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From Economics to Politico-Economics: Evolution of the Analysis of Federalism

by

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Abstract

This essay places the eight country case studies of federalism, economic reforms, and globalization (available as SCID working papers 147-153) in context. We trace the evolution of the literature on federalism from its early focus on the design of fiscal arrangements to achieve efficient outcomes in a world of benevolent social planners and closed economies to later work relaxing these assumptions and exploring different policy areas. The essay also discusses the motivating questions for the collection of case studies.

INTRODUCTION

Early analyses of federalism focused mainly on the potential economic benefits of federalism, largely ignoring or simplifying the socio-political realities that affect policymaking. Central governments were assumed to act as benevolent social planners, capable of reining in the benevolent social planners in power at the subnational level when these officials' actions create externalities for others outside their jurisdiction. Social planners at all levels were assumed to have all the relevant information and capacity for enforcement of their decisions. Opportunistic behavior was assumed away. The analyses also tended to focus mainly on fiscal goals such as efficient taxation, expenditure, and redistribution in prescribing particular divisions responsibilities across levels of government. These had little explicit advice about how to design federal institutions to withstand bargaining between levels of government, corrupt politicians, and political pressures from interest groups. The early economic theories of federalism also evaluated federalism in a closed-economy setting, rather than considering the interaction of national and subnational governments with the world economy.

The analytical literature on federalism has evolved substantially from the "economic federalism" framework.[1] Theoretical and empirical analyses have paid more attention to policymakers' motivations and abilities and the effects these can have on the optimal division of responsibilities across levels of government in federations. Politicians at both levels of government may be re-election seeking, policy-motivated, revenue-seeking, or interested in obtaining "perks" from office, among other goals. Empirical case studies have also emphasized the importance of variation in policymakers' administrative abilities. There has been less attention to the consequences of corruption for federalism.[2]

The literature also considers various constraints on the central governments' ability to carry out policies. The "cooperative federalism" literature represents central governments

[1] The term "economic federalism," "cooperative federalism," and "majority-rule federalism" are drawn from Inman and Rubinfeld (1997).
[2]The effect of federalism on corruption has been studied more extensively, though empirical evidence is mixed. Treisman (2000), for example, finds a positive relationship while Fisman and Gatti (2002) find that decentralization is associated with lower corruption.

as being constrained to only pass policies that are unanimously agreed to by representatives from lower-tier governments, while the “majority-rule federalism” literature replaces the constraint of unanimous approval with the restriction that central government policies be approved by a majority of elected representatives from lower-tier governments. Recent analyses have also studied the effects of information asymmetries on center-state relations.

We call this branch of the literature “political federalism” analysis. Both economic and political federalism analyses ask the same kinds of questions about how federal systems, especially fiscal arrangements, should be designed. The approaches differ mainly in their assumptions about who the actors are and what motivates them. These assumptions, in turn, affect the cost-benefit analysis for evaluating the division of taxation, expenditure, and regulatory responsibilities across jurisdictions

Recent literature has also moved into analyzing the interaction of federalism with the political and economic environment, or what we call “politico-economic federalism” analysis. This branch of the literature builds on the political federalism analyses by considering the effect of the economic environment, especially the degree of integration with the international economy, on federalism more explicitly than the political federalism literature. It also delves into the dynamics of federalism, analyzing the politics of assigning responsibilities to various levels of government and the factors behind evolving federal structures.

The politico-economic federalism literature tends to be primarily positive in contrast to the other analyses’ normative analysis. The literature is also less well-developed analytically, in part because the processes underlying the complex interaction of federalism and policymaking as well as the evolution of federalism are likely to be clouded by specific country circumstances. The section on politico-economic federalism in this introduction is less a literature review than a summary of open questions for further research.

From Economics to Politico-Economics

The set of case studies on federalism, economic reform, and globalization sponsored by SCID contributes to the political and politico-economic literatures on federalism with a set of case studies of the evolution and interaction of federalism, economic reforms, and globalization in Argentina, Australia, Brazil, Canada, China, India, Mexico, and Nigeria. The countries vary widely in level of economic development and socio-political characteristics, but all share the common challenge of governance with multiple levels of politicians and bureaucrats.

Each case study focuses on several key questions. First, how have federal institutions evolved over time? What are the forces behind changes in fiscal arrangements, power sharing between levels of government, and political institutions? Second, how does the changing economic environment, especially greater openness to international capital and trade flows, affect federalism? What new strains, if any, does globalization place on federal governments and how have the countries we study responded? Third, what kinds of institutional and political arrangements are associated with greater macroeconomic stability and more flexibility to carry out economic reforms? What specific features of the federations we study make these countries vulnerable to shocks, over-borrowing, and other well-known dangers of federalism? How does the division of policymaking power across levels of government affect the prospects for economic reforms such as privatization and opening to the international economy? Integration with world capital and goods markets raises new policy challenges such as financial sector reform and regulatory reform for all countries; division of power across levels of governments may affect nations' ability to respond.

