

Second Generation Fiscal Federalism: Implications for Decentralized Democratic Governance and Economic Development

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Much fiscal analysis of developing countries is on the following pattern: the academic literature is drawn on to construct a model fiscal system; the existing situation in a particular country is examined to determine how it diverges from the model; and a fiscal reform is then proposed to transform what *is* into what *ought to be*. This approach is deficient because it does not require sufficient detailed examination of existing reality to ensure that the assumptions postulated in the model are congruent with reality, that the recommended changes can in fact be implemented, or that, if implemented, they will in fact produce the desired results.

In contrast, my approach is first to study in detail exactly *how* the existing system works, and *why* it works that way, in order to have a firm basis for understanding what changes may be both desirable and feasible. My emphasis has thus always been more on what *can* be done than on what *should* be done (Bird 1992,x, emphasis in original).

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Abstract

First generation fiscal federalism (FGFF) studies the performance of decentralized systems under the assumption of benevolent social planners. Second Generation Fiscal Federalism (SGFF) studies the fiscal and political incentives facing subnational officials. The paper focuses on three aspects of SGFF. First, it considers the design of intergovernmental transfers. While FGFF emphasizes correcting vertical and horizontal equity, SGFF emphasizes the importance of fiscal incentives for producing local economic prosperity. SGFF extends FGFF approaches by showing how non-linear transfer systems can produce both equalization and high marginal fiscal incentives to produce local economic growth. Second, the paper raises the fiscal interest approach, showing how different tax systems produce different fiscal incentives for political officials to choose policies. Several topics are explored: those affecting the design of markets, the soft budget constraint, the incentives of special districts, and corruption. Third, the paper discusses how the tragic brilliance mechanism perverts democracy in the context of federalism in developing countries. The tragic brilliance mechanism interacts with federalism by giving central governments an incentive to create highly centralized federal systems so that they have greater discretion over policy benefits. The paper ends with a two brief discussions: how to overcome the impediments to decentralization; and SGFF implications for engineering decentralized reform.

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1. Introduction

Why do federal nations exhibit such widely different economic performance? Some are rich (Switzerland and the United States) while some are poorer (Argentina and Brazil); some exhibit fast-paced growth (modern China) while others little growth (Mexico).

In this essay, I explore this issue by surveying the new literature on second generation fiscal federalism (SGFF), which complements first generation fiscal federalism (FGFF). The distinction between FGFF and SGFF parallels that made by Musgrave (1959,4):

[Theories of Public Economy] can be approached in two ways. First, we attempt to state the rules and principles that make for an efficient conduct of the public economy. . . . In the second approach, we attempt to develop a theory that permits us to explain why existing policies are pursued and to predict which policies will be pursued in the future.

FGFF is largely normative and assumes that public decisionmakers are benevolent maximizers of the social welfare (Musgrave 1959, Oates 1972, Rubinfeld 1987). SGFF builds on FGFF but assumes that public officials have goals induced by political institutions that often systematically diverge from maximizing citizen welfare (Oates 2005, Garzarelli 2004, and Qian and Weingast 1997; see also Brennan and Buchanan 1980 and Wicksell 1896). As Hatfield (2005) puts it, “Economic policy is not decided by benevolent social planners, but by government officials, usually with at least one eye to their reelection prospects.”

The distinction should not be overdrawn – no clean demarcation exists between the generations, and many first generation works develop considerable positive implications. Nonetheless, the distinction is important because it emphasizes the extension of normative fiscal federalism to take systematic account of public official incentives.

SGFF models provide a range of new insights into fiscal federalism, especially the positive behavior of decentralized systems. This approach also provides new normative prescriptions for the design of federal systems, including how many of the prescriptions of FGFF should be adapted given more realistic political choice environments. SGFF also explores how various institutions align – or fail to align – the incentives of political officials with those of citizens. This approach is central to understanding differential federal performance.

In this essay, I survey a range of SGFF ideas and explore their implications for developing countries in the context of decentralization and democratic governance. I begin with the perspective of market-preserving federalism. By studying the conditions and incentives of subnational government authority and policymaking, this perspective provides a comparative theory of federal performance: federal systems that satisfy different combinations of the market-preserving federalism conditions differ in predictable ways. The comparative analysis helps explain why decentralized systems exhibit so much variance in behavior, with some decentralized countries being very rich and others remaining very poor. This analysis allows us to study a range of what I call “pathologies of federalism” – perverse economic outcomes that are market-distorting.

I next discuss recent SGFF implications for intergovernmental transfer systems. FGFF models emphasize the importance of transfers for mitigating vertical and horizontal imbalances. The SGFF approach emphasizes the importance of incentives generated by local tax generation for fostering local economic prosperity. Subnational governments are more likely to provide market-enhancing public goods when they capture a large portion of the increased tax revenue generated by greater economic activity. SGFF approaches have significant implications for the design of transfer systems so that equalization goals can be achieved without diminishing the incentives of public officials to foster thriving local economies.

Next, I turn to the fiscal interest approach first articulated by Wallis, Sylla and Legler (1994), but with long roots in the study of fiscal federalism, including Buchanan (1960), Brennan and Buchanan (1980), and Tiebout (1956). The idea is that public officials are biased toward policies that relax their budget constraint. Different systems of taxation and intergovernmental transfers therefore directly affect local governmental behavior and policy choice. I study several types of fiscal incentives associated with intergovernmental transfer systems, the design

of markets, the soft budget constraint, the incentives of special districts, and corruption. The analysis shows why subnational fiscal incentives the early United States but not modern Mexico pushed state governments to create a competitive banking industry instead of an oligopolistic one.

I also discuss the role of democracy. Democracy is a source of freedom and expression for citizens, and when it works well, it provides citizens a means to express choices and to hold public officials accountable. But democracy often fails in practice for developing countries. I investigate one source of failure of democracy called “tragic brilliance,” the idea that voting can create political dependence (Diaz, Magaloni, and Weingast 2005). By making fiscal transfers to finance local public goods and services – such as water, road maintenance or schools – depend on whether voters in a locality support it, the incumbent regime prevents many voters from exercising choice. In this way, elections become a means of political control rather than of citizen expression. Subnational government fiscal independence mitigates this perverse effect.

I end with two discussions. The first briefly highlights the differences between FGFF and SGFF approaches. The second, focuses on engineering decentralization and summarizes the second generation recommendations for the design of federal systems.

Before beginning, let me observe that SGFF encompasses a large and varied literature. At the most general level is Inman and Rubinfeld’s call for a new political economy of federalism (Inman 1988; and Inman and Rubinfeld 1993, 1997a,b).¹ Others call for understanding differences among federal systems in order to learn what institutions support market-preserving or market-enhancing federalism (Weingast 1995).² Still others, working in the context of developing countries, follow Bird’s (1992) point noted in the paper’s headnote.³ A large body of work studies various forms of common pool problems, of which three stand out: the so-called “race to

¹ Also in this approach is the work of Congleton, Kyriacou, and Bacaria (2003), Cremer and Palfrey (2002), Iaryczower, Saiegh, and Tommasi (2000), Jones, Sanguinetti, and Tomasi (1999), Kenny and Winer (2006), Lockwood (2002), Knight (2004a,b), Rao and Singh (2005), Singh and Srinivasan (2006), Volden (2000), and Winer and Hettich (2006). Rodden (2006), Weingast (2005) and Winer and Hettich (2006) provide partial surveys.

² See also Dick (1998), Montinola, Qian and Weingast (1995), Jin, Qian and Weingast (2005), McKinnon (1997), Parikh and Weingast (1998), Sinha (2002), Slider (1997) and Wiesner (2003).

³ See also Bardhan (2002), Bird (1999), Litvak, Ahmad, and Bird (1998).

the bottom” when local public decisions exhibit external costs⁴; the problems with a soft budget constraints for subnational governments⁵; and common pool problems associated with centralized provision of local public goods.⁶ Beginning with Riker (1964), another large strand in the literature emphasizes the political aspects of federal performance, particularly political parties.⁷ Others study a “fiscal interest model” that emphasizes how the tax system affects political officials’ incentives (Wallis, Sylla and Legler 1994).⁸ Several scholars study the incentives of federalism to mitigate or exacerbate corruption.⁹ Relatedly, scholars investigate the self-enforcing rules necessary maintain federal stability.¹⁰

⁴ Zodrow and Mieszkowski (1986), Keen and Marchand (1996), Rom et al (1998), Wildasin (1991), and Wilson (1991). Revesz (1997) provides a survey and critique, and Fischel (2001) argues why the race to the bottom fails to hold at the local level. A closely related literature studies tax competition, e.g. Wilson (1999) and Wilson and Wildasin (2004).

⁵ Rodden, Eskaland, and Litvack (2001) survey this large literature. See also Dillinger and Webb (1999), Kornai (1986), Rodden (2005), and Wibbels (2005). Wildasin’s (1997) “too big to fail” is also a variant on this logic.

⁶ Besley and Coate (2003), Dillinger and Webb (1999), Inman and Rubinfeld (1997), Johnson and Libecap (2003), Knight (2003), Lockwood (2002), Poterba and von Hagen (1999), Sanguinetti (1994), Stein (1998), Weingast, Shepsle and Johnsen (1981) and Winer (1980). Cohen and Noll (1988) provide a nice variant on this logic with respect to technology programs. A large empirical literature provides evidence for this proposition, including: See Cogan (1994), Cohen and Noll (1988), Diaz-Cayeros, et. al. (2002), Dillinger and Webb (1999), Gilligan and Matsusaka (1995), Inman (1988), Inman and Fitts (1990), Poterba and von Hagen (1999), Rodden and Wibbels (2002), Stein (1998), Stockman (1975), and Winder (1980). See also Fornasari, Webb, and Zou (1999).

⁷ See Blanchard and Shleifer (2000), Chhibber and Kollman (2004), Dillinger and Webb (1999), Garman, Haggard, and Willis (2001), Enikolopov and Zhuravskaya (2002), Filippov, Ordeshook, and Shvetsova (2003), Jones, Sanguinetti, and Tommasi (2000), Rodden (2005), and Rodden and Wibbels (2003).

⁸ See also Careaga and Weingast (2003) and Zhuravskaya (2001). This idea links back to major works by Buchanan (1960), Brennan and Buchanan (1980), and Tiebout (1956).

⁹ See Ahlin (2005), Careaga and Weingast (2003), Shleifer and Vishny (1993), and Treisman (2001).

¹⁰ Bednar (1999), De Figueiredo and Weingast (2005), Filippov, Ordeshook, and Shvetsova (2003), Inman and Rubinfeld (1997a), Stepan (2004b), Treisman (1999), and Tsebelis (1997). These ideas are related to the “size of nations” literature of Alesina and Spolare (2004), Boulton and Roland (1997), and Boulton, Roland, and Spolare (1996). Boix (2003) presents a variant on this logic.

2. Market-Preserving Federalism and the Comparative Theory of Decentralized Governance

Local governments exist within the context of an “ecology” of institutional arrangements, an ecology with political, legal-constitutional, and economic aspects. This section develops a framework for analyzing this ecology: how different political, legal-constitutional and economic institutions affect the performance of local governments.

Federalism, and decentralization more generally, encompasses a wide range of different political-economic systems, not one, whose political and economic properties vary widely (Shah 1997b, Watts 1999, Wiesner 2003). As Litvak, Ahmad, and Bird (1998,vii) observe, “decentralization is neither good nor bad for efficiency, equity, or macroeconomic stability; but rather that its effects depend on institution-specific design.” We therefore cannot speak of the tendencies of federalism per se. Some federal systems promote macroeconomic stability and economic growth while others just the opposite.

Consider: For the last three centuries, the richest nation in the world has almost always been federal. The Dutch Republic from the late sixteenth through mid-seventeenth centuries; England from the late seventeenth or early eighteenth and mid-nineteenth centuries (a de facto if not de jure federal system); and the United States from the late nineteenth to the present. Similarly, modern China, a de facto federal state, has experienced sustained rapid growth. India, having grown slowly for several decades, has experienced high growth in the last. In contrast, the large Latin America federal states of Argentina, Brazil, and Mexico, and modern Russia have all fared much more poorly. How do we account for such large differences in economic performance?

In this section, I develop a comparative theory of decentralized governance that explains the differential economic performance of various types of decentralization. This SGFF approach makes explicit some of the implicit assumptions in the FGFF approach. This framework emphasizes the incentives facing political officials. It provides a first step toward understanding some of the institutions necessary to support decentralization that provides political officials with incentives to improve social welfare. As a comparative theory, it also shows why some decentralized nations grow rich while others remain poor.

To understand the comparative theory of federal performance, I develop a set of conditions that help differentiate federal systems.¹¹ All federal systems decentralize political authority, so a necessary condition for federalism is:

(F1) Hierarchy. There exists a hierarchy of governments with a *delineated scope of authority*.

Yet federal systems differ enormously in terms of the policy authority of the different levels of government. The following conditions characterize how federal states assign authority among national and subnational governments.

(F2) Subnational autonomy. Do the subnational governments have primary *both local regulation of the economy and authority over public goods and service provision for the local economy*?

(F3) Common market. Does the national government provide for and police a *common market* that allows factor and product mobility?

(F4) Hard Budget constraints. Do all governments, especially subnational ones, face *hard budget constraints*?

(F5) Institutionalized authority. Is the allocation of political authority *institutionalized*?

We can characterize different federal systems by which of conditions they satisfy, ranging from the hierarchy condition alone to all five conditions.¹²

An ideal type of federalism, called *market-preserving federalism* or market-enhancing federalism, satisfies all five conditions (see Weingast 1995). These conditions make explicit some of the political assumptions implicit in FGFF. Indeed, many of the major results in this approach implicitly assume most or all these conditions, including Oates's (1972) "decentralization theorem," Tiebout's (1956) interjurisdictional competition, and Musgrave's (1959) solution to the assignment problem.

Economists have long argued that federalism places subnational governments in competition with one another (Tiebout 1956, Oates 1972, Brennan and Buchanan 1980). Competition gives subnational governments the incentive to foster local economic prosperity rather than costly market intervention, service to interest groups, and corruption. Competition

¹¹ This section draws on Montinola, Qian, and Weingast (1995) and Weingast (1995, 2005). Inman and Rubinfeld (1997a) provide alternative sets of conditions for differentiating among federal systems.

¹² To make this discussion manageable, I ignore many subtleties and simply assume that each condition either holds or not. For further details, see Montinola, Qian, and Weingast (1995) and Weingast (1995).

among jurisdictions limits a subnational government's ability to abuse its policy authority, for example, by predated on investments or by granting privileged positions, such as monopolies or above market wages to government workers. Governments that fail to foster markets risk losing capital and labor – and hence valuable tax revenue – to other areas. Put another way, interjurisdictional competition provides political officials with strong fiscal incentives to pursue policies that provide for a healthy local economy, a topic discussed in greater detail in the next section.

Effective inter-jurisdictional competition requires several institutional conditions. First, subnational governments must have the authority to adapt policies to their circumstances; hence, the subnational autonomy condition (F2). Per the FGFF assignment principle, these governments must have considerable power to regulate local markets, to tailor the provision of local public goods and services to local circumstances, and to set tax rates, ideally to reflect local demand for public services (Musgrave 1959, Oates 1972).

Many federal systems restrict the policy authority and independence of subnational governments, compromising the benefits of federalism. Examples include Mexico throughout much of the late twentieth century; India from independence through the mid-1990s; and Russia under Putin.

Second, effective competition among jurisdictions requires product and factor mobility across jurisdictional boundaries – hence the common market condition (F3). This condition has held for the United States since the inception of the Constitution. Indeed, rising trade barriers among the states was one of the principal Federalist arguments against the Articles of Confederation. In contrast, India allows internal trade barriers and Russia restricts the movement of labor, capital and goods across regional borders in various ways.

The failure of the common market condition creates a pathology in which subnational government become a *de facto* "national government" within its jurisdiction. Internal trade barriers short-circuit interjurisdictional competition and hence federalism's constraints on subnational policymaking: these barriers reduce or even remove the penalty for costly market intervention, rent seeking, and corruption. Because many developing federal systems limit factor mobility, particularly labor mobility, Bardhan (2002) questions whether the standard FGFF framework is relevant for many developing countries.

Third, effective interjurisdictional competition requires a hard budget constraint (F4), which concerns both government borrowing and fiscal

transfers among levels of governments.¹³ This condition requires that subnational governments bear the financial consequences of their policy decisions, so that they cannot spend beyond their means or endlessly bail out failing enterprises.¹⁴ A hard budget constraint also precludes the national government from bailing out subnational governments that go into deficit, whether through cash transfers or forgivable loans.

Per SGFF logic, a hard budget constraint provides local political officials with incentives for prudent fiscal management of their jurisdiction. As Shah (1997) concludes, “to ensure fiscal discipline, governments at all levels must be made to face financial consequences of their decisions.” In contrast, subnational governments facing a soft budget constraint have incentives to spend beyond their means, pursue costly market intervention, provide costly benefits to interest groups, endlessly subsidize ailing enterprises, and engage in corruption. The expectation of bailouts lowers the financial costs to the subnational governments (though not to the country) of these expenditures. The fiscal incentives of a soft budget constraint work against fiscal prudence. Argentina in the 1980s and Brazil in the 1990s both experienced hyper-inflation as their state governments spent without limits, forcing the federal government to bail them out.

