

## On the Migration of Fiscal Sovereignty

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The Oxford English Dictionary defines sovereignty as “supreme dominion, authority, or rule.” As a response to the sectarian violence of the 16<sup>th</sup> and 17<sup>th</sup> centuries, Jean Bodin and Thomas Hobbes advocated the elevation of a single domestic sovereign with absolute authority over a distinct territory. Recognizing that such supreme authority invites abuse, later thinkers have sought ways of protecting liberty and improving governance by finding ways of dividing and limiting sovereignty without destroying it. Decentralization and especially federalism have always been attractive from this perspective. The central government might be sovereign over what James Madison referred to in *Federalist 10* as “the great and aggregate interests,” with subnational governments sovereign over the “local and particular.” If each can be constrained to its respective sphere of authority, ambition will counteract ambition, thus protecting individual liberty. Moreover, local governments will have better information about citizen preferences for public goods than central governments. Mobility and intergovernmental competition will enhance welfare even further by helping citizens reveal preferences for public goods and limit rent-seeking. This notion of decentralization and divided sovereignty is at the heart of leading theories in welfare economics, public choice, and political science.

Yet something is wrong with this picture: it bears little resemblance to actual trends in the migration of fiscal, political, and administrative authority that started in the late 20<sup>th</sup> century. Sovereignty in the modern era of multi-tiered governance is often murky and shifting. “Supreme authority” in a policy area might be willfully delegated

upward or downward, contested in the courts, or even by challenged by force. More importantly, it is often explicitly or implicitly shared. Though American political scientists pointed this out years ago when referring to sovereignty in American federalism as resembling a “marble cake” rather than a “layer cake,” economists and political scientists have continued to theorize about decentralization as if it were primarily a process of neatly transferring sovereignty over distinct policy spheres from the center to regional or local governments.

Some aspects of the trend toward decentralization fit comfortably within that framework: Policy decisions in areas like policing, infrastructure, and education are increasingly being influenced by local officials, popularly elected governors and mayors have taken the place of central appointees, and the share of total public sector expenditures undertaken directly by central government officials has drifted downward.<sup>1</sup> But other features of this trend are harder to grasp but potentially more important. In most cases, decentralization means the joint involvement of two, three, or even more layers of government in formulating, implementing, and funding policies. Central governments almost never completely abandon entire policy areas; they often remain highly involved in regulating and overseeing local policy and budget decisions. While expenditure authority has migrated downward, taxing authority has not. The trend toward decentralization has been funded by revenue sources that are shared between central, regional, and local governments—usually according to fixed formulae—and a combination of general and earmarked grants, some of which are often quite discretionary and subject to political manipulation. Even when state and local

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<sup>1</sup> For a review of the evolving empirical literature on decentralization, see Rodden (2004).

governments collect taxes, the center often regulates or directly sets the base and/or rate, and often regulates the access of provincial and local governments to credit markets.

In short, decentralization is more likely to blur sovereignty than to limit or divide it. A new political economy literature takes up the task of rethinking decentralization in a context where subnational governments spend, the center taxes, and intergovernmental fiscal relations are characterized by politicized bargaining. A key observation in this literature is that the advantages of fiscal and political decentralization often emphasized in traditional theories might only be achievable under restrictive political and institutional conditions.<sup>2</sup> In a similar vein, this essay offers an attempt to rethink the basic notion of fiscal sovereignty in multi-tiered systems as an evolving set of beliefs in the context of a dynamic game of incomplete information played between central and subnational governments.<sup>3</sup> Provincial or local governments, along with their creditors and voters, attempt to assess the credibility of the central government's commitment to abide by pre-specified intergovernmental fiscal arrangements. When higher-level governments take on heavy co-financing obligations, fiscal sovereignty among subnational governments is difficult to maintain. The first section of this essay explains this game and its implications for the fiscal decisions of subnational governments. The second section discusses cross-national research and case studies of fiscal behavior around the world that explore some empirical predictions emerging from this analytical framework. The final section is more speculative, asking deeper questions about the historical conditions that shape the fiscal sovereignty of subnational governments, pointing the way toward a new research agenda.

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<sup>2</sup> See, e.g., Besley and Coate 2003, Inman and Rubinfeld 1997.

