for red lights as do taxi drivers in Bogotá. This suggests that rules alone are not enough. They have to be set in an environment in which they will be effective. For this reason, it is
important to emphasize the political transactions environment and, in particular, the key ingredients of the environment that can render it cooperative or uncooperative, which is exactly what the paper does.

Focusing on a single country, however, even if studied in great detail, is not the best way to go about discovering what the key ingredients of the political transactions environment may be. It would be better to undertake a detailed comparison of the institutional structure of a few Latin American countries, which should be similar in a number of dimensions, but different in some of the potentially crucial political dimensions of the political transactions environment (such as, for example, the electoral rules of the national legislature or the degree of legislative turnover). I encourage the authors to move in this direction in future research.

Other countries demonstrate the same type of failures (namely, opportunism, economically inefficient choices, suboptimal policy reform, and underinvestment in capacity), but with very different characteristics with respect to the three aspects of the political transactions environment identified as crucial in the paper: the short-term horizon of legislators (due to high turnover); the relative weakness of legislators vis-à-vis the governors; and the weak horizontal separation of power. Take, for example, the cases of Colombia and Brazil, which are the other most highly decentralized countries in Latin America. Both countries have electoral rules that are very different from those in Argentina. In Brazil, the party leadership has very little power over the careers of legislators, and both countries have a much higher rate of reelection of legislators (close to 50% compared to 17% for Argentina). Colombia is a unitary country, which should also alter the transactions environment, since it reduces the independence of the subnational units. And yet the two countries have very similar outcomes, with high subnational deficits, overindebtedness, and bailouts. This suggests that they also have uncooperative transactions environment.

The question, then, is whether the ingredients identified by the authors are really that important. Have other important ingredients of the political transactions environment been overlooked? A comparison of a few countries, rather than the analysis of a single one, would be much more compelling, as it would provide a clearer guide as to which elements of the political transactions environment render that environment uncooperative. Such a comparative study should include a country in which the failures of the fiscal federal system identified for the Argentina case are not widespread.
As mentioned above, the authors identify three aspects of the political transactions environment that they consider important for the uncooperative outcome. But could it be that a combination of these factors actually lessens the problems? It is important to look not only at potentially key ingredients of the political transactions environment, but also at the interaction of some of these ingredients. Hallerberg and von Hagen, for example, find that important features of the budget process (namely, the degree to which it is decentralized) can result in bad fiscal outcomes under some political systems, but not under others.¹

An interaction that may be particularly important for this paper is the high turnover of legislators and their weakness relative to governors. The authors stress that the high turnover of legislators makes it difficult to strike mutually beneficial intertemporal trades. They also stress, however, that governors play an important role in forming the party lists for the legislature. Now, if governors control the legislators, then perhaps the high turnover is not such a problem, provided the governors serve longer terms. The issue is the turnover rate of governors. The paper does not address this point, but many provinces in Argentina have been controlled by the same powerful families for long very periods. Examples include the Sapag family in Neuquén, the Romanos in Salta, the Romero Feris family in Corrientes, the Rodríguez Saa family in San Luis, the Saadis in Catamarca, and the Menems in La Rioja. Angeloz has also stayed in power a long time in Córdoba, although he is not a member of a family clan. If the tenure of governors is in fact longer than that of legislators, and if governors control legislators, then the scope for mutually beneficial intertemporal trades may be reestablished.

With regard to the policy recommendations, I sympathize with the federal fiscal institution proposed in the paper. No set of rules regarding intergovernmental relations should be cast in stone. Situations change, so the system has to be flexible enough to respond appropriately to changes. A federal fiscal institution such as the one proposed here, in which both the central government and the provinces are represented and which has solid backing from a strong, somewhat autonomous technical department, would play an important role in this regard. There is quite a jump, however, between the policy recommendations and the rest of the paper. The authors need to more clearly justify their focus on the federal fiscal institution.