The final condition – institutionalized authority (F5) – provides the glue for the decentralized system. This condition requires that decentralization must not be under the discretionary or unilateral control of the national government. Instead, a set of institutions must exist that prevent the national government from altering or undoing aspects of subnational autonomy. In the absence of this condition, the national government can compromise subnational government autonomy and hence the benefits from competition among them. The Mexican president, for example, has historically had the power to remove governors (Carlos Salinas, President of Mexico from 1988 to 1994, removed over half the

¹³ Several works provide excellent discussions of the HBC, especially the specific institutional necessary to implement it. See Dillinger and Webb (1999), Haggard and Webb (2004), McKinnon (1997), Rodden (2005), Rodden, Eskaland, and Litvak (2001), and Wildasin (1997).

¹⁴ McKinnon (1997) argues that the hard budget constraint must be supplemented by a prohibition on subnational government borrowing to finance current expenditures. This type of borrowing is a recipe for disaster: if many states do so simultaneously, the implied burden on the center is at once too difficult to resist politically (Wibbels 2003) and yet too costly to finance.

governors during his six year term). This power dramatically reduces the independence of the states because the federal government can threaten those states which do not conform to the federal government's policy wishes (Dillinger and Webb 1999; Willis, Garman, and Haggard 1999).

The power of the central government to intervene in state affairs differs dramatically across federal systems. The Indian Constitution grants the central government relatively unconstrained power to take over states (although interventions by the courts have changed this in recent years), whereas the Spanish Constitution places a complex set of constraints on the central government's ability to take over a state (Stepan 2004a).

The institutionalized authority condition is easy to understand in the abstract, yet we know too little about the mechanisms that make some federal systems succeed. A host of writers follow Riker (1964) and argue that the form of the party system is essential to maintaining federalism.¹⁵ Some party systems allow national elites to dominate the parties; others allow local elites to dominate; and still others allow for a balance of power among national and local elites. When national elites dominate parties, they are likely to force local leaders to go along with institutional changes that compromise local government powers (as in Mexico under the PRI or India under the Congress Party). In contrast, a party system dominated by local elites is more likely to force national elites to accept subnational government common pool behavior, such as bailing out subnational deficits (as in Brazil in the late 1990s). Finally, a party system balanced between national and local elites is more likely to support decentralization, as both local and national elites guard their own prerogatives (as in the United States). This perspective begs the issue of what creates different types of party systems (though see Filippov, Ordeshook and Shvetsova 2003, who argue that the electoral system generates the party system; see also Cox 2001).¹⁶

¹⁵ See, for example, Filippov, Ordeshook and Shvetsova (2003), Chhibber and Kollman (2004), Dillinger and Webb (1999), Enikolopov and Zhuravskaya (2002), Garman, Haggard, and Willis (2001), Rodden (2005), Rodden and Wibbels (2003), and Tommasi et al. (2000). Volden (2004) traces the evolution of Riker's views on federalism.

¹⁶ Bednar (2006) and de Figueiredo and Weingast (2005) provide game theory models to study institutionalized autonomy, emphasizing the importance of states and the center using trigger strategies to police one another. Bednar emphasizes the importance of the center's policing the states, for example, with respect to the common market constraint. De Figueiredo and Weingast emphasize a balance between the center's policing the states and the states' collective ability to police the center from abusing its authority. Madison referred to this latter mechanism in Federalist 46, where he noted that potential abuses by the center would sound

Market-preserving federalism limits the exercise of corruption, predation, and rent-seeking by all levels of government. This form of decentralization is particularly important for developing countries, where central government market-intervention frequently bestows many sectors with monopolies and various forms of protection from competition. Market-preserving federalism makes it difficult for any government to create monopolies and massive state-owned enterprises whose primary political purpose is to provide jobs, patronage, and other forms of inefficient economic intervention that plague developing countries (as Buchanan and Brennan 1980 have observed). A subnational government that seeks to create monopolies, engage in extensive corruption, or arrange a favored position for an interest group places firms in its jurisdiction at a disadvantage relative to competing firms from less restrictive jurisdictions.

The market-preserving federalism framework also characterizes a set of pathologies of federalism, forms of market-distorting federalism that fail to provide incentives to foster and preserve markets (see Wibbels 2005, ch2). To summarize, the absence of one or more of the conditions (F2-F5) implies some form of inefficiency or pathology.

- The absence of subnational policy authority inhibits the subnational competitive process and the ability of subnational governments to tailor policies to local conditions.
- The absence of a common market directly hinders competition among jurisdictions, so that subnational governments are more likely to engage in corruption, rent-seeking, and inefficient resource allocation. Restrictions on factor mobility have a similar effect.
- A soft budget constraint allows subnational governments to live beyond their means so that they engage in more corruption, non-remunerative benefits to interest groups, and endless subsidies to inefficient enterprises.
- Finally, the absence of institutionalized authority allows the center to threaten subnational jurisdictions who seek policy independence.

This brief analysis of federal pathologies suggests why many recent decentralization reforms fail. Because decentralization so often fails to satisfy one or several of the market-enhancing conditions, it fails to

the alarm among the states and cause them to react in concert to prevent center abuse.

provide subnational governments with appropriate incentives to foster markets. Indeed, too frequently in the developing context, decentralization involves very limited local government policy or tax independence. For example, Thomson (n.d.) observes that much devolution of power in Africa often grants too little policy authority, contains too many unfunded mandates, and grants subnational governments only unproductive taxes and inadequate and unpredictable intergovernmental transfers. Similarly, Wiesner (2003,17-19) criticizes Bolivia's decentralization because it granted subnational governments "insufficient capacity (incentives)" or policy authority while allowing a soft budget constraint based on debt relief.

A related problem in the developing world is that decentralization in a truly predatory state is not likely to succeed. A central government that is not committed to decentralization has numerous mechanisms to undermine subnational government performance, including inadequate revenue, constraints on subnational policymaking and unfunded mandates, and direct threats to political officials who deviate from a preferred policy.

Let me conclude the discussion of comparative federalism with a contrast between post-reform China and India under the Congress party (1950-1990) that helps characterize the differential performance of these two federal systems. China is a market-preserving federal system embedded within an authoritarian regimes (Jin, Qian, and Weingast 2005, Montinola, Qian and Weingast 1995). Provinces (and lower governments) have been the great engine of economic growth, and have since 1980 exercised wide ranging policy and fiscal independence, allowing them to innovate pro-market policies and provide market-enhancing public goods. China satisfies nearly all the conditions, with the possible exception of F5: Provinces have substantial policymaking authority (F2) and face a relatively hard budget constraint (F4), although there remain some trade barriers (F3) and the institutional security of the system (F5) remains in some doubt (see discussion below).

In contrast, India's sluggish performance from independence through the mid-1990s reflects its centralized federal system, where the central government made most of the important policy decisions (compromising F2) and imposed some restrictions on the movement of goods across states (F3). States did face a hard budget constraint (F4). However, as discussed below, the center also had the ability to take over states, and it used this discretion in part to undermine the successful opposition parties. This further compromised state independence (both F2 and F5). In short,

centralized federalism, with too little state policy or fiscal independence, prevented states from innovating and fostering more market-enhancing local economies than that favored by the center. Importantly, as the center has loosened the constraints on states, states have become more innovative and India's economic growth has improved significantly.

3. The Fiscal Interest Approach: Taxation and The Design of Transfer Systems

The fiscal interest approach emphasizes how fiscal institutions create fiscal incentives for subnational political officials that affect their policy choice and hence their jurisdiction's performance.¹⁷ No matter what the goals of subnational officials, greater revenue relaxes their budget constraint, allowing them to further their goals. Political officials of all stripes are therefore biased toward policies that increase their revenue.¹⁸ This observation implies that the fiscal system directly influences whether governments choose market-fostering or distorting policies. In this section and the next, I focus on how different forms of taxation and intergovernmental transfers affect how subnational governments use their policy authority to structure markets.

Economists have long known about this principle, although they have not always studied it systematically. Tiebout (1956), for example, discussed the beneficial effects of the property tax for local government. Because the value of public goods is capitalized into the value of local property, maximizing revenue from property taxation leads city managers to choose public goods that maximizing local property values. Moreover, city managers facing intense interjurisdictional competition have incentives to maximize property values as a means of inducing scarce capital and labor to locate and remain in their jurisdiction. Because these taxes provide general incentives for local political officials to design

¹⁷ Wallis, Sylla and Legler (1994) first developed this approach. Weingast (2005) provides a short survey.

¹⁸ This assumption differs from the revenue maximization assumption of Brennan and Buchanan's (1980).

policies that foster markets and attract capital and labor, property taxes are an important component of local government fiscal structure.¹⁹

Timmons (2005) provides evidence for the fiscal interest model. He shows that voluntary compliance with taxes is higher when citizens received public goods and services they value in exchange for taxes (see also Levi 1988). This effect is especially strong among subnational governments, particularly in a market-preserving federal context.

3.1. Transfer Systems, Vertical and Horizontal Equalization, and Incentives

The fiscal interest approach has significant implications for the design of transfer systems within federal systems. The FGFF rationale for intergovernmental emphasizes vertical and horizontal tax imbalances, spillovers of benefits, and forestalling costly tax competition (see Boadway and Flatters 1982, Boex and Martinez-Vazquez 2006, Oates 1972). Vertical imbalances arise when the center collects taxes more easily and at lower economic cost than subnational governments; it also arises when the central government preempts subnational government revenue sources (McLure 1993). Efficiency considerations therefore suggest that the center raise more taxes and then transfers funds to subnational government to finance a portion of their expenditures. Horizontal imbalances arise because regional economies differ, often markedly, in their income and hence in their ability to provide citizens with public goods and services. Here too transfers from the center can mitigate these imbalances by providing greater funds to poorer localities.

SGFF models place greater emphasis on the importance of revenue generation by subnational governments (Rodden 2002, Singh and Srinivasan 2006, Careaga and Weingast 2003): subnational governments that raise a substantial portion of their own revenue tend to be more accountable to citizens, more likely to provide the services people want, to provide market-enhancing public goods, and to be less corrupt.

Many FGFF scholars recognize this principle. Shah (1997,a,b) argues this point in a series of influential papers. For example, “In Mexico, South Africa, and Pakistan, federal revenue sharing transfer finance up to 99

¹⁹ Bahl and Linn (1992, especially chs 4-6) provide one of the most comprehensive discussions of the property tax in decentralized systems. Fischel (2001) explains why property taxation leads local governments to focus on citizen welfare. Nonetheless, these incentives are incomplete, as Epple and Romer (1994) have shown.

percent of expenditures in some provinces. This de-linking of taxing and spending responsibilities has led to accountability problems at the provincial levels” Shah (1997a). McLure (1998,1) observes that “Subnational governments that lack independent sources of revenue can never truly enjoy fiscal autonomy; they may be — and probably are — under the thumb of the central government.” Similarly, Bahl and Linn (1992,428), in their authoritative study of local fiscal federalism in developing countries, observe that “grants can make local governments less accountable for their fiscal decisions (they may now increase spending without increasing taxes); hence there will be less incentive to improve the efficiency of local government operations and develop innovative methods of delivering public services.”

Despite these observations, FGFF analyses of intergovernmental transfers tend to focus on equity considerations rather than emphasizing the effect of transfers on subnational government policymaking or growth. As Singh and Srinivasan (2006,34) observe, “The standard public finance question takes subnational jurisdiction’s income as given and looks at the incentive effects of tax assignments and transfers. The [SGFF] growth perspective examines the effects of the tax and transfer system on incentives to increase income (e.g., through public or private investment).” Singh and Srinivasan further suggest that “the allocative efficiency of the tax system in a standard public economics sense is of second order importance relative to fiscal autonomy on the revenue side” (23).

The SGFF logic provides two related reasons for these conclusions. First, transfers that are negatively related or only weakly positively related to subnational income growth give local governments poor fiscal incentives to foster local economic growth. Second, such transfer systems induce greater corruption and rent-seeking. This subsection studies the first issue, while the next studies the second. In contrast, subnational governments that capture a large portion of the extra revenue derived from increased economic activity within their jurisdiction are far more likely to provide market-enhancing public goods and services.

The attempt to correct vertical and horizontal imbalances in developing countries often means that these transfer systems exhibit poor responsiveness to localities that foster local economic growth. For example, the Finance Commission’s transfers of revenue to states in India reflect a series of weights for different criteria: 62.5 percent is negatively related to a state’s income, so that poorer states receive greater funds; 10 percent on the basis of population; and the remainder somewhat evenly

divided among state area, an index of infrastructure, tax effort, and fiscal discipline.²⁰ This type of intergovernmental transfer system provides poor fiscal incentives for subnational jurisdictions to foster local economic growth (Singh and Srinivasan 2006).

To analyze these incentives, consider a transfer system, such as the Indian Finance Commission's, set by formula that takes into account various economic and demographic characteristics, such as income and population. Suppose that the formula is fixed with reference to a given year so that the center allocates revenue using the same proportions each year, with the only variable across years being the size of the revenue pool to be divided among subnational governments.

If there are n provinces, then the average province receives $1/n$ of the total revenue pool, no matter how good or bad its policies. Let the total revenue pool be R , so that the average province receives R/n of the pool. Now let the province alter policies to foster local economic growth so that the revenue generated from the province increases by 1 unit. The total revenue pool is now $R+1$. The average province's share is now $1/n$ of $(R+1)$, which equals $R/n + 1/n$. In other words, the province receives $1/n$ of the total increase in revenue generated solely from its increased investment in the local economy. The province bears the full expenses for the market-enhancing public goods but captures only $1/n$ of the fiscal return.

Careaga and Weingast (2003) called the poor incentives of these transfer systems "fiscal law of $1/n$."²¹ In a country with even a modest number of states, this proportion is quite small. One of 23 provinces in Argentina would receive only four centavos for each newly generated peso in taxes; while one of 33 states in Mexico would receive three centavos. In contrast, fiscal systems that allow growing regions to capture a major portion of new revenue generated by economic growth provide far stronger incentives for local governments to foster local economic growth.

No systematic study exists of these fiscal incentives, but a few investigations calculate the proportion of local revenue captured by local governments in particular cases. Although it is unlikely that this single variable accounts for long-term economic growth, the results suggest an

²⁰ These figures are for the 11th Finance Commission. See Rao and Singh (2005, ch 9, especially table 9.3) and Singh and Srinivasan (2006). The Planning Commission also transfers money to states based on different criteria.

²¹ Following the results of Weingast, Sheplse, and Johnsen's (1981) "law of $1/n$ "; see also Inman (1988).

interesting pattern for developing countries (see table 1). Careaga and Weingast (2003) calculated the marginal revenue retention rate for Mexico for different periods. In 1995, we calculated it as 23.3 percent. But there were periods when all state revenue was put in a common pool and then divided by a sharing rule, which meant that the percentage for the average state was close to 1/33 (for 33 states). Parikh and Weingast (2003) made a similar study of India and concluded that the figure was between 20 and 30 percent for Indian states.²² Zhuravskaya (2000) calculated that this figure as 10 percent for Russian cities. She shows that, for every ruble increase in local revenue, the regional government within which the city is located extracts most of the value of the increase by *lowering* transfers 90 kopecks. Blanchard and Shleifer (2000,9) suggest that the figure for regions with respect to the center may be a bit higher, “but not very high.”

In contrast, states in the 19th century United States retained upwards of 100 percent of increases in revenue. Provinces in post-reform China also retain a high proportion of revenue. Jin, Qian, and Weingast (2005) calculate that during the high growth period following the initial reforms (1981-92), Chinese provinces on average marginal retained 89 percent of additional tax revenue generate within the province.²³

Transfer systems may exhibit other perverse fiscal incentives. Some systems are explicitly “gap-filling,” meaning that provinces with larger deficits receive larger transfers. As discussed in section 4 below, because these systems subsidize spending beyond revenue, they provide subnational governments with incentives to spend beyond their means. Gap-filling has long been a feature of transfers within Indian system, a problem that has gotten considerably worse in the last decade. Relatedly, both Argentina and Brazil in the late twentieth century had local branches of the central bank that essentially allowed provinces to transfer debt to the central government, leading to massive financial problems.

Another problem is that some transfer systems fail by design. Wiesner (2003,23) argues that decentralization in Latin America is analytically flawed, too often emphasizing subnational government entitlements to revenue rather than markets and incentives: “These frameworks tend to neglect market-based mechanisms and make the capture of large

²² The data presented in Shah (1998,136-44) suggest that the figures for Pakistan are similar, if not lower.

²³ Further, they show that 68 percent of all provinces faced a marginal retention rate of 100 percent.

unconditional transfers an easy ride for public sector rent-seeking.” For example, Bolivia, Brazil, and Ecuador considerably increased the transfer of revenue to subnational governments without increasing the policy responsibility (Wiesner 2003).²⁴ This is a recipe for waste and corruption. In almost all countries of Latin America that decentralized in the 1990s, “transfers from the national to the subnational level grew at a faster pace than total expenditures. At the same time, tax revenues were not growing as fast, and fiscal deficits increased across the region” (Wiesner 2003,44). Common pool problem of budgets have also plagued this region (Jones, Sanguinetti, and Tommasi 1999, Stein 1998, and Wiener 2003).

