

Illinois Law and Economics Working Papers Series Working Paper No. LE06-001 January, 2006

THE ECONOMICS OF FEDERALISM

Larry E. Ribstein* and Bruce Kobayashi**

*Richard W. and Marie L. Corman Professor, University of Illinois College of Law **Associate Dean and Professor of Law, George Mason University School of Law

This paper can be downloaded without charge from the Social Science Research Network Electronic Paper Collection:

http://papers.ssrn.com/pape.tar?abstract_id=875626

GEORGE MASON UNIVERSITY SCHOOL OF LAW

THE ECONOMICS OF FEDERALISM

Larry E. Ribstein Bruce H. Kobayashi

06-15

GEORGE MASON UNIVERSITY LAW AND ECONOMICS RESEARCH PAPER SERIES

This paper can be downloaded without charge from the Social Science Research Network at http://ssrn.com/abstract_id=875626

The Economics of Federalism

Bruce H. Kobayashi & Larry E. Ribstein

January 6, 2006

Abstract

This is the introductory essay for the *Economics of Federalism*, a book edited by the authors and forthcoming in Edward Elgar Publishing's ECONOMIC APPROACHES TO LAW series. This essay discusses the major issues and theories concerning federal political systems, which we define as systems that have a hierarchy of at least two distinct "state" and "central" levels, each with a well-defined scope of authority. The essay discusses two branches the economics literature. The first branch, on competitive federalism, stems from Tiebout's 1956 article. It focuses on the horizontal structure of federalism and examines jurisdictional competition between state governments for mobile individuals and resources. The second branch of the literature, on fiscal federalism, examines the vertical structure of federalism, or the division of public services and taxing power between the central and state governments. The essay also examines applications of the economic analysis of federalism to specific areas of the law, including corporate law, antitrust law, environmental law, choice of law rules, contractual choice of law, and public choice theory.

I. THE TIEBOUT THEORY	3
II. OTHER BENEFITS OF FEDERALISM.	4
A. EXIT RIGHTS AND VOICE	4
B. THE PROMOTION OF ECONOMIC GROWTH AND DEVELOPMENT	4
C. FEDERALISM, INNOVATION, AND INFORMATION	5
D. THE OPTIMAL SCALE OF GOVERNMENT	5
III. PROBLEMS OF FEDERALISM.	6
A. SPILLOVERS	6
B. DISTRIBUTION ISSUES	6
C. CONSTRAINTS ON MOBILITY	6
D. USING GRANTS TO SOLVE PROBLEMS OF FISCAL FEDERALISM.	7
III. THE SIZE, SHAPE AND EXISTENCE OF FEDERAL SYSTEMS	7
IV. CONSTRAINTS ON THE FEDERAL GOVERNMENT	8
V. SUPPLY SIDE CONSIDERATIONS	9
VI. EFFECT OF FEDERALISM ON POLITICAL STRUCTURE	9
VII. COORDINATION AMONG SUBORDINATE STATES	9
VIII. FEDERALISM AND INDIVIDUAL RIGHTS	10
IX. LEGAL CONSTRAINTS ON FEDERALISM	11
X. SPECIFIC APPLICATIONS	11
A. CORPORATE LAW	11
B. ANTI-TRUST AND REGULATION	12
C. ENVIRONMENTAL LAW	12

XI. CONCLUSION	14
H. LAW AND DEVELOPMENT	14
G. MARRIAGE AND OTHER SOCIAL POLICY ISSUES	13
F. Takings	13
E. Welfare reform	13
D. PROPERTY AND TRUST LAW	13

12

Federal political systems have a hierarchy of at least two distinct levels, referred to here as "state" and "central," each with a well-defined scope of authority so that each level is autonomous within its scope (Riker 1964). Federal structures are used in many countries (Riker 1964). The primary economic question is how to allocate government functions and means of carrying out these functions among governments at different levels of the hierarchy. One main branch of the economic literature, the literature on competitive federalism, focuses on the horizontal structure of federalism. These articles examine jurisdictional competition between state governments for mobile individuals and resources (Tiebout 1956). A second main branch of the literature is that on fiscal federalism literature (Oates 1972; Breton 1988). These papers examine how the provision of public services and taxing power should be divided between the central and state governments – that is, federalism's vertical structure. The central government should use fiscal policy to correct spillovers and other distortions that result from uncoordinated state policymaking. Any study of federalism ideally should cover both the

I. THE TIEBOUT THEORY

horizontal and vertical structures of government (Keen & Kotsogiannis 2002). But because this may not be practicable, analysts often have focused on one or the other.

The economic theory of federalism began with a study of taxes and provision of public goods. The modern literature on the economics of federalism is often traced back to Tiebout's (1956) article on state public expenditures. Tiebout argued that Samuelson's (1954) hypothesis that governments would under-produce public goods did not necessarily apply to the provision of public goods by competing state governments. Tiebout, in effect, viewed these governments as markets in which individuals, like consumers, choose the jurisdictions that best satisfy their preferences for public goods and taxes. Under this view, public goods would be efficiently allocated when (1) people and resources are mobile, (2) the number of jurisdictions is large, (3) jurisdictions are free to select any set of laws they desire, and (4) there are no spillovers (Oates, 1972).

Numerous articles have tested empirically the assumptions and hypotheses the Tiebout model generates. Early tests of the hypothesis postulated that housing prices would correlate negatively with local government tax rates and positively with local government spending levels. Oates (1969) found that housing prices negatively related to the effective tax rate and positively with public school expenditures per pupil. However, critics noted that no such relationship should exist in full Tiebout equilibrium, when taxes equal the price of efficiently provided local government services (Hamilton 1976). Thus, the rejection of the null hypothesis of no relationship between housing prices and fiscal variables indicated that such a Tiebout equilibrium did not exist. Epple et al. (1978) showed that correlations between housing prices and local government fiscal variables cannot test a more refined hypothesis based on the Tiebout theory.

A second set of papers testing the Tiebout theory used sub-county data to examine whether lower mobility costs were associated with greater Tiebout sorting. Gramlich & Rubinfeld (1982) estimated public spending demand functions and found that variance in local spending demand within communities was significantly lower than the statewide variance. This finding is consistent with Tiebout sorting of individuals with similar demands for public spending. Gramlich & Rubinfeld also found that estimated preferences for median voters in urban areas were consistent with actual levels of local government services provided. However, the results were weaker in rural areas, where mobility costs are higher. These results are consistent with local jurisdictions providing the desired level of services in the presence of low mobility costs. On the other hand, Rhode & Strumpf (2003) found that decreased mobility costs over time were not associated with increases in intercommunity heterogeneity in local taxation and service levels, which is inconsistent with Tiebout sorting. This suggests that forces reducing cross-community heterogeneity overwhelmed Tiebout forces over time.

