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Author(s): Jonathan Rodden

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Comparative Federalism and Decentralization

On Meaning and Measurement

Jonathan Rodden

The basic structure of governance is being transformed in countries around the world as authority and resources migrate from central to subnational governments. Political scientists and economists have developed a wealth of theories to explain the causes and consequences of these shifts, but systematic empirical testing has lagged behind. Researchers increasingly supplement case studies with analyses of large cross-national data sets that exploit both diachronic and cross-national variation. While the constraints of data collection necessitate simple propositions at relatively high levels of abstraction, it is appealing to test hypotheses about federalism and decentralization with data drawn from around the world over several decades. Yet, while breadth and generality are the greatest assets of cross-country regressions, they can also create pitfalls that threaten to obscure rather than clarify the facts.

Reliable cross-national data on decentralization and federalism are scarce, and the concepts are often assumed to be complementary or even interchangeable. The emerging view of decentralization shows an organic, intertwined transfer of political, fiscal, and policy autonomy. Some cross-national studies seek to explain endogenous fiscal decentralization.¹ Others treat decentralization and federalism as exogenous and attempt to measure their effects on economic growth or proxies for accountability, corruption, or the quality of governance.² Still others have examined the implications for deficits, inflation, and macroeconomic stability, while older studies examine the size and growth of government.³ Each of these studies uses a simple measure of fiscal decentralization, a binary distinction between federal and unitary political systems, or both.

The most clearly discernible *Leitmotiv* in these studies is a growing disappointment with decentralization and federalism, especially among developing countries. Optimistic theories, starting with Montesquieu and continuing through modern welfare economics, stress advantages of information revelation and accountability in more decentralized governance structures.⁴ Public choice theories explore the possibility that mobility in a decentralized, multijurisdiction context can facilitate better matching of citizen preferences and government policy through “sorting” and can lead to smaller, more efficient, less corrupt government and under some conditions

more secure markets and faster growth.⁵ However, recent empirical studies take issue with these theories; they find that decentralization and federalism are associated with higher levels of perceived corruption, larger government, macroeconomic instability, and under some conditions lower growth.⁶ They often conclude by casting doubt upon the benefits of decentralization and federalism.

However, distinctions between various shades of decentralization and federalism have not been taken seriously. Questions about the design, content, and form of decentralization are glossed over not because the theories and hypotheses of interest are undifferentiated, but because more refined data are difficult to collect. The bluntness of these measures is often acknowledged but defended as the cost of achieving a large enough sample to make reliable inferences. But just how high are these costs? Do the favored indicators of decentralization actually measure the concepts addressed in the relevant theories? Some basic questions about definitions and measurement need to be asked. The links between theory and empirical analysis have been quite tenuous in the first generation of empirical studies.

New data can provide a fuller conceptual and descriptive account of forms of decentralization and federalism and thus several important clues as to why the results of previous empirical studies are so dissonant with normative theories and often with one another. Above all, rather than enhancing the independent authority of state and municipal governments, decentralization often creates a more complex, intertwined form of governance that bears little resemblance to the forms of decentralization envisioned in textbooks on fiscal federalism or in public choice theories. In light of these facts, it is necessary to reassess what has been learned from the first generation of cross-national studies and to emphasize ways of improving data collection, theory, and the links between the two.

Decentralization

Decentralization is often viewed as a shift of authority towards local governments and away from central governments, with total government authority over society and economy imagined as fixed. Attempts to define and measure decentralization have focused primarily on fiscal and to a lesser extent policy and political authority.

Fiscal Decentralization Most empirical studies of decentralization focus exclusively on the balance of expenditures and revenues between governments. They rely on the IMF's *Government Finance Statistics Yearbook* to calculate the combined regional and local share of total government spending. The first column of Table 1 presents expenditure decentralization data for all countries for which the IMF provides good coverage over the 1990s. Well over half of public expenditures are made at the regional and local levels in decentralized federations like Canada and Switzerland, while the figure is less

Table 1 Fiscal Decentralization Variables (Averages over 1990s)

