

STRENGTH IN DIVERSITY? FISCAL FEDERALISM AMONG THE FIFTY U.S. STATES

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Incomplete Draft: October 30, 2014

Not for Distribution

Paper prepared for the  
Annual Conference of the National Tax Association  
Santa Fe, New Mexico  
13-15 November 2014

## Section I. Introduction

Fiscal federalism in the United States has a distinctive structure that contrasts sharply with that in most other industrialized nations. Indeed, foreign scholars, visiting in the United States, are often astonished at what they find: a highly decentralized structure consisting of fifty different fiscal and governmental systems with many apparent anomalies when compared to fiscal systems elsewhere. Our purpose in this paper is to describe and explore the U.S. “brand” of fiscal federalism and to contrast it with the more typical forms of intergovernmental structure that one finds elsewhere.

We begin in section II with an overview of the distinctive features of the intergovernmental system in the United States. We then proceed in subsequent sections to investigate in greater depth the striking variety in fiscal structures and the operation of systems of public education across the fifty states. Our treatment has two basic themes. The first is simply the highly decentralized nature of the public sector in the U.S.; the second is the large variation in governmental and fiscal structure and in laws across the fifty states. In the final section of the paper, we turn to the normative implications of our descriptive analysis and ask whether or not all this diversity across the states is a good thing. Does such diversity produce outcomes that increase social welfare?

## Section II. An overview of the distinctive character of the U.S. fiscal system

Compared to most other industrialized nations, the U.S. has a relatively small and highly decentralized public sector. In Table 1, we display for a subset of the countries comprising the Organization for Economic Cooperation and Development (OECD), the size of the government sector as measured by total revenues or total expenditures as a share of Gross Domestic Product.

In 2009, the U.S. ranked 32 out of 34 OECD countries in the size of its government sector as measured by revenues. In that year, U.S. governments financed much of their spending through borrowing, thus, when the size of government is measured by expenditures, the U.S. rank rises to 24, which still places the country in the bottom one-third of the 34 OECD countries.

Using two different sources of data (the OECD and the International Monetary Fund, IMF), we display in Table 2 for several countries the shares of total revenues and of total expenditures that are attributable to sub-national governments. The U.S. is one of the more

decentralized countries among this set of industrialized countries. Depending on the measure and the source, the degree of decentralization in the U.S. sits in a tight range from 43 percent to 47 percent, and expenditures are only slightly more decentralized than are revenues, with that difference being the smallest of all of the differences displayed. Only Switzerland and Canada are more decentralized than the U.S.<sup>1</sup> In several countries (Denmark, the Netherlands, Norway and the UK, for example), expenditures are much more decentralized than are revenues. In these countries, revenues from the central government are an important source of funding for sub-national units of government.

The sizeable degree of decentralization in the U.S. reflects in large measure the limited range of functions performed at the central level in the U.S. In the budget of the central government, two items, military spending and the social security program, account for more than half of central expenditures. The primary responsibility for other functions rests with the state and local sector.<sup>2</sup>

Not only are direct expenditures on goods and services at the central level relatively small in the U.S., but transfer payments from the center to the state and local sector are modest. In fiscal year 2011, central-government grants to state and local governments accounted for 17 percent of central expenditures and about a quarter of spending by state and local governments (Congressional Budget Office, 2013). About half of these transfers support public-health programs, most notably the Medicaid program, which provides health care for low-income households. There are also transfers to the states to assist with various infrastructure programs such as highway construction.

But there are no general transfers to the states. It is interesting in this regard that Robin Boadway (2006), in his general treatment of federal fiscal systems, argues that “Equalizing transfers are the lifeblood of federations. They facilitate the decentralization of fiscal

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<sup>1</sup> Spain also appears to have a large degree of decentralization; however, as explained in the footnotes to Table 2, we doubt the accuracy of the data for Spain.

<sup>2</sup> In an earlier literature, Brennan and Buchanan (1980) argue that there is a causal relation between the extent of fiscal decentralization and the overall size of the public budget. They contend that competition among lower-level governments constrains the monopolistic tendencies of the public sector so that countries with highly decentralized public sectors would tend to have relatively small public sectors. This notion became known as the Leviathan Hypothesis. The evidence is, however, mixed at best. Oates (1985), in the first empirical study of “Leviathan,” finds that the evidence runs counter to the Brennan-Buchanan proposition. Some later empirical work, however, suggests a more complex relationship. See, for example, Ashworth, Galli, and Padovano (2013).

responsibilities by addressing the inequities and inefficiencies that would result from decentralization of spending and revenue-raising responsibilities” (p. 376). This is not the case in the U.S., where there are no general equalizing transfers.