<sup>3</sup> The essay draws heavily on Rodden (forthcoming).

### *Fiscal sovereignty and commitment*

When sovereignty is unclear or disputed, actors use the information available to them and assign probabilities to the likely ultimate locus of authority in the event of a conflict. Sovereignty at a given time in a given policy area in decentralized systems is best understood as an *ex ante* set of beliefs about likely winners of future intergovernmental battles. For instance, federal sovereignty over inter-state trade in the American federation evolved slowly over the course of the 18<sup>th</sup> and 19<sup>th</sup> centuries, but as with monetary policy, there were long periods in which economic actors made investment decisions under considerable uncertainty about the locus of future authority.

Sovereignty over debt can be understood in a similar way. According to the conventional definition, central governments are sovereign debtors with “supreme authority” over their debt—no higher government guarantees it or can compel them to repay it. On the other hand, non-sovereign debtors like firms *can* be compelled to repay. When lending to individuals or firms in a developed domestic credit market, lenders have recourse to a variety of legal sanctions imposed and enforced by the sovereign if borrowers do not repay their debts. When lending to sovereign central governments, however, they have no recourse. Their hopes for repayment must be based on either the government’s interest in preserving its reputation in order to maintain access to credit markets (Eaton and Gersovitz 1981) or the creditor’s ability to mobilize trade or military sanctions against the borrower (Bulow and Rogoff 1989).

For subnational governments, however, the line between sovereign and non-sovereign debt is blurred. Creditors must make educated guesses about whether the

center implicitly guarantees their debt. Consider a simple game of incomplete information played between a provincial government and a central government. The provincial government is faced with a negative fiscal shock requiring fiscal adjustment, and must decide whether to endure the political pain of adjusting on its own, or follow an unsustainable debt path and ask for the central government for an unplanned debt relief transfer. Prior to this move, however, the first move is made by nature, which determines the central government's type—either committed or not. When pressed, the committed type of central government always prefers to allow the government to default, while the irresolute type of central government always prefers providing a bailout rather than allowing the local government to default. The provincial government does not know what type of central government it is playing against, so its fiscal decisions must be made based on its beliefs about the central government's type.

These beliefs are a good way to think about fiscal sovereignty. Provincial governments who believe with a probability of one that they are playing against a committed central government can be viewed as fiscal sovereigns. Looking down the game tree, they will adjust to negative shocks and attempt to avoid unsustainable deficits. Provincial governments who believe with probability zero that they are playing against a committed center are not sovereigns, and they will rationally respond to negative shocks by waiting for bailouts. In practice, however, as long as central governments have the power and resources to provide bailouts that are politically or economically costly to provide, we can think of the game as being played with incomplete information-- these probabilities are greater than zero and less than one. Unclear fiscal sovereignty is a fact of life in many decentralized fiscal systems.

The game is more interesting if envisioned as unfolding with several stages, where the provincial government can attempt to test the government's resolve in earlier stages, but as the game moves on its debt burden grows and the costs of adjustment increase, where the worst possible outcome for the province is that the game ultimately ends in default without a bailout. In this set-up, after each move by the central government, provincial governments update their beliefs about its type. Thus an irresolute center can attempt to mimic a committed center by denying bailouts in earlier rounds, hoping to induce the provincial government to adjust without a bailout. Thus under some constellations of beliefs and payoffs, there is an equilibrium characterized by delayed adjustment by provincial governments who unsuccessfully attempt to extract bailouts in early rounds but blink in the face of default.

A good example of the game in action was in the interaction of the U.S. states and federal government in the 1840s. The federation was still relatively young, and had a recent history of debt assumption and rather ad hoc resource distribution from the center to the states. There were good reasons to question the center's "no bailout" commitment. Bolstered by the good credit of the federal government, many states had undertaken internal improvements funded by debt. In the face of an unexpected fiscal shock associated with a financial panic, many states refused to introduce new taxes or otherwise adjust. Instead, they demanded bailouts from the central government, joining their (mostly British) creditors in arguing that their debt had implicitly carried a federal guarantee. It is difficult to reconstruct the perceived odds of a federal bailout from historical materials, but it is clear that the debt assumption movement was quite powerful and its failure was certainly not easy to predict. Several states held out bailout hopes to