	1	2	3	4	5	6	7	8
	State-local expendit exp	Grants/state- local revenue	Own-source state-local rev/total rev.	Grants + rev. sharing/state- local rev.	Own-source state-local rev/total rev	State-local tax rev/total rev (rate and base autonomy)	State-local tax rev/total rev (rate and base autonomy)	Borrowing autonomy
Source	GFS*	GFS*	GFS*	Rodden 2002	Rodden 2002	OECD*	OECD*	Rodden 2002
Argentina	0.44			0.56	0.18			4.0
Australia	0.50	0.40	0.32	0.37	0.33			2.5
Austria	0.34	0.27	0.27	0.58	0.16	0.008	0.004	1.6
Belgium	0.12	0.56	0.06			0.048	0.004	
Bolivia	0.21	0.09	0.18	0.43	0.11			1.5
Botswana	0.03	0.83	0.01	0.84	0.01			1.0
Brazil	0.41	0.34	0.28	0.36	0.27			4.5
Bulgaria	0.19	0.35	0.15	0.92	0.02			1.0
Canada	0.65	0.26	0.51	0.32	0.47	0.321	0.299	2.7
Colombia	0.54	0.43	0.31	0.38	0.32			3.0
Denmark	0.41	0.34	0.33	0.43	0.32	0.174	0	1.5
Finland	0.41	0.34	0.33	0.36	0.31	0.196	0	3.0
France	0.19	0.35	0.13	0.39	0.12			3.0
Germany	0.45	0.25	0.34	0.70	0.13	0.0090	0.0002	2.5
Guatemala	0.10	0.65	0.04	0.87	0.03			2.0
Hungary	0.10					0.018	0	
Iceland	0.23	0.09	0.23			0.184	0	
India	0.49	0.43	0.33	0.42	0.34			2.5
Indonesia	0.13	0.73	0.03					
Ireland	0.29	0.72	0.09	0.74	0.08			1.8
Israel	0.14	0.40	0.06	0.38	0.09			2.4
Italy	0.23	0.68	0.09	0.80	0.05			2.5
Malaysia	0.14	0.19	0.16					
Mexico	0.26	0.11	0.20	0.59	0.09	0.018	0.018	2.6
Netherlands	0.30	0.70	0.09	0.70	0.09	0.010	0	2.3
Nigeria	0.48	0.86	0.09	0.86	0.09			1.0
Norway	0.35	0.40	0.22	0.39	0.22	0.004	0	1.6
Peru	0.23	0.73	0.07	0.05	0.23			2.5
Philippines	0.08	0.46	0.05	0.41	0.06			1.0
Poland	0.17	0.31	0.13	0.54	0.09	0.032	0	2.0
Portugal	0.09	0.48	0.05	0.40	0.06	0.011	0.009	2.5
Paraguay	0.02		0.01	0.23	0.01			2.0
Romania	0.11	0.44	0.07	0.44	0.07			1.0
Spain	0.36	0.60	0.16	0.56	0.17	0.053	0.022	2.5
Sweden	0.37	0.18	0.33	0.20	0.32	0.183	0.006	3.0
Switzerland	0.55	0.25	0.41	0.19	0.45	0.179	0.113	3.0
Thailand	0.06	0.28	0.05					
UK	0.29	0.71	0.09	0.74	0.08	0.040	0	1.5
USA	0.53	0.30	0.42	0.34	0.39	0.177	0.177	3.0

* and author's calculations

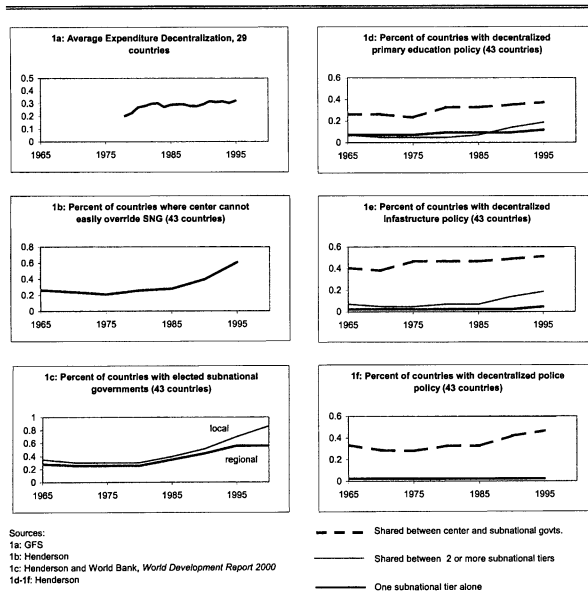
than four percent in some highly centralized African countries. More important, these data make it possible to trace developments in fiscal (de)centralization over time. Figure 1a displays averages for a group of twenty-nine countries for which time series data are available back to 1978. It demonstrates a striking upward trend. In 1978 on average around 20 percent of expenditures were made at subnational levels, and by 1995 the figure had jumped to over 32 percent. By no means is this trend universal, however. In some countries, the balance of spending authority shifted back slightly towards the central government in the 1990s, while fiscal decentralization has been most pronounced in Spain and much of Latin America.

However, these data do not inspire much confidence in their usefulness as a composite measure of decentralized authority. For instance, Denmark is the third-most decentralized country in the world according to Table 1—even more decentralized than the United States—though the central government tightly regulates virtually every aspect of local government finance. Nigeria appears as number seven, even though the states during this period of military rule were little more than administrative outposts of the central government.

In short, it is difficult to know what to make of expenditure decentralization data without additional data on the regulatory framework for subnational finance. Most theoretical arguments stressing efficiency gains from decentralization (along with more recent arguments pointing out its dangers) implicitly assume that improvements (deteriorations) in responsiveness or stronger incentives for effort (self-seeking) stem from increased autonomy from central control. As with industrial organization theory, the essence of decentralization in most studies is that it grants local governments wider discretion while limiting the center's access to information and curbing its ability to overturn local decisions *ex post*.⁷ In comparing firms, if the regional divisions in firm A spend more than regional divisions in firm B, it may not reflect that A is more decentralized in any real sense if A's regional managers are tightly controlled by the central office and their decisions are subject to frequent *ex post* reversals while B is essentially a holding company. In the same way, expenditure decentralization within governments may communicate very little about the locus of authority.

An important consideration is whether expenditure decentralization is funded by intergovernmental grants, revenue that is shared with the center according to a fixed formula, or the mobilization of own-source revenue through independent taxes, user fees, and borrowing. Until recently, virtually all cross-country studies have ignored these distinctions. The *Government Finance Statistics Yearbook* does include a line in its subna-

Figure 1 Selected Time Series Indicators of Decentralization



tional revenue accounts called “grants,” but for many countries they do not include constitutional revenue-sharing programs. This line can be used to calculate overall transfer-dependence; averages are presented in the second column of Table 1. Moreover, an alternative measure of fiscal decentralization can be obtained by calculating own-source revenue as a share of total government revenue (the third column in Table 1). While a useful source of variation over time, one should be careful about drawing inferences based on cross-section variation since the coding of grants and subnational own-source revenues seems not to be consistent across countries.