The authors use analytical narratives to explore these questions.[3] Much of the analysis of the politics of federalism and the interaction between the institutions, policymakers, and economic environment is based on game-theoretic reasoning, but the presentation is narrative. Country studies include detailed descriptions of the evolution of federal institutions, the current economic and political circumstances, and other aspects of the

[3] See Bates, et al. (1998) for a methodological overview and examples of analytical narratives.

country contexts. The format borrows analytical clarity from formal theory, but without being bound to the same stark stylized representation of federalism.

This working paper provides context for the country case studies by discussing the evolution of the literature federalism from the early models of “economic federalism” to the broad current politico-economic analysis of federalism. A companion paper highlights the findings that emerge from the country studies.

OVERVIEW OF COUNTRIES

The countries studied represent a varied cross-section of six developing and two industrialized federal nations. (Table 1) Incomes per capita varied from over US$25,000 (PPP) in Australia and Canada to US$758 (PPP) in Nigeria in 2002. The range of levels of development allows us to see federalism interacting with variety of economic environments. Canada and Australia, on the one hand, provide examples of federalism against a context of relatively efficiently functioning democracies and markets, while the workings of federal states interact with the challenges of nation-building and economic development in other countries.

Brazil and Argentina, two much-studied Latin American federations, were included as examples of countries in which authoritarian regimes have historically alternated with democratic ones. The countries also have a common history of macroeconomic instability, in part due to subnational over-borrowing. Brazil has taken significant steps to limit these vulnerabilities, while Argentinean economic reforms have stalled with the recent crisis. Mexico’s economic circumstances – increased integration over the past decade and the current challenge of second-generation reforms and increasing economic disparities across states - are similar to Brazil and Argentina, but the political context of transition from one-party to multi-party rule provides some contrast.

The world’s two largest nations, China and India, one a thriving multi-party democracy, the other an authoritarian one-party state, are included. Both are actively pursuing economic reform and greater international integration as well as facing the challenge of eradicating poverty. China's federalism is also distinct from others in the study in that most of the decentralization has been in the economic rather than the political realm.

Nigeria, the poorest country in the sample, is resource-rich, but has significant economic challenges to overcome in addition to consolidating a relatively new and unstable democracy.

All of the countries except for China have at least one tier of elected subnational governments with a structure that parallels the central government.[4] Most of the elected subnational governments have no formal accountability to the central government. India is an exception, as its 28 states and 2 of the 7 Union Territories have centrally-appointed governors alongside their elected legislatures and executive chief ministers. The state governors are nominally appointed by the President, but are effectively agents of the more powerful central government and its head, the Prime Minister.[5] Nigeria's transition to democracy is the most recent. The 1999 Constitution provides for an executive, judicial, and bicameral legislative branch at the national level and state level, while the third-tier local government areas have an elected chairman and council of leaders.

China's structure stands out among the countries in this study as being economically decentralized but politically centralized. It is clearly not a federal country in the political sense. The cession of control over local economies and reduction of controls on local government-owned enterprises has in some ways substituted for political decentralization to elected subnational leaders. The arrangement is generally regarded as economically beneficial in that provinces' economic powers offset the threat of central government

[4] With the exception of a few elected leaders at the fourth (township) tier of government or below, subnational leaders are appointed by the levels above them.

[5] The Indian President and state governors are not quite the analogues of constitutional heads of state, nor are they heads of government. The Constitution endows them with the power to force candidates for Prime Ministership (or Chief Ministership at the state level) to prove that they have support of a majority of members of the Parliament or state legislature. Indian state governments have an unusual dual accountability. Although the legislatures are elected by the citizens and propose governments of their choosing who are accountable to the legislatures, the central government is constitutionally empowered (Article 356) to suspend elected state governments or temporarily replace them by central rule. This power was used relatively frequently in the past, but has been exercised less recently.

expropriation and provide a stable environment for investment, but its political effects are unclear.[6]

The political units at the first tier of subnational governments, however, are still quite large in several countries we study. The smallest Indian state has a population of 60,000 and many are in the tens of millions. The largest, the state of Uttar Pradesh, has a population of over 166 million. Argentina's provinces range from 115,000 population to over 14 million people.

Smaller political units have varying degrees of independence. Canada, Australia, and India have lower tiers of governments that are under the states/provinces' control. Elected local governments (districts, *taluqs*, and *panchayats* from largest to smallest jurisdictions) are under the Indian state governments' control, but the national Finance Commission makes recommendations about transfers of funds. The constitutional status of India's panchayats was recently clarified, reiterating that they are under state governments' control, in 1993. Canada and Australia's municipalities are also subject to provincial control but have no constitutional status. China's five tiers of government are similarly hierarchical. Each level of government determines tax-sharing agreements, grant distributions, and expenditure responsibilities for the level immediately below. The first tier governments delegate local functions such as waste disposal, etc., to these levels of government.