II. OTHER BENEFITS OF FEDERALISM.

The literature on the economics of federalism since Tiebout has articulated several benefits of federal systems in addition to the sorting and matching theorized by Tiebout. While many these benefits are supported by exit rights and mobility, some are not dependent upon such mobility (Oates, 1972; 1999).

A. EXIT RIGHTS AND VOICE

By letting a voter supplement his "voice" with an option to "exit" the jurisdiction, exit rights under federalism can powerfully check state governments' powers to tax and regulate (Epstein 1992). Exit rights effectively bring market forces to bear on political structures. While the literature on competitive federalism largely has focused on exit rights, some have pointed out that there is an optimal balance of exit and voice. These tradeoffs can be complex, as ease of exit theoretically can reduce use of voice to a suboptimal level Hirschman (1972) analyzes these tradeoffs generally in the context of firms and of unitary governments, but does not explicitly address federalism issues. Decentralized federal political structures may be optimal even in the absence of viable exit rights because reducing the size of the jurisdiction may enhance the exercise of voice (Brennan & Buchanan 1980).

B. THE PROMOTION OF ECONOMIC GROWTH AND DEVELOPMENT

Federal systems can increase economic growth and development. The theory known as "market preserving federalism" sets out several conditions under which a federal system will effectively preserve markets and provide incentives for economic growth and development (Weingast 1995; Qian & Weingast 1997). Under this theory, a nation adopts political institutions that credibly commit it to self-enforcing structure of limited government. Under this self-enforcing design, state units have primary regulatory responsibility, there are no barriers to trade, and state governments face "hard" budget constraints in the sense that they can neither print money nor engage in unlimited borrowing. Under these conditions, property rights will be respected and contracts enforced primarily at the state level. The self-enforcing design also must constrain the power of the federal government. Thus, the central government would have authority only over national issues and could not undo state protections, and states would not have

incentives to defect from this agreement by free-riding. The jurisdictions would interact through a common market, which fosters growth and development.

C. FEDERALISM, INNOVATION, AND INFORMATION

A federal system has the potential advantage over a unitary system that the state jurisdictions can be laboratories to experiment with various mixes of laws, taxes and services (Oates 1999). The notion of the states as laboratories has great intuitive appeal and therefore has influenced the legal treatment of federalism. For example, Justice Brandeis, in his oft quoted dissent in *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932), noted that "it is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country." State by state determination of issues is less likely than federal government determination to result in nationwide uniform policy choices, especially if individuals sort themselves according to their heterogeneous preferences. The advantages of state variation over centralized uniformity are emphasized by the competitive federalism literature and underlie the "decentralization theorem" of fiscal federalism literature (Oates 1999).

The central government theoretically can conduct limited policy experiments even without a federal system (Oates 1999). But a partitioned federal system at least increases the likelihood such experimentation may occur. State governments are better informed than the central government as to their constituents' needs. (Oates 1999, 1972). Because decentralized governments are presumably closer to their constituents, they are much more likely to possess superior knowledge of local preferences and cost conditions (Hayek 1945). And while the central government theoretically can employ local agents, local government agents have stronger political incentives than those of the central government to take their constituents' preferences into account (Oates 1999). These information and political advantages suggest that states will have a comparative advantage over the central government in producing variation and experimentation. On the other hand, state politicians may under-produce costly innovation if those in other states can free-ride on them (Rose-Ackerman 1980, Strumpf 2002), unless quasi-property rights or other institutional mechanisms are available to address this free-riding (Ribstein 2004).

D. THE OPTIMAL SCALE OF GOVERNMENT

State governments may be able to operate closer to the optimal scale than a unified government (Tullock 1969). Although central government provision of services can internalize spillovers, at some point of expansion the costs of political bargaining among individuals and groups may exceed internalization benefits. These costs are likely to increase with the size of government for several reasons. First, governments operating with a larger scope or scale cannot use the sorting and matching function, and thus must offer larger bundles of services to a larger and more heterogeneous set of constituents. This may dissatisfy individual constituents on a larger number of issues. Optimal division between the federal and local governments therefore requires balancing the internalization of spillovers with these scale effects. Federal structures also can enhance the exercise of voice by decreasing the size of the political unit (Brennan & Buchanan 1980). Thus, even if the central government would more efficiently carry out some activities, considerations of "political efficiency" may justify assigning such functions to the states.

III. PROBLEMS OF FEDERALISM.

The literature on federalism has identified several problems with decentralizing government authority.

A. SPILLOVERS

Public goods and costs may spill over from one state jurisdiction into others (Sandler & Culyer 1982).. This would give each jurisdiction suboptimal incentives to provide public goods, or incentives to permit harmful activities whose effects are felt mainly in other jurisdictions. For example, a subordinate jurisdiction has little incentive to provide for the nation's defense because other jurisdictions could free-ride on these defense costs. A jurisdiction might have incentives engage in tax exportation by taxing activities whose main benefits are felt elsewhere or revenues earned elsewhere (Gordon 1983; Oates and Schwab 1988; Inman and Rubinfeld 1996, Shaviro 1992). Jurisdictions also may choose to permit activities such as pollution and gambling that cause harm in other jurisdictions (Donahue 1997).

B. DISTRIBUTION ISSUES

Mobility within a federal system may affect the distribution of resources (Buchanan 1952). States competing for business and capital may have incentives to levy lower or more regressive taxes to attract the more mobile wealthy while providing fewer services for the less mobile poor (Epple & Romer 1991). This may particularly be a problem if the central government devolves welfare responsibilities to the state governments, as has been occurring in the U.S. (Donahue 1997). More generally, the presence of both mobile and non-mobile resources can cause states' tax policies to favor mobile resources and thereby distort factor prices and utilization. Factor mobility may decrease welfare under certain circumstances (Flatters, et al. 1974).

C. CONSTRAINTS ON MOBILITY

Many of the advantages of federalism depend on an optimal level of mobility of citizens and resources that does not always exist. State jurisdictions may impose taxes and tariffs or exit restrictions that impede movement between jurisdictions (Epstein 1992). Mobility also may be constrained by jurisdictional differences in legal rights, cultural and ethnic affinities, language barriers, and family ties.

Constrained mobility may have distributional implications because some groups of citizens are less mobile than others. For example, retirees and childless individuals may be more mobile, resulting in state policies designed to attract them at the expense of the less mobile. Businesses generally may be more mobile than individuals, as business is becoming increasingly national and international and states therefore increasingly fungible as business environments (Donahue 1997).