One way to improve upon this measure is to draw on country sources to develop a measure of subnational revenue autonomy that does not code automatic distributions from revenue-sharing schemes as own-source revenue. The fourth column of Table 1 presents a measure of grants plus shared revenues as a share of subnational revenue, and the next column includes a measure of own-source revenue as a share of the total.⁸ The latter is an alternative to the simple expenditure decentralization variable. It attempts to measure the share of total government revenue that is actually raised through revenue efforts of subnational governments.

However, even this variable severely overestimates the extent of subnational revenue autonomy. While subnational governments may collect the revenues labeled as own-source, the central government may nevertheless maintain the power to set the rate and the base, leaving the subnational governments as mere collectors of centrally determined taxes. A recent OECD study tackles this complex issue, but unfortunately only for a small number of countries.⁹ From this study, it is possible to calculate two additional variables: the share of total tax revenues over which subnational governments possess full autonomy to set their own tax rates and their own rates and base. These variables, also presented in Table 1, paint a very different picture of subnational fiscal autonomy. Several countries in which subnational governments account for large shares of total spending (column 1) and taxation (column 5) have very little autonomy over tax rates and base (column 7). In fact, the study makes it clear that the United States, Canada, and Switzerland are in a class by themselves when it comes to autonomous subnational revenue authority. An important goal for further data collection is the improvement and extension of the OECD study, especially to developing countries.

Table 2 presents a matrix of pair-wise correlation coefficients for all of the variables discussed in this article. The numbers of cases upon which the correlations are based are presented in italics. The own-source revenue decentralization variables calculated from the *Government Finance Statistics Yearbook* and country sources are highly correlated at .9. In the first column there are reasonably high correlations (.87 and .84) between expenditure decentralization and the own-source revenue decentralization variables calculated from the *Government Finance Statistics Yearbook* and country sources. However, for the smaller OECD sample the correlation between expenditure decentralization and either of the autonomous local tax collection variables falls to around .64.

Additionally, central governments might attempt to restrict the fiscal autonomy of subnational governments not only through conditional grants and regulations governing local taxation, but also through formal limitations on subnational borrowing. The ability to access credit markets or other sources of deficit finance independently is an important component of subnational fiscal autonomy. An index created by the Inter-American Development Bank considers debt authorization requirements, numerical limits, and restrictions on the use of debt imposed by the central government, along with the ability to borrow through banks and public enterprises owned by subnational governments (in 1995). This variable, which ranges from 1 to 5, is presented in the last column in Table 1. Table 2 shows that borrowing autonomy is positively correlated with measures of expenditure and revenue decentralization and negatively correlated with transfer-dependence.¹⁰

Policy Decentralization The decentralization of policy autonomy is rarely addressed by empirical scholars because it is difficult to measure. Fortunately, Vernon Henderson has recently taken up the task.¹¹ First of all, Henderson asks whether the central government has the legal right to override the decisions and policies of lower levels of government “with an ease that calls that very authority into question.”¹² Although the coding involves a fair amount of discretion, Figure 1b shows that in 1975 21 percent of the central governments in Henderson’s sample lacked override authority and that by 1995 the figure soared to 60 percent. Second, Henderson asks which level of government is responsible for decision making in each of three policy areas: primary education (control of curriculum and hiring/firing of teachers), infrastructure (local highway construction), and local policing. The plots in Figures 1d through 1f show an unmistakable trend towards increasing influence for local and regional governments in each policy area.

Perhaps the most striking aspect of these charts is the prevalence of shared authority. The portion of the sample in which the central government and one or more local governments have joint policy authority is plotted with a dashed line. Very rarely do central governments fully cede autonomy to subnational governments. In the vast majority of cases, decentralization entails a move from complete central dominance to joint involvement of the center and one or more subnational tier. Even in the cases where the central government is not involved, authority is often shared between two or more subnational tiers (plotted in normal font). Finally, situations in which a single subnational tier is involved in policymaking (plotted in bold font) are extremely rare. Studies of fiscal federalism start with “the presumption that the provision of public services should be located at the lowest level of government encompassing, in a spatial sense, the relevant benefits and costs.”¹³ The normative prescription and ultimately the positive theories that flow from it envision a neat compartmentalization of authority according to something like the subsidiarity principle, with occasional shared authority for tasks where the rele-

