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The Tax Autonomy of Local Governments in the United States

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Andrew Reschovsky
University of Wisconsin-Madison

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Abstract

Statistics on the share of total government tax revenue raised by local governments provide an incomplete picture of local government taxing power. If higher level governments define the local tax base, determine tax rates, or place other restrictions on local taxes, local governments have limited *tax autonomy.* In the mid-1990s, the Organization of Economic Cooperation and Development (OECD) developed a methodology for measuring the degree of local government tax autonomy, which since then they have applied to OECD member countries on a regular basis. Because the U.S. local government fiscal system is highly complex and heterogeneous, the OECD tax autonomy reports excluded the U.S. The purpose of this paper is to fill that gap by applying the OECD taxonomy of taxing power to local governments in each state and the District of Columbia.

The results show that on average, local governments in the U.S. have a little more tax autonomy than local governments in the average OECD country. However, because of the heavy reliance on the property tax in the U.S. and the widespread presence of property tax limitations, tax autonomy is substantially limited in many U.S. states. If the U.S. had the same mix of taxes as found in the average OECD country, tax autonomy would be substantially greater in the U.S. than in most OECD countries. Even among states that rely heavily on the property tax, there exists substantial difference among states in their degree of local government tax autonomy.

About the Author

Andrew Reschovsky is Professor Emeritus of Public Affairs and Applied Economics at the University of Wisconsin-Madison. He has taught in educational programs and undertaken research for the Lincoln Institute of Land Policy, where he served as Resident Fellow in Taxation. He has published widely on topics related to state and local government finance. His current research focuses on the impact of the housing crisis on the financing of large American central cities, the measurement of municipal fiscal health in China and in the U.S., and local government tax autonomy in the U.S. He has served as an advisor to the South African Financial and Fiscal Commission and the Organization of Economic Cooperation and Development in Paris. In 2011, he was awarded the Steven D. Gold award by the Association of Public Policy Analysis and Management in recognition of his contributions to state and local fiscal policy. He earned a Ph.D. in economics from the University of Pennsylvania.

He can be reached at: reschovsky@lafollette.wisc.edu

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Table of Contents

The Tax Autonomy of Local Governments in the United States

Introduction

Local governments have a long history in United States. Prior to the American Revolution, they operated quite independently of the British government. The tenth amendment of the U.S. constitution, adopted in 1791, affirmed that the establishment and regulation of local governments was a matter of state rather than federal law. As a result, the structure, financing, and responsibilities of local governments differs across the 50 states.

Within the U.S. federal system, local governments play a central role in providing primary and secondary education, local public safety, sanitation and sewage services, public health, and recreational facilities. Excluding national defense and foreign affairs, local governments account for 25.3 percent of total government spending (Bureau of Economic Analysis, 2016). The important role of local governments is also apparent on the revenue side. Of the total amount of taxes collected in the U.S. (including payroll taxes), 15.9 percent are levied by local governments. Among the 33 other member countries of the Organization of Economic Cooperation and Development (OECD), the average local tax share is 10.4 percent.[1]

As pointed out by a number of economists, it is difficult to use public finance data, either on expenditures or on tax revenues, to provide accurate cross-national comparisons of the importance of local governments in countries' fiscal systems (Bird, 2011; Owens and Panella, 1991; Blöchliger, 2015). A large literature on fiscal decentralization has emphasized that true decentralization requires that local governments have the ability to make their own spending and revenue decisions, free from the control of overlying governments.

This paper will focus on *tax autonomy*, in other words, on the *taxing powers* of local governments. A local government that has full tax autonomy could in principle decide what taxes to use, define the tax bases, determine tax rates and any other features of each tax, such as exemptions and credits. However, as pointed out by Richard Bird (2011), a local government with complete discretion over its choice of tax instruments would in effect operate like a small independent country, and no longer be "local" in the context of any intergovernmental system.[2] A more practical definition of local government tax autonomy focuses on the degree of discretion a local government has over the base, tax rates, and other attributes of the taxes it has at its disposal.

Starting in 1995, the Organization of Economic Cooperation and Development (OECD) has assessed on a regular basis the tax autonomy of state or regional and local governments in the 34 OECD member countries. The approach taken by the OECD involved the development of a

[1] Arguably, the OECD-average share of tax revenue from local governments is somewhat overstated because in some OECD countries a portion of local government taxes are shared taxes, which economists often categorize as central government grants rather than local taxes (Blöchliger and King, 2006).

[2] Even U.S. states, which have wide discretion over their choice of taxes, are subject to a constitutional prohibition against levying taxes on interstate commerce and on exports.

taxonomy to assess the degree of tax autonomy in each country. Each tax instrument used by state or local governments in each country was assigned one of 11 possible codes indicating its degree of tax autonomy or taxing power. The results of this exercise are summarized by calculating the share of total government revenue by level of government assigned to each tax autonomy code. In both Austria and Israel, for example, local governments have almost no control over the amounts or the composition of their local tax revenues, while in Australia and New Zealand, local governments have nearly complete autonomy over their local taxes.

