

# Secession Risk and Fiscal Federalism

Jason P. Sorens, Dartmouth College, jason.p.sorens@dartmouth.edu

Forthcoming, *Publius: The Journal of Federalism*

September 23, 2015

## **Abstract**

Why is fiscal federalism so often dysfunctional from an economic point of view? Particularly in the developing world, fiscally decentralized systems often lack hard budget constraints and an open, common market. This article argues that preventing secession can require fiscally deleterious institutions. Beyond the well-known device of “fiscal appeasement,” central governments facing potential secessionist challenges try to hamstring regional tax collection and permit regional protectionism against goods and labor. While ethnic diversity has helped to preserve relatively robust forms of fiscal federalism in Canada and Switzerland, it has had the contrary effect in developing countries. Even among Western democracies, those governments unwilling to countenance secession are less likely to respond to secessionist challenges by decentralizing taxation powers. The political logic of decentralization may stymie efforts to reform decentralized institutions along the lines recommended by economists and the multilateral lending institutions.

“The Catalan Government has sent another warning message about its lack of liquidity, which depends on the Spanish Executive’s regular transfers since most of taxes [sic] are collected by Madrid-based services. The Spokesperson for the Catalan Executive and Minister for the Presidency, Francesc Homs, accused the Spanish Government of ‘deliberate asphyxia’ and asked the rest of the Catalan parties to ‘pool together’ to denounce the situation. According to Homs, such financial asphyxia will affect everything except salaries, which ‘are guaranteed’... This situation started to occur when the Catalan Government began to support the self-determination process and the Spanish Government was fostering its recentralisation agenda” (CNA 2015).

## **Introduction**

Why does strong fiscal federalism not exist outside Western industrialized democracies? By “strong” fiscal federalism is meant the competitive model of federalism, in which subcentral jurisdictions compete for a mobile tax base in a common market by exercising their autonomous regulatory and taxation powers, while facing a “hard budget constraint” that limits their ability to take on debt. Canada, the United States, Switzerland, and the European Union come closest to this model (Rodden 2004).

Many developing democracies have adopted federal or decentralized systems of government, among them India, Indonesia, Mexico, Brazil, Argentina, South Africa, Pakistan, and Malaysia. Yet none of them have adopted anything remotely resembling the competitive system of fiscal federalism described above. It is not for want of economic advice that developing-country governments have not reformed their federal institutions. The multilateral financial institutions have adopted economists’ recommendations for reforming fiscal decentralization to encourage fiscal responsibility, by matching revenue-raising powers to spending powers and by allowing more autonomous economic policy-making at the subcentral level. The World Bank maintains a major program on fiscal decentralization.

Still, while developing countries have indeed decentralized expenditure responsibilities significantly over the past several decades, there has been no such trend in autonomous taxation powers. The new subcentral spending is financed through “shared” taxes (with rates and base set by the central government) or grants, which are commonly discretionary and opaque. Local government freight taxes and state migration restrictions in India and heavy employment and procurement preferences for indigenes in Indonesia have undermined the common market there.

Why do apparently economically perverse forms of federalism persist? One hypothesis is “fiscal appeasement.” Associated most strongly with the work of Treisman (1998, 1999), this line of work has found that central governments may have incentives to funnel grants to regions that credibly threaten to secede, in

order to prevent secession. If the central government can distinguish sincere from strategic threats, then appeasement will not incentivize further secessionist threats. And even if it cannot, appeasement can still be rational when it allows the central government to buy time or political space to deal with the most serious threats (Treisman 2004). Bakke & Wibbels (2006) find that central transfers are associated with less ethnic protest among geographically concentrated minorities in federal countries. Ishiyama (2012) finds that the ruling party in Ethiopia directed more spending toward districts won by the opposition after the 2005 election. Alemán & Treisman (2005) also argue that fiscal appeasement helps explain the pattern of transfers to states in India.

This article follows this literature on secession prevention but goes beyond fiscal appeasement. In federations in which regionally concentrated ethnic minorities dominate certain jurisdictions, there is a risk that regional governments will use their political and fiscal resources to demand additional powers or even independence, and central governments respond with “excessive” fiscal centralization (denying regional governments tax autonomy) and “excessive” decentralization of common-market policies (“excessive” from a narrowly economic point of view). The quotation above from a story in Catalan government-funded media illustrates how this logic may be playing out in Spain: when the center prevents regions from collecting their own taxes, it can punish secessionist regions fiscally. Not only do central governments offer secessionist regions transfers, as in the appeasement account, but they deny them autonomous revenue-raising powers.

The next section presents background to the issue under two headings: conflict prevention and political economy. What have political scientists found about the relationship between decentralized institutions and secessionist conflict? What have political economists argued and found about the structure of federalism and economic outcomes? The following section develops hypotheses to test the theoretical propositions that secession risk encourages political decentralization, tax centralization, and decentralization of common-market policies. Then the paper investigates the evidence for those hypotheses. The evidence suggests that economically perverse fiscal decentralization may be politically rational for governments seeing secession as a serious threat, even though such policies may undermine governments’ ability to fight secessionists in the long run.

## **Theoretical Background**

Why do governments decentralize? This section considers first the ways in which decentralization could prevent secession, then the possible economic benefits of decentralization. A puzzle arises because governments often decentralize in ways that have net economic costs. The section then synthesizes the insights from the conflict and political economy literatures into three theoretical propositions about how secession risk affects

the precise forms decentralization takes.

### Decentralization and Secession Prevention

#### *Ethnonationalist Accommodation*

Territorial decentralization could reduce the risk of secession in several ways.

First, under a spatial model of territorial autonomy preferences, decentralization holds promise as a way of peeling off “soft secessionist” supporters from an ethnonationalist movement. By bringing the new status-quo territorial arrangement closer to the views of nationalist supporters, some of them should decide to support the new arrangement over total independence (Hechter 2000).

Second, ethnically based federalism could fracture the dimensions of conflict within a deeply divided society, opening up room for cross-cutting alliances and “taking pressure off” the central government (Horowitz 1985). The idea here is that the territorial scope of political contestation determines the territorial scope of ethnic identities (Posner 2004). To compete for power at the central level, political entrepreneurs will construct broad ethnic identities. When spoils of power are available at a lower level, they will attract entrepreneurs that play on smaller-scale identity categories. Federalism thus can help “break up” large ethnic coalitions and provide space for interethnic alliances.

Third, territorial autonomy could physically separate hostile ethnic groups, giving them broad self-rule and reducing the spoils of office at the center, which could generate security dilemmas (Kaufmann 1996). This idea seems to have been behind the Dayton Accord’s partial partition of Bosnia and Herzegovina into Serb and Bosniak-Croat “entities,” the latter of which was further divided into Bosniak-majority and Croat-majority cantons.

#### *Pitfalls of Accommodation*

Accommodationist strategies, including decentralization, also pose certain risks.

Appeasement could signal weakness, encouraging yet more ethnic challenges. Walter (2006*a*, 2006*b*) finds that governments that face multiple potential secessionist challenges, particularly in valuable territories, are less likely to compromise with the first such challenge, while governments that do compromise with secessionist challengers face even more such challengers in the future. Early decentralization before violence might not create this problem.

Second, decentralization could encourage the development of regional party systems and regional identities (Bunce 1999, Brancati 2006, Brancati 2009). Where those possible sequelae materialize, the risks of conflict will be higher than otherwise.

Third, nonethnic or “heterogeneous-unit” federations do not necessarily offer minority ethnic groups autonomy at all, and even ethnic federations could allow local majorities to trample the rights of local minorities (Kymlicka 1998).

Fourth, decentralization will not reduce secession risk if regional minorities fear the central government will abrogate autonomy in the future (Lake & Rothchild 2005).