Mobility can also create problems when some factors are not mobile. As noted in part B, for example, when capital is mobile, but individuals are not (Oates and Schwab 1988), mobility can cause distort both the fiscal and policy decisions of heterogeneous local jurisdictions. Similar distortions will occur when individuals are mobile, but capital (e.g., land) is not (Epple & Zelentiz 1981; Buchanan & Goetz 1972).

D. USING GRANTS TO SOLVE PROBLEMS OF FISCAL FEDERALISM.

Some of the spillover problems discussed above can be solved through grants by the central to state governments (Inman & Rubinfeld 1996, 1997; Gordon 1983; Oates 1972; Oates 1999; Epple & Romer 1991). The central government could make conditional grants to be spent in particular ways if the purpose of the grant is to provide incentives for the production of public goods that otherwise would be subject to free-rider problems. On the other hand, the grant could be unconditional as to use if it is intended to solve distributional inequities between jurisdictions (Buchanan 1952).

Much of the discussion of grants ignores public choice issues concerning what lower level jurisdictions do with the grant money. There may be "flypaper" effects, as grants intended to induce voters to finance public goods that have benefits outside the jurisdiction actually may "stick" at the central level, thereby expanding the size of government (Oates 1972; Brennan & Buchanan 1980; Hines & Thaler 1995; Fisher 1982).

The central government has other mechanisms at its disposal to deal with interjurisdictional issues, including directly providing the service (as with national defense), reducing tax rates or providing deductions for taxes paid in the disadvantaged states (Inman & Rubinfeld 1997). Again, this discussion often ignores the public choice issues concerning whether or not the central government will use available fiscal policies to counter these spillover effects (Inman & Rubinfeld 1996). There is little evidence that federal grant-in-aid policies and other vertical intergovernmental transfers are consistent with reducing inter-jurisdictional spillovers (Inman 1988).

Even without central government intervention, state governments could minimize inter-jurisdictional problems through the form of taxation (Krelove 1992, Meyers 1990). For example, states could discourage jurisdiction-shopping for tax rates, facilitate redistribution of income, or avoid externalizing tax burdens by relying on taxes tied to instate benefits, taxes on immobile property, or taxes based on residence (head taxes) (Oates 1999; Oates & Schwab 1988). However, an efficient result may hold only in limited circumstances (Inman & Rubinfeld 1996). Where individuals have homogenous preferences and taxes are limited to head taxes, a decentralized economy with mobile individuals and capital will achieve tax efficiency (Tiebout 1956). Tax efficiency can be achieved in such an economy when states use source-based taxes (taxes that tax factors where they are employed and tax goods and services where they are purchased) in addition to head taxes. However, tax efficiency under in the presence of source taxes requires that states do not act myopically when setting these taxes (that is, the states' tax setting decisions must recognize the effect these decisions will have on equilibrium taxes) (Inman and Rubinfeld 1996).

III. THE SIZE, SHAPE AND EXISTENCE OF FEDERAL SYSTEMS

Which countries are likely to be, and to remain, federal systems, and how these systems will be organized geographically, depends to some extent on the costs and benefits of federalism for a particular country. Under the "decentralization theorem" (Oates 1972), it is more efficient to provide public goods through the state than the central government if consumption levels depend on geography, assuming that the costs of providing the public goods are the same for the central as for the state government. Although the desirability of heterogeneity may justify smaller state jurisdictions, such a division entails offsetting costs, including more inter-jurisdictional spillovers and higher costs of collective decision-making because of the need to maintain multiple government

units (Tullock, 1969).

Competition between jurisdictions theoretically can check the size and scope of individual jurisdictions, and thereby reduce the overall size of government (Grossman 1989; Brennan & Buchanan 1980; Hayek 1948, Persson & Tabellini 2000; Weingast 1995). Brennan & Buchanan's "Leviathan theory" views the central government as a tax-maximizing monopolist constrained only by the possibility that individuals will withhold their labor. In contrast, decentralized government forces politicians to compete for mobile individuals and capital. Thus, under this theory, "total government intrusion into the economy should be smaller, *ceteris paribus*, the greater the extent to which taxes and expenditures are decentralized." (*Id* at 185). On the other hand, rent-seeking competition between local governments can increase the size of government (Anderson & Tollison 1988).

Numerous articles have empirically examined the Leviathan hypothesis with mixed results. For example, Oates (1985) found little evidence of correlation between measures of decentralization and the size of government based on cross-sectional data. Zax (1989) found that decentralization that increases competition between local governments decreased the size of government, while decentralization that sacrificed scale economies increased the size of government. Rodden (2003) tested the Leviathan hypothesis using panel data and additional explanatory variables and found that decentralized governments funded by autonomous local taxation have smaller public sectors. In contrast, decentralization funded by revenue sharing grants or centrally regulated state taxation is associated with larger government.

The existence and shape of federal systems also depend on political considerations. For example, the U.S. has jurisdictions of many sizes and shapes that do not seem to mesh with demographic or other characteristics and that have not changed significantly despite changes in underlying costs and benefits. Thus, Riker (1964) emphasizes the "military condition" – the objective of the central government to expand, coupled with offering a threat or opportunity to the lower level jurisdictions. The institutional economics theory of federalism discussed below may offer at least a partial explanation.

IV. CONSTRAINTS ON THE FEDERAL GOVERNMENT

A viable federal system requires a central government to deal with free-riding and other refusals to cooperate by state governments (Riker 1964; Persson & Tabellini 1996a, b; de Figueiredo & Weingast 2005). But there is a danger that the central government will eliminate the benefits of diverse jurisdictions by exercising too much power (Riker 1964). A fundamental dilemma of federalism is how to have a central government that is strong enough to provide a check on the lower level governments, but is not so strong that it overwhelms the states (Riker 1964). This dilemma is a difficult one, because state governments cannot easily prevent the central government from seizing power other than by seceding, which would destroy the union, or by refusing to empower the central government at the outset. Thus, federalism must be self-enforcing (de Figueiredo & Weingast 2005).

One prominent theory holds that durable, market-preserving federalism (see discussion above) is self-enforcing (Weingast 1995; Qian & Weingast 1997; McKinnon 1997). Borrowing from institutional economics and the theory of the firm, these writers argue that institutional constraints prevent the central authority from "overawing" the state units. The equilibrium is maintained because the nation's constitution coordinates

and enforces citizens' views about the appropriate limits on government. In the absence of such a consensus, the central government would form coalitions that defeat state governments' power. For example, federalism in England was built on powerful state justices of the peace who cared about state prosperity. After the Glorious Revolution the country reached consensus on the need to limit the monarch's power. In the U.S., Jacksonian democrats held power by establishing various constraints on the national government, including a 2/3 rule for nominating candidates for presidency, which gave southerners a veto over national policy. Critics of the theory note several shortcomings, including the lack of empirical support and uncertainty as to the conditions necessary for the creation and maintenance of a federal system (Rodden & Rose-Ackerman 1997).