Table 2 Correlation Coefficients for Decentralization Variables, 1990s

	State-local exp/total exp	Grants/state- local revenue	Own-source state-local rev/total rev. (GFS)	Grants + rev. sharing/state- local rev.	Own-source state-local rev/total rev (R 2002)	State-local tax rev/total rev (rate autonomy)	State-local tax rev/total rev (rate and base autonomy)	Borrowing autonomy	Policy autonomy	Subnational elections
Grants/state-local revenue	-0.1958 35									
Own-source state-local rev/total rev. (GFS)	0.8729* 36	-0.5908* 35								
Grants + rev. sharing/state-local rev.	-0.1668 32	0.4600* 30	-0.3724* 31							
Own-source state-local rev/total rev (Rodden2002)	0.8419* 32	-0.4182* 30	0.8995* 31	-0.5979* 32						
State-local tax rev/total rev (rate autonomy)	0.6407* 19	-0.3817 18	0.7257* 18	-0.6557* 16	0.8698* 16					
State-local tax rev/total rev (rate and base autonomy)	0.6399* 19	-0.2278 18	0.8806* 18	-0.434 16	0.7027* 16	0.6797* 19				
Borrowing autonomy	0.4126* 32	-0.3545 30	0.4953* 31	-0.4510* 34	0.5128* 32	0.2246 16	0.2741 16			
Policy autonomy	0.5130* 23	0.1499 19	0.3402 19	0.0833 19	0.1067 17	0.3417 10	0.3117 10	0.1038 19		
Subnational elections	0.5475* 23	-0.1299 19	0.4313 19	-0.2409 19	0.3461 17	0.3285 10	0.335 10	0.2533 19	0.7775* 47	
Partisan harmony	-0.6128* 12	-0.0716 11	-0.5331 11	0.3941 12	-0.4829 11	-0.2381 7	-0.2208 7	-0.5574 12	-0.6011* 13	-0.5863* 13
Federalism dummy	0.6220* 39	-0.2581 34	0.8039* 35	-0.0325 34	0.5047* 32	0.0679 18	0.5102* 18	0.4204* 34	0.3611* 47	0.3994* 47

Simple pairwise correlation coefficients
 Number of overlapping cases in list
 * significant at .05

vant benefits and costs fall between levels. However, the data in Figure 1 show that central and regional governments are often involved even in the determination of the curriculum and the hiring and firing of elementary school teachers and in decisions about local road construction. It is possible to turn the policy data in Figure 1 into a simple measure of decentralized policy autonomy. A reasonable strategy is to give countries two points if they lack central overrides, two points for each policy area controlled exclusively by regional or local governments, and one point for policy areas in which they are jointly active with the center. For 1995 the index ranges from zero to seven. Table 2 shows that this variable is correlated at .51 with expenditure decentralization but is not significantly correlated with any other decentralization measures.

Political Decentralization It is possible to get some insight into political decentralization by tracking regional and local elections over time. Figure 1c plots the portion of the sample in which regional and local governments were popularly elected, again showing a dramatic trend toward decentralization. While only 30 percent of local governments in the sample were elected in 1970, by 1999 the figure had grown to 86 percent. For many of the countries the shift to subnational elections was part of a broader shift from authoritarianism to democracy in the late 1980s and early 1990s.

A simple index of political decentralization ranging from zero to two assigns one

point for each subnational level at which executives were popularly elected in 1995. Not surprisingly, Table 2 shows that popularly elected local officials have higher levels of policy autonomy than appointed officials and preside over larger shares of public expenditures.

While the binary distinction between elected and appointed officials is useful, subtler variation in political decentralization among systems featuring popularly elected subnational officials is more difficult to quantify but just as important. Above all, it is important to assess the relationship between the central and subnational electoral arenas. For instance, the slate of candidates competing in local elections might be chosen by central government party officials. At the other end of a spectrum, state or local officials might play a key role in selecting candidates for central government elections. For example, federal party lists are drawn up by state party leaders in Australia and Germany, and the states play a key role in selecting presidential candidates in the U.S. Although such issues are examined in a few case studies, a worthy goal for future research would be to compile a cross-national data set.¹⁴

More abstractly, such variables are interesting in assessing the relative independence (or interdependence) of the central and subnational electoral arenas. For instance, state gubernatorial elections in the United States are known to be influenced by voters' evaluations of the president and his copartisans. Unfortunate governors might suffer from a midterm punishment effect, while lucky governors might get a free ride on the coattails of a popular president during times of economic prosperity. In a more extreme example of externalities between central and subnational elections, voters view German state elections as federal midterm contests because they directly determine the partisan make-up of the powerful upper legislative chamber. On the other hand, David Samuels suggests that coattails in Brazil, where the states are the federal electoral districts, operate in the opposite direction: federal elections are heavily influenced by state-level politics in which governors play a crucial role.¹⁵

The success of a subnational official has a component that is based on evaluations of local performance and a component that is based on evaluations of the national party. In spite of coattails, several studies demonstrate clear links between measures of state-level fiscal and macroeconomic performance and gubernatorial election results in the United States. Thus, the reelection prospects of U.S. governors clearly have both national and state components. An estimation of the size of these components for subnational officials in different countries would tell a great deal about their incentives, for example, for intergovernmental cooperation, local effort, and fiscal discipline.

A less precise but more manageable assessment of the relationship between central and subnational electoral arenas was first suggested by William Riker and Ronald Shaps and has been implemented for a sample of fourteen federations since the 1970s: the number of state or provincial chief executives sharing the party affiliation of the federal chief executive.¹⁶ This figure conveys information about fluctuations in political (de)centralization over time and facilitates useful cross-national

comparisons. For instance, it tracks the dramatic decline of Congress party dominance in India, the gradual erosion of PRI dominance in Mexico, the fragmentation of the Brazilian federal system, and Nigeria's spurts of authoritarianism and democratic federalism. Although the number of overlapping cases is low, Table 2 suggests that on average in the 1990s this index of "partisan harmony" is negatively correlated with measures of fiscal and policy decentralization.

Federalism

Federalism is not a particular distribution of authority between governments, but rather a process—structured by a set of institutions—through which authority is distributed and redistributed. Federalism can be traced back to the Latin *foedus*, or covenant. The word eventually was used to describe cooperative, contractual agreements between states, usually for the purpose of defense. Covenants and contracts imply mutuality—to serve any purpose, both parties must fulfill some obligation to one another. If the central government can get everything it wants from local governments by simple acts of administrative fiat, it makes little sense to see the two as engaged in a contractual, or federal, relationship. Federalism implies that for some subset of the central government's decisions or activities it is necessary to obtain the consent or active cooperation of the subnational units.