To see how distinctive the U.S. grant system is, in Table 3 and Figure 1, using IMF data, we document for several countries the size of central government transfers to subnational governments. It can be seen that in countries such as Australia and Denmark state and local governments rely more heavily on central government transfers than in the U.S. Indeed, only in Germany, Spain and Switzerland do subnational governments have a lower reliance on central government grants and we suspect that Germany’s and Spain’s figures are greatly underestimated because of the treatment of shared taxes.

To understand to what degree diversity among subnational governments is a distinct feature of the U.S. system, in Table 4, we display for a handful of countries the degree of diversity across states or regions (as measured by the coefficient of variation) observed in total subnational expenditures per capita. Australia shows substantial diversity, followed by the United States. The three European countries exhibit significantly less diversity, a fact that fits well with the casual observation that countries in Europe, for the sake of preserving equity, tend to devolve less fiscal autonomy to subnational governments than does the United States.

Not only is the state and local sector relatively large and diverse in the U.S., but the states vary widely in their laws and institutions, reflecting differences in social values. There are, for example, quite different laws and procedures across the states for marriage, divorce, inheritance rules and taxes, capital crimes and punishment, and tort law more generally. Moreover, the executive and legislative structures of state and local government vary significantly across the states. Many have deep historical roots. One striking example is the state of Louisiana, whose legal system is still based largely on the Napoleonic Code, where most other states have common-law backgrounds. Another is the state of Nebraska, which has a unicameral government.

A current and highly controversial matter that reflects this diversity is the issue of single-sex marriage. Several states have passed laws restricting marriage to a man and a woman, while other states make provision for single-sex marriages. This has become even more complicated by

the unwillingness of some states to recognize single-sex marriages legally performed in other states. These issues are currently being sorted out through the judicial system.

The reliance on diverse approaches to current policy issues also manifests itself in some new and recent efforts to address global climate change. Rather than imposing a uniform set of standards for reducing carbon emissions from power plants, the Obama Administration has promulgated a new regulation that offers the states a menu of policy options to meet their respective pollution-reduction targets (Davenport and Baker, 2014).

In the next two sections, we explore more deeply and systematically the extent of decentralization and the variation across the states for two major institutions: state and local fiscal systems and the structure and funding of public education. We then address the normative issue of whether or not the striking diversity across states enhances overall social welfare.

### Section III. Fifty distinct fiscal systems

Diversity is one of the characteristics that best summarizes the 50 fiscal federal structures of the states in the United States. In this section we document to what extent diversity is present in variables important to understanding the sub-national public sector. Table 5 presents descriptive statistics on 11 variables that capture the main features of the state and local public sector in 2011. The first column lists the variables of interest (defined at the bottom of the table). In the second column we present the United States average calculated as the simple average of the fifty state values. The next two columns present two measures of diversity, the standard deviation across states, and the coefficient of variation (standard deviation divided by the mean). Finally, in the last two columns we present the minimum and maximum values observed across the fifty states. For many variables the range between the minimum and maximum values is quite large, indicating that states can differ dramatically in some characteristics of their fiscal structure.

On average, state governments and local governments are very similar in size, as measured by direct expenditures as a percentage of Gross State Product (GSP), labeled in the table as size of state government (at 8.81 percent) and size of local government (at 8.55 percent). The diversity across states, as measured by the coefficient of variation, is larger between states than between local governments of different states. When the sub-national governments are

considered together, their expenditures are on average 17.36 percent of GSP, and the coefficient of variation drops, which indicates that state and local governments complement each other to a certain extent.

The degree of decentralization as measured by the proportion of total state and local government expenditures carried out by local governments is on average 41 per cent. We see large differences among states, from Vermont with only around 17 percent in the hands of local governments to Colorado where the local governments spend more than the state government (56 percent of the total). There are also large differences across the states in state-to-local transfers as a percentage of total local revenues, with a range from 8.02 percent in Hawaii to 63.82 in Vermont.