Another theory rests on national politicians' incentives to maximize political support, which may sometimes require not alienating state interest groups (Macey 1990). This theory explains why the federal government has not sought to seize power on several issues such as corporate law despite its constitutional power to do so.

V. SUPPLY SIDE CONSIDERATIONS

The advantages of federalism depend significantly on the individual incentives of political actors. As explained immediately above, these incentives help explain why central government politicians respect the power of state governments. But it is also necessary to explain why state government politicians would have an incentive to engage in jurisdictional competition. It has been argued that they may not, since they are not rewarded for successful innovations and may suffer political penalties for unsuccessful innovations (Rose-Ackerman 1980). However, this ignores the incentives of citizens and interest groups, particularly including lawyers, to supply innovations (Ribstein 2004; Sitkoff & Schnazenback (2005).

VI. EFFECT OF FEDERALISM ON POLITICAL STRUCTURE

The above discussion focuses on issues relating to allocating power between the central and state governments. There is a further question whether federalism matters to decisions made by the central government – that is, whether those decisions depend on whether the country is federalist or unitary. There are theoretical reasons to believe that they do, and some anecdotes to support the theory (Rose-Ackerman 1981). Citizens may vote against national laws that restrict their states' ability to export costs and support laws that reduce the extent that other jurisdictions seek to impose on them. National support for a law therefore may depend on whether the nation has a unitary or federal structure. For example, a state's residents may support a national law that bans gambling if their own state can allow it, or may support a national law that bans gambling everywhere, thereby preventing neighboring states from imposing on them the costs of legalized gambling. Also, citizens in states adopting minimum wage and pollution laws may favor federal preemption to prevent other states from imposing costs on them, but states without these laws may benefit from national diversity, particularly as more states adopt the laws. Thus, it is not clear a state consensus points the way to a national law. Moreover, federalism creates interest groups based on geographical location that might not exist under a unitary system (Oates 1999; Grossman 1989).

VII. COORDINATION AMONG SUBORDINATE STATES

As discussed above, state jurisdictions may have incentives to externalize costs, inadequate incentives to produce public goods with extra-territorial benefits, or an inability to effect socially desirable redistribution because of the mobility of citizens and

resources. The central government may be able to remedy some of these problems, but the remedies may be ineffective, and may lead to giving excessive powers to the central government. This raises the question whether there are more cost-effective ways to reduce inter-jurisdictional costs.

One possible approach is through design of the decision rule at the central government level. Under a system of "cooperative federalism" the central government can act only upon a unanimous vote of the states' representatives (Inman & Rubinfeld 1997). However, a unanimity rule would entail high decision costs and might impede effective central government action (Buchanan & Tullock 1962). Agreement might be secured by compensating jurisdictions that would lose through a central government decision, provided the states can agree on allocations (Inman & Rubinfeld 1997). The problems of cooperative federalism are reflected in the failure of the Articles of Confederation in the U.S. and in Europe's difficulties in coordinating fiscal policies (Inman & Rubinfeld 1997).

Other alternatives include compacts (Oates 1999), and voluntary coordination among the states. One possible mechanism of cooperation is the central promulgation of "uniform" law proposals. However, coordination problems remain, combined with political costs at the uniform lawmaking level (Ribstein & Kobayashi 1996).

The states can coordinate through courts' application of choice-of-law rules (Baxter 1963). State A's courts have incentives to apply State B's laws in order to encourage State B lawmakers to reciprocate by enforcing State A's law. States may apply laws other than their own to achieve a variety of goals, including predictability and decision-making by the courts with knowledge about state conditions (O'Hara & Ribstein 2000). State lawmakers have incentives to enforce contracts to apply the law of a particular state and provide for adjudication in that state. If states do not enforce such contracts, parties may completely avoid contacts with the state, thereby inflicting costs on interest groups in the state (Ribstein 2003). These choice-of-law rules do not, however, fully solve coordination problems as long as the federal constitution does not prevent state legislatures from overriding them (see Part IX).

VIII. FEDERALISM AND INDIVIDUAL RIGHTS

The above discussion focuses on fiscal federalism. But there are also important federalism issues regarding problems of social policy. For example, should the states be permitted to decide issues regarding abortion, the right to die and same sex marriage? Many of these issues involve individual rights that are embodied in the national constitution. Recognition of some fundamental rights may be necessary to ensure popular acceptance of a federal system. For example, if federalism favors racists, and "if in the US one disapproves of racism, one should disapprove of federalism" (Riker 1964 at 155). It arguably follows that citizens' acceptance of devolving authority to the states can be increased by protecting some individual rights from erosion by the states. Also, central government recognition and enforcement of individual rights enables the mobility among jurisdictions that is essential to a federal system. On the other hand, national recognition of rights undercuts the competition and diversity advantages of a federal system. In some situations, including marriage, the federal system might reach an efficient compromise by permitting affected parties to contract for the law of a particular state (Buckley & Ribstein 2001).

IX. LEGAL CONSTRAINTS ON FEDERALISM

The federal constitution sets out the relationship between the central government and state governments. The constitution may not determine the actual relationship between government units, or may be significant mainly in representing a consensus rule with which the parties have expressed willingness to comply. This Part will focus on the US constitution as an example of the types of rules that deal with the above problems.

The federal constitution must give the central government some power to regulate spillovers among the states. Thus, the "commerce clause" of the U.S. Constitution, article I, § 8, clause 3, provides that Congress has the power "[t]o regulate Commerce . . . among the several states." The problem is limiting the federal government's power to the spillover situation (Kitch 1980). For example, in *Gonzales v. Raich*, 125 S.Ct. 2195 (2005), the Supreme Court held that the Commerce Clause authorized regulation of intrastate growing of marijuana because the marijuana might enter interstate commerce, although the effect of its doing so was probably minimal.

If the federal government lawfully exercises power, its statutes must take precedence over state law to the extent they conflict. The "Supremacy Clause," U.S. Constitution article VI, § 3, clause 2, so provides. The courts must then interpret the statutes to determine whether they permit avoidance by inconsistent state law. Again, the courts can significantly expand federal government power, consistent with the language of the Constitution, by broadly interpreting federal statutes.