Before filling in the details on the institutions that underlie federal contracts, it is important to understand how and why federal contracts are made in the first place. Both the definition and the operation of federalism are wrapped up in the historical conditions that give rise to the original contract. William Riker posits that modern federations originated as bargains aimed at achieving military defense against a common enemy, though one might add other collective goods like free trade and a common currency.¹⁷ Alliances and loose confederations are often plagued by instability, free riding, and collective action problems, but if the incentives for cooperation are strong enough and political incentives are properly aligned, representatives of the entities might negotiate a new governance structure featuring a central government with stronger enforcement powers and decision rules that require something less than unanimity. Once this contract is made, it takes on a life of its own and continues even after the enemy has been defeated or a common market or currency achieved. Alfred Stepan identifies a second path to federalism.¹⁸ Many multinational states are formed not by voluntary bargains but by the vagaries of conquest and colonialism. A federal bargain becomes necessary to hold the multinational state together and assuage fears of interethnic exploitation.

In both scenarios the original federal bargain is an agreement about the composition and powers of the central government and the rules that will structure future interactions between it and the units. The aftermath of the original bargain makes federations dis-

tinct from unitary systems. The units will not cede authority to the center without safeguards against future exploitation, either by the center itself or by other states. Thus federal bargains generally include constitutional language protecting the sovereignty and autonomy of the units, in some cases including clauses that vest them with all residual powers not explicitly designated to the center. The credibility of such language often hinges on the presence of a strong, independent constitutional court. More important, federal bargains require majorities and often supermajorities of the territorial units for a wide range of policy changes, especially changes in the basic vertical distribution of policy and fiscal authority or the constitution itself.

From Philadelphia in 1776 to the Nice Summit of the European Union in 2000, it is clear that in striking a federal bargain the most serious concerns about exploitation come from small territories that would be consistently overwhelmed if votes were apportioned according to population. Thus, small states insist on representation schemes based on territory, while large states argue for population-based representation. The compromise usually involves a population-based lower chamber and a highly malapportioned upper chamber that overrepresents small states.¹⁹ Comparative data collected by David Samuels and Richard Snyder show that federations demonstrate much higher levels of upper chamber malapportionment than unitary systems.²⁰

Thus, federalism is a form of preference aggregation that often leans on bargains among territorial governments or their representatives as opposed to majority rule among individuals.²¹ But by no means is this concept binary. Table 3 depicts a continuum that reflects the role of territorial governments in the central government's policy-making process. At the far left, decisions are made by majorities of individuals. Territorially based districts play no role. Perhaps the best modern examples are referenda or town meetings in rural New England and Switzerland. To provide a more realistic national-level example, in Israel, with only one nationwide electoral district, lower level governments do not map onto any territorial unit that plays a formal role in the central government's decision procedure. Further along the continuum are legislatures with representatives elected from territorial districts, the model for most modern legislatures. Even if these districts do not correspond to the boundaries of territorial governments (as in Westminster-style systems where redistricting is frequent), more territorial bargaining might be expected than in systems without districts. Yet further along the continuum are legislatures in which the boundaries of territorial governments correspond with those of electoral districts but seats are allocated by population, as in the Italian upper chamber. The next slot in Table 3 is occupied by the upper chambers of most modern federations, including the United States. Each territory has a similar number of directly elected representatives, regardless of population. But the next slot on the continuum is even more federal. In the original U.S. Senate and the modern German *Bundesrat*, representatives are appointed by the constituent governments. Finally, at the far right of Table 3 are legislatures in which delegates are appointed, small states are overrepresented, and changes from the status quo require supermajorities or, at the extreme, unanimity. For constitu-

tional changes, the German *Bundesrat* falls into this slot, as does the EU council of ministers for most important policy issues. With each move to the right along this spectrum, territorial governments take greater precedence as the relevant units in constructing legislative majorities, and one might say that representation is more federal.

The representation of states in central government policymaking is part of the essence of federalism.²² Yet a strict definition would seem to exclude Canada, since the provinces are not formally represented as veto players in the decision-making process of the federal government. Nevertheless, the federal and provincial governments are clearly locked into an ongoing process of intergovernmental contracting that takes place primarily outside of central government institutions. The Canadian central government goes so far as to sign formal, contractual agreements with the provinces. Even though the Canadian central government need not obtain the approval of the provincial governments in order to make policies, it often can not implement them without cajoling, striking bargains with, and making side payments to provinces. The Russian and Spanish central governments engage in direct bilateral and multilateral bargaining with regional governments, and a variety of rather formal, policy-specific multilateral bargaining bodies including the states and the central government has evolved in Germany and Australia.

In sum, federal contracting is largely a product of institutional incentives arising from previous bargains, but sometimes the relevant institutions are not identified in the constitution. Some countries, like Germany, Brazil, and the United States, possess virtually all of the above qualities. India, Austria, and Canada, however, are generally considered federations even though their upper legislative chambers are neither strong nor highly malapportioned. India's federal credentials are sometimes challenged because of the prime minister's constitutional authority to dismiss state governments, but this power has been used with diminishing frequency over time without constitutional change.