Before discussing the federal fiscal institution, they should first discuss some policy recommendations that more closely match the problems identified in the political transactions environment. They should then explain to the readers that an alternative to some of these policies (or a complement to others, perhaps) is to create a different venue for inter-governmental dealings, which sidesteps some of the problems identified above.

Mauricio Cárdenas: Decentralization is now under intense scrutiny in Latin America. Early fascination with fiscal federalism has been replaced with a more critical assessment, partly because countries have experienced a tension between the objectives of macroeconomic stability, on the one hand, and political and fiscal decentralization, on the other. Reform proposals, however, generally focus on designing new institutions that improve the outcome of decentralization, rather than advocating a return to more centralized fiscal and political structures.

In that spirit, the paper by Mariano Tomassi, Sebastián Saiegh, and Pablo Sanguinetti is an important contribution. They start by characterizing fiscal federalism in Argentina as inefficient and subject to “all sorts of perverse incentives.” According to the authors, the critical aspects are the following:

—Large vertical fiscal imbalance. Provincial expenditures require transfers from the national government (57 percent of the centrally collected taxes). At the same time, the revenue-sharing rules are convoluted, combining fixed-sum transfers, minimum transfer guarantees, and special provisions that benefit the central government by reducing the tax-sharing pool.

—High deficits, high indebtedness, and procyclical finances in provincial governments. In several cases, the federal government has intervened by bailing out the provinces with unsustainable finances.

—Inefficiencies in taxation. Poor local and national tax collection combined with special provisions that reduce (or eliminate) national taxes in certain regions. In addition, taxation is increasingly based on nonshared taxes, such as payroll taxes, which may be inefficient.

—Inefficiencies in the provision of public goods. The system of transfers does not respond to changes in the costs associated with supplying those goods to a targeted population. The rules do not provide incentive mechanisms that reward efficiency in the use of transfers.
After explaining these features as the outcome of political transactions, the authors propose an institutional reform to address the shortcomings of the current scheme. In their words, the rules of the political game do not facilitate cooperative intertemporal exchanges between national and subnational governments, resulting in inefficient policies. The proposed agenda therefore centers on changing the way political transactions take place.

My comments focus on three aspects of the paper. First, I discuss the authors’ characterization of the Argentine fiscal federalism. Second, I examine the arguments they use to explain the key aspects of that characterization. Finally, I comment on their recommendations, mainly the creation of a new set of institutions.

My first point is related to their description of the main features of the federal system in Argentina. Not all the elements in their list of stylized facts can be considered proof of inefficiencies in the system. Take, for example, the existence of large vertical fiscal imbalances or the fact that subnational fiscal imbalances explain a large part of the consolidated fiscal imbalance. These characteristics are inherent in systems with centrally collected taxes and a high degree of expenditure decentralization. The authors also attribute the inefficiencies in taxation (for example, poor tax collection) to the existence of a federal fiscal system. One could argue that other factors, different from the ones mentioned in the paper, play a more significant role in explaining the inefficiencies of tax collection in Argentina.

In my opinion, what is peculiar about the Argentine case is the way in which revenues are transferred from the national government to the provinces. The paper indicates that the rules defining the system of transfers have changed frequently and do not follow clear-cut criteria. Transfers have therefore become almost discretionary and arbitrary. This poses interesting questions. What explains the complex evolution in the system of transfers that created such a fiscal labyrinth? What are the consequences of those rules? How should they be changed? This is really what deserves attention.