Finally and most importantly for this article, regional autonomy could improve the political and military capability of potential secessionist insurgents. Knowing this, central governments might refuse to offer autonomy in the first place. While the commitment problem that central governments face with respect to autonomous minorities has been much discussed in the literature, the autonomous minorities’ own commitment problem vis-à-vis the center has been less investigated.

### Political Economy of Fiscal Federalism

#### *Competitive Federalism*

“Fiscal federalism” refers to institutions decentralizing considerable policy and fiscal powers to subcentral governments. Fiscal federalism and political federalism are distinct concepts and do not necessarily coincide. Consider three general models of fiscal federalism: competitive, cooperative, and state-corroding federalism.

Competitive federalism consists of four elements (Oates 1985, Weingast 1995, Rodden 2006):

1. Subcentral governments exercise considerable economic policy and expenditure competencies.
2. Subcentral governments face a “hard budget constraint” due to largely funding own expenditures out of own taxes.
3. A common market permits free movement of labor, capital, and goods across jurisdictional borders.
4. The system is institutionalized and self-enforcing, because the central government has made credible commitments not to interfere in the legally authorized decisionmaking of subcentral authorities.

The competitive federalism model has attracted many political economists. Nevertheless, broadly neoclassical scholars still debate about other elements of the model and the extent to which we can generalize its applicability. Following Hayek (1939 [1948]) and Brennan & Buchanan (1980), Weingast and associates have touted “market-preserving federalism” as a competitive-federalism model in which subcentral governments compete for a mobile tax base by suppressing rents and boosting the productivity of government investments (Weingast 1995). By contrast, many public finance scholars argue for “equalization” grants to prevent rich regions from enjoying a tax-base advantage, and otherwise support interjurisdictional transfers as needed to

solve externalities problems (Boadway & Shah 2009, Rodden 2010). Treisman (2007) further disputes whether jurisdictional competition will always have beneficial consequences, noting that under certain circumstances, some jurisdictions will not bother to compete for capital at all, or may compete with perverse policies.

Competitive federalism, with or without equalization grants, may have the following virtues:

1. Subcentral officials have better information about local conditions and a closer electoral tie to local voters than central officials do, giving them the incentives and tools to create policies better suited to local conditions (Bardhan 2002).
2. Hard budget constraints limit subcentral governments' willingness to take on unsustainable debt (Rodden 2002).
3. Jurisdictional differences in collective goods provision allow taxpayers to "sort" themselves according to their preferences for such goods (Tiebout 1956).
4. Jurisdictional competition for tax base gives local officials incentives to rein in rents and improve their productivity.
5. Retaining a large share of revenues from tax base growth on the margin gives subcentral governments a strong incentive to promote growth (Weingast 2009).

To be sure, decentralization has costs, and few would endorse the competitive federalism model for every country. But once a government has embarked on decentralization, mainstream political economists agree on principles such as ensuring a common market, limiting opportunistic intervention by the center, assigning tax-raising powers commensurate to expenditure responsibilities, and boosting local policy capacity and electoral responsiveness (Litvack, Ahmad & Bird 1998, Gemmill, Kneller & Sanz 2013).

### *Cooperative Federalism*

Contrast competitive federalism with two alternative models: "cooperative" and "state-corroding" federalism. Cooperative federalism permits subcentral governments substantial policy responsibilities but denies significant tax-varying powers: they receive their revenue either from central grants or from tax-sharing based on centrally designated or negotiated formulas. If the European Union, Switzerland, Canada, and the United States provide reasonable approximations of the competitive federalism model, then Germany and Austria since their fiscal reforms in the 1960s are classic examples of cooperative federalism. Döring & Voigt (2006, p. 203) even question whether Germany is fiscally federal at all, arguing that the autonomy enjoyed by the *Länder* is mostly "administrative" rather than "legislative."

Economists criticize the German and Austrian systems for allowing the subcentral governments to externalize the costs of their spending to other jurisdictions and for failing to allow meaningful variation in fiscal policies across jurisdictions to track citizens' preferences (Bird & Smart 2002, Döring & Voigt 2006).

Criticisms of that kind apply even more forcefully to postcolonial "cooperative federations" such as those of India, Indonesia, and South Africa, where institutional fragility often precludes vigorous enforcement of meaningful budget constraints, raising risks of high indebtedness and default (Parikh & Weingast 1997).

### *State-Corroding Federalism*

Cai & Treisman (2004) show that competitive dynamics in a federal system may lead subcentral governments to use regulatory laxity or subsidies to attract capital. Central governments should therefore limit the extent to which they delegate enforcement powers over interjurisdictional negative externalities to the subcentral governments. Here, "state-corroding federalism" refers more broadly to any federal design that gives incentives for hollowing-out of state capacity.

Two real-world examples are particularly relevant here: indirect subcentral access to the central bank due to soft budget constraints and the ability of subcentral governments to impose protectionist barriers.

The problem of "soft budget constraints" refers to the incentives of lower-level governments to overspend and undertax due to expectations of bailouts from the central government. Rodden (2002) has found that when subcentral governments raise more of their spending from autonomous taxes, or when the central government closely oversees subcentral budgeting, debt levels are lower than when neither condition is met. Case studies of Argentina and Brazil show how large intergovernmental transfers fueled subcentral fiscal irresponsibility, which has in turn threatened the fiscal health of these federations (Saiegh & Tommasi 1999, Webb 2003, Rodden 2003).

Meanwhile, India and Indonesia authorize infringements on the domestic common market. In India, local taxes on freight and imports for consumption (*octroi*) and poor road infrastructure add substantially to the cost of internal trade (Bardhan 2006), and certain states may also control in-migration of ethnic strangers (Rao & Singh 2007). After democratization and decentralization, provincial governments in Indonesia enacted preferences for local indigenes and products in hiring and procurement, respectively (Ray & Goodpaster 2003). Discriminatory "user charges," licenses, and inspections also inhibit interprovincial trade (Ray 2009).

### Theoretical Propositions

While a scholarly consensus has emerged on some fiscal aspects of federations, no such consensus has appeared on territorial accommodation and secessionist conflict. The conditions leading to successful, conflict-dampening decentralization are apparently complex and subtle. It is interesting, therefore, that all ethnic

federations in the developing world flout political economists' recommendations for fiscal design. Even though the effects of decentralization on ethnic conflict are debated, developing-country governments have moved to offer more autonomy over time to various ethnic minorities, but they have often done so in ways that seem economically perverse.

### *Secession Risk and Political Decentralization*

When secession is a real risk, central governments can use political decentralization as a substitute for costly violence to reduce the risk. "Political decentralization" refers to the granting of local autonomy over policies important to local identity such as education and culture, as well as over policies important to local welfare such as environment and health, combined with the buttressing of self-government by allowing local voters to elect their own representatives. Decentralizing political power may reduce secessionism because it assuages ethnonationalist minorities' symbolic fears of being "swamped," losing "ownership" of their region, or no longer being "*maîtres chez nous*." Horowitz (1985, pp. 129-31, 216-19) describes the importance of symbolic recognition over issues such as flags, emblems, official languages, and jurisdictional boundaries for ethnic conflict. Providing symbolic recognition can reduce a minority's sense of threat and willingness to engage in conflict. Numerous protest and insurgent movements in India have died down after the granting of statehood to the minorities involved, from Mizoram to Telangana to Jharkhand. Conflicts tend to resurge where there are disagreements about borders or influxes of immigrants that threaten to change the ethnic character of the state (e.g., Assam, Tripura).

While appeasing threats of violence with decentralization may encourage future challenges, as Walter argues, this consideration should not prevent central governments in ethnoregionally diverse countries from implementing political decentralization "magnanimously" before facing explicit threats, nor should it prevent central governments mired in unwinnable secessionist conflicts from agreeing to new autonomy as a way to create sustainable peace.

Existing research has found that strength of secessionism in a region at time  $t$  is associated with subsequent decentralization, at least in Western democracies (Sorens 2012). Even in the developing world, reasonably democratic governments, such as those of India, the Philippines, and Indonesia, have shown at least some willingness to grant autonomy to secessionist minorities.