The Nigerian and Brazilian local governments are more directly connected to the central government. The Nigerian National Assembly prescribes the states' allocation of transfers to this third tier and the Brazilian central government transfers resources directly to the municipal governments. This third tier of government that is constitutionally recognized and largely independent of the second tier.

Ethno-linguistic and socioeconomic heterogeneity varies across countries as well, from the ethnically divided Nigerian states and multi-lingual, multi-cultural India to the

[6] China is the model for Weingast's (1995) account of "market preserving federalism."

relatively more ethnically homogeneous, but economically diverse China. This diversity within nations has had varying effects on the federal states: inter-state and center-state politics are heavily influenced by ethno-linguistic differences in Canada and Nigeria, but economic differences appear to dominate in relationships between states in socio-economically heterogeneous Brazil. Competition for shares in national revenues and negotiation over the terms and extent of redistribution are a major part of politics in all of the countries.

The more ethnically diverse states have shown some tendency to subdivide over time, producing smaller, more ethnically homogenous units, but this is not a widespread phenomenon. Indian states were formed after independence so that the language spoken by a majority of its population would be the same. There have been a few new states created since then, most recently three new states were created in the later 1990s. The Nigerian federation has changed the most: there were originally 3 regions in 1946 and there are 36 currently.

ECONOMIC FEDERALISM

Inman and Rubinfeld (1997) summarize economic federalism as:

> "preferring the most decentralized structure of government capable of internalizing all economic externalities, subject to the constitutional constraint that the central government policies be decided by an elected or appointed 'central planner'." (45)

The framework evaluates federal arrangements according to their ability to provide citizens with the public goods they desire at the lowest cost possible.

Economic federalism proposes several advantages of federalism. Local governments are assumed to have an information advantage in identifying local needs. Decentralization also allows for more variety in the provision of public goods so that local preferences can be satisfied.[7] Mobility ensures efficient matching of citizens with jurisdictions that provide the public goods they prefer.[8] Local governments are also potential laboratories for policy experiments.

Economies of scale and externalities could offset these benefits of decentralization to varying extents. Some public goods may have economies of scale that cannot be obtained in smaller subnational jurisdictions. Local policies can have spillovers for other jurisdictions – environmental regulations in one town, for example, can affect pollution in another town, for example.

The same mobility that ensures matching of citizens with jurisdictions also limits the potential for redistribution by subnational policies. Progressive taxation and generous welfare benefits are likely to drive the well-off away and attract the poor, eroding the scope for redistribution.[9] Economic federalism thus recommends that the central government carry out most redistributive policies.[10]

The economic federalism literature addresses the question of tax assignment by working out the central and subnational taxes a benevolent social planner would set. Gordon's (1983) derivation of optimal tax rates for a federation involves solving six equations balancing a variety of welfare goals, all of which ignore policymakers' potentially opportunistic personal motivations. The solutions to these complex calculations are unlikely, however to be the taxes that any kind of politicians would choose.[11] The general policy prescription is to have as much central control over tax rates and bases as possible, since subnational governments will overlook the many externalities that their taxation decisions create.[12] Competition for businesses and citizens may lead subnational

[7] Oates (1972, 1994)
[8] Tiebout (1956), Bewley (1981)
[9] Gramlich (1985)
[10] Central control over redistribution is complicated, however, by the difficulty of separating redistribution from provision of public services. See Musgrave (1997) for a discussion of the implications of ongoing devolution for redistribution.
[11] Inman and Rubinfeld (1996)
[12] Only the special case of a Tiebout (1956) economy – in which states compete for residents and uses a residential head tax to pay for public goods – achieves efficiency with decentralized tax setting.

governments to set inefficiently lower business and income taxes for example. Subnational governments' efforts to exclude socially beneficial but locally unpopular activities (such as dumps or nuclear waste processing) can lead to over-taxation in other cases. Lower-level governments' quest to tax less mobile bases is also likely to lead to regressive taxation since the poor tend to be among the least mobile.[13]

Economic federalism has driven normative policy prescriptions and has provided the logic for increased decentralization of expenditure responsibilities in the 1980s and 1990s. The economic federalism framework has fallen short, however, in providing an accurate description of how federations actually function. The assumption that central and local governments are social planners who do not interact strategically with each other plays a crucial role in the cost-benefit analysis for decentralization, yet it is clearly not true. Governments also vary substantially in administrative capacity and transparency. Optimal policies are affected by changing assumptions to be more realistic.

The economic federalism framework also focuses on closed economies, in contrast to the reality of international integration. This omission also affects the cost-benefit analysis for federalism, as integration can reduce the benefits of decentralization and increase the potential costs. One set of benefits of decentralization comes from the fact that it carves out variety within a country, so that people have a place to move to that matches their preferences for taxation, public goods, etc. With international labor mobility, however, this kind of sorting could take place across countries so that the internal degree of decentralization need no longer be welfare enhancing.