The federal constitution may not only empower the central government to act, but also may forbid the states from engaging in regulation that has spillover effects. The Commerce Clause of the U.S. Constitution has been held to imply a "negative" version that restricts state power to regulate interstate commerce. *Cooley v. Board of Wardens*, 53 U.S. (12 How.) 299 (1851). The Supreme Court has endorsed a theory of the negative Commerce Clause that is consistent with the economic theory of federalism in holding that state statutes are unconstitutional if their costs fall mostly on interest groups outside the state while groups inside the state reap the benefits (Fischel (1987), Levmore 1983). However, the Court has applied this theory inconsistently, except to the extent that states clearly *discriminate* against interstate commerce. Challenges under the Full Faith and Credit Clause and Due Process Clauses of the U.S. Constitution to state regulation that effects spillovers also generally have been unsuccessful (Ribstein 1993).

X. SPECIFIC APPLICATIONS

This Part discusses a few specific legal areas where federalism issues have been particularly important.

A. CORPORATE LAW

Significant federalism issues are raised by regulation of the internal governance of corporations and other business firms. Particularly to the extent that these firms have owners throughout the country, it would be costly to apply different state laws to the owners who reside in each state. The owners may agree to apply the law of a single jurisdiction, as by incorporating there. Strict application of this rule would give corporations significant ability to choose from among all state laws without regard to their physical location, thereby providing an example of federalism under conditions of complete mobility. The U.S. is a prominent example of a federal system that applies this "incorporation-state" choice of law rule.

On the other hand, many countries in Europe and elsewhere apply a "real situs" rule that applies the law of the corporation's home office. This rule provides more mobility because it is more costly for firms to change home office than their legal state of incorporation, this rule permits less mobility. However, the European Union appears increasingly willing to apply the incorporation rule. Case C-212/97, *Centros Ltd. v. Erhvervs-og Selskabsstyrelsen*, 1999 E.C.R. I-1459 (1999), 2 C.M.L.R 551 (1999); Case C-167/01, *Kamer van Koophandel en Fabrieken voor Amsterdam v. Inspire Art Ltd.*, September 30, 2003), 2003 E.C.R. __ (2003).

The choice among these rules depends significantly on the extent to which the incorporation rule permits states to export regulatory costs, or the situs rule discourages efficient jurisdictional competition. In the U.S., the inventor of the term "race to the bottom" argued that the incorporation rule permitted the leading state of Delaware to export the costs of inefficiently lax regulation (Cary 1974). However, the stock markets promote a "race to the top" by capitalizing the costs of inefficient rules in the price of the shares (Winter 1977). Romano (1985, 2005) further developed the theory by applying institutional economics to show how Delaware could entrench its lead in incorporations by offering an efficient legal system. Other writers have argued that defects in the market for incorporations enable Delaware to win the incorporation race despite adopting laws that favor corporate managers over shareholders (Bebchuk 1992; Bebchuk & Ferrell 1999; Bebchuk & Hamdani 2002). Macey & Miller (1987) argue that Delaware wins the race by offering laws superior to those in other jurisdictions, but that much of the advantage is dissipated in rents to lawyers who influence the lawmaking process. Ribstein (2004) also emphasizes lawyers' role in the lawmaking process. Finally, there is reason to believe that state competition has been influenced by the threat of federal regulation (Roe 2003).

B. ANTI-TRUST AND REGULATION

The antitrust laws illustrate the coordination problems associated with multiple jurisdictions in a federal system (Epstein & Greve 2004). Easterbrook (1983) hypothesized that the U.S. Supreme Court's state action doctrine might foster regulatory competition by forcing firms that demand industry-specific anticompetitive legislation to accept the most stringent form of regulation. However, states may thwart this approach by externalizing regulatory costs.

Antitrust legislation also consists of rules that apply to firms generally (Sherman Act, EC Competition Laws). Large firms operating in multiple jurisdictions may be subject to multiple and inconsistent regulations, and therefore may have to decide between complying with the most stringent regulation and avoiding these jurisdictions altogether. A central government theoretically may address these coordination problems. However, central government regulation may simply be added to regulation at the state level (Epstein & Greve 2004; Inman & Rubinfeld 1997). Moreover, except in limited cases, there is little evidence of coordination between central governments.

The problem of regulation by overlapping jurisdictions is not limited to antitrust law. Similar issues arise in other contexts, including the regulation of contracts (Ribstein & Kobayashi 2002). In these contexts, such problems may be solved by enforcing contracts that specify the applicable law and jurisdiction.

C. ENVIRONMENTAL LAW

Environmental law seems to offer a good example of state coordination problems

because of states' ability to export costs and incentives to free ride on regulation in other states. However, Revesz (2001) has shown that public choice theory does not necessarily predict that the state rather than central government regulation would under-protect the environment. Environmental interest groups may face greater free-rider problems than business groups in obtaining federal regulation, but may have more power at the state level. Moreover, states have incentives to protect the environment in order to compete for firms and citizens on the basis of environmental quality. There is data that U.S. states effectively protect the environment and that citizens' heterogeneous preferences can account for regulatory differences among the states. There is also evidence that federal regulation often has inappropriately targeted intra- rather than interstate environmental issues (Adler 2005).

D. PROPERTY AND TRUST LAW

There is a developing literature on the federalism of property laws. A study of the demise of the U.S. "rule against perpetuities," which restricts the terms of trust instruments, shows an active, lawyer-driven state competition (Sitkoff & Schanzenback 2005). Bell & Parchamovsky (2005) propose enabling a corporate-type state competition for real property rules.

E. WELFARE REFORM

Welfare reform exemplifies the tradeoffs between providing a "laboratory" for development of policy and facilitating export of costs beyond state borders (Donahue 1997, Oates 1999, Brown & Oates 1987, Levine & Zimmerman 1999, Gramlich and Laren 1984). These tradeoffs are being tested in the U.S. as welfare reform at the federal level has devolved responsibility to the states. Although states competed to be "welfare magnets" prior to federal welfare reform, the dynamic may have changed in recent years.

F. TAKINGS

Federalism presents a potentially interesting perspective from which to examine state takings. Competition in the market for development may constrain state governments from engaging in exactions, thereby rendering less necessary constitutional protection (Been 1991). Resolution of this issue depends on the costs of mobility.

G. MARRIAGE AND OTHER SOCIAL POLICY ISSUES

One of the most important modern federalism issues is the extent to which federal constitutional and statutory law is appropriate to protect individual rights from erosion by the states. As discussed above, protection of such rights may be important in ensuring mobility within a federal system and citizens' willingness to accept devolution to the states. On the other hand, devolution to the "laboratory" of the states may be the best way both to develop social policy and to satisfy heterogeneous preferences. This may be particularly true for same sex marriage, where many of the relevant issues are in the nature of contract enforcement and therefore arguably can be left to resolution by the parties to the relationship (Buckley & Ribstein 2001). There are also contract-type issues with regard to the right to die, particularly in regard to promulgation of "durable powers of attorney" that leave medical instructions when one becomes incompetent. Abortion involves a clearer conflict between state policy and individual preferences. Nevertheless, there are questions as to whether the right to an abortion is the sort of fundamental right that should be protected at the federal level, or instead is an issue that can be devolved to the state governments.