Because of the complexity and heterogeneity of the U.S. fiscal system, the staff of OECD has to date not included local governments in the U.S. as part of their tax autonomy analyses. The goal of this paper is to fill the hole in the OECD analysis and reports by calculating the taxing power of local governments in each U.S. state. To the best of my knowledge, there is no existing literature that has attempted to assess local government tax autonomy in the U.S.

In the next section of the paper, I describe in some detail the methodology followed by the OECD in characterizing the tax autonomy of member countries. Section 3 explains the steps I took to assess the tax autonomy of local governments in the U.S. Section 4 presents the results of the analysis by comparing local government tax autonomy in the U.S. to tax autonomy in the other OECD member countries. Section 5 explores in more detail the tax autonomy results for the U.S., first by individual tax and then by state. Section 6 provides a summary and conclusion.

The Measurement of Tax Autonomy at the OECD

The first effort by the OECD to measure the tax autonomy of state and local governments used 1995 data from a survey of 19 OECD member countries (Organisation for Economic Cooperation and Development, 1999). The taxonomy that the OECD developed to assess the degree of tax autonomy was modified when the analysis was updated using data from 2002 and a larger sample of OECD countries (Blöchliger and King, 2006). The modified taxonomy (discussed below) has been used in all the updates since then.[3]

The OECD taxonomy is presented in Table 1. Characterizing the degree of freedom that state and local governments have to define their tax systems is inherently complex. Within any given country, there are many attributes that describe each tax, and numerous institutional and administrative details that help define the taxing power of state and local governments. In developing their taxing power taxonomy, the staff of the OECD has tried to capture the essence of tax autonomy in a handful of indicator codes.

The codes listed in Table 1 are arranged in decreasing order of tax autonomy. The "a" codes characterize taxes for which state and local governments can determine tax revenue by setting tax rates and defining other attributes of the tax, such as exemptions and credits, that influence the amount of the amount of tax revenue generated by the tax. The "b" codes are assigned in cases where higher level governments control attributes of a tax, such as the definition of tax

[3] A set of summary tables reporting the results of the six tax autonomy analyses conducted between 1995 and 2014 is include in the OECD's fiscal decentralization database. It can be accessed through OECD.Stat at https://stats.oecd.org/Index.aspx?DataSetCode=TAXAUTO.

bases and tax credits, but state and local governments have complete, or partial freedom to set tax rates. The code "b2" is used in cases where state and local governments can set rates within a range determined by a higher level of government. The "c" codes apply in the fairly rare circumstances where sub-central governments (SCG) have no control over tax bases or rates, but are given freedom to set tax credits, exemptions, or abatements. The OECD refers to these attributes of a tax system as "tax reliefs." The "d" codes are used for various types of *tax sharing* schemes.

Table 1

OECD Taxonomy of Taxing Power

a.1	The recipient SCG sets the tax rate and any tax reliefs without needing to consult a higher level government.
a.2	The recipient SCG sets the rate and any reliefs after consulting a higher level government.
b.1	The recipient SCG sets the tax rate, and a higher level government does not set upper or lower limits on the rate chosen.
b.2	The recipient SCG sets the tax rate, and a higher level government does sets upper and/or lower limits on the rate chosen.
c.1	The recipient SCG sets tax reliefs – but it sets tax allowances only.
c.2	The recipient SCG sets tax reliefs – but it sets tax credits only.
c.3	The recipient SCG sets tax reliefs – and it sets both tax allowances and tax credits.
d.1	There is a tax-sharing arrangement in which the SCGs determine the revenue split.
d.2	There is a tax-sharing arrangement in which the revenue split can be changed only with the consent of SCGs.
d.3	There is a tax-sharing arrangement in which the revenue split is determined in legislation, and where it may be changed unilaterally by a higher level government, but less frequently than once a year.
d.4	There is a tax-sharing arrangement in which the revenue split is determined annually by a higher level government.
e	Other cases in which the central government sets the rate and base of the SCG tax.
f	None of the above categories a, b, c, d or e applies.

Note: SCG refers to sub-central government. The taxonomy is applied separately to state/regional and local governments.
Source: Blöchliger and King (2006)

Although infrequently used in the United States, tax sharing schemes are quite common, especially in developing countries. Under a tax-sharing scheme, tax revenue is levied by a higher-level government, and a specified share of the revenue collected is shared with SCGs. The four "d" sub-codes indicate different arrangements for determining which government sets the sharing parameters, e.g. 50 percent of revenue to the central government, 30 percent to state governments and 20 percent to local governments. The "e" code is for taxes over which SCGs have no autonomy. The "f" code is only used when none of the other codes are appropriate. Fortunately, in the published OECD tax autonomy reports, the f codes are rarely used.