Courchere (1981) and McKinnon (1997) raise a related incentive problem with transfer schemes that are designed to provide substantial subsidies to the poorest regions in rich countries. McKinnon, for example, contrasts the huge subsidies by Canada of the Eastern Maritime Provinces and by Italy of Mezzogiorno in Southern Italy with the lack of subsidies by the United States to the American South. McKinnon suggests that the revenue transfers in Canada and Italy create dependency and a soft budget constraint. These transfers allow these regions to finance ailing and inefficient enterprises, seeming to saddle Southern Italy with highly capitalized, loss-making enterprises. This means the regional economy is far less likely to adapt so that it becomes more like the vibrant national economy. In contrast, southern states in America faced a hard budget constraint and no national subsidies. The poorest region in the United States after the Civil War through mid-20th century, southern states were able to grow rich by redesigning their economies with low regulatory burdens relative to the industrialized North and to take advantage of lower labor costs. This adaptation fostered the booming “sun belt” economy of the late twentieth century. McKinnon argues that the economic rise of the American South is unlikely to have occurred had it been subsidized in the manner of the Canadian Maritimes and the Italian Mezzogiorno.²⁵ For this reason, Courchere argues that these types of regional transfers are self-perpetuating.

²⁴ The opposite phenomenon is equally problematic – the devolution of considerably more authority and responsibility without the fiscal resources to implement it.

²⁵ Krueger (2006) uses similar logic to explain the difference between the vibrant economy in Poland just east of border with Germany and the lackluster economic performance of the former East Germany just west of the border: massive transfers from the German government have deterred economic development.

Table 1: Subnational Revenue Capture and Economic Growth

Degree of Revenue Capture	Growth
Very High	
States in U.S., 19 th Century	High
Provinces in China, 1982-93	High
Low	
China, immediate pre-reform era	Low
Mexican States, 1980-1995	Low
Indian States, 1950-1990	Low
Russian Cities & Regions, 1990s	Low

Sources: China (Jin, Qian, and Weingast 2005), Mexico (Careaga and Weingast 2003), India (Parikh and Weingast 2003), and Russia (Blanchard & Shleifer 2000, Zhuravskaya 2000).

3.2. SGFF Implications for the Design of Transfer Systems

SGFF logic suggests that the design of transfer systems must take at least two costs into account. Following FGFF logic, these should lower the tax burden on the economy and limit tax competition; and following the SGFF fiscal interest approach, transfer systems should also be designed so that transfers are sufficiently responsive to subnational governments that foster local economic growth. The above discussion shows that many transfer systems achieve equalization at the expense of subnational government incentives to foster economic prosperity. This conclusion seems to be true of most existing transfer schemes. Yet this tradeoff is neither a necessary nor an inevitable feature of transfer systems. In particular, it was not true of China's fiscal system from 1982-93.

Federations can simultaneously achieve all three goals – horizontal equalization, preventing tax competition, and ensure high marginal fiscal incentives – by designing transfer systems with non-linear functions that treat different categories of provinces differently. Poor provinces with only limited capacity to grow or to tax should be treated in a manner similar to the existing transfer systems. Most other provinces face a revenue sharing rule such as the following. First, the center keeps track of its revenue collection by province. Second, a step function allows the center to capture

a high proportion of revenue generated from a province up to a revenue level fixed in advance and then allows the province to keep a high or very high proportion of everything above that level.

Consider a country that combines centralized taxation with a traditional (non-step function) transfer scheme. Suppose the total revenue (federal and provincial) raised in a given province is 11 billion and that the center keeps 75 percent of the revenue and transfers 25 percent to the province. The feds receive 8.25 billion, and the province, 2.75 billion. As noted, the problem with this scheme is that it provides the province with low marginal incentives to foster local economic prosperity since it captures only one-quarter of any increase in revenue.

In contrast, consider the following non-linear approach: the national government retains 80 percent of all revenue raised in the province up to 10 billion, transferring 20 percent for the province; and then the center transfers 75 percent of all revenue above 10 billion to the province, retaining 25 percent for itself. This transfer rule implies that the 11 billion in taxes is divided into the same totals as the traditional transfer scheme – 8.25 billion to the feds, 2.75 to the province. But under the step function the province faces high marginal incentives to foster local economic prosperity, since it captures three-quarters of all new revenue generated.

Suppose the province creates conditions for growth of 10 percent per year for five years under the two schemes. Under the traditional transfer scheme, the province accumulates additional revenue of 1.68 billion in revenue; whereas under the high marginal scheme, it receives an additional 5.04 billion, three times as large. In both cases, the province begins with revenue of 2.75 billion; and in both cases, the costs of fostering economic growth are the same. Under the traditional scheme, its revenue after five years of 10 percent growth per year is 4.53 billion or 61 percent larger; whereas under the high marginal scheme, its revenue has more than doubled to 7.79 billion or 183 percent larger. In other words, the fiscal incentives to foster growth are far larger under the non-linear system.

The advantage of the high marginal transfer system is twofold. First, taxpayers are more likely to favor bearing the expenses of market-enhancing public goods when they receive a large fiscal return. Non-linear transfers therefore give citizens and their (subnational) governments strong fiscal incentives to foster local economic prosperity.

Second, although some provinces will get richer than others, the amount retained by the center is larger than if these provinces had not grown. So, inequalities among provinces may rise to a degree. But if

several provinces get richer, the amount available to the center to transfer to the poor provinces will be larger than under the non-linear transfer scheme than under the traditional scheme. Again, this means everyone can be better off. Further, if competition among jurisdictions induces poorer provinces to imitate richer ones, their growth may increase as well.

Of course, this type of system can be politically manipulated. One danger is that rich subnational governments are punished through the ratchet effect so that the center simply expropriates all the previous gains. Nonetheless, this scheme has strong potential since it increases the provinces' fiscal incentives to foster local economic growth.

3.3. Fiscal Equivalences

An important though underutilized concept concerns fiscal equivalence which emphasizes the importance of matching those being taxed with those receiving the benefits. Lindahl (1919) and Wicksell (1896) emphasized this principle in the late nineteenth and early twentieth centuries. Olson (1969; see also 1986) introduced the fiscal equivalence term, and Oates (1972,33-35) discussed the idea under the heading of "perfect correspondence"; Breton (1998) also emphasizes its importance.

This literature shows that a series of incentive problems arise when the political system de-links taxation and spending decisions, causing spending decisions to deviate from efficient levels (see Winer and Hettich 2006). Citizens typically oppose paying taxes that provide benefits for others. This means that higher governments have trouble providing local public goods to small groups of citizens. One way that higher governments get around this problem is by providing large packages of local public goods through the decision-mechanism of "universalism" or "something for everyone"; that is, large collections of similar projects to a majority or more of localities (Inman 1988, Wallis and Weingast 2006, Weingast 1979). Universalism characterizes federal rivers and harbors projects throughout American history and, since WWII, of a range of policy benefits, such as sewage treatment plants, federal poverty relief funds, federal highway funds, and most recently, funds for homeland security.

Similarly, when voters in a locality believe that the tax costs of their programs are spread across all localities, centralized provision of local public goods creates a common pool problem. Universalism mechanisms therefore lead higher governments to over-provide local public goods and services (Inman 1988, Porterba and Von Hagen 1999, Weingast, Shepsle

and Johnsen 1981, and Winer 1980).²⁶ Moreover, many public goods cannot be provided even in this inefficient manner. A majority of voters are likely to oppose infrastructure projects with huge costs but concentrated economic benefits, even when the benefits greatly exceed the costs (Wallis and Weingast 2006).

A related problem arises when the beneficiaries and decisionmakers are a small subset of the set of taxpayers financially responsible for local public goods. This setting creates a common pool problem that is a soft budget constraint. Because the small group of decisionmakers pays only a portion of cost but receives all the benefits, they can provide benefits to themselves at the expense of others. Alternatively, when the set of taxpayers is small relative to the set of beneficiaries, local public goods are likely to be under-provided.²⁷ As discussed below, special governments created solely for the purpose of providing a single local public good are a possible solution to this problem.

Reflecting these problems, Lindahl (1919), Buchanan (1965), Olson (1969,1986), among others, argue that the efficient provision of public goods requires equating the jurisdictional boundaries of the body providing public goods with the set of people affected by the public good. Deviations from this equation create various forms of incentive problems, leading to the over- or under-provision of local public goods.

The point here too is that intergovernmental transfers are not incentive-neutral. Because they break the link between the set of taxpayers and beneficiaries, these transfers may significantly affect the incentives to provide public goods.

²⁶ This literature on this topic is quite extensive. See, Besley and Coate (2003), Dillinger and Webb (1999), Gilligan and Matsusaka (1995), Inman (1988), Inman and Rubinfeld (1997a), Knight (2003), Lockwood (2002), Porterba and Von Hagen (1999), Rodden and Wibbels (2002), Stein (1998), and Weingast, Shepsle and Johnsen (1981).

²⁷ Yet another related problem is when some regions are over-represented in the national legislature. Stein and Tommasi (2005,75) discuss the effects of “territorial bicameralism” in which states are represented in a national senate. In both Brazil and Argentina, the significant over-representation of small states affords them a much larger share of the funds on a per capita basis. Similar evidence has been found for the United States (e.g., Johnson and Libecap 2003 on federal highway spending).

3.4. Transfers, Fiscal Incentives, and Corruption

Studies about the relationship between decentralization and corruption create a puzzle. Cooter (2003), Kotsogiannis and Schwager (2006), Shah (1997b), and Shleifer and Vishny (1993) argue that greater decentralization implies less corruption, in part because competition among subnational governments constrains their behavior and policy choice. In contrast, Treisman (2000) argues that federal systems are more corrupt than non-federal ones.

The above comparative theory of federalism provides the answer. It demonstrates that not all forms of decentralization are likely to improve welfare, so not all affect corruption in the same way. Because competition among subnational governments is one of the mechanisms for policing corruption, decentralization must satisfy the conditions of a common market (including mobile factors of production), have sufficient subnational policy authority, and a hard budget constraint (i.e., it must satisfy conditions F2-F4). Most decentralized countries fails to satisfy these conditions; they therefore fail to prevent corruption.

This idea – that some types of decentralization are more likely to control corruption – provides the first relationship between decentralization and corruption. In this subsection, I investigate a second relationship involving how the fiscal system affects corruption, revealing how greater subnational revenue dependence on transfers implies greater corruption.

Political officials generate political support in two broad ways – through the provision of market-enhancing public goods and through corruption and rent-seeking. Both create value for individuals and groups, and both induce particular citizens to support those in power. Providing rents for constituents creates value for them (often at the expense of other local citizens, but sometimes at the expense of citizens in other regions). These citizens typically reward political officials with support in exchange for their benefits.

In contrast to corruption and rents, providing market-enhancing public goods has two separate effects. First, it generates support directly through creating value for citizens. Second, because they expand the local economy, market-enhancing public goods increase local revenue, relaxing the budget constraint. A simple comparative static result shows that increasing the portion of a subnational government's revenue derived from locally generated revenue leads political officials to substitute more market-enhancing public goods for corruption (Careaga and Weingast

2003). The reason is that greater revenue capture increases the fiscal incentives of political officials to foster market growth. Conversely, the incentives to engage in corruption increase as subnational governments depend more on the central government for revenue and have low local-revenue generating capabilities.

A second aspect of some transfer systems enhances corruption. A common feature of transfer systems is that the central government provides rules and restraints on local government policymaking authority. In many cases, policies are designed in the center with little local discretion. Unfunded mandates are common.

The relevance for corruption is that central government policy control impedes the accountability of subnational governments. Centralized control of subnational government policymaking allows local government officials to blame policy failures on the central government whether the latter is responsible or not. Were the central government's controls really that insidious, or did the local officials simply fail to work around them? When citizens cannot tell, local government officials can engage in corruption while blaming the center.

In sum, scholars have identified two critical links between local government authority and the control of corruption. Greater competition (in the presence of conditions F2, F3, and F4) yields lower corruption. So too does greater subnational government revenue independence.

4. Further Implications of Fiscal Interest

Fiscal incentives affect a surprisingly wide variety of policy choices. In this section, I consider several additional applications of the fiscal interest approach.

4.1. Fiscal Interest and the Political Design of Markets

One of the most powerful tools for affecting the economic destiny of a country is its control over markets. This power is inherently political. The broader question concerns what leads some countries to foster thriving markets while others seek to control markets for political purposes – the

difference between Shleifer and Vishny's (1998a) "grabbing hand" versus "helping hand."²⁸ No general theory exists of these matters.

In this subsection I explore the fiscal interest approach to demonstrate that the fiscal system provides surprisingly strong incentives affecting political choice of policies with respect to markets, especially for subnational officials. The fiscal interest approach suggests that government officials are biased toward market policies that generate more revenue within their fiscal system. When they capture revenue based on broad taxes on economic activity, they have incentives to provide market-enhancing public goods and to create new market opportunities as a means of increasing the fiscal proceeds generated by markets. If in contrast they raise revenue by selling monopoly rights, then officials seek to restrict markets.

Both authoritarian and the weak democratic governments in developing countries have strong fiscal incentives to create monopolies.²⁹ Indeed, two forces point toward monopolies. First, they often have little capacity to tax, so selling rights to access markets may be a revenue-generating expedient. Second, governments in these states tend to be insecure, so officials have short time horizons that discount the long term in favor of more immediate payoffs. Political insecurity also forces political officials to use their policy authority, including the decisions about how to structure the economy, to enhance their security.

To mitigate both problems, political officials exchange monopolies, privileges, and other rights of limited access for revenue and political support. This type of exchange is a time-tested system that dates back 1000s of years. North, Wallis and Weingast (2006) argue that this exchange represents one of the political foundations of most developing countries today. Limits on entry and competition create rents in markets that can be shared among important elites, firms granted rights in markets, and the government. Maintaining their rents requires that the elites support the government in power, implying that when powerful groups obtain important rights, they support rather than challenge the government. Moreover, the government's insecurity-induced short time horizon implies

²⁸ Shleifer and Vishny's (1998,14) central question is, "first, what the interests of the political actors are, and second, how these interests translate into policies and institutions that further the objectives of the political actors."

²⁹ This argument draws on North, Wallis and Weingast's (2006), especially their approach to the natural state.

that it cares less about the long-term economic consequences of its policies.

4.1.A. Banking in the early United States and modern Mexico.

Wallis, Sylla, and Legler (1994) develop the fiscal interest approach and apply it to banking in the early United States; Haber (2005) applies it to a comparative study of the early United States and modern Mexico. Per the above logic, the most natural way for an authoritarian or a weak democratic government in a developing economy to structure the banking industry is to limit entry and sell bank charters as a means of creating economic rents that can be shared among the banks, the government, and specific citizens and firms who receive scarce loans. Because the government has significant interests in banking, exchange of privileged rights often explicitly or implicitly grants the government privileged access to loans. Moreover, as Haber (2005) argues, organizing the banking sector in this way means that it fails to provide the basic banking functions of an economy, notably, mobilizing capital to highest valued users who create new enterprises or seek to expand profitable ones. Instead, most loans go to the government, insiders, high government officials, and their relatives. An inevitable consequence of this structure, therefore, is limited competitiveness of the financial sector and hence limits on the degree to which banks help foster long-term economic growth.³⁰

This logic reflects how Mexico has always structured its banking industry (Haber 2005). Because charters are valuable, the government has a fiscal interest in restricting competition in the banking industry as a means of increasing its revenue. Haber also shows that Mexican government banking policy has gone through several cycles of rent creation and expropriation of bank assets, a policy cycle all too common in many developing countries.

The early history of the United States yields two important conclusions about fiscal interests and the political choice of market structure in banking. First, the United States was no exception to the rule about restricting entry to create rents shared among bankers and the government (Wallis et al, 1994). In 1800, most states used this system, including Pennsylvania whose commercial center of Philadelphia was the country's banking center.

³⁰ Moreover, Haber (2005) shows that, when this fiscal interest combines with a predatory government, the result is a banking sector that finances loans only to insiders. These states have a financial sectors that fail to provide the financial underpinning to a thriving economy.

Second, the United States had a strong market-preserving federal structure throughout the late eighteenth and nineteenth centuries, which affected states' fiscal interest. Per condition F2, states had nearly exclusive regulatory control over markets within their borders; per F3, participated in a common market with product and factor mobility; and, per F4, faced a hard budget constraint. Moreover, states raised virtually all of their own revenue. This structure meant that states had the freedom to design and redesign the rules governing various markets.

In the decade following 1800, Massachusetts slowly switched systems. Beginning with the monopoly approach, it created one large bank in which it invested heavily and several smaller banks. The state also imposed a tax on bank capital, which worked against the smaller banks: as the majority owner of the large bank, the state effectively payed part of its own tax. Yet over time, the state found it raised more revenue from taxes on the smaller banks than it did in dividends from the large bank. The state's fiscal interest led it to make two changes. First it sold its interest in the larger bank. Second, it stopped limiting entry and selling charters, and instead combined relatively low taxes on bank capital with more open entry into banking.

The new system gave Massachusetts banks a competitive advantage over all other U.S. banks. Merchants and enterprises funded in Boston – such as financing, insuring, marketing, and transporting U.S. export crops to Europe – had an economic edge over their competitors from other states.

Because a competitive banking center maximizes the size of its tax base, Massachusetts's fiscal interests – in contrast to that in all other states, including Pennsylvania – let it to promote the growth of a competitive banking sector. Wallis et al. note that this system was so successful, that by the early 1830s, the state of Massachusetts had more banks and more bank capital than any state in the country. It also received over 50 percent of its revenues from the tax on bank capital allowing it to make great reductions in the principal tax falling on its citizens, the property tax. This was a win-win policy for that state.