Where the diversity across states is more striking is in the reliance by state and local governments on different tax sources. On average states obtain almost equal percentages of their revenues from the individual income tax and the general sales tax, with over thirteen percent attributable to each tax. But the story state by state is very different. Some states do not employ one or the other tax, while other states raise up to 30 percent of total revenues from one or the other. These differences are well captured in the coefficient of variation of each tax variable, with values significantly higher than for any other variable examined. Similar variability is observed across local governments in the different states in their reliance on the property tax, with a mean value of almost 30 percent, but with large differences; for example, local governments in Arkansas raise less than ten percent from the property tax, while local governments in Connecticut raise close to 60 percent. We conclude that there are large differences across the states in their tax structures for both the primary tax sources at the state government level and the most important local government tax, the property tax.

States are less diverse in how they spend their revenues. The largest expenditure category, at 21.76 percent of total spending, is K-12 education, where the variability (coefficient of variation) is small relative to the variability in the other two spending shares reported (for higher education and public welfare) and the smallest variability in the table. The next most important expenditure component, public welfare (accounting for close to 20 percent of the budget), exhibits larger diversity than K-12 education, but still much less variation than we observe in the revenue variables.

One source of revenue that is more uniform across states than any of the other revenue variables analyzed is the amount of federal grants received by state and local governments combined. This source of revenue is on average as large as the sum of the individual income tax and the general sales tax put together, but there is little variability across the states as measured by the coefficient of variation, although the range between the maximum value (for Mississippi) and the minimum value (for Colorado) is almost twenty percentage points.

We have not identified any state that shows extreme values in more than a couple of the variables analyzed. A few states have values near the maximum or minimum in three variables (for example, Colorado has the highest degree of decentralization, the lowest reliance on federal grants, and one of the lowest values for the size of state government), but there are no obvious patterns to single out any one state.

We conclude that the state and local fiscal systems of the 50 states differ significantly and that the differences in their tax structures are much larger than the differences in their expenditure structures. States spend similar shares of total spending on education, for example, but obtain resources to finance expenditures through quite different tax structures. In the next section, we describe in some detail differences in systems of funding K-12 education in the U.S.

#### Section IV. K-12 Education: Equity versus local control

Over the last half century, there has been a movement among the states to reform the method of financing K-12 education. Oftentimes the reforms were inspired by state Supreme Court cases focused on inequities in funding across school districts. Policies enacted to reduce inequities tended to reduce local control and local reliance on the property tax for funding education. In general, dispersion in spending was reduced via increased resources for low-spending school districts.<sup>3</sup>

Different states have taken different approaches. ...yet to come...

#### Section V. Has diversity been stable and is all this diversity a good thing?

In the preceding sections of the paper, we have presented a basically descriptive treatment of the fiscal systems of the 50 states in the United States with two themes: first, the

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<sup>3</sup> See Murray, Evans and Schwab (1998) for an examination of changes in the distribution of K-12 education spending across school districts within and across states from 1972 to 1992.

public sector in the U.S. is relatively decentralized and, second, the diversity in systems, especially in tax structures, is quite large and striking. This raises two related questions. The first is an important normative issue: Is this diversity desirable? In other words, does it produce outcomes that increase overall social welfare? The second is whether diversity prevails over time and meets the tests of political stability and economic success.

The traditional economic case for fiscal decentralization is, in fact, based on the improved allocation of resources in the public sector that results from expanded fiscal choice at lower levels of government. It argues that diversity across the state-local sector, if appropriately structured, improves the performance of the overall public sector. In short, diversity is potentially a good thing.

This view has been formalized in the so-called Decentralization Theorem, which lays out a set of sufficient conditions for fiscal decentralization to be welfare-enhancing.

*The Decentralization Theorem:* For a public good—the consumption of which is defined over geographical subsets of the total population, and for which the costs of providing each level of output of the good in each jurisdiction are the same for the central government or for the respective local government—it will always be more efficient (or at least as efficient) for local governments to provide Pareto-efficient levels of output for their respective jurisdictions than for the central government to provide any specified and uniform level of output across all jurisdictions (Oates, 1972, p. 35).

This proposition seems quite obvious, but it does call attention to two conditions that are needed for its validity: the absence of any significant economies of scale associated with the centralized provision of the public good, and the absence of any important spillover effects across jurisdictions. On the first issue, existing studies suggest that decentralized provision of most public services (aside most notably from national defense) do not exhibit economies of scale that would justify centralized provision. The public outputs provided by state and local governments appear in most cases to exhaust any major scale economies.