the bitter end and defaulted when the bailout proposal failed in the legislature. Ultimately they were forced to undertake very painful adjustment measures. But state governments, voters, and creditors learned a valuable lesson: the central government—which was actually prohibited from borrowing on international credit markets during the affair—sent a costly signal of its commitment. After surviving a few more subsequent tests, the game has been played throughout the 20<sup>th</sup> century as if all parties have complete information that the center is committed. That is, the U.S. states approximate fiscal sovereignty. States may occasionally dance around the topic of bailouts—witness the most recent fiscal crisis—but hopes for bailouts are not sufficiently bright that states would actually refuse to adjust while waiting for debt assumption.

The game has played out differently in Argentina and Brazil in the 1990s. In these cases, several key provinces and states have correctly judged the center's commitment as non-credible, refusing to adjust and ultimately receiving large, costly bailouts. Clues to the center's lack of credibility were built into the basic intergovernmental agreements that emerged as democracy reemerged in the 1980s. In both cases, the central government remained highly involved in funding the constituent governments, often with a fair amount of discretion. Moreover, indebted states knew that they would be able to exert influence in the legislature, and log-rolling created a way to bring less indebted states into coalitions to vote for bailouts. Reproducing a pattern that has plagued both federations since the turn of the century, the largest states—especially São Paulo and Buenos Aires—expected that the center could not allow them to default because of negative externalities for the banking system and the country's creditworthiness. In each country, central governments have promulgated reforms

attempting to reassert “no bailout” commitments, but given the lessons learned from the central government’s moves in previous plays of the game, governors clearly continue to make fiscal decisions as if they are playing against a non-committed central government. Each country has had several major bailout episodes since the return of democracy, and governors continue to clamor for further debt renegotiation.

### *Intergovernmental fiscal systems and sovereignty*

Case studies have identified a variety of factors affecting the perceived likelihood of future bailouts, including the structure of jurisdictions, the nature of legislative bargaining, the identity and political clout of debt holders, and partisan incentives. Yet perhaps the most essential factor shaping fiscal sovereignty is the basic structure of intergovernmental fiscal relations between higher- and lower-level governments. Quite simply, bailout expectations are strongest when subnational governments rely on grants and revenue-sharing rather than independent local taxation. Even when the distribution of grants is usually non-discretionary, provincial governments can hold out hopes of pressing for increased allocations in future renegotiations in the event of a fiscal crisis. When a highly transfer-dependent government must close schools and fire stations and faces default, the eyes of voters and creditors turn quickly to the center for a solution, even if the fiscal crisis was actually precipitated by bad decisions at the local level. If local governments believe that the center’s role in financing them will cause the political pain of default to be deflected upward, this might affect not only their beliefs about the probability of a bailout, but might also reduce their own disutility of default.



One good way to measure bailout expectations—and hence fiscal sovereignty—is to examine the behavior of credit markets and bond rating agencies. In the guidelines used by rating agencies to assess subnational governments, transfer-dependence is clearly viewed as the best indicator of the central government’s implicit guarantee. Bond raters reason that if local governments that are highly dependent upon shared revenues and transfers are allowed to access credit markets, the center understands that it is ultimately responsible and provides an implicit guarantee. Thus in these cases the credit ratings of the subnationals are tightly clustered around or equal to the sovereign rating. For instance, Fitch-Ibca awards each of the German states with the federal government’s AAA rating because it is so thoroughly convinced that the German fiscal equalization system implies a federal guarantee of state debts. At the other end of the spectrum, rating agencies treat the U.S. states, Canadian provinces, and Swiss Cantons—the three federations with the heaviest dependence on independent subnational taxation in the world—as miniature sovereigns; credit ratings (and bond yields) are tightly linked to the independent debt servicing capacities of the subnational entities. Somewhere in the middle is a country like Australia, where rating agencies clearly pay close attention to the debt servicing capacities of the individual states, yet taking clues from the intergovernmental transfer system, they explicitly assess a high probability that the Commonwealth government would bail out troubled states in the event of a crisis. This allows transfer-dependent states like Tasmania to pay significantly lower interest rates than it would if it were a sovereign.