The competitive system allowed Massachusetts to eclipse Philadelphia as the nation's banking center. A number of years later, New York also switched fiscal systems, emulating Massachusetts, and New York City eclipsed both Boston and Philadelphia as the nation's banking center. Many other states subsequently switched to the system that worked. Had the United States been a centralized federalism, as modern Mexico, the

national government would have had little incentive to alter the original system of limited entry once it was in place.

Banking has changed considerably in the years since the competitive banking industry emerged in the United States. For one, banks are potential avenues of money laundering. This provides corrupt political officials, qua patrons, and banks, qua clients, to provide services that help corrupt officials move their money to safe havens in anticipation of a time when they are no longer officials. Nonetheless, the same principles apply. Banks have always been a source of benefits from corruption, with banks in Mexico lending largely to insiders and to the political officials patrons (Haber 2005). Although the scope of corruption benefits has increased, the logic of the system is the same: banks remain a source of rents to the state and political officials.

4.1.B. Other illustrations. The discussion of China above shows that fiscal incentives played a major role the success in China's economic reform, including the politics that prevented the anti-reform reaction after Tiananmen square. The reform provinces generated so much revenue for themselves that they became the fiscal powerhouses of China.

Shleifer and Vishny's (1998b) observations about the differential local government support for the economy in Poland and Russia draws on the same logic. Using survey techniques, they find that local government in Poland is far more supportive of business than in Russia. They attribute this difference to government officials' incentives. First, "the [electoral] incentives of local politicians in Russia – unlike those in Poland – do not encourage them to support private business." [248] Second, local government fiscal interests differ significantly. In Poland, local governments rely on local taxes, fees, and property taxes, so fostering local economic prosperity yields greater revenue. Whereas in Russia most revenue comes from higher governments that exhibit considerable opportunism with respect to transfers to lower government: regional governments reduce their transfers to cities that increase their revenue. Fostering a healthier local economy by Russian cities does not generate greater revenue for the local government. Consistent with Zhuravskaya's (2001) findings noted above, local officials have very low fiscal incentives to foster economic growth. As Shleifer and Vishny (1998a,249) conclude, "The effects of such fiscal federalism (which should be contrasted with Chinese fiscal federalism, where sharing rules are evidently firmer) are perverse."

This discussion yields three general lessons. First, a government's fiscal interest has strong effects on its incentives to choose pro- or anti-market policies. Governments that raise money from broad and relatively uniform taxes on general economic activities are far more likely to choose policies that foster markets. Governments that raise revenue through restrictive economic activities instead manipulate markets for political ends.

Second, subnational governments' fiscal interest in the presence of inter-jurisdictional competition is one of the ways a market-preserving federal system promotes pro-market policies. Interjurisdictional competition in the presence of subnational policy authority and a hard budget constraint implies that subnational governments experiment with policies and fiscal systems. This experimentation means that some jurisdiction is far more likely to choose a combination of a pro-market fiscal systems and market-enhancing public goods, leading it to out compete other jurisdictions. Yardstick competition then implies that other jurisdictions will imitate the successful innovation.

Third, and most obviously, opportunistic higher governments that capture the revenue gains from increased local economic activity reduce incentives for subnational governments to foster economic growth.

4.2. Fiscal Incentives and Local Government Independence

I want to juxtapose two different points made above. First, most federal systems in developing countries are highly centralized (Oates 1985), both for revenue collection and for policy choice; second, Chinese provinces had considerable fiscal independence during the initial high growth phase in the 1980s. In this subsection, I suggest that these two points are different sides of the same coin.

The fiscal interest model suggests that subnational revenue capacity helps maintain a federal system and especially subnational policy independence. Put simply, local fiscal capacity generates both greater local government accountability and greater local political power. On the accountability dimension, citizens have strong incentives to monitor their taxes, to demand responsiveness, and to ensure that they get their money's worth.

On the power dimension, revenue independence helps local governments maintain their policy independence. The central government almost always accompanies the transfers associated with revenue dependence with rules and restrictions that inevitably limit or compromise

the policy authority and independence of subnational governments. As discussed in the next section under “tragic brilliance,” revenue dependence also allows the center to threaten regions that deviate from its desired policies with the withdraw of revenue.

In contrast, revenue independence conveys political power that allows local governments to resist many unattractive interventions by the central government. As the discussion in the last section about China showed, the independent economic base of the reform provinces allowed them to resist the central government’s initiative to undermine their own fiscal independence by altering the fiscal basis of economic reform. Of course, this principle of fiscal power is a major reason why many central governments in developing countries resist creating subnational government independence. But the point still holds: SGFF models suggest that revenue independence is a central part of subnational government policy independence.

4.3. Fiscal Incentives of Hard and Soft Budget Constraints

The fiscal problems associated with soft budget constraints, particularly those that led to national financial meltdowns in Argentina and Brazil, have led scholars to study the incentive effects of the hard and soft budgets for subnational governments (see, e.g., Dillinger and Webb 1999, Haggard and Webb 2004, Inman 2003, Kornai 1986, McKinnon 1997, Rodden 2005, Rodden, Eskaland, and Litvak 2001, Sanguinetti 1994, and Wibbels 2003). Although they do not utilize the term, “fiscal interest,” these models all rely on the fiscal interest approach. A soft budget constraint arises from a variety of sources, all involving the expectation that subnational governments believe they will be able to externalize some of their fiscal burdens. For example, the central government may explicitly bailout subnational governments in fiscal distress. Alternatively the central government or the central bank may provide a series of forgivable loans to finance subnational government deficit (or from state branches of the central bank under the control of the state). Subnational governments facing a soft budget constraint have a reduced (or no) fiscal incentive to make prudent financial decisions.

4.4. Citizen Welfare, Fiscal Incentives, and Special Districts

Special districts are governmental entities designed for a single purpose, such as school districts, water supply and sanitation districts, park districts, regional transportation systems, business investment districts,

special economic zones, and watershed management districts.³¹ As Frey and Eichenberger (1999) observe, special governments are “functional, overlapping, competing jurisdictions” (FOCJ); that is, these governments typically have a single or focused purpose; they overlap with existing subnational governments (and may overlap with each other); and they compete for resources. Special governments contrast with general governments – for example, national, provincial and local – which typically have general authority over a wide range of revenue and policy issues.

When designed properly, special governments increase citizen welfare (Casella and Frey 1992, Frey and Eichenberger 1999, Ostrom 1991, Ostrom, Shroeder and Wynne 1993). The idea reflects the logic of fiscal equivalence: creating a jurisdiction that matches the beneficiaries of a local public good with those who pay for it through taxes. This match reduces the incentives for jurisdictions to create political benefits at the expense of others.

4.4.A. Special districts in the United States. SGFF scholars demonstrate that centralized provision of local public goods creates a common pool problem so that these goods are over-provided and tend to be larger than the efficient scale (Inman 1988, Porterba and Von Hagen 1999, Weingast, Shepsle and Johnsen 1981, and Winer 1980). Because the costs of financing projects are spread across all taxpayers, political officials representing specific localities have incentives to overspend on projects and policies benefitting their locality.³² Moreover, as noted, many local public goods cannot be centrally provided even in this inefficient manner: a majority of voters will oppose infrastructure projects with huge costs but concentrated economic benefits (Wallis and Weingast 2006).

Similarly, several mechanisms imply that many local public goods cannot be efficiently provided by the existing pattern of local governments. For example, some local public goods have a minimum efficient scale that exceeds that of the local jurisdictions; for others, the citizens seeking this

³¹ This subsection draws on Wallis and Weingast (2006); see also Ostrom (1991) and Wallis and Weingast (2005). The idea has long roots in the literature, e.g., Buchanan’s (1964) famous “theory of clubs.”

³² The literature on this topic is quite extensive and provides considerable empirical evidence. See, Besley and Coate (2003), Diaz-Cayeros, et al., (2002), Dillinger and Webb (1999), Gilligan and Matsusaka (1995), Inman (1988), Inman and Rubinfeld (1997a), Knight (2003), Lockwood (2002), Porterba and Von Hagen (1999), Rodden and Wibbels (2002), Stein (1998), Weingast, Shepsle and Johnsen (1981) and Winer (1980).

good are arranged across several neighboring local jurisdictions but comprise a majority in none. The mismatch of jurisdictions, benefits, and taxpayers imply that central, provincial, and local governments face difficulties financing many types of local public goods and services.

Special districts represent a mechanism to provide local public goods under these circumstances by allowing groups of citizens to create a new, single purpose government that matches taxpayers and beneficiaries with a government holding the authority to raise taxes and provide the local public good.³³ Thus, a group of citizens who do not correspond to an existing local jurisdiction may create water, sewer, recreation, land conservancy, or school districts to provide these goods. Similarly, neighboring jurisdictions can create special governments to internalize their externalities, as in the New York and New Jersey Port Authority or the Massachusetts Water Resources Authority which manages drinking water and sewage/waste treatment in the Boston Harbor area. Special governments provide a flexible institutional structure for satisfying a wide range of citizen needs. These governments now comprise the largest category of governments in the United States.³⁴

The SGFF approach recognizes a host of incentive problems associated with special districts when there is a mismatch between the taxpayers and beneficiaries (Wallis and Weingast 2006; see also Burns 1994). Indeed, special districts became important in the United States in response to incentive problems creating local government debt problems in the late 19th century. Special districts with particular institutional characteristics provided the solution to these debt problems.

Special districts have the ability to tax citizens within their jurisdiction. They may also have the ability to raise funds through issuing bonds, subject to approval by a majority of voters within the jurisdiction. These districts may charge user fees; for example, if they build infrastructure or provide public goods or services.

The fiscal interest approach demonstrates that the fiscal structure of these governments is critical to their economic and political performance (Wallis and Weingast 2006). Although a full investigation of this issue is

³³ The literature on special governments is quite extensive. See, e.g., Briffault (1996), Burns (1994), and Sbragia (1996).

³⁴ In 2002, the United States had 87,576, of which 87,525 are local governments (including the District of Columbia). Of the local governments, special governments are the largest category, numbering 35,052 (Wallis and Weingast 2006, table 1). Moreover, this category is also the fastest growing of governments in the United States.

beyond the scope of this paper, I raise one dimension of fiscal structure: who is responsible for servicing the bonds issued by a special government, solely that government and its taxpayers or a larger, general government (such as a state government within which the special district is located)? When special districts first came into prominence in the late 19th and early twentieth centuries, this issue was an open legal question.

When the bonds of special governments are backed by a general government, citizens and decisionmakers in these jurisdictions face a soft budget constraint. General government backing the bonds implies that taxpayers in this jurisdiction do not bear the full financial consequences of their decisions. They will therefore sometimes favor inefficient projects that provide benefits to themselves because the full costs are born by others. For example, suppose a set of citizens want a public good that cannot pay for itself. Suppose that they form a special district to provide this good, financing this project through bonds serviced by the user fees generated by the project. If the fees are insufficient to cover the costs of servicing the bonds, that liability is born by the general government.

In contrast, when citizens within the special district bear the full financial consequence of their decisions, they are far less likely to choose inefficient or non-remunerative projects.

Equally important, the decision about who bears the ultimate responsibility for special district bonds affects how bond markets evaluate special district bonds. The bond market is widely celebrated as providing incentives for good behavior by subnational government (Briffault 1996). When the sole responsibility for servicing the bonds lies with the voters of the special district, potential bondholders have strong incentives to evaluate the project to ensure it is financially sound. They avoid projects that cannot service the bonds. Bondholders do not have such incentives, however, when a general government is ultimately responsible. As long as the general government is financially sound, then the bondholders will be paid regardless of the project's success.

This discussion demonstrates that the incentives to choose efficient projects by special districts depend critically on the issue of who has ultimately responsibility for servicing these districts' bonds. With general government liability, bond markets have far less incentive to worry about the likely success of a special government project.

4.4.B. Special districts in other traditions. The “variable geometry” of the European Union provides a variant on the special district logic, allowing member states to set up multiple, functionally specific, policy

institutions, such as the European Monetary Union (Hooghe and Marks 2003). Eichenberger and Frey (2001) argue that this principle should be extended to all levels within the European Union, greatly increasing the scope of special districts.

The French tradition of special districts – *syndicats intercommunaux à vocation unique* (SIVU) – differs from the American tradition and lodges authority for creation of special districts with general purpose local governments. Special districts are subordinate to rather than independent of general governments. Nonetheless, France has a great many such governments that provide for inter-communal cooperation at the local levels. Thomson (n.d.,1) reports that in 1996, France had 36,500 communes and 19,000 SIVU's, the great majority of which (14,551) were single purpose public enterprises.

Thomson's purpose is to demonstrate the potential of special districts in Africa. Many countries in sub-Saharan Africa have experienced various forms of devolution of power, but this devolution focuses on local, general purpose governments. These countries typically have no general provisions allowing citizens, communities, or local governments to create special districts. Nonetheless, Thomson discusses four cases where special districts have been formed (Botswana, Malawi, Mali, and Namibia), generally improving accountability, efficiency and equity. In many cases, these districts are informal in origin, associations formed by fishers, hunters, pastoralists, and farmers to improve the stewardship of the renewable natural resources on which they rely. As Ostrom shows, part of the reason for this improvement is that these governments adjust incentives to increase coordination and management of common pool problem resources (Ostrom 1991, Ostrom, Shroeder, and Wynne 1993).

4.4.C. Conclusions. Special districts embody the fiscal equivalence principle by providing a flexible form of government that allows citizens to provide local public goods and services by matching taxpayers and beneficiaries. Yet very specific institutions are necessary to align the interests of decisionmakers within special districts with taxpayers so that they focus on public goods that provide benefits that exceed the costs. Indeed, the explosion of these governments in the United States reflects in part their ability to provide value-creating public goods. In the aggregate, these governments have issued hundreds of billions of dollars in debt, and yet very few go bankrupt: nearly all cover their costs through user fees and taxes imposed by the voters of the district.

5. Democracy and Decentralized Governance

Democracy is perhaps the most celebrated institutional means to create political accountability. It potentially provides citizens with a range of benefits. Perhaps most ostensibly, elections allow citizens to influence their own destiny by choosing one set of officials instead of another. Citizens also use voting to help police their rights. As James Madison emphasized in the *Federalist Papers*, voting allows citizens to “throw the rascals out” (see Riker 1982). The threat of being thrown out of office provides political officials with incentives to make decisions that reflect their constituents’ interests, including honoring citizen rights.³⁵

This section discusses the interaction of decentralization and democratic governance. It suggests ways in which decentralization can strengthen democracy and ways in which centralization can weaken democracy. Before we turn to this interaction, however, we must understand some of the limits of democracy, elections in particular.

5.1. Potential Limits of Democracy

Democracy is such an attractive value that policymakers and donor organizations too often fail to worry about the conditions under which it is more likely to succeed. Three aspects of democracy are critical for our analysis of democracy, one empirical and two theoretical.

The empirical aspect is that most new democracies fail, either due to coups or to “democratic set-asides” (incumbents cancel elections or refuse to step down after losing an election). The evidence is striking that democracy is far more likely to succeed in richer countries. Przeworski (2006) estimates that the frequency of a democracy failing each year in a country with a per capita income of less than \$1000 per year is .085 or one in twelve (see table 2); with a per capita income of \$3001-6055, it is .015 or one in sixty-one; while no democracy with a per capita income of greater than \$6055 has failed.³⁶ Put another way, the table also shows that

³⁵ Riker (1982) provides a systematic analysis of these two aspects of democracy, emphasizing the importance of the second. Persson and Tabellini (2000) provide the most comprehensive analysis of electoral incentives, accountability, and responsiveness of electoral and political institutions.

³⁶ Przeworski’s figures are in 1985 purchasing parity dollars. Moreover, for several reasons, these estimates should be taken as indicative. The data are necessarily derived from post-WWII history, so there is no event like the Great Depression in whose wake many democracies failed.

a democracy in the poorest category has only a .41 chance of remaining a democracy one decade later; in the \$1000-3000 category, the probability is .70; in \$3001-6055, .86, and 1.00 for the highest income category.

Table 2: Estimated Probability of Democratic Survival by Income Level

Income Level ^a	Estimated Probability of Failure per year	Estimated Probability of Surviving 10 years
< \$1000	.085	.41
1000-3000	.035	.70
3001-6055	.015	.86
>6055	.00	1.00

^a Przeworski's figures are in 1985 purchasing parity dollars.

Source: Przeworski (2006,1-2).

The first theoretical aspect of democracy comes as a surprise to many, in part because scholars and policymakers focus on the benefits of democracy: democracy has costs and can pose dangers to citizens. Elections empower governments to tax, regulate business, define property rights, and jail people. All these powers can be abused, as tyranny of the majority suggests; and even if not abused, these powers may impose sufficiently large costs that some citizens support extra-constitutional action and violence as a means of defending themselves.

The dangers of democracy are difficult for people in the developed west to understand because democracy in these countries allows citizens to determine their own destiny. But democracy in these countries is embedded in a series of institutions and norms that complement elections by place striking limits on government policymaking and therefore protect citizens from many potential abuses. Courts and other institutions, for example, enforce a wide range of citizen rights; and elaborate procedures constrain the range of feasible policies. Indeed, the need for legal systems in the developed west capable of upholding citizen rights against the government demonstrate that democracy alone cannot sustain citizen rights. Yet democracy in the developing context typically lacks these complementary institutions that help sustain it.