The issue of interjurisdictional spillover effects is more complex. For many state-local outputs involving infrastructure (e.g., local roads and parks), the benefits and costs accrue predominately within the jurisdictional boundaries. But there are some cases where state and local activities affect their neighbors. For environmental regulation, for example, polluting activities in one area may reach across boundaries; the emissions from power plants in one



locality or state are sometimes carried by prevailing winds into neighboring jurisdictions. The U.S. Environmental Protection Agency has used this as justification for the centralized regulation of such emissions.

A yet more complicated issue is education. In the highly mobile modern world with households moving among jurisdictions, the quality of public education in one state or locality can have significant implications for the productivity of workers and the quality of life elsewhere. Moreover, education also raises equity issues. As Boadway (2006) has pointed out, there may exist in a federation some sense of “horizontal equity,” that households in certain jurisdictions should not suffer adverse effects by virtue of simply being located in a state or locality with high levels of fiscal needs and/or relatively low fiscal capacity. Intergovernmental grants can provide a fiscal instrument to address some of these perceived inequities.<sup>4</sup> To some extent, of course, the case for fiscal decentralization and diversity runs counter to such equity principles. But particularly as regards education, there may be a pervasive sense, both on efficiency and equity grounds, that certain standards of achievement in educational systems be met in all jurisdictions.<sup>5</sup>

In the U.S., this concern has manifested itself in the so-called “Common Core Initiative.” The governors of the fifty states responded to this issue by establishing a working group that in 2008-2009 drew up a set of standards for achievement across the states. These standards consist of a set of quantified benchmarks in English-language arts and mathematics at each grade level from kindergarten through high school. These are basic skills in reading and mathematics that are to be taught and whose achievements are to be measured by testing. The Initiative does not lay out any specific curriculum; this is left to the individual states. In addition, each state determines its own timelines and budgetary procedures for meeting the standards.

The recent experience with the Common Core Initiative in the U.S. provides some intriguing insights into the kinds of tensions that arise under such measures that seek uniformity across the U.S. states. As of mid-2014, 43 states had approved the Common Core standards, but considerable opposition had emerged. The governors of a few states introduced bills to repeal the

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<sup>4</sup> We have, in fact, seen in Table 5 that K-12 education expenditures as a percent of total state and local expenditures is the variable that displays the least diversity across states.

<sup>5</sup> See Calsamiglia, Garcia-Milà, and McGuire (2013) for a treatment of the notion of solidarity in the context of a fiscal federal system

standards and replace them with a new set of locally determined standards amidst charges that such standards amount to a central takeover of public schools. Thus, we find here a striking confrontation between various efficiency and equity concerns on a national scale and the strong sense of the importance of decentralized choice and diversity in the U.S.

In view of the tensions mentioned above, it is conceivable that diversity across states may diminish over time. These tensions combined with the forces of globalization and competition could very well be moving the system toward greater homogeneity. In fact, in Europe, while there is a move toward greater devolution in some countries, the European Union is building supranational institutions for governance and economic management, and harmonization is at the center of the political discussion. If we find that diversity in the U.S. has been stable over time, it would bring interesting lessons to the European discussion, and might support the notion that diversity is viable and associated with economic benefits and political stability.

To investigate whether diversity in fiscal systems in the U.S. has been stable over time, we focus on the variables displayed in Table 5 and analyze their dynamics by examining their means, standard deviations, and coefficients of variation over the years 1977-2011. For most variables there is no clear pattern of convergence or divergence over time in the value of the coefficient of variation and therefore we conclude that diversity in the 50 fiscal systems is stable. The state individual income tax and general sales tax variables, which displayed the largest divergence in values in 2011 (see Table 5), have displayed similar degrees of variance for the period analyzed, although with some fluctuations up and down over the period. The local property tax, on the other hand, displays a slight decrease in its mean, and some reduction also in its coefficient of variation, showing therefore some reduction in diversity across states. This is likely due to the wave of reforms that began in the late 1970s and continued to roll across the states for many years, bringing in greater uniformity.