The paper explains the main features of Argentina’s federalism as the outcome of political transactions between the national and subnational governments. The analytical framework is a repeated game with economic and political shocks, in which the optimal policies are irresponsive to the latter. The argument is that certain exogenous factors do not facilitate cooperation, such that the outcome of the game is characterized by opportunism, economic inefficiency, impossibility of reform, and underinvestment.
The paper includes a very interesting discussion on intergovernmental politics in Argentina. The political environment is described as one in which it is hard to reach intergovernmental agreements that coordinate the actions of the different actors. More important, whenever those agreements are possible, their enforceability is severely limited. This is the result of Argentina's history of political and economic instability, which has prevented national and subnational governments from building institutions that facilitate cooperation. As in other democracies, Congress would be a natural institution for negotiating and enforcing the agreements between the competing actors. The executive branch of the subnational governments is more powerful than the legislature, however, because of the short-term horizon of legislators (associated with their high turnover) and the dominant role of governors in forming the lists of congressional candidates. The authors also argue that the lack of specialization among legislators further increases the de facto power of the executive branch, especially in budgetary matters. Moreover, governments have frequently deviated from what has been decided in Congress, without judicial implications. In my view, all this indicates that political reform should be oriented toward fixing a dysfunctional legislative branch.

Essentially, the paper's main explanation of the problems associated with federalism in Argentina is twofold. First, the key actors in intergovernmental relations are the president and the governors. Second, efficient intertemporal deals are rare, institutionally unstable, and easily reversed. This explanation leads me to a second set of comments. The authors do not elaborate on why the president (who can run for reelection) and the governors (who normally seek higher office) are not interested in trades that can have long-term positive payoffs. The question is no longer whether legislators are unspecialized and shortsighted, but whether the president and the governors are affected by the long-term consequences of their decisions.

A second point in relation to the explanation provided in the paper is that countries with very different institutional arrangements show similar features. Take, for example, the case of Colombia, which is not a federation but has a very decentralized political and fiscal structure. The stylized facts are quite similar to the ones described in the paper: large fiscal imbalances and indebtedness, a recurrent need for the national government to bail out local governments, and the impossibility of reform and cooperation. The institutional arrangement is just the opposite, however: a powerful Congress made of politicians with constituencies and agendas that are predomi-
nantely local, lower congressional turnover rates than in Argentina, weak governors who carry no decisionmaking capacity, an absence of party discipline, and effective judicial enforcement of the rules that frame decentralization.

An alternative theory may better explain Argentina’s case while also encompassing countries with different institutional arrangements but similar outcomes. The tragedy-of-the-commons literature offers an interesting possibility. Think of the centrally collected pool of taxes as an over-extended, inadequately priced common resource. Governors, mayors, members of congress, and others all lobby for additional transfers whose benefits they can internalize, at a cost to society as a whole.¹ Cárdenas and Partow model this setting; they show that rules are preferred to discretion when there are many competing groups, as in the case of provinces.² In contrast, if fewer actors are involved, it may be possible to push out the frontier of feasible combinations of flexibility and credibility by delegating authority to an autonomous agency.³ Rigid rules may be the only feasible solution to the commons problem when the fiscal structure is not unitary. The major cost of this solution, however, is the total loss of flexibility.

Finally, the recommendations of the paper emphasize the need for a broad-based institutional reform. Among other aspects, the proposed reform includes the creation of a new institution that would enforce a new revenue-sharing system and become the “formal arena in which issues of fiscal federalism could be decided.” In other words, this institution would replace Congress as the proper channel for intergovernmental agreements, and it would reduce the ex post discretion of the executive branch of the national government. This new political body would be made up of representatives of the national and subnational governments. I doubt, however, that this new arrangement would produce more efficient results. The critical element is to replace the transfers labyrinth with a clear set of rules that embody the efficiency and redistributive criteria. Under the current structure, Congress is unlikely to enact the necessary constitutional and legal changes that would clarify the rules of the game. This points to the need to reform Congress, together with the judicial institutions that can enforce the new rules. Without these reforms, a new institution, dominated by the president and the governors and based on discretion and flexibility, will rapidly mimic the current conditions.

¹. See, for example, Tornell and Velasco (1992).
³. On the tension between credibility and flexibility and its implications for institutional design, see Levy and Spiller (1994).
References


the XII Regional Seminar on Fiscal Policy. Santiago, Chile: Economic Commission for Latin America and the Caribbean (ECLAC).