Integration with the international economy can also increase costs of decentralization if subnational governments are allowed to borrow on the reputation of the central government. International interest rates are less elastic with respect to subnational borrowing than domestic interest rates would be, providing less of a curb on government indebtedness.

[13] Oates and Schwab (1986), Inman and Rubinfeld (1997), Wildasin (1989).

Finally, economic federalism offers few insights for how federal structures are chosen and change over time. It provides principles for allocating rights to taxation and expenditure responsibilities, but does not examine whether these will be chosen in political equilibrium or be stable over time. Tiebout's (1956) assertion that people will "vote with their feet" to sort themselves into separate jurisdictions with responsive subnational leaders is one of the few theories in the conventional analysis that proposes a mechanism for how federalism moves toward distributing resources efficiently. Nevertheless, it is only a theory of an equilibrium in which people and subnational governments are optimally matched and does not speak to the constant revisions to the federal bargain between the states and center government.

POLITICAL FEDERALISM

Political federalism departs from economic federalism by dropping the assumption that central governments are omniscient social planners. Policymakers are primarily politicians in this framework, motivated by prospects of reelection, the "perks" of office (that could include private returns from its corrupt use), lobbyist contributions, and other factors in addition to (or instead of) general social welfare. Administrators at all levels may or may not have the capacity and power to enforce the policies they deem desirable. Policymakers may or may not have complete information for determining which policies are desirable.

The literature on political federalism also assumes that levels of government interact strategically, so that the central government is no longer autonomously able to alter subnational policies. They must bargain with subnational governments to gain support from all or at least some minimum fraction of them. The change in assumptions has significant consequences for the optimal federal institutions and has more explanatory power than economic federalism for the outcomes we observe in decentralized countries.

The move toward political federalism was inspired in part by the growing public choice literature as well as the reality that the assumptions underlying the early work on federalism did not match the reality of governments in many countries. Subnational governments have had little incentive to act as social planners maximizing local welfare. Nigeria's subnational governments, for example, have only recently been elected and were previously appointed by the central government. While the number of countries with locally elected mayors in Latin America has increased from 3 to 17 over the past two decades, the administrative capacity of these lower levels of government is still questioned. Citizens in large subnational regions may not have much tighter control over their subnational representatives than they do over central representatives. Subnational governments do not have as much autonomy to respond to their constituents' demands, as the division of responsibilities is not as clean as envisioned, for example, in Oates (1972). The countries studied here often have a poor match between local governments' mandates and the resources available to them.

Political Policymakers

Policymakers motivated by prospects for reelection or the perks of office cannot be expected to use government budgets like social planners seeking the maximum welfare for their country or region. They can be expected to use information strategically, complicating the potential for social planner-like governance even if the incentives were present. Politicians may also be corrupt.

The reality of politicians as policymakers creates several new challenges for the design of federal institutions. First, expenditure, taxation, and grants assignments must somehow create incentives for lower level governments spend efficiently and responsibly. Subnational governments may over-spend on capital when capital transfers are easier to obtain than funding for current expenditures or vice-versa, for example. Their regional policies can distort national efforts to allocate funds toward priority projects or groups.

Politicians need to be motivated to expend effort and will not simply solve for the socially optimal action. Subnational governments, for example, need to be rewarded for increasing tax effort. Zhuravskaya (2000) shows that weak fiscal incentives for Russian cities to increase own revenues lead these subnational governments to over-regulate and restrict business. The fiscal arrangements prevent the subnational governments from retaining the increased revenues that would result from providing a good business climate.

The common pool problem in which subnational politicians over-spend from the pot of national resources (including both taxes and captive savings in the financial system) is also pervasive. The economic federalism prescription of central government dominance in taxation provides little fiscal restraint since costs of expenditure are distributed nationally. Subnational governments' over-expenditure can contribute significantly to the country's overall debt burden.[14] Subnational incentives to overborrow are especially pronounced when all local governments can borrow at the same interest rate rather than facing differential costs of capital reflecting their particular level of indebtedness. Subnational control over regional banks can also drain the national financial sector, as the central government may face the choice of bailing out regional banks or suffering more widespread financial repercussions that spill over subnational borders.

Second, the arrangements must make revelation of information incentive-compatible or at least minimize costs of auditing and oversight. Subnational governments may conceal information from the central government to gain more resources to spend on attracting votes in elections or rewarding key supporters, making it more difficult for the central government to behave as a social planner even if it wanted to. They might overestimate the costs of providing primary education, for example, in order to attract more funds from the central government.[15]

Moving away from social planners changes the cost-benefit analysis for federalism. In tax assignment, for example, the benefits of centralized taxation for reducing externalities and welfare-decreasing tax competition, for example, have to be weighed against the benefits of decentralized taxation for making subnational governments internalize the

[14] Stein (1997), Ter-Minassian (1997).
[15] Cornes and Silva (2003), for example, show that the central government may have to offer information rents to lower level governments in order to achieve some distributional goals.