*Theoretical Proposition 1:* Secession risk calls forth political decentralization.



### *Secession Risk and Tax Centralization*

Decentralizing political power to the regional level may address voters' demands and reduce future secessionism, but decentralizing economic power to regional governments may raise the risk of actual secession. Governments that worry about the risk of secessionist insurgency and their ability to combat one may therefore provide political autonomy without much economic autonomy.

Taxation authority provides the regional government a source of autonomous finance, a potential tool for funding a future insurgency. The experiences of Yugoslavia and the Soviet Union show that this is not an idle concern. During the crucial years 1989-1991, Croatia and Slovenia used their fiscal authority to surreptitiously purchase weapons, train fighters, and create new customs agencies (Silber & Little 1996). Roeder (1991, pp. 210-12) notes that the indigenous elites of certain Soviet republics used their control of media and meeting places after perestroika to orchestrate protests for autonomy. Similarly, Nigeria's Eastern Region was able to use its broad powers to fight the Biafra conflict (Nolte 2002). For the same reason, we should expect ethnoregionally heterogeneous, developing democracies to be reluctant to allow regional governments their own police forces. Georgia specifically prohibits Ajara from developing its own police force. Namibia, Malaysia, Madagascar, Nepal, Indonesia, and Bangladesh have also centralized this typically local function. India and Pakistan allow states their own police forces, but as we shall see, these countries have other mechanisms for ensuring central government oversight. Argentina, Brazil, Mexico, South Africa, South Korea, Taiwan, and Venezuela permit some of their regional governments to have police forces, but these countries do not face significant secessionist movements. The only other cases of devolved police powers are post-conflict situations such as Aceh, Gagauzia, and the ARMM, where rebels negotiate terms guaranteeing their future power.

Devolving autonomous taxation authority and control of armed units to regional governments risks raising the capacity of an ethnonationalist minority in any future conflict with the central government. An empowered regional government may then demand more of the center. Fearing this, central governments would often rather offer control of cultural-educational policies and other services, while forcing regional governments to rely on funding from the center. Central governments facing secessionist threats go beyond mere "fiscal appeasement" to handicap regional governments' own-source funding. Western liberal democracies might worry less about violent secession and therefore might be more willing to countenance regional tax autonomy.

*Theoretical Proposition 2:* All else equal, governments particularly worried about secession risk will be less likely to decentralize taxation authority.

## *Secession Risk and Common-Market Decentralization*

Secession deterrence might also explain why ethnic federations allow fragmentation of the common market. When regional governments can enact preferences for ethnic indigenes in public hiring and procurement, they discourage in-migration of ethnic strangers and fortify the own group's sense of control and collective autonomy. If Horowitz is correct that losing ownership of the ethnic homeland can spark secessionist conflict, then limiting in-migration of ethnic strangers can help to prevent conflict despite its economic costs. The Indian state of Tripura serves as a classic example here: from 95 percent of the population in the 1931 census, indigenous people fell to 31 percent by the 1991 census due to massive in-migration of Hindu Bengalis following Partition, and secessionist conflict, flaring up in the 1970s, persists to this day (Phukan 2013, p. 97). One rebel group demands the expulsion of all Bengali-speaking immigrants and their descendants who arrived after 1956 (South Asia Terrorism Portal N.d.).

*Theoretical Proposition 3:* All else equal, governments particularly worried about secession risk will be more likely to allow regional protectionism.

### **Hypotheses and Research Design**

To develop testable implications from the foregoing theoretical propositions, consider the following four comparisons: between Western liberal and developing democracies, between developing multinational democracies and developing uninational democracies with similar levels of public demand for decentralization, between secessionist and non-secessionist regions within the same country, and between governments that countenance secession and those that forbid it.

#### Western vs. Developing Democracies

Western liberal democracies might be more tolerant of secessionism than developing democracies. There is some evidence of this. India requires all candidates for office to swear an oath to uphold the unity of the country and criminalizes advocacy of secession, per the sixteenth amendment to the constitution. Even after democratization, Indonesia has fought a brutal counterinsurgency operation against Papuan secessionists and declared martial law in Aceh in 2003-2005 to defeat secessionists there (Aspinall 2009, Human Rights Watch 2015). If democratic governments in developing countries particularly fear violent or nonconsensual secession, then they will be less likely than Western liberal democracies to decentralize taxation powers, all else equal. They will not necessarily be any less likely to offer political autonomy, because both types of governments should see political decentralization as a way to reduce the popular appeal of secession.

*Hypothesis 1:* Tax decentralization is less likely in developing democracies than Western democracies, but

political decentralization should be just as likely.

### Multinational vs. Uninational, Developing Democracies

Multinational democracies should perceive higher secession risk than uninational democracies. On the other hand, public demand for decentralization is generally lower in the latter, and multinational status does not necessarily mean that secession risk is high. For instance, the Philippines has several large, geographically concentrated ethnic groups, but only one of them has had any secessionist mobilization in recent decades: the Moros of the South. To compare multinational and uninational democracies while controlling for the level of public demand for local autonomy, we should compare only *large*, uninational states to multinational ones. Demand for local autonomy is higher in countries like Brazil, Mexico, and Argentina that are large either in terms of population or area (Hooghe & Marks 2013).

If large, uninational democracies are willing to offer more regional tax autonomy than are otherwise comparable, multinational democracies, that would be significant evidence in favor of the view that secession risk causes tax centralization, especially if the multinational comparison group offers just as much regional political autonomy.

*Hypothesis 2:* Large, uninational, developing democracies will have higher regional tax autonomy than large, multinational, developing democracies but not necessarily more political autonomy.

*Hypothesis 3:* Large, uninational, developing democracies will be less likely to allow breakup of the common market than large, multinational, developing democracies.

### Secessionist vs. Non-Secessionist Regions

Autonomy can be asymmetric within countries. If the government fears secessionism, it will be more willing to offer tax autonomy to regions without secessionist movements than regions with them. By contrast, it will be more willing to offer political autonomy to regions with secessionists than regions without them. In this article, I look at India, a large, multinational, developing democracy with a hard line on secessionism. Although all Indian states have the same formal powers, I expect that the Indian government will attempt to subvert the tax autonomy of states with a secessionist past. The formal institutions of federalism in India have not greatly constrained its central government, and data on tax collections are therefore likely to prove a more reliable guide to effective state tax autonomy than formal constitutional provisions.<sup>1</sup>

*Hypothesis 4:* Within India, states with a history of secessionist movements will collect less own-source tax revenue as a share of their economy than states without such a history.

To test the hypothesis that regions with a secessionist past will get *more* political autonomy, I look at

state populations. Regions with lower populations have less claim to statehood, all else equal, in a country of a billion people. The existence of a state with a low population implies that its people were able to secure political autonomy when such a concession would ordinarily be unexpected, perhaps through secession threats.

*Hypothesis 5:* Within India, states with a history of secessionist movements will have lower average population than states without such a history.

### Divisible vs. Indivisible States

Western democracies differ in their approaches to secession. Some governments define themselves as indivisible, while others seem willing to countenance secession under some circumstances. The former should be more worried about an uncontrolled, unilateral breakup and therefore less willing to decentralize taxation. To test this, I compare Western democracies with constitutional provisions of indivisibility or requiring officeholders to swear to uphold “territorial integrity” to those without such provisions. All governments should respond to secessionism with more political decentralization, but secession-tolerant ones might also respond with tax decentralization.

*Hypothesis 6:* Secessionist vote share in Western democracies calls forth political decentralization.

*Hypothesis 7:* Conditional on high secessionist vote share, Western democracies that define themselves as indivisible will offer less tax autonomy than those that do not.