The degree of decentralization shows stability over time in all three statistics. The size of state government has experienced an increase in its mean, but there is no significant change in the diversity measures. Similar patterns can be observed for the size of local government. The expenditure share variables, which exhibited lower diversity values than the tax figures in 2011, show quite stable patterns except for public welfare. An important increase in the mean of the share of public welfare over time corresponds with a decreasing mean of the share of K-12

education, but while the latter maintains its diversity over time, the share of public welfare shows a clear decrease in diversity across states. This increase in uniformity is likely due to the increasing importance of Medicaid as a share of the public welfare budget and the direct role of the federal government in financing the program and setting the rules.

An interesting picture emerges from this examination of the 50 fiscal systems in the U.S. over the last 35 years. Of the variables characterizing the state and local fiscal systems, the variables that are the most diverse and have remained diverse over time are those that arguably matter less for equity and perhaps matter the most for efficiency – the major tax variables. The states have chosen more uniformity in expenditure variables, in particular, education and public welfare, which are more relevant for achieving equity. In effect, the decentralized system in the U.S. appears to have achieved a measure of equality or solidarity while allowing local choice over taxes.

Fiscal decentralization and diversity may have advantages beyond expanded fiscal choices at the state and local level: they can encourage development and experimentation with new forms of public policy. In the most famous statement of this view (so-called “Laboratory Federalism”), Justice Louis Brandeis wrote in 1932 that

There must be power in the States and the Nation to remold through experimentation our economic practices and institutions to meet changing social and economic needs...It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory, and try novel social and economic experiments without risk to the rest of the country (Osborne, 1988).

There are, in fact, a number of instances in the U.S. in which innovative measures introduced by state or local governments spread into wider use in other states, or, in some instances, at the national level. Unemployment insurance, for example, was a state-level policy before the federal government effectively made it mandatory across all the states in 1932. In the field of environmental regulation, California introduced the first emissions standards for motor vehicles in 1959, more than a decade before the implementation of national standards. In a more recent policy innovation, five states in the 1970s introduced a new fiscal institution to cushion public finances against the shocks resulting from cyclical variability in revenues and expenditures. These measures consisted of budget stabilization funds (known as “rainy-day funds”) with explicit rules for deposits, withdrawals, and replenishment. The general appeal of

such funds soon became apparent with a rush of adoptions by other states in the 1980s. At last count, there were only five states without such a fund. Another example is the welfare reform act of 1996. The design of the reform that was adopted at the federal level drew heavily upon various experiments undertaken at the state level. Fiscal decentralization and diversity have thus made a variety of contributions to social well-being.

There is no simple answer to the normative question we pose in this section of the paper: does diversity in subnational fiscal systems increase overall social welfare? There has been some prior exploration of the potential magnitude of the welfare gains from diversity—and this work suggests that the gains may be quite substantial (Oates, 1997). The evidence presented here suggests that diversity has thrived in the U.S., particularly with respect to tax systems, despite many potentially derailing forces. It appears, at least for the U.S., that a decentralized, diverse system has served the country well.

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Table 1: Size of Government: Total Central+State+Local Revenues and Expenditures as a Share of GDP (select OECD countries, 2009)

Country	Total Revenues as a percent of GDP	Revenues Rank over 34 countries	Total Expenditures as a percent of GDP	Expenditures Rank over 34 countries
Australia	33.00	30	35.30	30
Canada	38.53	21	44.05	23
Chile	21.25	34	24.62	33
Denmark	55.61	2	58.42	1
France	49.57	6	55.99	3
Germany	44.47	11	47.50	16
Israel	39.76	19	44.27	22
Mexico	22.19	33	23.51	34
Netherlands	45.96	10	51.40	10
New Zealand	42.28	14	41.91	26
Norway	56.18	1	46.32	17
Spain	34.67	26	45.80	19
Sweden	54.19	3	55.16	4
Switzerland	34.95	25	33.74	31
Turkey	32.67	31	39.38	28
United Kingdom	40.35	17	51.64	9
United States	30.99	32	42.18	24
OECD average	41.39		46.24	

Table 2: Degree of Fiscal Decentralization: State+Local as a share of Central+State+Local, Revenues and Expenditures (IMF 2012; OECD 2012 except for Canada 2010, and Israel and Mexico 2011)