costs of their expenditures. The potential costs of decentralized taxation are also different in the political federalism literature. While the economic federalism literature worries about taxes being too low due to a race to the bottom to compete for capital, the political federalism literature also worries about taxes being too high when politicians at each level of government act as revenue-maximizing "Leviathans." Optimal tax structures balance these two pressures, instead of centralizing most power to set tax rates.[16]

Federalism also complicates governments' efforts to mitigate income shocks when politicians opportunistically seek to increase their disposable revenues. There is a tradeoff between risk sharing (co-insurance) and fiscal indiscipline. Central government commitments to reimburse states for expenditures after decisions have been made provide full insurance, but may also exacerbate the common pool problem since states will anticipate paying only a fraction of the resources that they spend. Lump-sum ex-ante transfers made before spending decisions prevent the common-pool problem, but do not insulate states as well from shocks to income. The less room there is for subnational spending decisions (the more centralized the country), the less chance there will be for a common pool problem to emerge and the more insurance can be provided without causing fiscal indiscipline.[17]

The politics of federalism, however, mean that competition across jurisdictions has more benefits than mentioned in the economic federalism literature. Economic federalism praised competition in public goods provision, while the political federalism literature envisions competition in governance quality. Gordon and Wilson (2003), for example, look at the case where competition is over "waste." Residents control regional tax rates, officials determine how the money is spent. The residents' ability to move to other jurisdictions provides discipline on the composition of expenditures that would not be present if all expenditure decisions were centralized. The overall level of spending in a federation might be higher or lower than in a unitary state (it depends on how much

[16] Brennan and Buchanan (1977,1980); Keen and Kotsogiannis (2003).
[17] Sanguinetti and Tommasi (2003) model this trade-off.

spending on public goods there is when waste is decreased) but the composition will always be better in a federation.

Constraints on Central Government Autonomy

The political federalism literature models constraints on central government autonomy in various ways. “Cooperative federalism,” like economic federalism, is a normative theory of federalism. Restricting the central government’s policies to only those that would be accepted by all subnational units ensures that any changes are Pareto-improving, but could rule out those that require transfers among units, and besides, does not match any political system functioning today. It does not assume an omnipotent, benevolent central planner, however, and shifts more of the burden of obtaining economies of scale and offsetting externalities to the state governments. The framework assumes that states will bargain amongst themselves or in a national legislature to compensate each other for externalities or divide output from shared utilities and other large-scale public works.[18]

Prescriptions for the division of responsibilities across national and subnational governments vary between the economic and cooperative federalism literatures. Welfare benefits, for example, would be seen as the province of the central government under economic federalism since state-level differences would lead the poor to migrate to high-benefit areas that would eventually become bankrupt. Cooperative federalism, on the other hand, would argue that subnational governments can be in charge of welfare benefits without loss of efficiency – they would simply make an arrangement in which some areas would compensate others proportionally to the number of émigrés that were covered.

Inman and Rubinfeld (1997) point out several reasons to be skeptical of cooperative federalism’s policy prescriptions. Even in the case where property rights over revenue or resources do exist, Coasian bargaining is unlikely to be successful where states have

[18] Wittman (1989), Ellickson (1979)

irreconcilable ideas of fairness, imperfect information about each other or the problem that is being addressed, or where there are many states involved in the bargain.[19]

The transactions costs are likely to be too high for cooperation between subnational governments to be widespread.[20] Most federal countries (including those studied in this volume) do not have formal institutional infrastructure for enforcing contracts between subnational governments and supporting discussion of contentious issues between regional governments without involving central government oversight. Political parties may support coalition-building between subnational governments, but these will shift as policymakers in power change.

"Majority-rule federalism," on the other hand, starts with an assumption that the central government can only implement policies approved by a majority of the subnational governments and derives an optimal division of responsibilities across levels of government in this case. Tullock (1969), for example, weighs the economic benefits of central provision of services against inefficiencies arising from central government political bargaining. The cost-benefit analysis for decentralization versus centralization depends on the efficiency of the legislature, which in turn depends on its size, organization, distribution of agenda-setting powers among other factors.[21]

Subsequent work has built on the democratic federalism framework to incorporate more detailed specification of the structure of subnational representation in national governments, the role of party allegiances in constraining national decisions, undemocratic governments, and other features of political systems around the world.

[19] Inman and Rubinfeld (1997) review the empirical evidence on state cooperation and find that the overall record "has not been impressive." (49). They argue that while economic federalism calls for too much centralization, cooperative federalism may call for too little centralization.
[20] Dixit (1998, 2003) lists numerous aspects of economic policy and modern institutions that he argues can only be rationalized as efforts to overcome transactions costs in policymaking and planning.

[21] The literature on legislative organization and efficiency of policymaking is large and varied. See Weingast, Shepsle, and Johnson (1981), Krehbiel (1992), and Weingast and Marshall (1988) among others.