The second theoretical aspect of democracy is that all successful democracies satisfy the *limit condition*; the limit condition, namely, that various institutions and incentives limit the stakes of power by restricting the scope of policy authority of elected representatives (Weingast 2006). Successful democracies limit the stakes of power through the constitution and other institutions that protect a range of citizen rights and other aspects of the status quo. The centrality of the limit condition is revealed by events in Chile in 1973 where the legitimately elected government threatened landowners and others on the political right, leading them to support a bloody coup. When citizens believe they are protected under the system, they are far less likely to support extra-constitutional action, such as coups. Democracies that satisfy the limit condition are therefore more stable.

The absence of the limit condition in the developing context reveals a critical difficulty with sustaining democracy in the poorest and under-institutionalized countries – these states face grave difficulties maintaining institutions that satisfy the limit condition.

5.2. Democracy and Decentralization

Decentralization has a surprisingly wide range of interactions with democratic governance. First, an odd feature of the promotion of democracy around the world is that these efforts nearly always focus on the national government. Absent the limit condition and a wide range of institutions to protect citizen rights, national elections create great risk and potential instability for citizens. That risk in turn generates potential support for coups and democratic set-asides. This form of national democracy is therefore unstable.

An alternative strategy is to initiate democracy at the local rather than the national level. Building democracy from the bottom up greatly reduces the risk, in part because subnational governments have less policy authority.

A sequential program for democratization that begins at the local level is therefore an alternative to initiating unstable democracy at the national level. Once successful political competition emerges at this level, steps can be taken to open national politics to the democratic competition. Moreover, whereas most authoritarian regimes are unwilling to initiate full national democracy, these regimes may find a strategy of sequential democratization more attractive since initiating local democracy is less threatening.

Importantly, one of the most stable new democracies, Taiwan, made the transition to democracy through a series of steps that began at the local level and slowly built up to democracy at the national level (Diamond and Myers 2001). Taiwan's sequential strategy has created a stable, modern democracy.

Hiskey (2006) and Thomson et al. (2004) provides a variant on the theme of sequential democratization by suggesting that special districts provide an important way to initiate democracy in authoritarian regimes without a wholesale devolution of power or local democratization: "the creation of special districts that encompass multiple localities can provide a much needed 'training grounds for self-governance short of wholesale devolution of power and authority to all general purpose [Local Government Units] in a given country, the scale of the change is usually less extensive and more focused as regards special districts'" (Hiskey 2006, 22, quoting Thomson, et al, 2004,ix).

Second, decentralization contributes to the limit condition in another way that involves party politics. In a centralized nation, losing a national election is very costly to the incumbent and its supporters. Incumbents therefore have incentives to hold onto power despite losing. In the absence of the limit condition, it may simply be too costly to give up power.

In a decentralized state, however, losers can typically maintain a local power base from which to remain politically visible and to provide some benefits to their constituents. Local political strongholds also provide a base from which this party can launch a future attempt to recapture national power. By lowering the stakes of power, decentralization makes it more likely that losers of national elections will give up power.

Third, a growing literature studies the relationship between decentralization and conflict in divided societies; that is, states with ethnic, cultural, or linguistic differences.³⁷ In some cases, decentralizing authority to regions with more homogeneous populations allows these groups to live in harmony within a larger state, which seems to played a role in "holding together" Belgium, India, Spain, and the Netherlands (Lijphart 1975, Stepan 2004a). Decentralization has also seemed to mitigate conflict in the Indonesia and the Philippines. Inman and Rubinfeld (2005) argue that decentralization was essential to the democratic transition in South Africa. Whites were willing to promote the transition because decentralization provided sufficient security to them.

³⁷ Siegle (2006) surveys this literature.

In contrast, decentralization sometimes exacerbates conflict in divided societies (Snyder 2000). Eaton (2006), for example, argues that decentralization in Colombia exacerbated its conflict because the control of local governments provide the different groups with resources and authority useful for fighting. The bottom line is that we know too little about whether decentralization – or specific forms of decentralization – help mitigate conflict.

Fourth, Myerson (2006) argues that decentralization adds to the success of democracy in another way; namely, to help incubate candidates for national office. Subnational office allows officials to gain experience and reputation. Decentralization therefore provides national voters with more information about the candidates, and they can pick for national leaders those who have been especially successful at the subnational level.

Finally, a large literature suggests that certain institutional features of democracy are more likely to preserve decentralization.³⁸ I have already mentioned Riker's thesis about the party system in this context (see section 2). The literature associates a range of institutions with stable decentralization. For example, when subnational officials are elected, in contrast to serving at the pleasure of the national government; or when the constitution designates that the principal subnational units have direct representation in the government (e.g., in a "senate").

5.3. Tragic Brilliance: How Insecure Governments Use Centralized Fiscal Control to Undermine Elections

Democracy has other potential liabilities. In what follows, I summarize the "tragic brilliance" mechanism of an authoritarian or weak democratic regime that allows the government to pervert elections so they serve as a mechanism of social control rather than citizen choice. (Diaz, Magaloni, and Weingast 2005).

As noted, democracy in the developed west satisfies the limit condition – these countries impose credible limits on what democratically elected representatives may do (Weingast 2006). Citizens enjoy a wide range of rights and public goods and services by virtue of citizenship, not based on a political relationship with those in power. In particular, standard local public services – such as water, electricity, education, sewer service, and

³⁸ Bland (2006) surveys this literature. See also the references in note 7, *infra*, especially Dillinger and Webb (1999) and Garman, Haggard, and Willis (2001).

road maintenance – do not depend on whom an individual or a locality votes for.

Elections in many authoritarian and weak democratic regimes often differs dramatically from this ideal. In Mexico under the PRI – the party that virtually monopolized power from 1930 through the early 1990s – elections served a very different purpose than citizen choice. Although Mexico has long been a federal system, the PRI engineered a very centralized one (Diaz-Cayeros 2006), where the central government raises most of the revenue and finances most state and local expenditures through transfers. In the 1980s, the average local government received over 80 percent of its revenue from higher governments.³⁹

Although this pattern of revenue generation and spending conforms to that recommended by FGFF, its purpose was not to further citizen welfare. Instead, the PRI used its discretion over revenue to threaten localities who supported the opposition by withdrawing funds to finance local governments. Most local services require substantial revenue. The threat to withdraw revenue forced opposition-favoring citizens to face a dilemma: voting for the opposition meant a far smaller level of public services. Revenue centralization afforded the PRI the discretion to force most voters to support it at the polls, even voters who preferred the opposition.

As evidence, the case study literature shows that when the first two cities, Ciudad Juarez and Chihuahua, voted in the opposition in 1983, the cities lost on the order of half their budgets (Rodriguez 1995, Rodriguez and Ward 1995). Similarly, in a study of 1800 of 2400 Mexican municipalities from a more recent period, Diaz, Magaloni and Weingast (2005) provide econometric evidence showing that municipalities which support the opposition receive on average one-quarter less revenue.

Land reform in Mexico reveals another aspect of the tragic brilliance mechanism: reform policies often fail by design. Economists demonstrate that significant increases in the equity of land distribution improve both economic growth and income equality (Alesina and Rodrik 1994), but this has not been the case in Mexico. Diaz, Magaloni, and Weingast (2006) show that the central government designed land reform in Mexico to create political dependence. Peasants receiving land did so as communities rather than an individuals. Until recently, peasants could not sell, lease, or use the

³⁹ Some of the transfers were by formula, but a large portion of it was discretionary, especially for local governments (Careaga and Weingast 2003).

land as collateral. These policies created agricultural collectivities that were closer in spirit to the soviet collective farms than to the types of land reform that increased economic growth in Japan, Korea, and Taiwan (Alesina and Rodrik 1994), where private property right systems created far more efficient land use.

Mexican land reform produced marginal farms, and a great many of the collectivities required subsidies in the form of water, seeds, and fertilizer to provide a living. The subsidies, in turn, created political dependence: as long as the farms remained marginal, the farmers had to support the PRI to maintain their subsidies.

The tragic brilliant mechanism represents a pathology of both democracy and decentralization. It is tragic because it forces opposition-leaning citizens to play an active role in maintaining a regime that they would rather replace; but also brilliant in that authoritarians use their policy discretion to create political dependence and subservience while providing the outward veneer of elections, choice, and democracy.

The tragic brilliance mechanism reveals a political motivation for why regimes in developing countries centralize policy authority and taxation. Wholly apart from administrative efficiencies and fiscal equity, centralization affords insecure political regimes with political leverage over lower governments and citizens. By making the delivery of basic local public goods and services depend on whom citizens vote, the incumbent regime at once restricts citizen ability to throw the rascals out, to exercise fiscal autonomy, and to influence public policies.⁴⁰

The main lesson is that, for democracy to serve as a mechanism of freedom and choice, it must be embedded in institutions that constrain the government's use of discretionary fiscal authority to threaten voters who vote for the opposition. Preventing the operation of the tragic brilliance mechanism therefore presents another SGFF rationale for decentralizing fiscal authority. Independent taxation authority allows local governments

⁴⁰ This discussion analyzes the tragic brilliance mechanism from the standpoint of democracy. But the tragic brilliance can also be analyzed as a patron-clientele exchange system in other regime types. The discussion above emphasized one side of this exchange, elections as a means of political control. The other side of this coin, however, is that, the mechanism requires that patrons deliver the goods. Seen in this light, the mechanism is a partially reciprocal one, if asymmetrical. The mechanism can therefore be interpreted as the means by which both sides of the patron-clientele relationship make a credible commitment to the exchange (see, for example, Chabal and Daloz's 1999 study of patron-client relations in Africa). The new insight of the tragic brilliance approach is that patrons can create relationships with clientele even if the latter are worse off on average from the relationship.

not only a fiscal interest in fostering local economic prosperity, but also a much greater degree of independence from a controlling (and potentially predatory) center.

5.4. Closed or Open Access Organizations

Another pathology in decentralized systems (and regimes more generally) concerns organizations.⁴¹ Economists emphasize the importance of open access to economic organizations. The most celebrated aspect of economic openness is general incorporation, allowing anyone who meets a minimum set of administrative criteria to form a corporation. In contrast, limited access to organizations is associated with special incorporation where creating a corporation required a special act of the government. Special incorporation allows political officials to restrict access to corporations so as to create various forms of rents, including protections from competition.⁴² Competitive markets require open access to economic organizations.

Open access to other forms of organizations – political, social, and legal – is equally important. Political scientists emphasize the importance of civil society in helping to maintain democracy (Lipset 1963, Offe 1992, O'Donnell and Schmitter 1986, Putnam 1993, Widner 2001). A vibrant civil society depends on the ability of citizens to form organizations to further their interests, to monitor the government, and to help citizens react in concert to a government that violates the constitution. Because it allows opponents of the regime to organize and compete for power, open access to political organizations is a critical component of both political competition and political accountability.

Most weak democracies and authoritarian regimes restrict access to both political and economic organizations – and for good reason. Open access to economic organizations threatens these regime's stability by disrupting or destroying the regime's clientele relationships. Allowing entry of economic organizations, for example, dissipates the rents granted to clients in exchange for political support that helps maintain these regimes in power.⁴³ Similarly, authoritarian regimes restrict access to other

⁴¹ This section draws on North, Wallis, and Weingast (2006) and Wallis (2006).

⁴² For this reason, Adam Smith (1776) was quite negative about the corporation (general incorporation first arose in the United States in the 1830s and 40s, and in Britain somewhat later).

⁴³ Recent models provide a means of understanding the logic of authoritarian regimes. See Bueno de Mesquita et al. (2003), Haber (2006), and North, Wallis, and Weingast (2006).

forms of organizations because these organizations allow individuals to coordinate their activities through the civil society in opposition to the regime. Suppression of organizations not only requires limiting access to political organizations, such as opposition interest groups and parties, but also organizations formed for other purposes that might be transformed by clever political entrepreneurs for political ends.

Restricted access to all forms of organization therefore impedes political accountability and economic growth in weak democracies and authoritarian regimes. Limiting access to organizations is therefore another form of pathology for federalism. Decentralization in the presence of limited access to organizations will fail to work in a way that is responsive to citizen interests.

5.5. Implications for the design of decentralized governance

The arguments in this section provide a cautionary note about the promotion of democracy in the developing world. Democracy is a justly celebrated aspect of freedom in the developed world, but like other freedoms – such as freedom of the press, freedom of speech, freedom to form economic organizations – it is difficult to implement. Democratic success requires that it be embedded in a series of institutions that support it. At the very least, this implies that creating successful democracy in the developing world requires more than just creating elections.

Initiating democracy at the local rather than national level may well prove an important way to begin the transition to national democracy. Because the stakes are lower, local elections are clearly easier to implement and sustain than national ones. Moreover, democracy at the local level can play an important role in local government accountability.

Of course – and per the second generation theme – for local democracy to work, it must be embedded in a series of institutions that affect the incentives of political officials. Citizens and the military have fewer incentives to initiate coups in democracies that satisfy the limit condition. When the absence of the limit condition combines with the tragic brilliance mechanism so that basic services depend on who citizens support in elections, citizen choice is proscribed and democracy serves more as a mechanism of social control than of citizen choice.

Design of decentralized governance should also limit the tragic brilliant mechanism. Centralization of policymaking and taxation authority allows weak democracies and authoritarian regimes in the developing world to create political dependence that forces some opposition-leaning

citizens to support the regime. Fiscal decentralization at once limits the application of this mechanism and helps create the limit condition.

Another institutional feature that helps support democracy is open access to organizations. Organizations are central to mobilizing the support of many individuals, to monitoring the government, to advocating for citizen interests, and more generally to support the competitive political process underlying democracy. Countries that suppress organizations therefore stifle the democratic process.

6. Overcoming Impediments to Decentralization

In this section, I consider two strategies for implementing decentralization, especially in the presence of predatory governments.

6.1. Local Government Fiscal Independence in Predatory Systems

Predatory central governments are a problem throughout the developing world, and these governments can hinder the operation of an otherwise well-designed federal system. A predatory central government that faces relatively few constraints on its behavior can reverse or compromise any and all of the benefits of decentralization. There are no magic cures for this problem.

6.1.A. The problem. A common and yet insidious form of predation perverts the logic of innovation and competition in a local government exhibiting policy independence. Suppose a particular subnational government creates a thriving local economy that stands out in comparison with other regions. A predatory central government may well expropriate the value of successful firms. Moreover, this economic success potentially provides local political officials with a resource and political base with which to challenge national leaders, either to extract greater concessions or freedoms; or to challenge their leadership. The threat of political challenge provides predatory or insecure central governments with an incentive to prevent local governments from succeeding. National leaders of predatory states may therefore use their powers to reduce or remove the authority of the local government; they can expropriate control of all successful enterprises; or they can take over the local government and reverse its policies. Crook and Manor (2004) provide an instructive example of how the dominant Congress party in India dismantled the

successful opposition Janata Party's ruling of the state of Karnata in the 1980s.

The economic side of this problem is even worse. The risk of a predatory reaction by the central government feeds back into the local economy, making it less likely that economic agents will make investments that can be expropriated even if these would be profitable under the local government's policies. It may well be that, in truly predatory governments, there is little hope for reform.

6.1.B. Overcoming predation through decentralization. China's successful market-preserving federal system suggests one way around these problems. The last condition of market-preserving federalism requires institutional limits provide some form of credible commitment by the central government to honor the rules of the federal system. Whether by design or happenstance, China's reform-minded leaders accomplished this condition in two ways. The first and perhaps more important is fiscal. Rodden (2001) shows that most federal systems are surprisingly centralized with respect to revenue collection.⁴⁴

Communist China had a long history of anti-market policies, mass murder, and other forms of predation. This predatory behavior represented a strong impediment to market reform and economic growth and investment: why should economic agents trust such a government to honor economic reform policies rather than, at some point down the road, reverse itself and punish those successful under reform? Communist China under Mao exhibited several great policy reversals with exactly that type of punishment; notably, the Great Leap Forward, a period of retrenchment, followed by the Cultural Revolution.

This political risk meant that economic reform had, somehow, to limit the authority of the central government. China's strategy in promoting economic reform was decentralization: the devolution of economic

⁴⁴ Although a large number of countries have substantial subnational expenditures (measured by share of GDP), only 3 countries have a significant degree of autonomous revenue raising authority: Switzerland (around 12 percent), the United States (around 18 percent), and Canada (around 30 percent). In contrast, many countries have subnational spending above 35 percent of GDP (and the median around 50%) but autonomous revenue raising capacity of 1 percent or less: Austria, Belgium, Czech Republic, Denmark, Finland, Germany, Hungary, Iceland, Netherlands, Norway, Poland, Portugal, Sweden, and the United Kingdom. New Zealand and Spain have subnational expenditures in this range with slightly higher subnational revenue capacity, around 2 and 5 percent, respectively (Rodden 2001, figure 4). Until recently, Australia had one of the largest vertical imbalances of the developed countries (McLure 1993).

policymaking (policy authority condition) and fiscal authority (including the HBC) to the provinces (Montinola, Qian and Weingast 1995, Oi 1993, and Shirk 1993). This new policy authority allowed the reform-oriented provinces to alter their policies from socialist to pro-market. Provinces also faced strong fiscal incentives to promote reform under what the Chinese called the “fiscal contracting system,” 1981-1992 (see Jin, Qian, and Weingast 2005 and Oksenberg and Tong 1991). Under this system, most provinces raised their own taxes under a fiscal contract with the central government. Many contracts were of the following form: share fifty percent of all revenue raised up to some level and then allow the province to retain 100 percent of all revenue beyond. The average province faced a marginal tax retention rate of 89 percent; and 68 percent of all provinces faced a marginal retention rate of 100 percent (Jin, Qian, and Weingast 2005). Reflecting strong fiscal incentives to promote reform, many provinces quickly grew rich as their economies mushroomed.⁴⁵

Per SGFF logic, as the reforms succeeded, fiscal authority granted the provinces both the incentive and political power to act independently of the central government. The combination of policy authority and fiscal health allowed provinces to steer policy independent of the central government. The fiscal incentives also had strong political effects on constraining the central government. Because most provinces benefitted from and had significant investment in the system, they were able to counterbalance the central government. For example, a conservative reaction against reform followed the suppression of the protests in Tiananmen Square in 1989. Provincial leaders – in particular, the governor of the most successful reform province, Guangdong – used this power to prevent the proposed anti-reform reaction (Shirk 1993, 194-95, Montinola, Qian and Weingast 1995).