## **Evidence**

### Tax and Political Decentralization in Western and Developing Democracies

I start with the Hooghe, Marks & Schakel (2010) database of regional authority, which covers only 42 countries, most of which are rich democracies. I have extended their coding to all “consolidated democracies” in the world annually from 1950 to 2010, where consolidated democracies are countries that score either at least “6” on the Polity IV project’s overall index of regime type (*POLITY2*) or at least “6” on Polity IV’s executive constraints variable (*XCONST*) for at least ten consecutive years. There are sixty-five developing or recently developed democracies that fit the aforementioned criteria for at least one ten-year spell since 1950, fifteen of which appear in the original Hooghe et al. database. Regional tiers are coded if mean population of the units exceeds 150,000, and regions with special autonomy are coded separately.

The scope of autonomy is scored on a 0-4 scale, where “0” means that the region enjoys no authoritative competencies in economic, cultural-educational, or welfare-state policy, “1” that the region enjoys authoritative competency in one of those areas, “2” that it enjoys competencies in at least two of those areas but does not

meet criteria for a higher score, “3” that it enjoys competencies in at least two of those areas, as well as at least two of residual powers, police, own institutional setup, and local government, and “4” that it meets the criteria for a “3” code and enjoys powers over immigration or citizenship. Fiscal autonomy is also on a 0-4 scale, where “0” means no tax autonomy, “1” regional control of base *or* rate of minor taxes, “2” regional control of base *and* rate of minor taxes, “3” regional control of base *or* rate of a major tax (general sales/VAT or personal or corporate income), and “4” regional control of base *and* rate of a major tax. Representation adds up to a 0-4 scale, where regions get a point each for indirectly elected executives and legislatures, or two points each for directly elected executives and legislatures. Finally, “institutional depth” includes a code for whether the central government maintains some kind of veto power over regional legislation.

Following Sorens (2011, 2014a, 2014b), I construct regional self-rule indices multiplicatively, on the assumption that a lack of autonomy on one dimension vitiates autonomy on other dimensions as well. For instance, if a region has the power to set its own taxes, but the regional leadership with that power is appointed by the central government, then the regional leadership will serve as agents of the central government, not regional voters.

*Political Self-Rule* and *Economic Self-Rule* are the two indices. *Political Self-Rule* is the product of policy scope and representation. *Economic Self-Rule* is the product of policy scope, fiscal autonomy, and representation. Each index is halved if the center can veto regional policies. I do not score the indices zero in such cases because multidimensional spatial models of bureaucratic delegation suggest that if the government has to take action in some way to constrain an actor, that actor’s autonomy is limited but not destroyed (Shepsle 2010).

Only one region in the developing world attains a maximum score of “64” on *Economic Self-Rule*: Sikkim before 1975, when it was an independent protectorate of India. High *Political Self-Rule* is more widespread. Argentina, Burma (1948-1961), Georgia (Ajara, 2004-2010), India, Indonesia, Israel (Palestinian National Authority, 1994-2010), Mexico, Moldova (Gagauzia, 1995-2010), Nicaragua (Atlantic North and South Autonomous Regions [RAAN and RAAS], 1990-2010), Pakistan, Philippines (Autonomous Region in Muslim Mindanao [ARMM], 1990-2010), South Africa, and Taiwan all afford some regions a policy scope score of “3” or better.

Figure 1 displays a scatter plot of regions on *Economic Self-Rule* and *Political Self-Rule*, categorized into Western liberal democracies and developing democracies, as of 2006, the last year of the Hooghe et al. dataset. Each observation is a special-status region (e.g., Greenland, Åland, ARMM) or regional “type” of identical autonomy (e.g., U.S. states, Argentinian provinces). Only first-tier regions are shown, that is, for any geographic area for which different regional tiers overlap, the more autonomous tier as determined by, lexicographically, *Economic Self-Rule*, *Political Self-Rule*, and the *Institutional depth* variable, or, if more

than one tier remains equal on all three of those variables, the tier with geographically larger regions.

-fig1 here-

Regions of Western democracies that score highly on *PSR* also generally score highly on *ESR*. In 2006, Western regions' average *ESR* score was 26.8. Outside the developed West, that figure was a mere 6.8. There is also a difference in *PSR*, though not as stark: 8.8 versus 3.6. The correlation between the two autonomy indicators in Western democracies is 0.94; in other democracies it is just 0.74. Among the 19 regions in developing democracies where *PSR* is greater than or equal to six in 2006, the correlation between *PSR* and *ESR* is just 0.41. Developing democracies are reluctant to offer tax autonomy to their regions vice other forms of autonomy, and they seem *especially* reluctant to offer the very broadest tax autonomy when political autonomy is also high.

Western democracies are more likely to decentralize over the period of analysis. ANOVA analysis shows that the annual average change in *ESR* is higher in Western democracies than in other democracies ( $p = 0.030$ ). The same test on change in *PSR* accepts the null. A more sophisticated analysis controls for the ceiling effect (regions at the maximum or minimum value of self-rule to begin with can only go in one direction), clusters standard errors on countries, and treats the determinants of the decision to decentralize and of the quantity of decentralization separately. When this is done, Western democracies are more likely to decide to decentralize on both the *PSR* and *ESR* dimensions ( $p < 0.01$ ), but only on *ESR* is Western democracy significantly associated with the *quantity* of decentralization.

These tests tend to support part of Hypothesis 1, that Western democracies are far more willing to decentralize taxation than developing democracies. However, they also suggest that developing democracies are somewhat less favorable to political decentralization. There may be other reasons for this, such as the lack of sufficient talent to staff regional administrations or hangovers from authoritarian rule.

#### Tax Decentralization and Common Markets in Multinational and Uninational Democracies

I test Hypotheses 2 and 3 by comparing seven cases: India, Indonesia, the Philippines, Argentina, Brazil, Mexico, and Colombia. The first three are the most populous currently democratic, multinational states, and the latter four are the most populous currently democratic, uninational states. The former group features non-negligible secession risk, while the latter group has only negligible secession risk, but because of their large size in terms of both area and population, most of these Latin American cases are federations. The Latin American cases should feature greater tax decentralization and more unified common markets than the multinational Asian states.

Table 1 shows autonomous, subcentral tax revenues as a percentage of general government tax revenues

in the seven cases. India is the most tax-decentralized case, while Indonesia, the Philippines, and Mexico are highly tax-centralized.

- table 1 about here -

Two of the three large countries with secessionist minorities studied here forbid regional governments from raising significant financial resources on their own. The Philippine government nominally requires the Autonomous Region in Muslim Mindanao (recently renamed Bangsamoro) to adopt a progressive system of taxation, but 95-98 percent of the ARMM's revenue comes from central government grants, and the autonomous government is widely seen as a kind of employment agency and slush fund for former Moro National Liberation Front fighters (Wallich, Manasan & Sehili 2007, Manasan 2008). In Indonesia, Aceh's "special autonomy" allows it no more control over tax collection than other provinces enjoy, apart from the trivial *zakat* (alms). However, India's extensive tax decentralization is surprising.

While three of the four large countries *without* secessionist minorities *do* let regional governments possess significant autonomous taxation powers, one of them – Mexico – does not. Still, the mean tax decentralization score as of most recent year available is only slightly lower for the multinational democracies, 15.7% versus 17.4%, and the difference is not statistically significant in an ANOVA test with six degrees of freedom. We cannot say for certain that Hypothesis 2 is supported, due to the insufficient statistical power of a test over seven cases.

The ethnic (quasi-)federations in the developing world are indeed more willing to break up the common market to assuage ethnic anxieties. The Indian constitution explicitly permits this, while Indonesia practices it *de facto*. The Indian government has negotiated with northeastern states with strong secession movements to give them powers to control immigration from other states (Rao & Singh 2007, p. 302). The Philippine government's transfer of land tenure power to the ARMM/Bangsamoro achieves a similar purpose. None of the unational democracies have this feature. We can be more confident in confirming Hypothesis 3.