Acknowledging constraints on central government autonomy, like the assumption of self-interested and possibly inept policymakers, changes conclusions about the costs and benefits of decentralization. It also suggests a new set of criteria for evaluating federalism: "How can federal arrangements constrain self-interest?" and, "How can federal arrangements create incentives for cooperation between and across government tiers?"

First, central governments' dependence on subnational cooperation can lead competition between states (generally thought of as a benefit of decentralization) to be welfare-decreasing. Cai and Treisman (2004) point out that interjurisdictional competition to attract capital and labor can reduce welfare if subnational politicians compete by shielding investors and others from central government taxation and regulation. Competition is thus likely to be state-eroding when the central government's enforcement capacity depends on state cooperation.

Second, subnational governments can check national governments' ability to carry out policy changes, a degree of restraint that can have both positive and negative consequences. Weingast (1995) brings out the positive aspects with his theory of market preserving federalism. When federalism rewards subnational governments for success and punishes them for predation, it can solve the same commitment problem as separation of powers or democracy: it ensures that a state powerful enough to govern will not be able to use this power to prey upon the private sector.[22]

Other authors point out that federalism automatically creates more veto players that have to sign off on any economic reforms.[23] Subnational governments are likely to desire fiscal adjustment and other macroeconomic reforms less than the national government – since the macroeconomic costs of overspending and overborrowing are dispersed across other regions – and so act as brakes on economic reforms. Financial sector reform can be particularly contentious when subnational governments rely on regional banks for deficit

[22] See also Montinola, Qian, and Weingast (1995) for a discussion of MPF in the Chinese context.
[23] Wibbels (2000), Rodden and Wibbels (2002), Tsebelis (2002).

financing. Many areas of economic reform, such as privatization, require both central and subnational government action so that central government policy initiatives can only achieve limited results. Subnational governments have less incentive to initiate such macroeconomic policy changes, as they are less likely than national governments to be held accountable for a country's macroeconomic instability. Subnational governments may also demand extensive subsidies in exchange for continued support for the federation, making it difficult to reduce overall government size.[24]

Third, the widely-noted negative macroeconomic effects of federalism stem in large part from central governments' inability to restrict opportunistic subnational government behavior.[25] The central government may not be able to credibly commit not to bail out indebted subnational governments or recapitalize failing regional banks, for example, if subnational governors influence voting in the national legislature. It cannot coordinate subnational regulation or enforce conditions for transfers if it cannot in some way monitor and punish subnational policymakers. It will face difficulties implementing economic reforms if all policies must be approved by a legislature of politicians loyal only to their state-level constituencies. Empirical studies of macroeconomic performance in federations generally support the warnings.[26]

The political federalism literature's move toward more realistic portrayal of policymakers and of inter-governmental relations raises as many questions as it answers, however. Some aspects of politics and political institutions have received more attention than others, for example. Much of the work has focused on democracies, for example, with less attention to the workings of federalism in dictatorships or countries without locally elected officials. Politicians tend to be the focus of analysis more than bureaucrats. More recent work covering less developed countries does not assume functioning, accountable, political structures at all levels of government, but it has focused on arguing that administrative capability and political accountability somehow be improved before or

[24] Treisman (1999)
[25] See Prud'homme (1995) for a comprehensive warning about the negative macroeconomic consequences of federalism.
[26] Wibbels (2000), World Bank (1997), Rodden, Eskeland, and Litvack (2002).

during decentralization without mapping out a path.[27] The effects of corruption on federalism have also gotten less attention than the impact of federalism on corruption.[28]

In addition to the various kinds of political constraints considered in the cooperative federalism and majority rule federalism literatures, asymmetric information also limits central government autonomy. The central government may not be able to observe the local governments' actions perfectly, while the subnational government's interests are unlikely to be perfectly aligned with the national government. The vast literature on agency theory suggests a variety of ways that the central government (the principle) can design directives to motivate the subnational government (the agent) to perform, but these are often second-best solutions relative to a world in which omniscient and benevolent social planners operated at both levels of government.

POLITICO-ECONOMIC FEDERALISM

What we call politico-economic literature on federalism builds on the political federalism literature by changing the economic assumptions in addition to the political assumptions of the economic federalism literature. It considers the interaction of federal institutions with the economic context of international integration and economic reforms. The dynamics of federalism – how institutions evolve over time as policymakers respond to political and economic pressures– are part of this interaction.

Federalism in a Global Context

Cross-border flows of goods, services, and capital as well as international migration are increasingly important facets of the economic environment. Table 1 summarizes several indicators of global integration for the countries studied. Trade flows (imports and exports) as a percentage of GDP range from a low of 23% in Brazil to a high of 93%

[27] Bahl and Linn (1994); Fiszbein (1997)

[28] Bardhan and Mookherjee (2000)'s analysis of the relative susceptibility of local and central governments to capture is one analytical paper that explicitly studies corruption at central and local levels, while Fisman and Gatti (2002) has a more empirical emphasis.