The difficulty of these issues is indicated by the fact that federal systems have adopted differing responses to questions of allocation of authority. For example, while the Supreme Court of Canada has clearly recognized a constitutional right to same sex marriage (Klarman 2005), it is unclear whether the Supreme Court of the U.S. would go that far (*Lawrence v. Texas*, 539 U.S. 558 (2003)).

H. LAW AND DEVELOPMENT

A critical modern federalism issue is the extent to which federalism should be promoted for developing countries. The success of federalism in developed countries in encouraging markets and property rights suggests that this approach would also work in developing countries. On the other hand, the Tiebout conditions arguably cannot be met in many such countries because of citizens' lack of mobility resulting from, among other factors, the presence of community-specific public goods, cultural and language differences and strong norms limiting acceptance of outsiders. Also, state governments often have weak information, accounting and accountability and low-quality public bureaucrats as compared with the central government (Bardhan 2002; Oates 1999 at 1144; Martin & Lewis (1956), Shah 1998).

XI. CONCLUSION

Federalism will continue to be important as rapidly developing technologies and business practices raise questions about the appropriate locus of taxation and regulation. Some government functions inevitably will continue to be provided at the local level, while others need to be provided by the central government. A form of government that both promotes local services and enforcement of property rights and deals with coordination problems has obvious benefits. The problem lies in devising mechanisms and structures that maintain the appropriate balance between central and local government power.

REFERENCES

Adler, Jonathan, "Jurisdictional Mismatch in Environmental Federalism," *NYU Environmental Law Journal*, (forthcoming 2005).

Anderson, Gary M. & Robert D. Tollison, "Legislative Monopoly and the Size of Government," 54 *Southern Economic Journal*, pp. 529-545 (1988).

Bardhan, Pranab, "Decentralization of Governance and Development," 16 *Journal of Economic Perspectives*, pp. 185-205 (2002).

Baxter, William, "Choice of Law and the Federal System," 16 *Stanford Law Review*, pp. 1-25 (1963).

Bebchuk, Lucian A., "Federalism and the Corporation: The Desirable Limits on State Compeition," 105 *Harvard Law Review*, pp. 1435-1510 (1992).

Bebchuk, Lucian A. & Allen Ferrell, "Federalism and Corporate Law: The Race to Protect Managers from Takeovers," 99 *Columbia Law Review*, pp. 1168-99 (1999).

Bebchuk, Lucian A. & Assaf Hamdani, 'Vigorous Race or Leisurely Walk: Reconsidering Competition Over Corporate Charters," 112 *Yale Law Journal*, pp. 553-615 (2002).

Been, Vicki, "Exit as a Constraint on Land Use Extractions: Rethinking the Unconstitutional Conditions Doctrine," 91 *Columbia Law Review*, pp. 473-545 (1991).

Bell, Abraham & Gideon Parchamovsky, "Of Property and Federalism," U. Penn Working Paper (2005).

Brennan, Geoffrey & James Buchanan, *The Power to Tax: Analytical Foundations of a Fiscal Constitution*, Cambridge University Press (1980).

Breton, Albert, Competitive Governments: An Economic Theory of Politics and Public Finance, Cambridge University Press (1998).

Breton, Albert, "Mobility and Federalism," 37 *University of Toronto Law Journal*, pp. 318-26 (1987).

Brown, Charles C. & Wallace E. Oates, "Assistance to the Poor in a Federal System," 32 *Journal of Public Economics*, pp. 307-30 (1987).

Brueckner, Jan, "A Test for the Allocative Efficiency in the Local Public Sector," 19 *Journal of Public Economics*, pp. 311-31 (1982).

Buchanan, James M., "Federalism as an Ideal Political Order and an Objective for

Constitutional Reform, 25 *Publius*, pp. 19-27 (1995).

Buchanan, James M, "Federal Grants and Resource Allocation," 60 *Journal of Political Economy*, pp. 208–21 (1952).

Buchanan, James M., "Federalism and Fiscal Equity," 40 *American Economic Review*, pp. 583-99 (1950).

Buchanan, James M. & Charles J. Goetz, "Efficiency Limits of Fiscal Mobility: An Assessment of the Tiebout Model," 1 *Journal of Public Economics*, pp. 25-43 (1972).

Buchanan James M. & Gordon Tullock, The Calculus of Consent, U. Mich. Press (1962).

Buckley, Frank H. & Larry E. Ribstein, "Calling a Truce in the Marriage Wars," 2001 *University of Illinois Law Review*, pp. 561-610 (2001)

Cary, William L., "Federalism and Corporate Law: Reflections Upon Delaware," 83 *Yale Law Journal*, pp. 663-705 (1974).

De Figueiredo, Rui J. P. & Barry R. Weingast, "Self-Enforcing Federalism," 21 *The Journal of Law, Economics, & Organization*, pp. 103-135 (2005).

Donahue, John, "Tiebout? Or Not Tiebout? The Market Metaphor and America's Devolution Debate," 11 *The Journal of Economic Perspectives*, pp. 73-81 (1997).

Easterbrook, Frank H., "Antitrust and the Economics of Federalism," 26 *Journal of Law & Economics*, pp. 23-50 (1983).

Elliot, E. Donald, Bruce A. Ackerman & John C. Millian, "Toward a Theory of Statutory Evolution: The Federalization of Environmental Law," 1 *Journal of Law, Economics, & Organization*, pp. 313-40 (1985).

Epple, Dennis & Alan Zelentiz, "The Implications of Competition among Jurisdictions: Does Tiebout need Politics?" 89 Journal of Political Economy, pp. 1197-1217 (1981).

Epple, Dennis, Alan Zelenitz & Michael Visscher, "A Search for Testable Implications of the Tiebout Hypothesis," 86 Journal of Political Economy, pp. 405-25 (1978).

Epple, Dennis & Thomas Romer, "Mobility and Redistribution," 99 *Journal of Political Economy*, pp. 828-58 (1991).

Epstein, Richard A., "Exit Rights Under Federalism," 55 *Journal of Law & Contemporary Problems*, pp 147-115 (1992).

Epstein, Richard A. & Michael S. Greve, *Competition Laws in Conflict: Antitrust Jurisdiction in the Global Economy*, AEI Press (2004).

Farber, Daniel A., "Environmental Federalism in a Global Economy," 83 *Virginia Law Review*, pp. 1283-1319 (1997).