#### Tax Autonomy Across Regions of India

Because India's formal institutions serve as a poor guide to the effective state of decentralization, it is possible that the Indian government treats secessionist regions differently from non-secessionist ones. If secessionist regions are permitted less tax autonomy, then we should find that states with a secessionist history will have lower own-source tax revenue as a share of their economy (Hypothesis 4). If secession threats tend to elicit political autonomy, then secessionist states in India should have lower average population than non-secessionist ones (Hypothesis 5).

Rao & Singh (2007, p. 307) provide data on states' own-source revenues as a share of net state domestic product (NSDP) in 2000-01, along with state poverty rates. Own-source revenue as a share of the economy ranges from 3.1% in Manipur to 15.9% in Sikkim. The poverty rate ranges from 3.5% in Jammu and Kashmir (J&K) to 47.2% in Orissa. States with higher poverty rates should have lower tax ratios due to lower tax base and higher central transfers. The states of Assam, Jammu and Kashmir, Manipur, Mizoram, Nagaland, Punjab, and Tripura are marked as having hosted secessionist insurgencies since decolonization.

All the secessionist states have lower than average own-source revenue other than Punjab, which is one of the richest states. An ANOVA difference-of-means test between secessionist and non-secessionist states strongly suggests that the former have lower average own-source revenue ( $p < 0.01$ , 27 d.o.f.). A regression analysis controlling for poverty rates suggests that secessionist states have lower own revenues by about 4.6 percentage points of NSDP ( $p < 0.001$ ). Since mean own-revenue share of NSDP is just 8.8%, this is a large effect. Adding urbanization rate from the 2011 Census of India does not change the estimate on secessionist status (poverty and urbanization are individually insignificant and jointly significant). Thus, we have strong evidence that secessionist states in India have lower own-source revenue effort, which is not explained by their impoverished or rural status. This evidence is inconsistent with a mere "fiscal appeasement" thesis, which would predict higher central transfers to secessionist states but not dramatically lower tax ratios.

Secessionist states are smaller than non-secessionist states. The mean population of the latter is 53 million, and of the former, just 12 million. This has nothing to do with secessionism's being more likely to arise in vast areas of low population density, for the land area of secessionist states is also smaller: 60,000 square kilometers versus 136,000 square kilometers on average. These differences are statistically significant. Regions that pose a secessionist threat are therefore more likely to gain statehood than regions without such a threat, as is obvious when one examines those regions that have gained statehood since the comprehensive reorganization of 1956: Nagaland (2 million people), Mizoram (1.1 million), Tripura (3.7 million), Assam (31 million), and Manipur (1.1 million) all posed a strong secessionist threat before statehood and are on average smaller than Punjab (28 million), Meghalaya (3 million), Uttaranchal (10 million), Arunachal Pradesh (1.4 million), Chhattisgarh (26 million), Gujarat (60 million), Haryana (25 million), Himachal Pradesh (6.9 million), Jharkhand (33 million), and Maharashtra (110 million), which all gained statehood post-1956 without a significant secessionist threat.<sup>2</sup> Hypotheses 4 and 5 are confirmed.

#### Constitutional Indivisibility and Fiscal Federalism

The theoretical logic of this essay also implies that in Western democracies, where formal institutions bind more tightly than they do in the developing world, a constitutional definition of indivisibility will reduce



governments' willingness to decentralize taxation powers to a region hosting a secessionist movement. The assumption here is that central governments defining themselves as indivisible are unwilling to countenance secession and will try to suppress it if possible. While no central government favors its own breakup, some are willing to permit secession if it is the settled will of a geographically and culturally coherent part of the country.

To test this implication, I model change in regional economic and political self-rule over the 1980-2006 period as a function of average secessionist vote share, 1980-2000, constitutional indivisibility, initial self-rule, and appropriate spatial lags, using top-tier individual regions (each U.S. state, each German *Land*, each French *région*, etc.) as observations. Secessionist vote share at the regional level comes from Sorens (2012) and is measured in national (countrywide) elections. Sorens finds that more secessionist regions obtain more autonomy over the 1980-2000 period, but I expect to find that indivisibility modifies this relationship. Constitutional indivisibility is scored "1" for countries whose constitutions include a clause defining the country as indivisible, as "0.5" for countries whose constitutions include a duty of officeholders to uphold the "territorial integrity" of the country (which is more ambiguous than indivisibility, because it might simply refer to staving off territorial conquest), and "0" for all others. These data come from the Constitute Project ([constituteproject.org](http://constituteproject.org)). Regions that had already achieved in 1980 the maximum economic or political self-rule score, depending on the equation, are excluded, because it is impossible for them to gain more self-rule.

The equations follow a Spatial Durbin Model (SDM) specification (LeSage & Pace 2009), where regions are considered contiguous if they are in the same country. The SDM includes a spatial lag of the dependent and all independent variables and maximizes a likelihood function developed to eliminate the bias associated with the endogeneity of the spatially lagged dependent variable. The logic behind using the SDM here is that when a government chooses to decentralize, it typically decentralizes to multiple regions – autonomy is more often symmetric than asymmetric. Therefore, the regions in the dataset are not independent, and their spatial dependence must be modeled. A statistically significant spatial lag of the dependent variable would suggest that when one region in a country gets more autonomy, others do as well. A statistically significant spatial lag of initial self-rule implies that when some regions in a country have more autonomy, there is a tendency for other regions to catch up over time.

Here are the full regression equations in general form:

$$\begin{aligned}
 Y &= \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_1 \bullet X_2 + \gamma Z + \\
 &\rho WY + \lambda_1 W X_1 + \lambda_2 W X_1 \bullet X_2 + \zeta W Z + \epsilon, \\
 \epsilon &\sim N(0, \sigma^2),
 \end{aligned}
 \tag{1}$$

where  $Y$  is the dependent variable (alternately, change in economic and political self-rule),  $X_1$  is secessionist vote share,  $X_2$  is indivisibility,  $Z$  is initial self-rule of the appropriate type, and  $W$  is the row-standardized spatial weights matrix of contiguous regions. The marginal effect of a one-percentage-point change in secessionist vote share on decentralization when the country is not indivisible is given by  $\beta_1$ , the marginal effect of such a change when the country is indivisible is given by  $\beta_1 + \beta_3$ , the marginal effect of moving from divisibility to indivisibility on decentralization when secessionist vote share is zero is given by  $\beta_2$ , and the marginal effect of such a move when secessionist vote share is at its mean is given by  $\beta_2 + \beta_3\bar{X}_1$ . Hypothesis 6 predicts that  $\beta_1$  and  $\beta_1 + \beta_3$  will be positive in the political self-rule equation. Hypothesis 7 predicts that  $\beta_3$  will be negative in the economic self-rule equation, and that  $\beta_2 + \beta_3\bar{X}_1$  will be negative for high values of  $X_1$ .

Table 2 presents the estimation results for four models: the baseline economic and political decentralization equations and both equations with the addition of another control variable, non-secessionist regionalist vote share over 1980-2000. Sorens (2012) argues that a finding that secessionist but not regionalist vote share induces decentralization supports the “secession threat” mechanism for decentralization over an alternative hypothesis that distinctive regional identities alone elicit decentralization.

- table 2 about here -

The results support both hypotheses. In the economic decentralization equations, secessionist vote share is strongly associated with more decentralization when the country is not indivisible ( $\beta_1 = 1.5, p < 0.001$ ), but indivisibility eliminates this relationship ( $\beta_3 = -1.3, p < 0.001; \beta_1 + \beta_3 \approx 0$ ). Non-secessionist regionalist vote is actually negatively associated with economic decentralization. In the political decentralization equations, secessionist vote share is positively associated with decentralization when the country is not indivisible ( $\beta_1 = 0.06, p < 0.01$ ), but less so when the country is indivisible ( $\beta_1 + \beta_3 = 0.02$ ). On the other hand, we cannot be confident that indivisibility itself actually modifies this relationship, because  $\beta_3$  is not statistically significant in the first equation (it is in the second). Again, regionalist vote share is actually negatively associated with political decentralization. The evidence more strongly supports Hypothesis 7 than it does Hypothesis 6, but both are consistent with the data. Secessionism calls forth both economic and political decentralization in divisible countries, but probably only political decentralization in indivisible countries.