Country	IMF Revenues Decentralization	OECD Revenues Decentralization	IMF Expenditures Decentralization	OECD Expenditures Decentralization
Australia*	0.27	NA	0.46	NA
Canada*	0.55	0.55	0.76	0.66
Chile	0.07	NA	0.13	NA
Denmark	0.27	0.29	0.63	0.62
France	0.16	0.16	0.20	0.21
Germany*	0.35	0.35	0.46	0.39
Israel	0.08	0.09	0.12	0.12
Mexico	NA	0.10	NA	0.45
Netherlands	0.10	0.10	0.32	0.32
New Zealand	0.07	NA	0.08	NA
Norway	0.13	0.14	0.34	0.34
Spain*^	0.34	0.43	0.50	0.40
Sweden	0.38	0.38	0.49	0.49
Switzerland*	0.46	0.48	0.63	0.58
Turkey	0.05	NA	0.10	NA
United Kingdom	0.06	0.09	0.27	0.26
United States	0.43	0.45	0.45	0.47

\* We are unable to check but we strongly suspect that grants from the regional level of government (states) to the local level of government (locals) are double counted in the IMF expenditures data for these countries, i.e., grants from states to locals are counted as expenditures by states and the monies are counted again as expenditures by locals. If this is the case, the degree of decentralization of expenditures is exaggerated.

^ The OECD figures for Spain look suspect to us. Our understanding of the Spanish system is that revenues are less decentralized than expenditures.

Table 3: Degree of grants dependency of subnational governments  
(2012, or most recent year available)

Country	Intergovernmental Transfers as a Percentage of Subnational Government Revenue
Australia	41.84
Canada*	N/A <sup>2</sup>
Chile*	46.08
Denmark*	55.36
France*	27.11
Germany	9.33
Israel*	29.26
Mexico	N/A <sup>2</sup>
Netherlands*	69.64
New Zealand*	20.45
Norway*	43.51
Spain	10.78
Sweden*	22.35
Switzerland <sup>1</sup>	16.74
Turkey*	59.27
United Kingdom*	71.12
United States	20.06

Source: Government Finance Statistics, International Monetary Fund.

\*For these countries, the subnational government includes only the local level.

1: Most recent year available for Switzerland is 2011.

2: Data are not available on an accrual basis.