In spite of these gray areas, previous attempts at cross-national measurement treat federalism as a binary concept. Countless cross-national studies draw on the classifications of constitutional scholars who identify federations by relying more on common sense and experience than rigorous coding criteria.²³ The bottom row of Table 2 displays correlation coefficients for the simple federal dummy variable with the other decentralization variables. It is not surprising to find that federalism is positively correlated with measures of expenditure, revenue, borrowing, policy, and political decentralization. Contrary to common wisdom, federations are indistinguishable from unitary systems in levels of transfer-dependence. Furthermore, the positive correlation coefficient for subnational tax autonomy is driven by three federations: the U.S., Switzerland, and Canada. The other federations for which data were available possess very low levels of tax autonomy.

The traditional classification of federations is quite expansive, lumping together countries as diverse as Switzerland and Pakistan. It also masks important variation over

Table 3 The Role of Territorial Governments in Legislatures

	Unitary			Federal		Confederal
Decision-making units	Individuals	Elected district reps that do not correspond to territory govts.	Elected district reps that correspond to territory govts.	Elected district reps that correspond to territory govts.	District reps that are appointed by territory govts.	District reps that are appointed by territory govts.
Apportionment of districts	n.a.	one person one vote	one person one vote	mal-apportionment	mal-apportionment	mal-apportionment
Requirement for policy change	simple majority	simple majority	simple majority	simple majority	simple majority	Qualified- or super-majority
Example	town meeting	UK Parliament	Italian upper chamber	United States Senate	German Bundesrat	EU Council of Ministers

time, for example, Nigeria as it slips in and out of military dictatorship and India as president's rule fades into obsolescence. There is room for improvement in the measurement of federalism. Coefficients on federal dummy variables in cross-country regressions should be regarded with skepticism. Although perhaps not much better, a potential avenue for more refined measurement would be the creation of a continuous measure by allocating scores based on the dimensions of federalism listed above and the representation criteria displayed in Table 3. Better yet, any attempt to measure federalism should be carefully calibrated to the theoretical argument of interest.

Linking Theory and Data Analysis

Several lessons from this exercise in concept clarification and measurement stand out. While expenditure decentralization and federalism are correlated with some alternative measures, they are blunt and potentially misleading proxies for many of the phenomena addressed in leading theories about the causes and consequences of decentralization. Even more important, the data presented above paint very different pictures of decentralization and federalism from those implicitly assumed in much of the theory. Fiscal and policy decentralization do not often entail a shift in some fixed amount of authority or money from the center to regional or local governments. Rather, it usually entails the addition of new layers or addition to the resources or responsibilities of existing lower-tier governments in the context of overlapping spheres of authority.

Political decentralization also adds to the complex and intertwined nature of multi-tiered governance. When policy authority and finances are intertwined, it is not surprising that voters' evaluations of central and subnational officials are also interrelated. Studies of normative fiscal federalism and American constitutional theories of dual federalism have cast a long shadow. Too often economists and political scien-

tists theorize about decentralization as if it entails a neat division of tasks, with the center only stepping in to provide national collective goods and correct spillovers. Prevailing notions of federalism in political science create a similar problem. Federalism does not necessarily entail greater independent authority for subnational governments over taxes, expenditures, or anything else. Federalism does not imply that the center and states are sovereigns, each protected from the interference of the other. On the contrary, federations have evolved as ongoing incomplete contracts and by their very nature are under constant renegotiation. In most federations the center often depends on the provinces to implement and enforce many of its decisions, and the center can not change the status quo in certain areas without the consent of the constituent units.

Building on these lessons, the remainder of this article revisits several broad topics addressed in cross-country empirical research. For each area of research, it discusses limitations of existing studies, ways to improve the link between theory and data, and new directions for theory.

Endogenous (De)centralization The key intuition of fiscal federalism theory is that the benefits of decentralization are positively correlated with the geographic variance in demands for publicly provided goods.²⁴ This line of argument builds on the logic expressed by Montesquieu and Rousseau in stressing the benefits of decentralization when territories are large and populations vast. Although they do not make explicit the political process through which demands for decentralization are transformed into policy, they maintain that excessively centralized systems in large, heterogeneous countries will face overwhelming pressure to decentralize, lest they fall apart through secession or civil war. Alberto Alesina and his collaborators extend this logic and examine a basic trade-off between the benefits of large jurisdictions and the costs of heterogeneity in large populations.²⁵ But large size comes at a cost: the difficulty of satisfying a more diverse population. Another group of studies emphasizes a related trade-off between the benefits of coordination and economies of scale and the benefits of setting tax rates and determining redistributive transfers locally in societies with heterogeneous income levels (and distributions) across regions.²⁶ In all of these models, sufficiently high levels of heterogeneity generate demands for decentralization or even secession.

One challenge for testing these arguments is that they require measurements of regional heterogeneity of preferences. The proxies used in empirical studies by Wallace Oates and Ugo Panizza are land area and ethnolinguistic heterogeneity, which are found to be positively associated with expenditure decentralization. Moreover, these studies find that wealth and democracy are positively associated with expenditure decentralization.

However, as argued above, expenditure decentralization is likely a poor proxy for the policy and political devolution that these theories address. When ethnic or lin-

guistic heterogeneity generates demands for decentralization, demands are likely to focus on the locus of decision making about educational curriculum or policing or the introduction of local elections. For Bolton and Roland's argument, which focuses on preferences over the locus of tax authority deriving from income, the correct independent variable would require regional data on income levels and interpersonal distribution, and the correct dependent variable would be something like the OECD tax autonomy variables described above. However, the move from theory to testing will be quite difficult; the type of subnational autonomy over taxation envisioned in this theory is extremely rare, even among the most developed countries.