## Discussion

All of the hypotheses derive some support from the data, though Hypotheses 2 and 6 get the weakest support. Western democracies decentralize more taxation powers than do developing democracies (Hypothesis 1), suggesting that governments that have more reason to worry about violent secessionist challenges are less likely to boost the fiscal capacity of regions. There is also some evidence that large, unilingual, developing

democracies are more willing to decentralize taxation than are large, multinational, developing democracies (Hypothesis 2), although the outlier case of India prevents the difference in mean tax decentralization between these two sets of cases from reaching statistical significance at a paltry six degrees of freedom. Digging down into the case of India reveals that those states that have hosted independentist movements enjoy far less effective tax autonomy, as revealed in own revenue as a share of net state product, than those that have not (Hypothesis 4). This finding suggests that India has permitted formal tax autonomy to its states only because it has the power to erode that autonomy on a state-by-state basis. There is also quite strong evidence that, among the regions of Western democracies, those that boast stronger secessionist parties obtain more economic policy powers over time, unless the country's constitution defines the country as indivisible. This finding suggests that even in the West, governments anxious about secession are reluctant to give regions their own fiscal resources.

The foregoing findings all tend to support Theoretical Proposition 2, that governments worried about secession risk centralize tax policy. Theoretical Propositions 1 and 3 also receive support, however. Indian states with a secessionist history are far smaller than those without, suggesting that posing a secession threat gets an ethnoregional group statehood (Hypothesis 5). Among regions of Western democracies, those with stronger secessionist movements get more economic and political autonomy over time, and even indivisible states may be willing to make political concessions to secessionist regions, though the statistical estimates are not strongly consistent on this point (Hypothesis 6). In other words, secession risk generally elicits political autonomy. Finally, multinational, developing democracies often let regions break up the common market, while this policy is unheard-of in ethnoregionally homogeneous countries (Hypothesis 3).

## **Conclusion**

Why do so many democracies persist in forms of fiscal and economic decentralization that mainstream economists regard as pathological? Multinational states prioritize secession deterrence over economic efficiency at the observed margin, and to do this they make their regional governments dependent on central government grants, which co-opt potential ethnic entrepreneurs and serve as a potential sanction to misbehavior, and allow regional governments ample autonomy over policies designed to enhance ethnic security, including exclusion of migrants from other parts of the country and preferences for local goods.

None of the developing countries surveyed in this article are likely to adopt a thoroughgoing fiscal federalism of the kind seen in the United States, Canada, Switzerland, or the European Union. They are all more centralized than the Western cases. India, Indonesia, and the Philippines have strong incentives to rein in potentially secessionist territories. Indeed, even a long-running rebellion in Aceh that the central

government could not decisively win was not enough to induce the Indonesian government to grant the region its own tax-raising powers.

While Brazil and Argentina are the most fiscally decentralized federations examined here, their subcentral governments suffer from “soft budget constraints.” Mexico is still dealing with the hangover of fiscal centralization under authoritarianism. The federal government has sought to decentralize taxation powers, but lower-income state governments are resisting. Providing a large, lump-sum, “adequacy” grant while allowing state governments to use their own taxes to benefit from economic growth, as Weingast (2009) recommends, might be the most plausible path forward.

In India, the demise of the “license Raj” has boosted states’ effective autonomy and yielded economic dividends. But the evidence suggests that India’s formal institutional design as written down in its detailed constitution masks great informal diversity in states’ actual taxation powers. All else equal, Indian states with a secessionist history feature far less subnational taxation as a share of their economy.

This article introduces a new dataset on regional self-rule in developing countries, following the schema used in the popular Hooghe, Marks & Schakel (2010) dataset. Quantitative codings and qualitative descriptions of the cases are available as an online supplement. Researchers should use these data with caution, however, given the frequency with which informal arrangements trump constitutional requirements in developing democracies.

Why do so many governments adopt forms of decentralized institutions that conflict with the counsel of mainstream economists? The standard answer in the literature has been fiscal appeasement of potential secessionists. This answer is not so much wrong as incomplete. Fiscal appeasement is more effective when central governments have hamstrung regional tax-collection capabilities in order to render them fiscally dependent and reduce the credibility of secessionist threats. The evidence canvassed here, particularly from India, shows that not only do central governments give more grants to secessionist regions, but they apparently also reduce what these regions can raise in taxes.

## Notes

<sup>1</sup>One example of the weakness of formal institutions in India is the fact that the Congress Party rigged elections in Jammu and Kashmir for decades to prevent parties suspected of separatism from gaining power (Cottrell 2013, p. 174).

<sup>2</sup>Goa and Sikkim are excluded here because they acceded to the union without having to be carved out of an existing state.