A second mechanism arose to raise the costs to the central government of an anti-market reaction, although this one was not by design. An important aspect of Chinese economic reform is the floating labor population, workers from the interior who come to the coastal reform provinces to work. These laborers do not become local citizens but instead work under a system of limited rights – effectively an intra-China guest worker system (Solinger 1999). Host provinces retain the right to send

⁴⁵ The Chinese system is based on provincial revenue collection. The more common centralized revenue collection systems can use the same type of arrangements as long as they keep track of revenue collection by province.

these laborers back to their home provinces. This labor population is now huge – over 100 million workers.

The existence of a huge floating labor system has a striking political implication: the most likely response to an anti-reform reaction by the central government would be for the reform provinces to kick out many or most of the floating laborers. This means that 10s of millions of people – perhaps approaching 100 million – would instantly become problems for the central government: how are they to be fed, clothed, and housed? Because hungry people can topple governments, this potential reaction places a significant hurdle in front of political leaders who are tempted to impose an anti-market reaction to economic reform.

The main implication is twofold. First, although China's devolution of power to the provinces at the inception of economic reform was discretionary, the reform's success created strong power centers in the provinces that now counterbalance the center's discretion. Second, the Chinese case has important lessons for the design of decentralization in poor countries traditionally plagued by predatory or under-institutionalized governments. One circumstance is a fiscal or other crisis. A crisis often means that the current government coalition cannot be sustained. As donor agencies have long known, such governments are often willing to exchange reform for aid. Imposing liberal reforms without parallel political reforms leaves the political system in a position to undermine or sabotage economic reform. The alternative to imposing liberal reform alone is to combine policy reform with institutional reform that promotes decentralization. But as noted, not all decentralizations are equal, and many will only worsen economic performance. To succeed, decentralization must devolve real policy and fiscal authority to subnational governments.

6.2. Decentralizing One Step Ahead

The Chinese case also suggests an important strategy for implementing decentralization. Many developing countries face some resistance to decentralization, in part because it is new and may make things worse. Indeed, poorly designed decentralization has made things worse in some countries, for example, due to soft budget constraints or to mismatches in responsibility and resources.

In many developing countries, an across the board decentralization may well be problematic. The political and economic situation of some localities is such that greater freedom will result not in greater

responsiveness to local citizen welfare, but instead greater authority and resources allow local officials to create a larger scope for the system of local rents and corruption (Haggard and Webb 2004).

An alternative to across-the-board decentralization is to decentralize in a series of steps. The idea is first to identify a province or region that is most likely to succeed in fostering local economic growth; and then to design decentralization so that this province obtains new authority, incentives, and resources to reform “one step ahead.” The purpose of this strategy is to create a demonstration effect that decentralization can work in this country.

The Chinese successfully employed this strategy, allowing Guangdong Province to reform one step ahead. Many other provinces were skeptical of reform, and used their increased powers to maintain or even reinforce the traditional system. But Guangdong’s quick success won converts around the country, and even some of the most traditional provinces embraced reform. For example, Heilongjiang Province in China reacted to Guangdong’s market reforms by increasing the standard subsidies of the socialist system. Yet Guangdong’s reforms proved succeeded in lowering market prices of the same goods below the subsidized price elsewhere. Heilongjiang’s fiscal incentives led them to dismantle their expensive subsidies and imitate Guangdong (see Montinola, Qian and Weingast 1995).

A similar, one step ahead strategy has emerged in a de facto way in Mexico with the areas seeking to integrate with the United States economy, and to a lesser degree, in India. In Mexico, the center actively sought to discourage this independent movement from below (per discussion of the tragic brilliance mechanism above), but could not prevent it. Many of the export-localities wrestled political control from the dominant party, the PRI, in order to improve the delivery of local services necessary to foster the light export industry developing in Northern Mexico.

Although the central authorities punished these areas with a marked decline in revenue transfers, the localities made up the revenue deficit by removing corruption – the PRI used their control of local utilities to pad the labor budget by mailing money to supporters throughout Mexico – and by charging user fees for improved local services (Rodriguez 1995 and Rodriguez and Ward 1995). As Rodriguez (1995,166) suggests, “Over the course of only a few years, the ratio of state to local revenues. . . changed from around 70 percent state funding to over 70 percent local funding.”

Citizens and firms willingly paid user fees for reliable, valued services, such as solid waste disposal, water, and road maintenance.

Part of the reason this system works is the high local demand for more efficient services necessary to integrate the economy with the United States. The success of the first two municipalities to attempt this strategy, Ciudad Juarez and Chihuahua in 1983, created the demonstration effect. By the mid-1990s, most of the larger cities in Mexico were governed by the opposition.

7. A Brief Contrast between the FGFF and SGFF Approaches

FGFF and SGFF approaches are complementary rather than competing. FGFF studies the optimal design of fiscal institutions in the context of welfare maximization without respect to the incentives of political officials. SGFF extends and adapts FGFF lessons to the context of incentives and self-interested political officials.

One difference is that SGFF attempts to make explicit the political assumptions underlying FGFF's prescriptions. The conditions of market-preserving federalism make these assumptions explicit. This perspective also helps identify the incentives facing political officials under different forms of decentralization. FGFF scholars have always understood the importance of policy authority, common market and HBC for their prescriptions. Because these conditions were often implicit in the FGFF framework, many decentralizations in the last 20 years have been designed without attention to these conditions. Making them explicit also makes clearer the pathologies arising when decentralization fails to satisfy one or more of these conditions.

The SGFF approach amends FGFF lessons about intergovernmental transfer systems. FGFF tends not to focus on the incentive effects of transfer systems, and many transfer systems around the world provide political officials with poor incentives to foster local economic prosperity. SGFF provides several lessons for the design of transfer systems. First, it emphasizes the critical importance of local government revenue generation. This makes local governments more responsive to citizens, reduces corruption, and increases the incentives to provide market-enhancing public goods. Local revenue generation is also important in a political sense. Central governments of many developing countries decentralize, but with too many strings and conditions that compromise the

effects of decentralization. Subnational governments often have few resources with which to resist the center. Revenue independence grants subnational governments bargaining leverage and hence a degree of independence. Second, SGFF emphasizes the importance of step functions in transfer systems to provide subnational governments with higher marginal incentives to foster local economic prosperity.

More generally, the fiscal interest approach shows that the form of the tax system affects subnational government policymaking, particularly policies with respect to the market. All governments have a bias toward policies that increase their revenue. Because market-enhancing public goods increase their tax revenue, governments that rely on broad-based taxes are more likely to foster local economic prosperity than governments that rely on privileges and monopolies for their revenue. SGFF approaches also emphasize that greater marginal revenue retention by local governments increases incentives of local political officials to provide market-enhancing public goods. Greater marginal tax retention increases the fiscal return from these goods and therefore makes them more attractive to local public decisionmakers.

Perhaps the greatest area of blending of FGFF and SGFF approaches is with respect to financial mechanisms. All scholars now recognize the critical importance of establishing hard budget constraints for all levels of government, especially local ones. Soft budget constraints give poor incentives and lead to a range of financial and economic problems.

8. SGFF Implications for Engineering Decentralized Reform

The SGFF perspective provides a series of recommendations that adapt or supplement those of FGFF models. The early stage of development implies that second generation perspective does not provide a full normative approach to fiscal federalism. Nonetheless, its analysis of incentives of political officials provides several insights into the design of decentralized systems.

- *Decentralization comes in many shapes and sizes, and only some foster economic growth.*

The market-preserving federalism conditions emphasize two points. First, this form of decentralization fosters growth. Second, various pathologies emerge when various of these conditions fail.

- *Properly structured decentralization with improves accountability and public responsiveness by creating yardstick competition so voters in different localities can compare across localities.*

Decentralization puts local governments in competition, but only when it satisfies the conditions market-preserving federalism. Competition has several salutary effects. First, as Tiebout (1956) emphasized, the competition for factors of product provides local governments with incentives for foster local economic prosperity. Second, it provides a means of yardstick competition so that citizens across localities can compare the performance of their government with those of neighboring or like governments. This allows citizens to hold political officials accountable for poor performance relative to other governments (Besley and Case 1995).

- *Implement decentralization “one step ahead.”*

In many developing countries, regions have very different capacities and incentives to adjust to decentralization. Elites in some, for example, may benefit from the existing system and therefore have incentives to sabotage decentralization. In other regions, those in power will use their new resources and powers to increase corruption and rents. Still others may have so little administrative capacity that they cannot take advantage of greater political authority. Eventually, in the presence of a common market and mobile resources, these jurisdictions are likely to have trouble maintaining these policies. But in the short run, these regions work against the success of decentralization. In many developing contexts, decentralization is an experiment that can be reversed (as Haggard and Webb 2004 observe). When many regions work against it, decentralization is more likely to fail before the fruits can appear. Flaws in the design of federalism exacerbate this problem.

One way to mitigate this problem is to implement decentralization in steps. The first step is designed to create a demonstration or yardstick effect that decentralization works. To do so, the center designates one or a small number of regions to gain greater powers and resources and to

reform one step ahead of the others. When the regions chosen are those mostly likely to foster markets, perhaps taking advantage of international opportunities, the decentralization experiment is more likely to be judged a success and can be extended elsewhere. The one step ahead strategy interacts with yardstick competition to provide citizens in other localities with a demonstration effect that decentralization can lead to positive gains. China initiated its decentralization reforms by granting Guangdong province the power to reform one step ahead. The defection of many localities from the once hegemonic PRI system that dominated Mexican politics provides a variant on this logic. The areas defecting were those seeking to gain greater policy control so as to help them integrate with the United States economy.

- *Taxation systems should provide for local authority and control. Subnational governments should be responsible for financing their own expenditures (transfers can be used for equalization). Transfer systems should be predictable. Finally, transfer systems should provide strong marginal incentives*

SGFF models emphasize the importance of local taxation authority. This is both to create greater accountability (Litvak, Ahmad, and Bird 1998) and to create fiscal incentives for local governments to foster local economic growth. The fiscal interest approach emphasizes the importance of a fiscal system that allows subnational governments to capture substantial revenue when they promote growth through market-enhancing public goods. This requires that subnational governments have taxation instruments that respond positively to local economic activity, such as property taxes and user fees for local infrastructure and public services.

This approach has important implications for the design intergovernmental transfers systems. Most transfer systems aimed at redressing vertical and horizontal imbalances result in poor fiscal incentives due to common pool problems. Subnational governments that make major improvements in their local economy see the increased tax revenue spread across the rest of the country.

Designing transfer systems as step functions can mitigate this problem by sharing locally generated revenue with the center but providing subnational governments with strong marginal fiscal incentives to foster local economic growth. Step functions hold the promise of allowing the center to redress horizontal equity while providing strong subnational

incentives to promote local economic growth. Subnational governments that foster local economic prosperity can grow rich at the same time as providing greater revenue to the center to transfer to poorer regions.

- *SGFF models also provide a series of recent lessons about subnational borrowing. Subnational governments should face a HBC and should be allowed to go bankrupt. In particular, the central bank should not be designed with subnational control over branches that take over nonperforming subnational government loans. Subnational governments should also be prohibited from borrowing to finance current expenditures.*

The literature on soft and hard budget constraints provides a series of lessons about the incentives of subnational governments when the financial side of local government spending and borrowing is designed improperly. The expectation of bailouts creates incentives for local governments to spend beyond their means; it also destroys the financial incentives for these governments to foster local economic growth. A hard budget constraint requires that the center avoid bailouts and allow subnational governments to go bankrupt. A central bank with branches in each major province under the control of the province is a recipe for disaster, as Argentina and Brazil experienced.

- *Special districts and “flexible, overlapping, competing, jurisdictions” provide a flexible system for providing local public goods and services (in countries where feasible, such as Latin America), but they must have appropriate institutional rules governing their use and authority.*

Reflecting the fiscal equivalence logic of matching taxpayers with policy beneficiaries, special districts allow citizens to provide local public goods when existing governments cannot provide them or can only do so inefficiently. To prevent abuse and financial problems, these governments must be designed carefully. A majority of citizens of the proposed district must approve all tax and borrowing (and borrowing must be accompanied by taxation that finances the debt charges). It is also imperative that these governments be solely responsible for their own debt. If a larger, general government is ultimately responsible, citizens and political officials of the special government face a form of common pool problem and are more likely to choose projects with negative economic returns.

Under these rules, a majority of citizens will choose to finance a local public good only if they believe it worth more than the tax price they are simultaneously imposing. Similarly, these rules give the bond market strong incentives to evaluate the project to ensure that it will produce positive returns necessary to service the debt.

- *Democracy at the local level increases accountability. But democracy can only play this role in the absence of the tragic brilliance mechanism.*

Democracy provides an obvious value to citizens when it allows them to make choices over competing visions about policy and to throw out bad local officials. Yet the tragic brilliance mechanism – the threat by the center of withholding substantial revenue or policy benefits from localities that support the opposition – perverts elections by preventing citizens from exercising freedom of expression and choice. For democracy to allow freedom of expression and accountability, the political system must fix benefits for basic local public goods and services rather than have them be a function of whether the individual, group, or locality supports the incumbents. More generally, the limit condition shows that democracies are more likely to survive when they limit the stakes of politics.

- *Open access to organizations.*

Open access to organizations – both economic as well as political and social – complements other decentralization reforms. Many developing countries explicitly limit the ability to form both economic and political organizations. Limits on economic organizations restrict economic competition and help maintain policies that generate rents and maintain corruption. Opening access to organizations is therefore important for fostering economic competition necessary to make competitive decentralization work. Because they hinder the ability of citizens to monitor the government and to coordinate against the government in the face of violations of citizen rights, limits on political and social organizations lower government accountability and responsiveness. Open access to these organizations therefore promotes greater accountability of political officials and, more broadly, the civil society.

- *Decentralization in unitary states should be designed with institutional protections so that decentralization is not wholly at the discretion of the central government.*

Decentralization in unitary states that remains wholly at the discretion of the central government is too often compromised. Central control over decentralization allows the center to sabotage decentralization, whether directly by providing subnational governments with too much responsibility and inadequate revenue; or by threatening subnational governments that adopt policies at variance with those of the center. As the both the Mexican and the Chinese experiences suggests, fiscal independence is an important part of political and policy independence, so this seems a critical feature of decentralization within unitary states.

- *Choice of levels to support in decentralization: when labor and capital are more mobile locally than regionally, decentralization should focus on the local level.*

Decentralization in developing countries creates a dilemma about what level of government to support – middle or local. This choice is difficult and hinges on several factors. The FGFF logic of the assignment problem must obviously be a central principle. A SGFF consideration arises from pragmatic considerations. Many developing countries have explicit or implicit restrictions on inter-regional labor and capital mobility; for example, due to national restrictions, ethnic divisions, or to tension across regions. In these circumstances, labor and capital may be more mobile locally than inter-regionally. Per the market-preserving federalism logic, this means that condition F3 fails to hold across regions, so middle level governments have less incentives to foster regional economic prosperity.

Decentralization focusing on local governments in the presence of local labor and capital mobility locally is likely to create local government competition. This competition, given appropriate policy authority (F2) and a hard budget constraint (F4), local governments are likely to positive effects.

9. Conclusions

This essay surveys a range of new research on second generation fiscal federalism. The hallmark of second generation models is that they trace the implications of incentives created by political and fiscal institutions. This work provides a series of natural extensions of first generation models. FGFF models assume policy choice by benevolent social planners. The normative component of SGFF models study how to devise political and fiscal institutions to align the incentives of political officials with citizens so as to approximate the FGFF idea.

The essay covered several topics. The market-preserving federalism framework provides a series of conditions that afford a comparative theory of different forms of decentralization, depending on which of the various conditions characterize a particular federalism. This discussion demonstrated how different institutional forms of decentralization provide different incentives for subnational political officials. It also emphasized a range of pathologies of market-distorting federalism, forms of decentralization that fail to foster markets or which directly hinder markets.

A second topic is the fiscal interest approach. All political officials prefer greater budgets, so at the margin they favor policies that generate more revenue. This implies that the design of the fiscal system provides important incentives for policymakers. The design of federal systems must therefore take these second generation incentives into account.