In fact, the data presented above suggest that theories of endogenous centralization, if they aim to shed light on recent trends, should go beyond median voter theories in which decentralization is conceptually equivalent to secession. It may be more relevant to ask why politicians choose to make the state more intertwined and complex. For instance, what incentives lead central government politicians to give up independent responsibility for the provision of certain public goods and begin to share responsibility with local governments by funding decentralized provision through grants? Part of the answer might have to do with the potential for reducing central government budget deficits and shifting blame for poor performance. Conversely, what explains the dominant trend of the first half of the twentieth century in which independent fiscal and policy autonomy, especially over taxation, migrated from states and provinces to federal governments or, more recently, to intergovernmental bodies? Since the pathbreaking work of Fritz Scharpf and his associates, very little theoretical or empirical attention has been given to questions addressing the increasingly intertwined nature of central, regional, and local government decision making.²⁷

In short, beyond a handful of studies of expenditure decentralization, cross-national work on endogenous tax, policy, and political decentralization is virgin territory. The most promising avenue for the next generation of research is to address a wider range of decentralization variables and supplement median voter models with more realistic assumptions about institutions and politics.

Accountability, Corruption, and Good Governance If decentralization actually resembled the clean transfer of authority envisioned in fiscal federalism theory, it might bring government closer to the people and enhance information, accountability, and responsiveness to citizens. However, when decentralization amounts to adding layers of government and expanding areas of shared responsibility, it might facilitate blame shifting or credit claiming, thus reducing accountability. Even worse, in countries already suffering from corruption, it might lead to competitive rent-seeking and "overgrazing" of the bribe base.²⁸ Previous studies of corruption, in which the exogenous variables were measures of expenditure decentralization and the federalism dummy, were not well suited to distinguish between these possibili-

ties.²⁹ However, more recent work by Treisman attempts to deal with the potential problems associated with overlapping authority by using a variable counting the number of governmental tiers and a measure of decentralized (and by assumption overlapping) judicial and law enforcement authority.³⁰ Perhaps future studies might improve upon this approach by assessing the extent to which different tiers have overlapping policy or, better, regulatory authority.

Some of the most compelling arguments linking decentralization to enhanced accountability and lower corruption concern mobility and intergovernmental competition that reduce the ability of governments to extract bribes. However, neither expenditure decentralization nor federalism is a reasonable proxy for intergovernmental capital mobility and competition. The former requires some data on whether individuals and firms actually move or credibly threaten to do so. In much of the world, ethnic and linguistic ties are very strong impediments to mobility. In all but a small handful of wealthy countries, interjurisdictional mobility is more likely a desperate move to escape poverty than an expression of preferences about local service provision or corruption, and migration is often to the slums of the capital city where corruption and service provision might be even worse.

Even so, the theorists cited above focus primarily on the mobility of capital rather than labor. But for capital mobility to have an effect on governance, subnational governments must possess significant regulatory and especially tax authority. Yet the data presented above suggest that autonomous subnational tax authority is a fiction in many countries that appear on the surface to be quite decentralized. To examine the plausibility of interjurisdictional competition, one approach has been to examine the size and number of first tier jurisdictions under the assumption that mobility is less costly among smaller jurisdictions. This approach is not very informative, however, without a measure of the tax powers of governments. In fact, simple theories of optimal taxation provide good reasons to suspect a negative correlation between jurisdiction size and tax autonomy.

In any case, none of the existing empirical studies of corruption or good governance constitutes acceptable tests of hypotheses linking intergovernmental competition to restraints on subnational politicians. First of all, it may not be enough simply to identify subnational tax or regulatory autonomy or even note that horizontal competition takes place. In some countries, the structure of the subnational tax regime might encourage tax exportation or corrupt deals between subnational governments and manufacturers. Furthermore, though virtually all of the supposed benefits of decentralization hinge on improved accountability, very little is known about the links between the varieties of fiscal and policy decentralization (or, more appropriately, overlap) and the ability of voters to use elections to hold local officials accountable for their actions. A more promising avenue than cross-country regressions is to approach detailed single country studies from an explicitly comparative

perspective. For instance, studies of the United States show that voters independently punish and reward state politicians for fiscal and macroeconomic outcomes, while voters in the German states do not.³¹ The next step is to link such cross-country variations explicitly to differences in political and fiscal institutions.

Fiscal Scale and Redistribution A similar set of problems has plagued cross-national empirical studies of decentralization and the size of government. Whether or not one accepts the implicit antigovernment bias in these studies, there are good reasons to believe that decentralization, if it facilitates intergovernmental tax competition, will lead to a smaller public sector. The first generation of empirical studies, however, did not attempt to measure decentralized tax autonomy. Oates examined the effects of tax competition on the size of government by using cross-section data on expenditure decentralization, while Cameron used a federalism dummy.³² More recently, Ernesto Stein differentiated between fiscal decentralization funded by local taxes and transfers, even distinguishing between discretionary and constitutional transfers, in a cross-section study of government size in Latin America.³³ Rodden examined the differential effects of grants and own-source revenue using a large panel data set and used the OECD tax autonomy data cited above to identify countries in which tax competition is most likely.³⁴ The findings suggest that decentralization is positively associated with the overall size of government when funded by transfers but has a neutral or even negative effect in the rare cases when decentralization is funded by local taxation.