## References

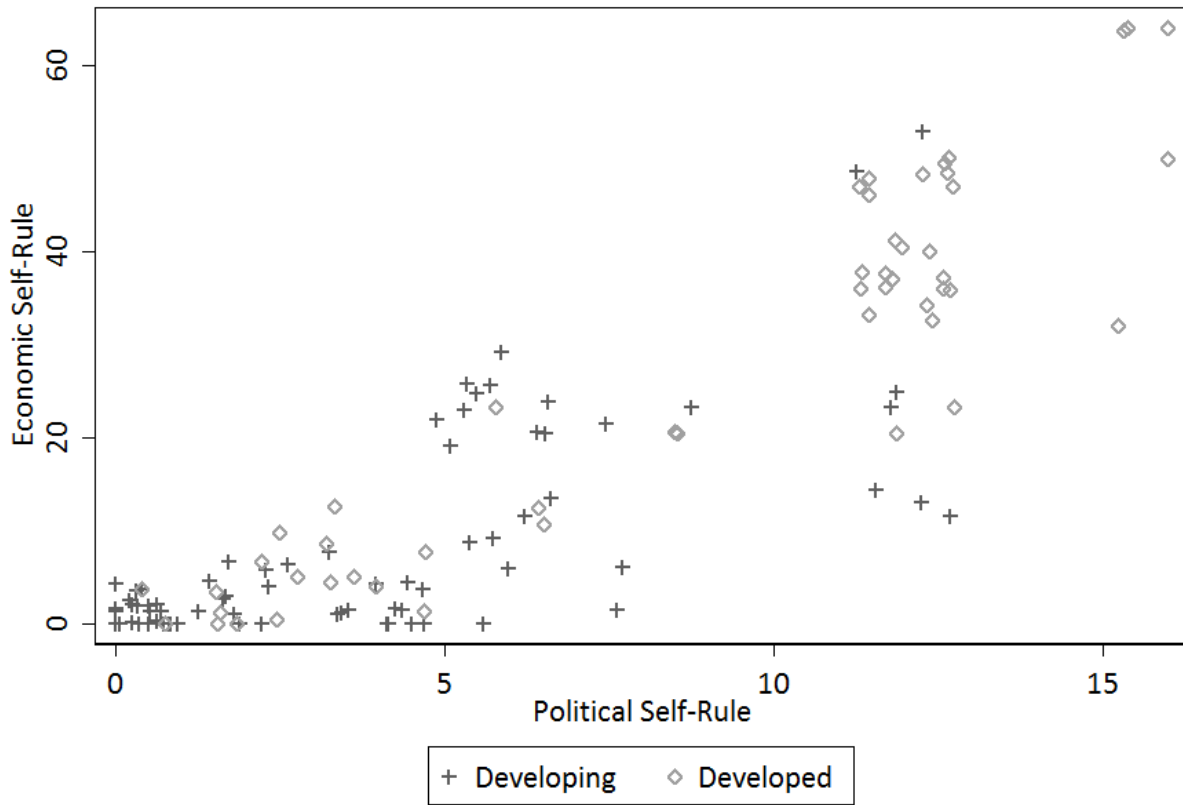
- Alemán, Eduardo & Daniel Treisman. 2005. Fiscal Politics in 'Ethnically Mined,' Developing, Federal States: Central Strategies and Secessionist Violence. In *Sustainable Peace: Power and Democracy After Civil Wars*, ed. Philip G. Roeder & Donald Rothchild. Ithaca, N.Y.: Cornell University Press pp. 173–216.
- Artana, Daniel, Sebastián Auguste, Marcela Cristini, Cynthia Moskovits & Ivana Templado. 2012. "Sub-National Revenue Mobilization in Latin American and Caribbean Countries: The Case of Argentina." Inter-American Development Bank Working Paper No. IDB-WP-297.
- Aspinall, Edward. 2009. *Islam and Nation: Separatist Rebellion in Aceh, Indonesia*. Stanford, Cal.: Stanford University Press.
- Bakke, Kristin M. & Erik Wibbels. 2006. "Diversity, Disparity, and Civil Conflict in Federal States." *World Politics* 59(1):1–50.
- Bardhan, Pranab. 2002. "Decentralization of Governance and Development." *Journal of Economic Perspectives* 16(4):185–205.
- Bardhan, Pranab. 2006. "Awakening Giants, Feet of Clay: A Comparative Assessment of the Rise of China and India." *Journal of South Asian Development* 1(1):1–17.
- Bird, Richard M. 2012. "Fiscal Decentralization in Colombia: A Work (Still) in Progress." International Center for Public Policy Working Paper 12-23.
- Bird, Richard M. & Michael Smart. 2002. "Intergovernmental Fiscal Transfers: International Lessons from Developing Countries." *World Development* 30(6):899–912.
- Boadway, Robin & Anwar Shah. 2009. *Fiscal Federalism: Principles and Practice of Multiorder Governance*. New York: Cambridge University Press.
- Brancati, Dawn. 2006. "Decentralization: Fueling the Fire or Dampening the Flames of Ethnic Conflict and Secessionism." *International Organization* 60:651–685.
- Brancati, Dawn. 2009. *Peace by Design: Managing Intrastate Conflict Through Decentralization*. Oxford, England: Oxford University Press.
- Brennan, Geoffrey & James M. Buchanan. 1980. *The Power to Tax: Analytical Foundations of a Fiscal Constitution*. New York: Cambridge University Press.
- Bunce, Valerie. 1999. *Subversive Institutions*. Cambridge, England: Cambridge University Press.
- Cai, Hongbin & Daniel Treisman. 2004. "State Corroding Federalism." *Journal of Public Economics* 88(3-4):819–843.
- CNA. 2015. "Catalan Government warns about extreme liquidity situation." May 27, <http://bit.ly/1MFsYwg>.
- Cottrell, Jill. 2013. Kashmir: The Vanishing Autonomy. In *Practising Self-Government: A Comparative Study of Autonomous Regions*, ed. Yash Ghai & Sophia Woodman. Cambridge, England: Cambridge University Press pp. 163–199.
- Döring, Thomas & Stefan Voigt. 2006. "Reforming Federalism German Style." *Intereconomics* 41(4):201–208.
- Gemmell, Norman, Richard Kneller & Ismael Sanz. 2013. "Fiscal Decentralization and Economic Growth: Spending Versus Revenue Decentralization." *Economic Inquiry* 51(4):1915–1931.
- Hayek, Friedrich von. 1939 [1948]. The Economic Conditions of Interstate Federalism. In *Individualism and the Economic Order*. Chicago: University of Chicago Press. (reprint).
- Hechter, Michael. 2000. *Containing Nationalism*. Oxford, England: Oxford University Press.

- Hooghe, Liesbet & Gary Marks. 2013. "Beyond Federalism: Estimating and Explaining the Territorial Structure of Government." *Publius: The Journal of Federalism* 43(2):179–204.
- Hooghe, Liesbet, Gary Marks & Arjan H. Schakel. 2010. *The Rise of Regional Authority: A Comparative Study of 42 Democracies*. New York: Routledge.
- Horowitz, Donald L. 1985. *Ethnic Groups in Conflict*. Berkeley: University of California Press.
- Human Rights Watch. 2015. "Indonesia: End Media Restrictions on Papua." May 1, <http://bit.ly/1zo1UBV>.
- International Monetary Fund. 2009. Macro Policy Lessons for a Sound Design of Fiscal Decentralization: Background Studies. Technical report IMF Fiscal Affairs Department.
- Ishiyama, John. 2012. "The Politics of Appeasement? Politics and Federal Financial Disbursements: The Case of Ethiopia." *Publius: The Journal of Federalism* 42(1):1–24.
- Kaufmann, Chaim. 1996. "Possible and Impossible Solutions to Ethnic Civil Wars." *International Security* 20(4):136–175.
- Kymlicka, Will. 1998. Is Federalism a Viable Alternative to Secession? In *Theories of Secession*, ed. Percy B. Lehning. London: Routledge pp. 111–150.
- Lake, David A. & Donald Rothchild. 2005. Territorial Decentralization and Civil War Settlements. In *Sustainable Peace: Power and Democracy After Civil Wars*, ed. Philip G. Roeder & Donald Rothchild. Ithaca, N.Y.: Cornell University Press pp. 109–132.
- LeSage, James & R. Kelley Pace. 2009. *Introduction to Spatial Econometrics*. Boca Raton, FL: CRC Press.
- Litvack, Jennie, Junaid Ahmad & Richard Bird. 1998. *Rethinking Decentralization in Developing Countries*. Washington, D.C.: International Bank for Reconstruction and Development.
- Llanto, Gilberto M. 2009. "Fiscal Decentralization and Local Finance Reforms in the Philippines." Philippine Institute for Development Studies, Discussion Paper No. 2009-10.
- Manasan, Rosario G. 2008. Local Public Finance in the Philippines: Balancing Autonomy and Accountability. In *Decentralization Policies in Asian Development*, ed. Shinichi Ichimura & Roy Bahl. Singapore: World Scientific pp. 333–388.
- Ministry of Finance. 2013. "Indian Public Finance Statistics 2012-2013." <http://finmin.nic.in/reports/ipfstat.asp>.
- Nolte, Insa. 2002. "Federalism and Communal Conflict In Nigeria." *Regional & Federal Studies* 12(1):171–192.
- Oates, Wallace. 1985. "Searching for Leviathan: An Empirical Study." *American Economic Review* 75:748–757.
- Parikh, Sunita & Barry R. Weingast. 1997. "A Comparative Theory of Federalism: India." *Virginia Law Review* 83(7):1593–1615.
- Phukan, Mridula Dhekial. 2013. "Ethnicity, Conflict, and Population Displacement in Northeast India." *Asian Journal of Humanities and Social Sciences* 1(2):91–101.
- Posner, Daniel N. 2004. "The Political Salience of Cultural Difference: Why Chewas and Tumbukas Are Allies in Zambia and Adversaries in Malawi." *American Political Science Review* 98(4):529–545.
- Rao, M. Govinda & Nirvikar Singh. 2007. Asymmetric Federalism in India. In *Fiscal Fragmentation in Decentralized Countries: Subsidiarity, Solidarity, and Asymmetry*, ed. Richard M. Bird & Robert D. Ebel. Cheltenham, UK: Edward Elgar pp. 295–319.
- Ray, David. 2009. Decentralization, Regulatory Reform, and the Business Climate. In *Decentralization and Regional Autonomy in Indonesia: Implementation and Challenges*, ed. Coen J.G. Holtzappel & Martin Ramstedt. Singapore: ISEAS Publishing pp. 150–182.