Fischel, Daniel R., "From MITE to CTS: State Antitakeover Statues, the Williams Act, the Commerce Clause, and Insider Trading, 1987 *Supreme Court Review*, pp. 47-_ (1987)

Fischel, William A., "Property Taxation and the Tiebout Model: Evidence for the Benefit View from Zoning, 30 *Journal of Economic Literature*, pp. 171-7 (1992).

Fisher, R., "Income and Grant Effects on Local Expenditures: The Flypaper Effect and Other Difficulties," 12 *Journal of Urban Economics*, pp. 324-45 (1982).

Flatters, Frank, Vernon Henderson & Peter Mieszkowski, "Public Goods, Efficiency, and Regional Fiscal Equalization," 3 *Journal of Public Economics*, pp. 99-112 (1974).

Gordon, Roger H., "An Optimal Taxation Approach to Fiscal Federalism," 98 *Quarterly Journal of Economics*, pp. 567-86 (1983).

Gramlich, Edward M. & Daniel L. Rubinfeld, "Micro Estimates of Public Spending Demand Functions and Tests of the Tiebout and Median-Voter Hypotheses," 90 *Journal of Political Economy*, pp. 536-60 (1982).

Gramlich, Edward M., Henry J. Aaron & Michael C. Lovell, "An Econometric Examination of the New Federalism," 2 *Brookings Papers on Economic Activity*, pp. 327-70 (1982).

Grossman, Phillip J., "Federalism and the Size of Government," 55 *Southern Economic Journal*, pp. 580-93 (1989).

Hamilton, Bruce W., "The Effects of Property Taxes and Local Public Spending on Property Values: A Theoretical Comment," 84 Journal of Political Economy, pp. 647-50 (1976).

Hayek, Friedrich, "The Economic Conditions of Interstate Federalism," reprinted in *Individual and Economic Order*, pp. 255-272, University of Chicago Press (1948).

Hayek, Friedrich, "The Use of Knowledge In Society," 35 American Economic Review, pp. 519-30 (1945).

Hines, J. & R. Thaler, "The Flypaper Effect," 9 *Journal of Economic Perspectives*, pp. 217-226 (1995).

Hirschman, Albert O., Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States, Harvard University Press (1970).

Hochman, Oded, David Pines & Jacques-Francios Thisse, "On the Optimal Structure of Local Governments, 85 *American Economic Review*, pp. 1224-1240 (1995).

Inman, Robert P., "Federal Assistance and Local Services in the United States: The Evolution of a New Federalist Fiscal Order," in Harvey Rosen ed., *Fiscal Federalism: Quantitative Studies*, pp. 33-74 (1988).

Inman, Robert P. & Daniel L. Rubinfeld, "The Judicial Pursuit of Local Fiscal Equity," 92 *Harvard Law Review*, pp. 1663-1750 (1979).

Inman, Robert P. & Daniel L. Rubinfeld, "Rethinking Federalism," 11 *The Journal of Economic Perspectives*, pp. 43-64 (1997).

Inman, Robert P. & Daniel L. Rubinfeld, "Designing Tax Policies in Federalist Economies: An Overview," 60 *Journal of Public Economics*, pp. 307-34 (1996)

Inman, Robert P. & Michael A. Fitts, "Political Institutions and Fiscal Policy: Evidence from the U.S. Historical Record," 6 *Journal of Law, Economics, & Organization*, pp. 79-132 (1990).

Keen, Michael J., & Christos Kotsogiannis, "Does Federalism Lead to Excessively High Taxes?" 92 *American Economic Review*, pp. 363-70 (2002).

Kitch, Edmund W., "Regulation and the American Common Market," in A. Dan Tarlock, ed., *Regulation, Federalism, and Interstate Commerce*, (1980).

Klarman, Michael J., "Brown and Lawerence (and Goodridge)," 104 *Michigan. Law Review*, pp. 431-489 (2005).

Kollman, Ken, John H. Miller & Scott E. Page, "Political Institutions and Sorting in a Tiebout Model," 87 *American Economic Review*, pp. 977-92 (1997).

Krelove, R., "Efficient Tax Exportation," 25 Canadian Journal of Economics, pp. 245-155 (1992).

Levine, Phillip B., & David Zimmerman, "An Empirical analysis of the Welfare Magnet Debate using the NLSY," 12 *Journal of Population Economics*, pp. 391-409 (1999).

Levmore, Saul, "Interstate Exploitation and Judicial Intervention," 69 *Virginia Law Review*, pp. 563-631 (1983).

Macey, Jonathan R., "Federal Deference to Local Regulators and the Economic Theory of Regulation: Toward a Public Choice Theory of Federalism," 76 *Virginia Law Review*, pp. 265-91 (1990).

Macey, Jonathan R. & Geoffrey P. Miller, "Toward an Interest Group Theory of

Delaware Corporate Law," 65 Texas Law Review 469-523 (1987).

Martin, Alison, W. & Arthur Lewis, "Patterns of Public Revenue and Expenditure," 24 *Manchester School of Economics Social Studies*, pp. 203-44 (1956).

McKinnon, Ronald I., "The Logic of Market-Preserving Federalism," 83 *Virginia Law Review*, pp. 1573-80 (1997).

Meyers, G., "Optimality, Free Mobility, and the Regional Authority in a Federation," 43 *Journal of Public Economics*, pp. 107-121 (1990).

Muller, Dennis C., "Federalist Government and Trumps," 83 *Virginia Law Review*, pp. 1419-1432 (1997).

Musgrave, Richard A., "Devolution, Grants, and Fiscal Competition" 11 *Journal of Economic Perspectives*, pp. 65–72 (1997).

Musgrave, Richard A., The Theory of Public Finance, McGraw-Hill (1959).

Oates, Wallace E., "The Effects of Property Taxes and Local Public Spending on Property Values: An Empirical Study of Tax Capitalization and the Tiebout Hypothesis," 77 Journal of Political Economy, pp. 957-71 (1969).

Oates, Wallace E., Fiscal Federalism, Hardcourt Brace Jovanovich (1972).

Oates, Wallace E., "An Essay on Fiscal Federalism," 37 *Journal of Economic Literature*, pp. 1120-1149 (1999).

Oates, Wallace E., "Searching for Leviathan: An Empirical Study," 75 American Economic Review, pp. 748-57 (1985).

Oates, Wallace E., "A Theory of Public Finance in a Federal System," 1 *Canadian Journal of Economics*, pp. 37-54 (1968).

Oates, Wallace E. & Robert M. Schwab, "Economic Competition Among Jurisdictions: Efficiency Enhancing or Distortion Inducing?" 35 *Journal of Public Economics*, pp. 333-354 (1988).

Oates, Wallace E. & Robert M. Schwab, "The Allocative and Distributive Implications of Local Fiscal Competition", in Daphne Kenyon and J.K. Kincaid, eds. *Competition Among States and Local Governments: Efficiency and Equity in American Federalism.*, pp. 127–45, Urban Institute (1991).