(driven mostly by oil exports) in Nigeria, with others closer to the high end than low. [29] India's growth in the trade to GDP ratio over the 1990s is the highest, at 5.9% per year, but others' growth has not been significantly lower. The large developing countries – Brazil and China - are among the highest recipients of foreign direct investment relative to GDP, but higher-income Canada is also among the top. Foreign direct investment as a percentage of GDP is growing fast as well, particularly in India.

International integration raises a new set of challenges for the design of federalism.

First, assuming open capital and goods markets as well as some degree of international labor mobility changes the constraints on both national and subnational policies. In an economy closed to capital flows, for example, subnational borrowing is naturally limited by the consequences of its borrowing on interest rates, but its borrowing has little effect on interest rates in an open economy with no power on the world capital markets. Subnational governments can continue incurring liabilities unless investors' caution or national government controls force them to internalize the costs of their borrowing too much.

An integrated capital market, an aspect of "globalization," raises the premium on having hard budget constraints at all levels of government. Foreign currency denominated debt at variable interest rates has far more potential to be destabilizing than domestic obligations as it exposes countries to exchange rate risk and interest rate shocks due to contagion, market sentiment, or business cycles in other countries. Integration in capital markets also increases the resource pool for financing deficits at all levels of government. Subnational governments with captive state-owned banks, access to subsidized credit from the national government, or expectations of bailouts in case of default will have an incentive to overborrow in any case, but spillover effects of this overborrowing, including higher interest rates, will gradually contain borrowing in an economy closed to external capital

[29] It is important to note that these numbers are not necessarily indicators of policy orientation. While India's low level of integration is likely related to its high tariff and non-tariff barriers, Nigeria's apparent "openness" reflects the dominance of oil. The trade to GDP numbers may also be misleading in that GDP measures value added and trade is gross value. The ratio will thus be inflated for countries that import intermediate goods and then re-export.

flows. These checks on indebtedness will not be present in economies open to external capital, unless the national government can make a credible commitment not to bail out subnational governments and investors come to view further lending as highly risky. Furthermore, national-level spillovers from subnational borrowing on international markets – frequently an increase in volatile short-term foreign debt that can (and often is) withdrawn quickly – lead to crisis and sudden lack of access to credit rather than a gradual increase in costs of capital to equilibrate supply and demand.

Integration in global capital markets, however, increases the strength of market discipline that can be brought to bear. Market-based limits, where the subnational governments' borrowing is only restricted by lenders' perceptions, can only work where there are relatively informed lenders who are not subject to political pressures to renew loans. International private investors, unlike central governments with subnational constituents or state-owned banks with managers appointed by subnational governments, are unlikely to continue lending beyond sustainable levels unless they have some expectation that the central government will bail out subnational debtors.[30] As in the previous sections on equity concerns and competition for resources, globalization can create powerful incentives for good policies if harnessed by domestic institutions.

Second, the institutions governing the interaction between national and subnational governments take on new significance when all levels of government have the potential to interact with the international market. Rules for assigning expenditure and revenue jurisdictions, for example, become constraints on subnational governments' direct competition for resources in the international economy. The challenge for federal design is to set these constraints to avoid distortions such as a "race to the bottom" when subnational governments compete by offering tax and regulatory concessions that are ultimately subsidized by the country as a whole.

[30] Public lending and foreign aid, in contrast, can weaken incentives for macroeconomic discipline if debt cancellation, relief, and rescheduling decisions are made on the basis of political or diplomatic factors or if loan conditionalities (such as those attached to World Bank or IMF loans) are selectively enforced. Increasing integration with global capital markets, however, has reduced the weight of concessional loans in many countries' debt.

Third, the considerably larger resource flows in the international economy relative to the pool that the national government can allocate itself means that controlling market forces to reach particular distributional goals is near impossible. Potential spillovers from foreign investment outweigh the effects of direct transfers, thus limiting the extent of redistribution through fiscal policy. We would expect policies that enable market participation rather than shield individuals or corporations from market forces to have more noticeable effects.

Policy prescriptions change when we consider federations embedded in the international economy. Janeba and Wilson (2003)'s model of decentralization's effect on international tax competition, for example, provides very different policy implications than economic federalism. While economic federalism advocates centralization of taxation to avoid the externalities associated with subnational tax competition, Janeba and Wilson show that decentralized choice of tax rates can be welfare-enhancing. Their model has regional and central governments choose a tax rate to finance the provision of public goods that they are responsible for and maximize residents' welfare. The subnational governments' ability to choose tax rates has two externalities: the horizontal externality in which lowering tax rates attracts capital from other jurisdictions and the vertical externality in which lowering the subnational tax rate attracts more capital into a country.[31] The central government can manipulate the relative size of the two externalities by changing the division of expenditure responsibilities that must be paid for. The authors show that there is a degree of decentralization of expenditure responsibilities (and hence necessity for tax collection) chosen independently by each country that is welfare-enhancing for both nations.