- Ray, David & Gary Goodpaster. 2003. Indonesian Decentralization. In *Autonomy and Disintegration in Indonesia*, ed. Damien Kingsbury & Harry Aveling. London: RoutledgeCurzon pp. 75–96.
- Rodden, Jonathan. 2002. “The Dilemma of Fiscal Federalism: Grants and Fiscal Performance around the World.” *American Journal of Political Science* 46(3):670–687.
- Rodden, Jonathan. 2003. Federalism and Bailouts in Brazil. In *Fiscal Decentralization and the Challenge of Hard Budget Constraints*, ed. Jonathan Rodden, Gunnar S. Eskeland & Jenny Litvack. Cambridge, MA: MIT Press pp. 213–248.
- Rodden, Jonathan. 2004. “Comparative Federalism and Decentralization: On Meaning and Measurement.” *Comparative Politics* 36(4):481–500.
- Rodden, Jonathan. 2006. *Hamilton’s Paradox: the Promise and Peril of Fiscal Federalism*. New York: Cambridge University Press.
- Rodden, Jonathan. 2010. Federalism and Inter-Regional Redistribution. In *The Political Economy of Inter-Regional Fiscal Flows: Measurement, Determinants, and Effects on Country Stability*, ed. Núria Bosch, Marta Espasa & Albert Solé Ollé. Cheltenham, UK: Edward Elgar pp. 191–219.
- Roeder, Philip. 1991. “Soviet Federalism and Ethnic Mobilization.” *World Politics* 43:196–232.
- Saiegh, Sebastián & Mariano Tommasi. 1999. “Why Is Argentina’s Fiscal Federalism So Inefficient? Entering the Labyrinth.” *Journal of Applied Economics* 2(1):169–209.
- Shepsle, Kenneth A. 2010. *Analyzing Politics: Rationality, Behavior, and Institutions*. New York: W.W. Norton.
- Silber, Laura & Alan Little. 1996. *Yugoslavia: Death of a Nation*. New York, NY: Penguin USA.
- Sorens, Jason. 2011. “The Institutions of Fiscal Federalism.” *Publius: The Journal of Federalism* 41(2):207–231.
- Sorens, Jason. 2012. *Secessionism: Identity, Interest, and Strategy*. Montreal, QC: McGill-Queen’s University Press.
- Sorens, Jason. 2014a. “Does Fiscal Federalism Promote Regional Inequality? An Empirical Analysis of the OECD, 1980–2005.” *Regional Studies* 48(2):239–253.
- Sorens, Jason. 2014b. “Fiscal Federalism, Jurisdictional Competition, and the Size of Government.” *Constitutional Political Economy* 28(3):354–375.
- South Asia Terrorism Portal. N.d. “All Tripura Tiger Force.” <http://bit.ly/1Iiykzo>.
- Tiebout, Charles. 1956. “A Pure Theory of Local Expenditures.” *Journal of Political Economy* 64:416–424.
- Treisman, Daniel. 1998. “Deciphering Russia’s Federal Finance: Fiscal Appeasement in 1995 and 1996.” *Europe-Asia Studies* 50(5):893–906.
- Treisman, Daniel. 1999. *After the Deluge: Regional Crises and Political Consolidation in Russia*. Ann Arbor: University of Michigan Press.
- Treisman, Daniel. 2004. “Rational Appeasement.” *International Organization* 58(2):345–373.
- Treisman, Daniel. 2007. *The Architecture of Government: Rethinking Political Decentralization*. Cambridge, U.K.: Cambridge University Press.
- Wallich, Christine, Rosario Manasan & Saloua Sehili. 2007. Subsidiarity and Solidarity: Fiscal Decentralization in the Philippines. In *Fiscal Fragmentation in Decentralized Countries: Subsidiarity, Solidarity, and Asymmetry*, ed. Richard M. Bird & Robert D. Ebel. Cheltenham, UK: Edward Elgar pp. 363–395.
- Walter, Barbara F. 2006a. “Building Reputation: Why Governments Fight Some Separatists but Not Others.” *American Journal of Political Science* 50(2):313–330.



- Walter, Barbara F. 2006b. "Information, Uncertainty, and the Decision to Secede." *International Organization* 60(1):105–135.
- Webb, Stephen B. 2003. Argentina: Hardening the Provincial Budget Constraint. In *Fiscal Decentralization and the Challenge of Hard Budget Constraints*, ed. Jonathan Rodden, Gunnar S. Eskeland & Jenny Litvack. Cambridge, MA: MIT Press pp. 189–212.
- Weingast, Barry R. 1995. "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development." *Journal of Law, Economics, and Organization* 11(1):1–31.
- Weingast, Barry R. 2009. "Second Generation Fiscal Federalism: The Implications of Fiscal Incentives." *Journal of Urban Economics* 65:279–293.



Markers are jittered (random constant added) to show number of observations.

Figure 1: Economic & Political Self-Rule, Regions, 2006

Table 1: Tax Decentralization

Country-Year	Tax Decentralization
Philippines 2007	5.8%
India 2011	37.8%
Indonesia 2006*	3.6%
Colombia 2007	17.1%
Mexico 2011	3.6%
Brazil 2012	28.6%
Argentina 2009	20.3%

Tax decentralization is subcentral own-source tax revenue as % of general government tax revenue, except \*, for which figure represents subcentral own-source revenue from all sources as % of general government revenue.

Sources: Llanto (2009, p. 22); Ministry of Finance (2013); International Monetary Fund (2009, p. 40); Bird (2012, p. 3); OECD Revenue Statistics; Artana, Auguste, Cristini, Moskovits & Templado (2012, p. 2)

Table 2: Spatial Durbin Models of Indivisibility, Secessionism, and Decentralization

Variable	DV: $\Delta$ <i>Econ. Self-Rule</i>		DV: $\Delta$ <i>Polit. Self-Rule</i>	
	Coef.(SE)	Coef.(SE)	Coef.(SE)	Coef.(SE)
Secess. vote	1.5 (0.1)	1.5 (0.1)	0.06 (0.02)	0.10 (0.02)
Indivisible	0.3 (0.5)	0.02 (0.5)	-0.03 (0.16)	-0.05 (0.15)
S.V.●Ind.	-1.3 (0.1)	-1.3 (0.1)	-0.04 (0.02)	-0.09 (0.02)
ESR <sub>1980</sub>	0.05 (0.05)	0.28 (0.07)		
PSR <sub>1980</sub>			-0.05 (0.06)	-0.09 (0.06)
Region. vote		-0.07 (0.02)		-0.04 (0.01)
W●S.V.	-1.2 (0.2)	-1.3 (0.2)	-0.15 (0.05)	-0.30 (0.05)
W●S.V.●Ind.	1.8 (0.2)	1.9 (0.2)	0.42 (0.09)	0.55 (0.09)
W●ESR <sub>1980</sub>	-0.07 (0.05)	-0.31 (0.07)		
W●PSR <sub>1980</sub>			0.02 (0.06)	0.04 (0.06)
W●R.V.		0.12 (0.03)		0.20 (0.04)
$\rho$	0.86 (0.02)	0.87 (0.02)	0.81 (0.03)	0.76 (0.04)
Intercept	0.2 (0.4)	0.4 (0.4)	0.40 (0.16)	0.45 (0.15)
N	185	185	230	230
Wald ( $p$ )	1272 (< .001)	1325 (< .001)	562 (< .001)	316 (< .001)
Log likelihood	-452.6	-444.3	-271.9	-246.8

*Secess. vote/S.V.* is regional vote share for secessionist parties.

*Indivisible/Ind.* is 0-1 variable for constitutional indivisibility of state.

*ESR* is economic self-rule (0-64).

*PSR* is political self-rule (0-16).

*Region. vote/R.V.* is regional vote share for regionalist parties.

*W* is the spatial weights matrix.