Understanding this logic, it is reasonable to expect that central governments with a large role in financing lower-tier governments would tightly regulate their access to

credit markets. Indeed, von Hagen and Eichengreen (1996) and Rodden (2002) use cross-country data to demonstrate a high correlation between transfer-dependence and centrally-imposed borrowing restrictions. Rodden (2002) finds that the combination of transfer-dependence and top-down borrowing restrictions is associated with long-term balanced budgets among subnational governments. Another finding is that this combination is most often found among unitary systems. Large federations—especially where the provinces were parties to the original constitutional bargain and must sign on to any significant alterations—find it difficult to limit the access of their constituent units to deficit finance. Politically powerful subnational governments with borrowing autonomy and limited tax autonomy can be a dangerous combination. In this context, blurred sovereignty can have troubling macroeconomic consequences.

*Why does fiscal sovereignty migrate?*

Cross-national comparative research has identified broad cross-national differences in subnational fiscal sovereignty and explored the implications for macroeconomic stability. Yet many important questions remain unresolved. An important further step is to explain why some subnational entities, like the U.S. states and Canadian provinces, have emerged and stabilized essentially as sovereigns, while others, like the Brazilian and Argentine states, gradually lost their fiscal sovereignty in the 20<sup>th</sup> century. One way to answer such questions is to examine critical moments, like the failed debt assumption movement in the U.S. in the 1840s or bailout episodes like Brazil's around 1900, 1930, and again in the 1990s. This approach leads to intriguing

though highly contingent stories about powerful individuals, complex backroom political deals, specific elections, military campaigns, and the like.

A goal for future research is to establish more generally the conditions under which decentralized tax autonomy and fiscal sovereignty can be sustained. In fact, the empirical results discussed above may be driven by omitted variables lurking in the background that jointly determine both the structure of federalism and macroeconomic outcomes. At the beginning of the 20<sup>th</sup> century, state and provincial governments had wide-ranging tax authority in Argentina, Australia, Brazil, Canada, Germany, Mexico, Switzerland, and the United States. The same was true of local governments in many unitary systems. In the federations especially, the fiscal authority of the central government was extremely limited. In many cases, the central government had little direct tax authority and had to depend on contributions from the provinces. By the end of the century, however, autonomous subnational taxation had virtually disappeared in Argentina, Germany, and Mexico, and was attenuated significantly in Australia and Brazil, while it has remained robust in Switzerland and the United States. Taxation in Canada was centralized during World War II, but the provinces quickly regained authority over the income tax thereafter.

What accounts for these different trajectories around the middle of the century? And why has the relative centralization of taxation been so stable ever since? It appears that a global recession and then a global war help explain the timing, but not the diversity of the responses. By answering these questions, we may gain a valuable perspective on the future of taxation and fiscal sovereignty. The remainder of this essay considers some nascent arguments emerging in the literature.

Regime Type: Federations were much more likely to retain decentralized taxation than unitary systems (Diaz-Cayeros 2004). Beyond this, perhaps the most obvious common feature linking the federations that have maintained decentralized systems of taxation is the simple fact that they have never fallen prey to centralized dictatorships. Some of the key moments of tax centralization in Argentina, Brazil, and Germany have come during their periods of authoritarian rule. However, significant centralization has also taken place under democracy, as in Weimar Germany or Australia and Canada during World War II.

Civil wars or ethnic antagonism: Switzerland and the United States had civil wars during the 19<sup>th</sup> century. The United States has race and the North-South divide, Canada has “two societies,” and Switzerland has three. Perhaps long-term tax decentralization stabilizes when a country has regionally-based, mutually suspicious groups. This is certainly not a sufficient condition, however, as long traditions of bloodshed, civil war, and regional antagonism in Mexico, Argentina, Nigeria, and other federations have been insufficient to prevent tax centralization.