Olson, Mancur, "'The Principle of 'Fiscal Equivalence': The Division of Responsibility Among Different Levels of Government," 59 *American Economic Review*, pp. 479-87 (1969).

O'Hara, Erin & Larry E. Ribstein, "From Politics to Efficiency in Choice of Law," 67 *University of Chicago Law Review*, pp. 1151-1232 (2000).

Olson, Mancur, "Toward A More General Theory of Governmental Structure," *American Economic Review*, pp. 120-5 (1986).

Parikh, Sunita & Barry R. Weingast, "A Comparative Theory of Federalism: India," 83 *Virginia Law Review*, pp. 1593-1615 (1997).

Pauly, Mark V., "Income Redistribution as a Local Public Good," 2 *Journal of Public Economics*, pp. 35–58 (1973).

Persson, Torsten & Guido Tabellini, "Federal Fiscal Constitutions: Risk Sharing and Moral Hazard," 64 *Econometrica* pp. 623-46 (1996a).

Persson, Torsten & Guido Tabellini, "Federal Fiscal Constitutions: Risk Sharing and Redistribution," 104 *Journal of Political Economy*, pp. 979-1009 (1996b).

Persson, Torsten & Guido Tabellini, Political Economics, MIT Press (2000).

Qian, Yingyi & Gerard Roland, "Federalism and the Soft Budget Constraint," 88 *American Economic Review*, pp. 1143-62 (1998).

Qian, Yingyi & Barry R. Weingast, Federalism as a Commitment to Preserving Market Incentives, 11 *The Journal of Economic Perpectives*, pp. 83-92 (1997).

Revez. Richard L. "Federalism and Environmental Regulation: A Public Choice Analysis," 115 *Harvard Law Review*, pp. 553-641 (2001).

Rhode, Paul W. & Koleman S. Strumpf, "Assessing the Importance of Tiebout Sorting: Local Heterogeneity from 1850 to 1990," 93 *American Economic Review*, pp. 1648-1677 (2003).

Ribstein, Larry E., "Choosing Law By Contract," 18 *Journal of Corporation Law*, pp. 245-300 (1993).

Ribstein, Larry E., "Federalism and Insider Trading," 6 *Supreme Court Economic Review*, pp. 123-71 (1998).

Ribstein, Larry E., "From Efficiency to Politics in Contractual Choice of Law," 37 *Georgia. Law Review*, pp. 363-471 (2003).

Ribstein, Larry E., "Lawyers as Lawmakers: A Theory of Lawyer Licensing," 69 *Missouri Law Review*, pp. 299-364 (2004).

Ribstein, Larry E. & Bruce H. Kobayashi, "An Economic Analysis of Uniform State Laws," 25 *Journal of Legal Studies*, pp. 131-199 (1996).

Ribstein, Larry E. & Bruce H. Kobayashi, "State Regulation of Electronic Commerce," 51 *Emory Law Journal*, pp. 1-82 (2002).

Riker, William H., Federalism: Origin, Operation, and Significance, Little Brown (1964).

Rodden, Jonathan, "Reviving Leviathan: Fiscal Federalism and the Growth of Government," 57 *International Organization*, pp. 695-729 (2003).

Rodden, Jonathan & Susan Rose-Ackerman, "Does Federalism Preserve Markets?" 83 *Virginia Law Review*, pp. 1521-72 (1997).

Roe, Mark, "Delaware's Competition," 117 Harvard Law Review, pp. 588-646 (2003).

Romano, Roberta, "Law as Product: Some Pieces of the Incorporation Puzzle," 1 *Journal of Law, Economics & Organization*, pp. 225-283 (1985).

Romano, Roberta, "The States as Laboratory: Legal Innovation and State Competition for Corporate Charters," *Yale University IFC Working Paper* No. 05-08 (2005).

Rose-Ackerman, Susan, "Does Federalism Matter? Political Choice in a Federal Republic" 89 *Journal of Political Economy*, pp. 152-165 (1981).

Rose-Ackerman, Susan, "Risk Taking and Re-Election: Does Federalism Promote Innovation?" 9 *Journal of Legal Studies*, pp. 593-616 (1980).

Rose-Ackerman, Susan, "Cooperative Federalism and Co-Optation," 92 *Yale Law Journal*, pp 1344-8 (1983).

Rubinfeld, Daniel L., "On Federalism and Economic Development," 83 *Virginia Law Review*, pp 1581-92 (1997).

Samuelson, Paul, "The Pure Theory of Public Expenditure," 36 *Review of Economics and Statistics*, pp. 387-89 (1954).

Sandler, Todd & A. J. Culyer, "Joint Products and Multijurisdictional Spillovers," 97 *Ouarterly Journal of Economics*, pp. 707-716 (1982).

Shah, Anwar, "Fostering Fiscally Responsive and Accountable Governance: Lessons from Decentralization," in *Evaluation and Development: The Institutional Dimension*, Robert Picciotto & Eduardo Wiesner, eds., pp. 83-96, World Bank (1988).

Shaviro, Daniel, "An Economic and Political Look at Federalism in Taxation," 90

Michigan Law Review, pp. 895-991 (1992).

Sitkoff, Robert H. & Max Schanzenbach, "Jurisdictional Competition for Trust Funds: An Empirical Analysis of Perpetuities and Taxes," 115 Yale Law Journal, pp. 356-436 (2005).

Steinberg, Richard, "Voluntary Donations and Public Expenditures in a Federalist System," 77 American Economic Review, pp. 24-36 (1987).

Stewart, Richard B., "Federalism and Rights," 19 *Georgia Law Review*, pp. 917-80 (1985).

Strumpf, Koleman S., "Does Government Decentralization Increase Policy Innovation?" 4 *Journal of Public Economic Theory*, pp. 207-241 (2002).

Tiebout, Charles M., "A Pure Theory of Local Expenditures," 64 *Journal of Political Economy*, pp. 416-424 (1956).

Tullock, Gordon, "Federalism and Problems of Scale," 6 *Public Choice*, pp. 19-29 (1969).

Weingast, Barry R., "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Growth," 11 *Journal of Law, Economics & Organization*, pp. 1-31 (1995).

Winter, Ralph K., Jr., "State Law, Shareholder Protection, and the Theory of the Corporation," 6 *J. Legal Studies*, pp. 251- (1977).

Wooders, M., "The Tiebout Hypothesis: Near Optimality in Local Public Good Economics," 48 *Econometrica*, pp. 1467-85 (1980).

Zax, Jeffrey S., "Is There a Leviathan in Your Neighborhood?" 79 American Economic Review, pp. 560-7 (1989).