The fiscal interest approach has several implications for the design of intergovernmental transfer systems. FGFF models suggest that these be designed to redress problems of vertical and horizontal imbalances. Yet standard transfer systems often yield very poor fiscal incentives for subnational officials to provide market-enhancing public goods. As Wiesner (2003) observes, too often these transfer systems provide entitlements rather than markets and incentives. The SGFF approach suggests that subnational governments are far more likely to foster local economic prosperity if they capture significant increase in revenue along with that prosperity. The SGFF perspective suggests that transfer systems be redesigned to as step-functions so as to allow significant horizontal equity while providing high marginal incentives. China's fiscal scheme in the 1980s and early 90s satisfied this property, with the average marginal revenue retention rate for a province being a remarkably high 89 percent.

I also discussed democracy. The benefits of democracy have long been celebrated as means of promoting citizen expression of choice and the accountability of political officials. When democracy works well, it provides both a means of freedom and good governance. Less obvious and too often ignored are the costs of democracy. In the context of decentralized expenditures on local public goods, the tragic brilliance mechanism allows nominally democratic governments to rig elections so that they serve as a mechanism of political control rather than of political choice. Decentralization can improve democracy in ways, including strengthening the limit condition and working against the tragic brilliant mechanism.

A final element of discussion concerned open access to organizations. Open access is essential to the competitive processes in both the economy and the polity. Market competition requires that entrepreneurs be capable of creating organizations to pursue their ideas, take risks, and challenge incumbents. Too often developing countries impose limits on the formation of economic organizations as a means of protecting incumbents and privileged constituents. Similarly, open access in the polity is essential for the civil society; for forming groups that monitor the government, represent citizen interests before the government, and mobilize citizens to advocate for their interests; and to help form and support opposition parties that are essential to democracy. Unfortunately, too often developing countries place restrictions on political and social organizations to protect and entrench their interests and protect the flow of benefits to their constituents.

Democracy at the local level increases accountability. But democracy can only play this role in the absence of the tragic brilliance mechanism. Open access with respect to organizations complements the competitive process in both the economy and the polity. Finally, decentralization in unitary states should be designed with institutional protections so that decentralization is not wholly at the discretion of the central government.

I ended by providing a series of recommendations generated by the SGFF perspective. These included decentralizing in steps, with the first step allowing one or a small number of regions the power to reform “one step ahead.” The fiscal interest model suggests that taxation systems should provide for local authority, control, and responsibility for financing their own expenditures (transfers can be used for equalization). In contrast to the common transfer mechanism, these should be designed to provide strong marginal incentives. SGFF have for over a decade emphasized the

importance of subnational governments should facing a HBC and the prospect that deficits lead to bankruptcy.

References

- Ahlin, Christian. 2005. "Effects and (In)Tractability of Decentralized Corruption." Working Paper, Department of Economics, Vanderbilt University.
- Alesina, Alberto, and Enrico Spolaore. 2003. *The Size of Nations*. Cambridge: M.I.T. Press.
- Bahry, Donna. 1987. *Outside Moscow: Power, Politics, and Budgetary Policy in the Soviet Republics*. New York: Columbia University Press.
- Bardhan, Pranab. 2002. "Decentralization of Governance and Development," *Journal of Economic Perspectives*. 16(4): 185-205.
- Bednar, Jennifer L. 1996. "Federalism: Unstable by Design," MS, Stanford University.
- Bednar, Jennifer L. 2006. *The Robust Federation*. Unpublished manuscript, Department of Political Science, University of Michigan.
- Bednar, Jennifer L., William Eskridge, and John A. Ferejohn. 2001. "A Political Theory of Federalism," in John Ferejohn, Jack Rakove, Jonathan Riley, eds., *Constitutions and Constitutionalism*. New York: Cambridge University Press.
- Besley, Timothy, and Anne Case. 1995. "Incumbent Behavior: Vote-Seeking, Tax-Setting, and Yardstick Competition," *American Economic Review* 85: 25-45.
- Besley, Tim, and Stephen Coate. 2003. "Central versus Local Provision of Public Goods: A Political Economy Analysis" *Journal of Public Economics*. 87(4), 2611-2637.
- Bird, Richard M. 1992. *Tax Policy and Economic Development*. Baltimore: Johns Hopkins University Press.
- Bird, Richard M. 1999. "Rethinking Subnational Taxes: A New Look at Tax Assignment," IMF Working Paper, Washington, DC.
- Blanchard, Olivier, and Andrei Shleifer. 2000. "Federalism with and without Political Centralization: China vs. Russia." Mimeo., Department of Economics, M.I.T.
- Bland, Gary. 2006. "Decentralization and Democratic Local Governance Programming Handbook: Elections and the Development of Democratic Local Governance," Paper delivered at the USAID Workshop, "Decentralization, Local Governance and Democratization," September 18-19, 2006, George Washington University, Washington, DC.
- Bolton, Patrick and Gerard Roland. 1997. "The Breakups of Nations: A Political Economy Analysis", *Quarterly Journal of Economics*, November, pp.1057-89.

- Bolton, P., G. Roland and E. Spolaore. 1996. "Economic Theories of the Break-up and Integration of Nations," *European Economic Review*, April.
- Boadway, Robin, and Frank Flatters. 1982. "Efficiency and Equalization in a Federal System of Government: A Synthesis and Extension of Recent Results," *Canadian Journal of Economics*. 15(4): 613-33.
- Boex, Jamie, and Jorge Martinez-Vazquez. 2006. "Designing Intergovernmental Equalization Transfers with Imperfect Data: Concepts, Practices, and Lessons." Unpublished Manuscript, Andrew Young School of Policy Studies, Georgia State University.
- Boix, Carlos. 2003. *Democracy and Redistribution*. Cambridge University Press.
- Boothe, Paul and I. Kryvoruchko. 2004. "Do Federal Transfers Stabilize Regional Government Revenues? Evidence from Australia and Canada" *Public Finance and Management*, 4, no. 4.
- Brennan and Buchanan 1980. *The Power to Tax*. New York: Cambridge University Press.
- Breton, Albert. 1998. *Competitive Governments: An Economic Theory of Politics and Public Finance*. Cambridge University Press.
- Briffault, Richard. 1996. *Balancing Acts: The Reality Behind State Balanced Budget Requirements*. New York: Twentieth Century Fund Press.
- Brown, Jennifer Gerarda. 1995. "Competitive Federalism and the Legislative Incentives to Recognize Same-Sex Marriage," 68 *Southern California Law Review* 745.
- Buchanan, James M. 1960. *Fiscal Theory and Political Economy*. Chapel Hill: University of North Carolina Press.
- Buchanan, James M. 1965. "An Economic Theory of Clubs," *Economica* 31: 1-14.
- Bueno De Mesquita, Bruce, Alastair Smith, Randolph M. Siverson, and James D. Morrow. 2003. *The Logic of Political Survival*. Cambridge, MA: MIT Press.
- Burns, Nancy. 1994. *The Formation of American Local Governments: Private Values in Public Institutions*. New York: Oxford University Press.
- Careaga, Maite, and Barry R. Weingast. 2003. "Fiscal Federalism, Good Governance, and Economic Growth in Mexico," in Dani Rodrik, ed., *In Search of Prosperity: Analytic Narratives on Economic Growth*. Princeton: Princeton University Press.
- Casella, Alessandra, and Bruno Frey, "Federalism and Clubs: Towards an Economic Theory of Overlapping Political Jurisdictions," in *European Economic Review*, Papers and Proceedings (March 1992) 36: 639-646.
- Chabal, Patrick, and Jean-Pascal Daloz. 1999. *Africa Works: Disorder as Political Instrument*. Bloomington: Indiana University Press.
- Chhibber, Pradeep K., and Ken Kollman. 2004. *The Formation of National Party Systems: Federalism and Party Competition in Canada, Great Britain, India, and the United States*. Princeton: Princeton University Press.

- Cogan, John F., 1994. "The Dispersion of Spending Authority and Federal Budget Deficits," in Cogan, Timothy J. Muris, and Allen Schick, eds., *The Budget Puzzle*. Stanford: Stanford University Press.
- Cohen, Linda R., and Roger G. Noll. 1998. *The Technology Pork Barrel*. Washington, DC: Brookings Institution.
- Congleton, Roger, Adreas Kyriacou, and Jordi Bacaria. 2003. "A Theory of Menu Federalism: Decentralization by Political Agreement." *Constitutional Political Economy*. 14: 167-190.
- Cooter, Robert D. 2003. "The Optimal Number of Governments for Economic Development," in Omar Azfar and Charles A. Cadwell, eds., *Market-Augmenting Government: The Institutional Foundations for Prosperity*. Ann Arbor: University of Michigan Press.
- Courchene, Thomas. 1981. "A Market Perspective on Regional Disparities," *Canadian Public Policy* (Autumn) 7: 506-18.
- Cremer, Jacques, and Thomas R. Palfrey. 2002. "Federal Mandates by Popular Demand," *Journal of Political Economy*, 108(5): 905-27.
- Crook, Richard C., and James Manor. 1998. *Democracy and Decentralization in South Asia and West Africa*. Cambridge: Cambridge University Press.
- de Figueiredo, Rui J.P., Jr., and Barry R. Weingast. 2005. "Self-Enforcing Federalism" *Journal of Law, Economics and Organizations*. (April) 21: 103-35.
- Diamond, Larry. 2002. "Thinking About Hybrid Regimes" *Journal of Democracy*. 13.
- Diamond, Larry, and Ramon Myers H. 2001. *Elections and Democracy in Greater China*. New York: Oxford University Press.
- Diaz-Cayeros, Alberto. 2006. *Federalism, Fiscal Authority and Centralization in Latin America*. New York: Cambridge University Press (forthcoming).
- Diaz-Cayeros, Alberto, Kenneth M. McElwain, Vidal Romero and Konrad A. Siewierski, 2002. "Fiscal decentralization, legislative institutions and particularistic spending" Working Paper, Department of Political Science, Stanford University.
- Diaz-Cayeros, Alberto, Beatriz Magaloni and Barry R. Weingast. 2005 "Tragic Brilliance: Equilibrium Party Hegemony in Mexico," Working Paper, Hoover Institution, Stanford University.
- Diaz-Cayeros, Alberto, Beatriz Magaloni and Barry R. Weingast. 2006. "Locking In the Poor: Why Authoritarian Regimes Sabotage Economic Reform to Stay In Power." Working Paper, Hoover Institution, Stanford University.
- Dillinger, William, and Steven B. Webb, "Fiscal Management in Federal Democracies: Argentina and Brazil," Working Paper, World Bank, 1999.
- Eaton, Kent. 2006. "The Negative Impact of Decentralization on Security: Armed Clientelism in the Colombian Conflict," *Security Studies* (forthcoming).

- Enikolopov, Ruben, and Ekaterina Zhuravskaya. 2002. "Influence of political institutions on the effect of decentralization" Center for Economic and Financial Research (CEFIR), Moscow, Russia.
- Epple, Dennis, and Thomas Romer. 1991. "Mobility and Redistribution" *Journal of Political Economy*. 99: 828-76.
- Epple, Dennis, and Alan Zelenitz. 1981. "The Implications of Competition among Jurisdictions: Does Tiebout Need Politics?" *J of Economic Theory* 89: 1197-217.
- Filippov, Mikhail, Peter Ordeshook, and Olga Shvetsova. 2003. *Designing Federalism: A Theory of Self-Sustainable Federal Institutions*. Cambridge University Press.
- Fornasari, Francesca, Steven B. Webb, and Heng-Fu Zou. 1999. "Decentralized Spending and Central Government Deficits: International Evidence," WP, WB.
- Frey, Bruno S., and Reiner Eichenberger. 1999. *The New Democratic Federalism for Europe: Functional, Overlapping, and Competing Jurisdictions*. Cheltenham, UK: Elgar.
- Garman, Christopher, Stephan Haggard, Eliza Willis. 2000. "Fiscal Decentralization: A Political Theory with Latin American Cases." *World Politics*. (January) 53: 205-36.
- Garzarelli, Giampaolo. 2004. "The Theory of Fiscal Federalism as a Theory of Economic Organization: Assessment and Prospectus." Working Paper, Department of Economics, Università degli Studi di Roma, "La Sapienza", Rome, Italy.
- Gilligan, Thomas, and John Matsusaka. 1995. "Deviations from Constituent Interests: the Role of Legislative Structure and Political Parties in the States." *Economic Inquiry*, 33: 383-401.
- Haber, Stephen. 2005. "Political Institutions and Financial Development: Evidence from the Political Economy of Banking Regulation in the United States and Mexico." Stanford Center for International Development Working Paper.
- Haggard, Stephan, and Steven B. Webb. 2004. "Political Incentives and Intergovernmental Fiscal Relations: Argentina, Brazil, and Mexico Compared," in Montero, Alfred P., and David J. Samuels, eds., *Decentralization and Democracy in Latin America*. Notre Dame, IN: Notre Dame University Press.
- Hatfield, John William. 2006. "Federalism, Taxation, and Economic Growth," Stanford University Graduate School of Business Research Paper No. 1929.
- Hooghe, Liesbet, and Gary Marks. 2003. "Unraveling the Central State, but How? Types of Multi-level Governance," *American Political Science Review* (May) 97: 233-43
- Hiskey, Jonathan. 2006. "Principals, Agents and the Goal of Decentralized Democratic Development," Paper delivered at the USAID Workshop,

- “Decentralization, Local Governance and Democratization,” September 18-19, 2006, George Washington University, Washington, DC.
- Iaryczower, Matias, Sebastian Saiegh, and Mariano Tommasi. 2000. “Coming Together: The Industrial Organization of Federalism.” Working Paper, Universidad de San Andres, Argentina.
- Inman, Robert P. 1988. “Federal Assistance and Local Services in the United States: The Evolution of a New Federalist Fiscal Order,” in Harvey S. Rosen, ed., *Fiscal Federalism: Quantitative Studies*. Chicago: University of Chicago Press.
- Inman, Robert P. 2003. “Local Fiscal Discipline in U.S. Federalism,” in Rodden, Eskeland, and Litvack (2003).
- Inman, Robert P., and Michael Fitts. 1990. “Political Institutions and Fiscal Policy: Evidence from the U.S. Historical Record,” *Journal of Law, Economics, and Organization*. 6 (special issue): 79-132.
- Inman, Robert P., and Daniel L. Rubinfeld. 1993. *Political Economy of Federalism*. Unpublished book manuscript.
- Inman, Robert P., and Daniel L. Rubinfeld. 1997a. “The Political Economy of Federalism,” in Dennis C. Mueller, ed., *Perspectives on Public Choice Theory*. New York: Cambridge University Press.
- Inman, Robert P., and Daniel L. Rubinfeld. 1997b. “Rethinking Federalism.” *Journal of Economic Perspectives*, (Fall) 11: 43-64.
- Inman, Robert P., and Daniel L. Rubinfeld. 2005. “Federalism and the Democratic Transition: Lessons from South Africa,” Working Paper, Wharton School of Business, University of Pennsylvania.
- Jin, Hehui, Yingyi Qian, and Barry R. Weingast. 2005. “Regional Decentralization and Fiscal Incentives: Federalism, Chinese Style,” *Journal of Public Economics* 89: 1719-42.
- Johnson, Robert N., and Gary D. Libecap. (2003) "Transactions costs and coalition stability under majority rule," *Economic Inquiry*, 41 (April): 193-207.
- Jones, Mark P., Pablo Sanguinetti, and Mariano Tommasi. 2000. “Politics, Institutions, and Fiscal Performance in a Federal System: An Analysis of the Argentine Provinces.” *Journal of Development Economics*. 61(2): 305-333.
- Keen, M. & Marchand, M., 1996. "Fiscal Competition and the Pattern of Public Spending," Papers 9601, Catholique de Louvain - Center for Operations Research and Economics.
- Kenny, Lawrence W., and Stanley L. Winer. 2006. “Tax Systems in the World: An Empirical Investigation into the Importance of Tax bases, Administration Costs, Scale, and Political Regime.” *International Tax and Public Finance*. 13: 181-215.
- Kornai, Janos. 1986. “The Soft Budget Constraint,” *Kyklos* 30: 3-30.