Political parties: William Riker’s classic argument about the importance of decentralized political parties in maintaining decentralized federalism (1964) provides another possible explanation. Indeed there seems to be some correlation between the centralization of party systems and the relative centralization of taxation. The federal and provincial party systems in Germany and Australia have grown increasingly intertwined since World War II, as have the federal and provincial fiscal systems. The Canadian party system seemed to unravel in the same period (directly after World War II) when provincial tax autonomy was restored. Taxation is more decentralized in Brazil than in

other Latin American federations, as is its party system. While these correlations are interesting, causation is elusive. In fact, Chibber and Kollman (2004) assert that the causation runs in the opposite direction: the relative centralization of fiscal authority shapes the incentives of voters, which in turn shape the relative centralization of the party system.

It seems likely that the centralization of taxation and political parties are co-determined. In the Mexican context, Alberto Diaz-Cayeros (forthcoming) argues that elites interested in creating a nation-wide common market and an integrated system of taxation found it difficult to commit not to expropriate the resources and patronage that sustained rural elites. A hegemonic party, the PRI, emerged as a valuable commitment device that promised rural elites a guaranteed flow of resources in the future. In this story, neither tax centralization nor party centralization “caused” the other, but both emerged as part of a pact among self-interested elites.

Inequality and economic geography: Another hypothesis—flowing from a model presented by Patrick Bolton and Gerard Roland (1997)—is that decentralized taxation is difficult to maintain in the presence of pronounced inter-regional income inequality, especially if a large portion of the wealth is generated in one dominant jurisdiction. In fact, the economic geography literature demonstrates that such a pattern emerges quite naturally in early stages of economic development, when agglomeration effects lead to pronounced income differences between the industrializing center and the poor, largely agricultural periphery. As a legacy of this, in most decentralized fiscal systems the median jurisdiction is much poorer than the mean. Since a decentralized system of taxation with a weak center would only allow the wealthy regions to provide public

goods like infrastructure investment and education and get further ahead while the periphery lags further behind, it is not difficult to understand why political entrepreneurs in the periphery would push for tax centralization aimed at capturing some of the wealth generated in the core. Whether one derives insights from median-voter or inter-regional bargaining models, it is straightforward to hypothesize that in the long run, decentralized taxation is most sustainable in the presence of a relatively even and fluid inter-regional income distribution that limits demands for centralized inter-regional tax-transfer systems.

It may also be important to consider the importance of intra-regional inequality and class conflict. Capitalists in the urban core may actually prefer a centralizing fiscal pact with rural elites if they fear that the urban poor would tax them at an even higher rate under decentralization. This provides an intriguing interpretation of the centralizing fiscal pacts in Latin America: urban capitalists form an alliance with rural strong-men, whose interests are intentionally over-represented in the legislature. A share of the urban industrial surplus—a part of which is to be used on patronage—is exchanged for rural support in maintaining a low overall level of redistribution.

Once tax centralization has been achieved, a simple combination of the facts of economic geography and the median voter logic might also help explain why it can be so stable. Consider the resistance of countries like Germany, Italy, and the UK to demands for tax decentralization. While the Italian North and wealthy German states like Baden-Württemberg and Bavaria are demanding tax decentralization, they are clearly outnumbered by jurisdictions—home to a majority of the population—that benefit from the status quo tax-transfer system. However, even if the wealthy regions with

preferences for decentralized taxation are outnumbered, they may be able to limit centralization if they are in a position to make credible secession threats, as in Belgium and Spain—the two European countries that have made the boldest recent moves toward increased subnational tax autonomy.

### *Conclusion*

Authority over the selection of provincial and local officials has shifted to their respective citizens, and the autonomy of these officials over administration and expenditures have increased vis-à-vis central officials. Yet in most cases, authority over taxation has remained centralized, and the center maintains an active role in inter-regional redistribution and the regulation of subnational finance. Thus an important task for political scientists and economists is to leave behind notions of neatly compartmentalized sovereignty and rethink decentralization as a form of sovereignty that is murky, contested, and frequently renegotiated. This essay has reviewed some contributions to a recent literature exploring fiscal management in multi-tiered systems when sovereignty over subnational debt is in dispute. It has also previewed a nascent literature seeking to make fiscal sovereignty endogenous by explaining the upward migration of tax authority over the last century and the conditions under which it might be avoided or reversed. Given the potential implications for inter-regional and inter-personal inequality, redistribution, and macroeconomic stability, we have much to gain from a new generation of theory-guided empirical research on the migration of tax authority.

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