Related studies suggest that federalism inhibits the growth of redistribution and the welfare state. There appears to be unanimous empirical support for this proposition from a variety of cross-national studies, but they are limited to around fifteen OECD countries and rely on a simple federalism dummy.³⁵ If limitations on redistribution are driven by intergovernmental competition that favors capital over labor and causes local governments to fear the welfare magnet phenomenon, federalism is a very poor proxy. An alternative federal story has to do with a status quo bias among federations owing to multiple veto players in the era of welfare state expansion, but it would require a more refined measure capturing some of the concepts from Table 3. Yet another attractive yet heretofore untested theory might have to do with the legislative overrepresentation of fiscally conservative farmers and rural elites at the expense of urban workers, in which case some variant on the Samuels-Snyder malapportionment index might be useful.

Macroeconomic Management Finally, improvements can be made in conceptualizing and using cross-national data to assess the links between decentralization and macroeconomic outcomes like deficits, inflation, and ultimately economic growth. New skeptical studies focus on coordination and collective action problems that complicate macroeconomic management, adjustment, and reform when expenditure

decisions are decentralized. Here, again, simple expenditure decentralization data without accompanying information about the institutional framework of subnational finance are misleading; central governments in countries with very decentralized expenditures often place strict limitations on subnational borrowing. Combined with central regulation of subnational taxation, these limitations can give the center tools with which to overcome local government impulses to conduct self-interested but collectively destructive fiscal policy. It is also important to examine the incentive effects of various forms of intergovernmental grants. When the central government can threaten to withhold intergovernmental grants, it may have an important lever with which to restrain local indiscipline and assuage intergovernmental cooperation problems. On the other hand, some kinds of intergovernmental transfers might also provide subnational politicians (along with their voters and creditors) with reasons to expect future bailouts, undermining their incentives for fiscal discipline.

In the new theoretical and empirical studies that stress macroeconomic dangers, federalism plays a larger role than fiscal decentralization. Federalism compounds coordination and cooperation problems because it entrenches the states as veto players in the central government's own policymaking process. Not only might states or provinces conduct collectively suboptimal fiscal policy, but constitutional protections might prevent the central government from intervening, or, through their representation in the legislature or intergovernmental bargaining bodies, the states that benefit might possess veto power to prevent reform.

However, these aspects of federalism are very poorly captured with a dummy variable. Perhaps federal-style bargaining is as pronounced in China as in any formal federation and less pronounced in Austria, Pakistan, or Nigeria (during its periods of military rule) than in unitary countries like Italy or, increasingly, the UK. The nature of federal bargaining has been transformed in India and Mexico after the fall of the Congress party and the PRI. Case studies of federalism and fiscal indiscipline reveal that small differences in political incentives, executive-legislative relations, and legislative organization have important consequences.³⁶ An important goal for further research is the development of federalism variables that address its constitutional and representational dimensions. Additionally, if federalism affects macroeconomic stability, the effect is likely to be contingent upon a variety of other political and institutional details, like expenditure and revenue decentralization, subnational borrowing autonomy, and partisan harmony.

A final concern with cross-national regressions exploring the consequences of decentralization, even if concepts are clear and measurements precise, is the fact that, as discussed above, the vertical organization of government is hardly exogenous. Both the nature of decentralization or federalism and macroeconomic variables might be codetermined by other variables like economic geography, the heterogeneity of the population, migration, income distribution, and demands for democracy and redistribution. Increased confidence in theories linking institutions to outcomes

requires a better understanding of how those institutions evolve and stabilize, an area in which theoretically informed country studies are the most promising starting point.

Conclusion

There have been pitfalls as well as progress in attempts to understand the vertical organization of government using cross-national data. A first generation of theories based on welfare economics and public choice has been supplemented with new approaches that pay attention to institutions and incentives, and empirical studies are beginning to follow suit. Early empirical studies paid little attention to the varieties of fiscal and political decentralization. Yet some of the key findings were useful; fiscal decentralization and federalism do not easily translate into the gains in efficiency and accountability predicted by the first generation of theory. The next generation of empirical studies is embracing the complexity and diversity of decentralization and considers the possibility that different types of decentralization have different causes and effects. The fit between theory and empirical analysis is improving, and there are several avenues for improved data collection and analysis.

Cross-national empirical analysis also has limits, and the relationship between quantitative and case study approaches to comparative politics is symbiotic. Some institutional details, like the incentive effects of different types of grants, legislative organization, and the political relationships between central and local officials, must first be analyzed with comparative case studies before progress can be made in cross-national empirical analysis. In general, producers of cross-national regressions should be modest about their claims, and consumers cautious in their interpretation. Cross-national measurability is sometimes conflated with relevance for theory or even policy, creating the danger that studies plagued by poorly conceived or poorly measured concepts can close minds and move the research program—and perhaps even policy—in unproductive directions. Cross-national regressions are most useful when they both respond to and help inform truly comparative case studies.

Finally, as lessons from case studies and cross-national data collection accrue, theories must evolve as well. This evolution is already taking place, as theorists respond to problems with accountability, corruption, and macroeconomic instability in newly decentralizing countries. An important further step is to recognize that decentralization over the last twenty years is not best understood as a clean transfer of fixed authority or resources from higher to lower level governments, or federalism as a fixed allocation of spheres of central and provincial autonomy. A more promising theoretical starting point is to analyze the causes and effects of shared and intertwined fiscal, political, and policy authority.

NOTES

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