- Knight, Brian. 2004a. Parochial Interests and the Centralized Provision of Local Public Goods: Evidence from Congressional Voting on Transportation Projects. *Journal of Public Economics*. 88(3-4): 845-866.
- Knight, Brian. 2004b. "Legislative Representation, Bargaining Power, and the Distribution of Federal Funds: Evidence from the U.S. Senate," NBER Working Paper No. 10385, National Bureau of Economic Research, Cambridge, MA.
- Kotsogiannis, Christos, and Robert Schwager. 2006. "Fiscal Equalization and Yardstick Competition," paper delivered at the Conference, "New Directions in Fiscal Federalism," September 14-16, 2006, Lexington, Kentucky.
- Krueger, Anne. 2006. "The Role Of Freedom, Openness And Individual Enterprise In Economic Development." Paper given at the Conference on "Freedom and Development," London School of Economics, May 25-26, 2006.
- Levi, Margaret. 1988. *Of Rule and Revenue*. Berkeley: University of California Press.
- Lijphart, Arend. 1975. *The Politics of Accommodation: Pluralism and Democracy in the Netherlands*. 2nd ed. Berkeley: University of California Press.
- Lindahl, Erik. 1919 [1958]. "Just Taxation – A Positive Solution," in Richard A. Musgrave and Alan T. Peacock, eds., *Classics in the Theory of Public Finance*. New York: Short-term Martin's Press.
- Lipset, Seymour Martin. 1963. *Political Man: The Social Bases of Politics*. Garden City: Anchor Books.
- Litvack, Jennie, Junaid Ahmad, and Richard Bird. 1998. *Rethinking Decentralization in Developing Countries*. The World Bank Sector Studies Series. Washington, D.C.: World Bank.
- Lockwood, Ben. 2002. Distributive politics and the benefits of decentralization. *Review of Economic Studies*, 69:313—338, 2002.
- Mariscal, Elisa, and Kenneth L. Sokoloff. 2000. "Schooling, Suffrage, and the Persistence of Inequality in the Americas, 1800-1945" in Stephen Haber, ed., *Political Institutions and Economic Growth in Latin America: Essays in Policy, History, and Political Economy*. Stanford: Hoover Institution Press.
- McKinnon, Ronald I. 1997. "Market-Preserving Fiscal Federalism in the American Monetary Union," in Mario I. Blejer and Teresa Ter-Minassian, eds., *Macroeconomic Dimensions of Public Finance*, New York: Routledge, pp.73-93.
- McKinnon, Ronald, and Thomas Nechyba. 1997. "Competition in Federal Systems: The Role of Political and Financial Constraints," in John Ferejohn and Barry R. Weingast, eds., *The New Federalism: Can the States Be Trusted?* Stanford: Hoover Institution Press.

- McLure, Charles E., Jr. 1993. "Vertical Fiscal Imbalance and the Assignment of Taxing Powers in Australia," Essays in Public Policy, Hoover Institution, Stanford University.
- McLure, Charles E., Jr. 1998. "Tax Assignment Problem: Conceptual Administrative Considerations in Achieving Subnational Fiscal Autonomy," paper presented at the Intergovernmental Fiscal Relations and Local Financial Management Course," Vienna, Austria, March 16-27, 1998.
- McLure, Charles E., Jr. 2000. "Tax Assignment and Subnational Fiscal Autonomy," *Bulletin for International Fiscal Documentation*, (December) 54: 626-35.
- Montinola, Gabriella, Yingyi Qian, and Barry R. Weingast. 1995. "Federalism, Chinese Style: The Political Basis for Economic Success in China" *World Politics* (October) 48: 50-81.
- Myerson, Roger B. 2006. "Federalism and Incentives for Success of Democracy" *Quarterly Journal of Political Science*. 1:3-23.
- Musgrave, Richard. 1959. *Public Finance*. New York: McGraw Hill.
- Musgrave, Richard. 1983. "Who Should Tax, Where, and What?" in Charles E. McLure, Jr., ed., *Tax Assignment in Federal Countries*. Canberra: Centre for Research on Federal Financial Relations, Australian National University.
- Nechyba, Thomas, and R. Strauss. 1997. "Community Choice and Local Public Services: A Discrete Choice Approach." *Regional Science and Urban Economics*.
- North, Douglass C., John Joseph Wallis, and Barry R. Weingast. 2006. "A Framework for Interpreting Recorded Human History," Working Paper, Hoover Institution, Stanford University.
- Oates, Wallace. 1972. *Fiscal Federalism*. New York: Harcourt Brace Jovanovich.
- Oates, Wallace. 1985. "Searching for Leviathan: An Empirical Study," *American Economic Review*, Sept 75: 748-57.
- Oates, Wallace. 1999. "An Essay on Fiscal Federalism" *Journal of Economic Literature*. (September) 37: 1120-49.
- Oates, Wallace E. 2005. "Toward a Second-Generation Theory of Fiscal Federalism," *International Tax and Public Finance* 12, 349-373.
- O'Donnell, Guillermo, and Philippe C. Schmitter, *Transitions from Authoritarian Rule: Tentative Conclusions about Uncertain Democracies*. Baltimore: Johns Hopkins University Press, 1986.
- Offe, Claus. 1992. "Strong Causes, Weak Cures," *East European Constitutional Review*, 1(1): 21-23.
- Oksenberg, Michael, James Tong. 1991. "The Evolution of Central-provincial Fiscal Relations in China, 1971-1984: The Formal System," *The China Quarterly* 125: 1-32.
- Olson, Mancur. 1969. "The Principle of 'Fiscal Equivalence': The Division of Responsibilities among Different Levels of Government," *American Economic Review*. (May) 59: 479-87.
- Olson, Mancur. 1986. "Toward a More General Theory of Governmental Structure," *American Economic Review*. (May) 76: 120-25.

- Ordeshook, Peter C., and Olga Shvetsova. 1997. "Federalism and Constitutional Design," *Journal of Democracy* (1997) 8(1): 27-42.
- Ostrom, Elinor. 1991. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press.
- Ostrom, Elinor, Larry Schroeder, and Susan Wynne. 1993. *Institutional Incentives and Sustainable Development: Infrastructure Policies in Perspective*. Boulder, CO: Westview Press.
- Parikh, Sunita A., and Barry R. Weingast. 2003. "Partisan Politics and the Structure and Stability of Federalism, Indian Style," Working Paper, Stanford Center for International Development, Stanford University.
- Poterba, James M., and Jurgen von Hagen. 1999. *Fiscal Institutions and Fiscal Performance*. Chicago: University of Chicago Press.
- Przeworski, Adam. 2006. "Self-enforcing Democracy," in Barry R. Weingast and Donald Wittman, eds., *Handbook of Political Economy*. Oxford: Oxford University Press.
- Putnam, Robert. 1983. *Making Democracy Work*. Princeton: Princeton University Press.
- Qian, Yingyi, and Barry R. Weingast. 1997. "Federalism as a Commitment to Preserving Market Incentives" *Journal of Economic Perspectives* (Fall) 11: 83-92.
- Revesz, Richard. 1997. "Federalism and Environmental Policy: A Normative Critique." in John Ferejohn and Barry R. Weingast, eds., *The New Federalism: Can the States Be Trusted?* Stanford: Hoover Institution Press.
- Riker, William H. 1964. *Federalism: Origins, Operations, and Significance*. Boston: Little, Brown.
- Riker, William H. 1982. *Liberalism Against Populism*. San Francisco: W.H. Freeman, 1982.
- Rodden, Jonathan. 2003. "Reviving Leviathan." *International Organization*. (Fall) 57: 695-729.
- Rodden, Jonathan. 2005. *Hamilton's Paradox: Promise and Perils of Fiscal Federalism*. New York: Cambridge University Press.
- Rodden, Jonathan, Gunnar Eskeland, and Jennie Litvack, eds. 2001. *Decentralization and the Challenge of Hard Budget Constraints*. Forthcoming, Cambridge: MIT Press.
- Rodden, Jonathan, and Erik Wibbles. 2002. "Beyond the Fiction of Federalism: Macroeconomic Management in Multitiered Systems," *World Politics*. 54 (July): 494-531.
- Rodriguez, Victoria E. 1995. "Municipal Autonomy and the Politics of Inter-governmental Finance: Is it Different for the Opposition?" in Rodriguez and Ward (1995).
- Rodriguez, Victoria E., and Peter M. Ward. 1995. *Opposition Government in Mexico*. Albuquerque: University of New Mexico Press.
- Rubinfeld, Daniel. 1987. "Economics of the Local Public Sector," *Handbook of Public Economics* vol. II, ed. by A. J. Auerbach and M. Feldstein. New York: Elsevier. pp. 571-646.

- Sanguinetti, Pablo J. 1994. "Intergovernmental Transfers and Public Sector Expenditures: A Game-Theoretic Approach." *Estudios de Economia*. 21(2): 179-212.
- Sbragia, Alberta M. 1996. *Debt Wish: Entrepreneurial Cities, U.S. Federalism, and Economic Development*. Pittsburgh: University of Pittsburgh Press.
- Scotchmer, Suzanne. 1994. "Public Goods and the Invisible Hand," in J. Quigley and E. Smolenski, eds., *Modern Public Finance*. Cambridge: Harvard University Press.
- Shah, Anwar. 1997. "Fiscal Federalism and Macroeconomic Governance: For Better or Worse?" Working Paper, World Bank.
- Shah, Anwar. 1997a. "The Quest for the Right Balance and Responsive and Accountable Governance: Lesson from Decentralization Experience," WP, WB.
- Shah, Anwar. 1997b. "Balance, Accountability, and Responsiveness: Lessons from Decentralization." WP #, World Bank, Washington, D.C.
- Shah, Anwar. 1998. "Indonesia and Pakistan: Fiscal Decentralization – An Elusive Goal?" in Richard M. Bird and Francois Vaillancourt, eds., *Fiscal Decentralization in Developing Countries*. Cambridge: Cambridge University Press.
- Shirk, Susan. 1993. *The Political Logic of Economic Reforms in China*. Berkeley: University of California Press.
- Shleifer, Andrei, and Robert Vishny. 1993. "Corruption," *Quarterly Journal of Economics* (Aug) 108: 599-618.
- Shleifer, Andrei, and Robert W. Vishny. 1998a. *The Grabbing Hand: Government Pathologies and Their Cures*. Cambridge, MA: Harvard University Press.
- Shleifer, Andrei, and Robert W. Vishny. 1998b. "Government in Transition," ch. 11 in Shleifer and Vishny (1998a).
- Siegle, Joseph. 2006. "Assessing The Merits of Decentralization as a Conflict Mitigation Strategy," Paper delivered at the USAID Workshop, "Decentralization, Local Governance and Democratization," September 18-19, 2006, George Washington University, Washington, DC.
- Singh, Nirvikar, and T.N. Srinivasan. 2006. "Federalism and Economic Development in India: An Assessment," SCID Conference on the "Challenges of Economic Policy Reform in Asia," Stanford University, June 1-3, 2006.
- Slider, Darrell. 1997. "Russia's Market-Distorting Federalism," *Post-Soviet Geography and Economics*. 38: 489-504.
- Smith, Adam. 1776. *Wealth of Nations*.
- Snyder, Jack. 2000. *From Voting to Violence: Democratization and Nationalist Conflict*. New York: Norton.
- Solinger, Dorothy J. 1999. "China's Floating Population: Implications for State and Society" in *The Paradox of China's Post-Mao Reforms*, edited by Roderick MacFarquhar and Merle Goldman. Cambridge: Harvard University Press.

- Stein, Ernesto. 1998. "Fiscal Decentralization and Government Size in Latin America," Working Paper, Office of the Chief Economist, Inter-American Development Bank.
- Stein, Ernesto, Mariano Tommasi, et al. 2005. *The Politics of Policies: Economic and Social Progress in Latin America*. Washington, DC: Inter-American Development Bank and the David Rockefeller Center for Latin America Studies, Harvard University.
- Stepan, Alfred. 2004a. "Toward a New Comparative Politics of Federalism, Multinationalism, and Democracy: Beyond Rikerian Federalism," in Edward L. Gibson, ed., *Federalism and Democracy in Latin America*. Baltimore: Johns Hopkins University Press.
- Stepan, Alfred. 2004b. "Electorally Generated Veto Players in Unitary and Federal Systems," in Edward L. Gibson, ed., *Federalism and Democracy in Latin America*. Baltimore: Johns Hopkins University Press.
- Stockman, David. 1975. "The Social Pork Barrel," *Public Interest* 39: 3-30.
- Thomson, James T. n.d. "Special Districts: An Institutional Tool for Improved Common Pool Resource Management." <http://dlc.dlib.indiana.edu/archive/00000364/00/thomsonj060200.pdf>, accessed, March 30, 2006.
- Tiebout, Charles. 1956. "A Pure Theory of Local Expenditures." *Journal of Political Economy*, 64:416-24.
- Timmons, Jeffrey F. 2005. "The Fiscal Contract: States, Taxes, and Public Services." *World Politics* (July) 57: 530-67.
- Tommasi, Mariano, Mark Jones, and Pablo Sanguinetti. 2000. "Politics, Institutions, and Fiscal Performance in a Federal System: An Analysis of the Argentine Provinces," *Journal of Development Economics* 61,2: 305-333.
- Treisman, Daniel. 1999. "Political Decentralization and Economic Reform: A Game-Theoretic Analysis," *American Journal of Political Science*, 43, 2: 488-517.
- Treisman, Daniel. "The Causes of Corruption: A Cross-National Study," *Journal of Public Economics*, 76(3): 399-457.
- Volden, Craig. 2000. "Constitutional Choice and Relative Spending in Unitary and Federal Systems," Paper delivered at the American Political Science Association Convention.
- Volden, Craig. 2004. "Origin, Operation, and Significance: The Federalism of William H. Riker," *Publius: the Journal of Federalism* 34(4): 89-107.
- Wallis, John Joseph. 2001. "The Property Tax as a Coordinating Device: Financing Indiana's Mammoth Internal Improvement System, 1835-1842." Working Paper, University of Maryland.
- Wallis, John Joseph. 2006. "Systematic Corruption," in Edward L. Glaeser and Claudia Goldin, eds., *Corruption and Reform: Lessons from America's Economic History*. Chicago: University of Chicago Press.
- Wallis, John Joseph, Richard E. Sylla, and John B. Legler. 1994. "The Interaction of Taxation and Regulation in Nineteenth Century U.S. Banking," in Claudia Goldin and Gary D. Libecap, eds., *The Regulated Economy: A Historical Approach to Political Economy*. Chicago: University of Chicago Press.

- Wallis, John Joseph, and Barry R. Weingast. 2005. "Federal Impotence: Why the States and Not the American National Government Financed Infrastructure Investment in the Antebellum Era," Working Paper, Hoover Institution, Stanford University.
- Wallis, John Joseph, and Barry R. Weingast. 2006. "Dysfunctional or Optimal Institutions?: State Debt Limitations, the Structure of State and Local Governments, and the Finance of American Infrastructure," Working Paper, Hoover Institution, Stanford University.
- Watts, Ronald L. 1999. *Comparing Federal Systems*. Montreal: McGill-Queen's University Press.
- Weingast, Barry R. 1995. "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development," *Journal of Law, Economics, and Organization*. (Spring) 11: 1-31.
- Weingast, Barry R. 1997. "The Political Foundations of Democracy and the Rule of Law," *American Political Science Review*. (June) 91: 245-63.
- Weingast, Barry R. 1998. "Political Institutions and Civil War: Institutions, Commitment, and American Democracy," in Robert Bates, Avner Greif, Margaret Levi, Jean-Laurent Rosenthal, and Barry R. Weingast, *Analytic Narratives*. Princeton: Princeton University Press.
- Weingast, Barry R. 2005. "The Performance and Stability of Federalism: An Institutional Perspective" in Claude Menard and Mary Shirley, eds., *Handbook of the New Institutional Economics*. Springer-Verlag.
- Weingast, Barry R. 2006. "Self-Enforcing Constitutions: With An Application to Democratic Stability in America's First Century" Working Paper, Hoover Institution, June.
- Weingast, Barry R., Kenneth A. Shepsle and Christopher Johnsen. 1981. "The Political Economy of Benefits and Costs: A Neoclassical Approach to Distributive Politics," *Journal of Political Economy* 89 (August 1981), pp. 642-664.
- Wibbels, Erik. 2003. "Bailouts, Budget Constraints, And Leviathans Comparative Federalism and Lessons From the Early United States," *Comparative Political Studies*. (June) 36: 475-508.
- Wibbels, Erik. 2005. *Federalism and the Market: Intergovernmental Conflict and Economic Reform in the Developing World*. New York : Cambridge University Press, 2005.
- Wicksell, Knut. 1896 [1967]. "A New Principle of Just Taxation" in R.A. Musgrave and A.T. Peacock, eds., *Classics in the Theory of Public Finance*. New York: St. Martin's Press.
- Widner, Jennifer A. 2001. *Building the Rule of Law*. New York: W.W. Norton.
- Wiesner, Eduardo. 2003. *Fiscal Federalism in Latin America: From Entitlements to Markets*. Washington, DC: Inter-American Development Bank.
- Wildasin, David E. 1991. "Income Redistribution in a Common Labor Market," *American Economic Review* (Sept.) 81: 757-774.
- Wildasin, David. 1997. "Externalities and Bailouts: Hard and Soft Budget Constraints in Intergovernmental Fiscal Relations." Typescript. Vanderbilt University.

- Wilson, John D. 1991, "Tax Competition with Interregional Differences in Factor Endowments," *Regional Science and Urban Economics* 21: 423–451.
- Wilson, John D. 1999. "Theories of Tax Competition," *National Tax Journal* 52: 269-304.
- Wilson, John D., and David E. Wildasin. 2004. "Capital Tax Competition: Bane or Boon," *Journal of Public Economics*. 88: 1065-91.
- Winer, Stanley L. 1980. "Some Evidence on the Effect of the Separation of Spending and Taxing Decisions," *Journal of Political Economy* 91(1): 126-140.
- Winer, Stanley L., and Walter Hettich. 2006. "Structure and Coherence in the Political Economy of Public Finance," in Barry R. Weingast and Donald Wittman, eds., *Handbook of Political Economy*. Oxford: Oxford University Press.
- Zhuravskaya, Ekaterina. 2000. "Incentives to Provide Local Public Goods: Fiscal Federalism Russian Style," *Journal of Public Economics* 76(3).
- Zodrow, George R., and Peter Mieszkowski. 1986. "The New View of the Property Tax: A Reformulation." *Regional Science and Urban Economics* 16 (August): 309-27.