Dynamics of Federalism

The politico-economic federalism literature raises the question: "What kinds of political arrangements are likely to lead to policy choices approximating the ideals set

[31] The allocation of capital across countries is determined by the relative size of the sum of central and subnational tax rates. All subnational units choose the same tax rate in equilibrium.

forth in the economic federalism literature?" Inman and Rubinfeld (1996)'s theoretical paper, for example, shows that universalistic legislatures are not likely to choose optimal tax structures since policy will be driven by the wishes of state representatives. More hierarchical legislatures, stronger nationally elected politicians (such as the executive), and constitutional restrictions on the kinds of taxes that subnational governments can have will lead to more efficient outcomes. Dixit and Londregan (1998) carry out a similarly-motivated positive analysis of grants regimes. They argue that grant mechanisms are determined by a game between multiple levels of re-election seeking governments. The key insight is that the central government has to take into account that the local governments will further redistribute funds in the way that serves local electoral needs best. Central governments will distribute funds differently than in a unitary state where they could just reach directly to voters. The same question could be asked in many other areas.

The question of how federations change over time is also wide open. The federal bargains in the countries studied in this collection are clearly incomplete contracts, originally derived from self-interested bargaining and modified along the way by negotiations between politicians in all tiers of government. These arrangements display different degrees of stability: the formal division of policy jurisdictions is in some cases enforced by outside parties (such as the courts or constitutions), in other cases self-enforcing (even if not collectively optimal), and in a few circumstances not enforced at all. Given these clear signs of some kind of dynamic process, when we can expect federal states to be moving toward efficient equilibrium? What are the consequences of these different kinds of contracts for countries ability to respond to changing economic and political environments – including greater integration? What determines whether federations have centripetal or centrifugal tendencies?

We would expect federal (and non-federal) states to get stuck in inefficient arrangements, for example, when possibilities of beneficial exchange across time and issues in the political arena are somehow limited, perhaps by politicians' short time horizons, political instability or mistrust generated by underlying ethnic or socioeconomic heterogeneity.

Federal bargains will be more difficult to change when provisions are written into constitutions or otherwise require supermajorities or unanimity for revisions.

The dynamic nature of federalism is clearly recognized in much of the more recent empirical and narrative work on federalism, but this has yet to be integrated into theories that would inform policies or help us understand the evolution of federalism.[32]

MOTIVATIONS FOR OUR STUDY

Each successive innovation in the literature on federalism has complicated and enriched the analysis. The basic insights of the economic federalism literature on the advantages and disadvantages of sharing responsibilities across levels of government continue to form the backbone for much policy advice, but the political and politico-economic literatures list numerous and important caveats for evaluating decentralization.

Making sense of these caveats, and assessing their applicability to a particular country setting can be difficult, however. Much of the empirical work in this area consists of single-country studies or cross-country regressions that do not delve into the mechanisms underlying the correlations found. There is a tendency to use a dichotomous federalism-non federalism divide rather than look at the factors that determine variation in performance among federalism.[33]

We hope that the studies contained in this volume are able to answer some of the open questions regarding the costs and benefits of federalism. Ultimately, improving analysis of federalism depends on gaining a better empirical understanding of how federalism functions. The question, "What does federalism look like?" is a starting point for more research on where does federalism come from as well as what kinds of structures are likely to be chosen by policymakers. "How has federalism changed?," provides some

[32] See, for example, Bahl (1999)'s "Implementation Rules for Fiscal Federalism."

[33] Rodden and Wibbels (2002) is one of the few papers to focus on the institutional correlates of macroeconomic performance variation among federations. This paper is a cross-country regression, however, and does not delve into the mechanisms behind the estimated relationships. The authors call for more research.

background for improving our understanding of the stability of federal arrangements. This collection of country case studies provides some raw empirical material that we hope improves our understanding of federalism's interaction with economic and political conditions around the world.

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1. Economic Overview

Country	GDP per capita, (PPP, constant international $) (2002)	Annual Growth (per capita GDP) 1991-2002	Population (millions) (2002)	Trade Openness (% GDP) (2002)	Annual % Growth Trade/GDP 1991-2002	FDI (%GDP) (2002)	Annual %Growth FDI/GDP 1991-2002
Argentina	9,633	1.43	36.48	40.49	10.57	0.77	17.48
Australia	25,032	2.17	19.66	41.76	1.94	4.06	30.12
Brazil	6,878	1.22	174.49	29.41	6.21	3.66	36.10
Canada	26,114	1.60	31.36	82.46[34]	4.38	2.87	22.61
China	4,054	8.77	1280.40	54.77	5.35	3.89	20.15
India	2,365	3.52	1048.64	30.82	5.92	0.59	42.42
Mexico	7,947	1.22	100.82	56.38	4.20	2.29	15.36
Nigeria	758	-0.61	132.79	81.26	1.78	2.94	10.25

Source: World Development Indicators (2004)

[34] This figure is for 2001