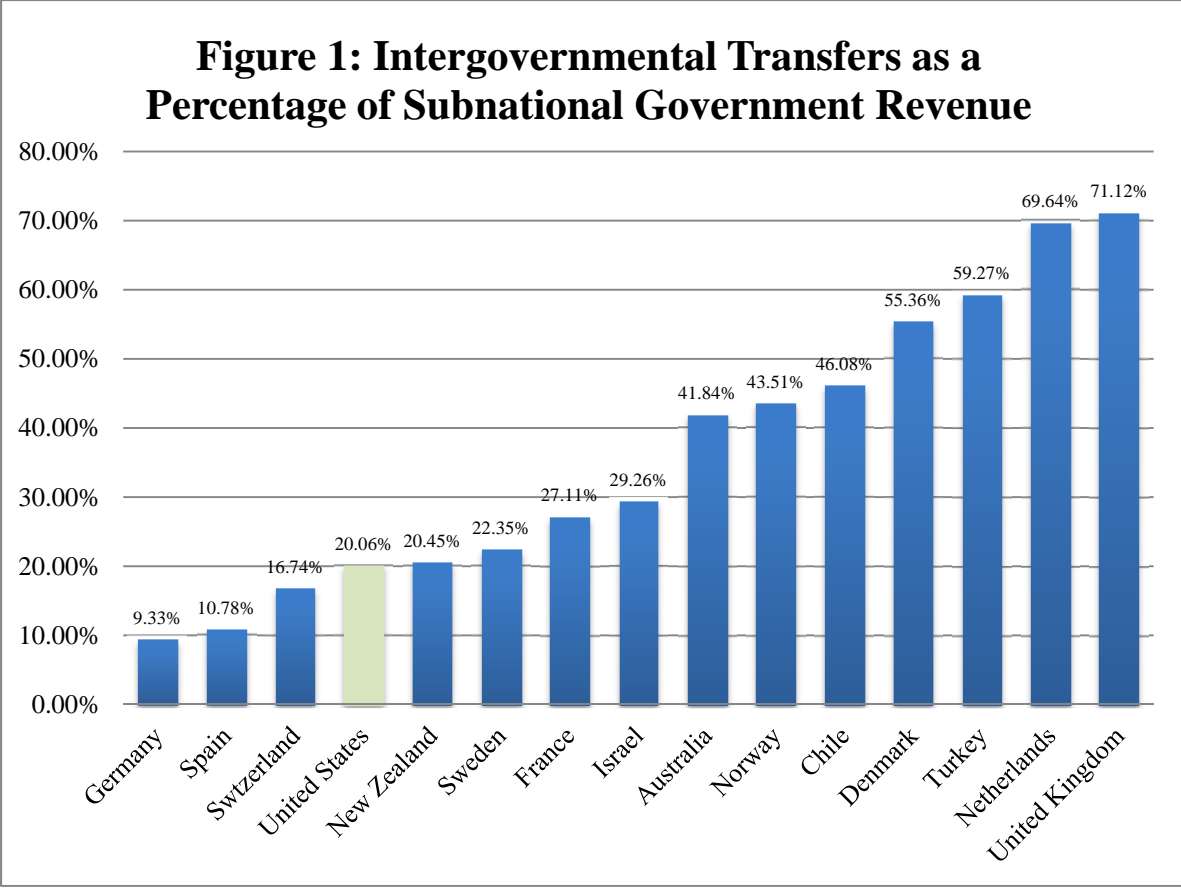


Table 4: Degree of Diversity across Regions in Total State+Local Expenditures Per Capita

Country (number of states/regions)	United States (50)	Australia (8)	Germany (16)	Spain (15*)	Sweden (21)
Coefficient of variation	0.22	0.31	0.16	0.08	0.06

Source: United States Census, 2011; Australian Government Finance Data, 2013; Statistisches Bundesamt, 2011, Germany; Instituto de Estudios Fiscales, BADESPE, 2012, Spain; Statistiska Centralbyran, 2009, Sweden.  
 \*For Spain we exclude the Basque Country and Navarra because they are under a different fiscal federal model than the other autonomous communities.

Table 5: Distinct fiscal systems. Statistics based on 50 State observations for 2011

Variable	U.S. average	Standard deviation	Coefficient of variation	min value (state)	max value (state)
Degree of decentralization	41.01	9.19	0.224	17.37 (VT)	56.38 (CO)
Size of state government	8.81	2.29	0.260	4.93 (NV)	14.05 (AK)
Size of local government	8.55	1.58	0.184	3.51 (HI)	12.09 (NY)
Size of s&l government	17.36	2.49	0.143	13.68 (TX)	24.76 (MS)
State-to-local transfers as a percentage of local revenues	33.85	8.45	0.250	8.02 (HI)	63.82 (VT)
Reliance by state government on individual income tax	13.54	7.92	0.585	0 (7 states)	27.55 (CT)
Reliance by state government on general sales tax	13.28	6.62	0.498	0 (5 states)	30.24 (WA)
Reliance by local governments on property tax	29.97	11.06	0.369	9.58 (AR)	58.29 (CT)
Percentage of total s&l expenditures on K-12 education	21.76	2.58	0.118	15.88 (HI)	28.73 (NJ)
Percentage of total s&l expenditures on higher education	10.37	2.44	0.235	6.03 (NY)	16.24 (UT)
Percentage of total s&l expenditures on public welfare	18.86	3.59	0.190	10.11 (WY)	25.77 (ME)
Reliance by s&l governments on federal grants	26.102	4.61	0.177	17.94 (CO)	37.64 (MS)

Source: United States Census, 2011. All mean variables are multiplied by 100

Degree of decentralization = local (own source) revenues/state+local (own source revenues)

Size of state government = state direct expenditures/GSP

Size of local government = local direct expenditures/GSP

Size of s&l government = state+local direct expenditure/GSP

State-to-local transfers as a percentage of local revenues = intergovernmental revenues from state to local governments/total local general revenues

Reliance by state government on individual income tax = state individual income tax revenues/total state general revenues

Reliance by state government on general sales tax = state general sales tax revenues/total state general revenues

Reliance by local governments on property tax = local property tax revenues/total local general revenues

Percentage of total s&l expenditures on K-12 education = state and local direct spending on elementary and secondary education/total state and local direct spending

Percentage of total s&l expenditures on higher education = state and local direct spending on higher education/total state and local direct spending

Percentage of total s&l expenditures on public welfare = state and local direct spending on public welfare/total state and local direct spending

Reliance by s&l governments on federal grants = intergovernmental transfers from federal government to state and local governments/total state and local general revenues