The Measurement of Local Government Tax Autonomy in the U.S.

In summarizing its tax autonomy results for local government taxes, the OECD weights each code, e.g. b1, by the share of total local tax revenue from each tax. The OECD revenue statistics calculate revenues on a calendar-year basis. To be consistent with the OECD approach, local government tax revenue in the U.S. must also be measured on a calendar-year basis. The tax autonomy analysis in this paper is based on calendar year 2012 data.

The only detailed and comprehensive source of data on the tax revenue of local governments in the U.S. is the annual *State and Local Government Finances* series.[4] The data, however, are provided on a fiscal year rather than calendar year basis. Conversion from fiscal to calendar year is complicated by the fact that there exists no consistent definition of local government fiscal years. According to data provided by the Census Bureau, in 2012, some local governments used fiscal years ending in every month of the year. In Appendix A, I describe in detail the procedure followed to convert Census data covering multiple fiscal years into calendar year 2012 data.

As shown in Table 2, in calendar year 2012 the tax revenue of local governments in the U.S. totaled $600 billion.[5] The table lists the amount of revenue from each tax and the number of states in which local governments used each tax. The listing of the taxes follows U.S. Census Bureau nomenclature, however, the corresponding OECD tax classification code number is indicated in parentheses following the name of each tax. Note that the property tax is used in all 50 states plus the District of Columbia. At least some selective sales taxes (sometimes referred to as excise taxes) and license taxes are used by local governments in most states. The use of other taxes is less widespread, with general sales tax used in 35 states, the individual income tax in 14 states, and the corporate income tax in only 8 states. Figure 1 uses 2012 data to illustrate the share of local government tax revenue coming from each tax. The figure clearly shows the dominant role played by the property tax.

To account for a feature of the property tax found only in the U.S., it was necessary to add one additional tax autonomy code to the OECD taxonomy of tax autonomy shown in Table 1. Over the past several decades, some states have imposed annual limits on the rate of increase in the property taxes levied by some or all their local governments. To account for the reduction of tax autonomy implied by the imposition of levy limits, we have added code "b3" to the OECD taxonomy.

The central task in carrying out the study of tax autonomy is to try to determine the degree of tax autonomy of each local government tax utilized in each state, and then to apply the appropriate tax autonomy code. Given the complexity of state and local tax systems in the U.S., this was by no means a simple undertaking. In many states, the property tax is subject to a range of state-

[4] These data are available for downloading at https://www.census.gov/programs-surveys/gov-finances.html. The dataset provides detailed local government revenue and expenditure data for the sum of all local governments in each state and for the District of Columbia.

[5] On average, revenue from taxes account for 65 percent of the total revenue local governments raise from their own sources, i.e. excluding intergovernmental grants. However, the share of own-source revenues from taxes varies from 44 percent to 86 percent across the 50 states and the District of Columbia (U.S. Census Bureau, 2018).

imposed limitations. These include limitations on rates, often complex restrictions on the annual growth rate of the assessed value of property, and restrictions on the growth rate of revenues from the property tax.[6]

Table 2

Local Government Tax Revenue in the United States, Calendar Year 2012

Type of Tax (OECD tax revenue classifcation code)	Local Government Tax Revenue (in thousands of dollars)	Number of States Utilizing Tax
Property (4100)	$438,574,306	51
General Sales (5112)	$71,530,352	35
Selective Sales (5120)	**$28,855,020**	**49**
Alcoholic beverage (5121, L10)	$554,539	16
Amusements (5126, L1)	$633,968	22
Insurance Premiums (5126, L7)	$770,248	6
Motor fuel (5121, L13)	$1,268,588	10
Pari-Mutuals (5126, L2)	$31,913	11
Public Utilities (5121, L12)	$14,067,935	45
Tobacco products (5121, L11)	$413,469	10
Other selective sales (5128)	$11,114,360	47
License Taxes (5210)	**$15,804,326**	**51**
Alcoholic Beverage License (5213, L7)	$180,228	36
Amusements License (5213, L9)	$112,279	33
Corporation Licenses (5213, L6)	$48,682	4
Motor vehicle licenses (5211 + 5212)	$1,849,165	36
Public Utility Licenses (5213, L8)	$524,521	31
Occupation and Business License NEC (5213, L10)	$6,103,825	50
Other License Taxes (5213, L12)	$6,985,626	51
Individual income (1100)	$27,833,190	14
Corporate income (1210, L2)	$7,611,364	8
Death and gift (4300)	$297,375	5
Documentary and stock transfer (4400, L2)	$4,460,486	35
Severance (5220, L1)	$88,554	11
Taxes NEC (6000)	$4,600,625	50
Total taxes	$599,655,598	51

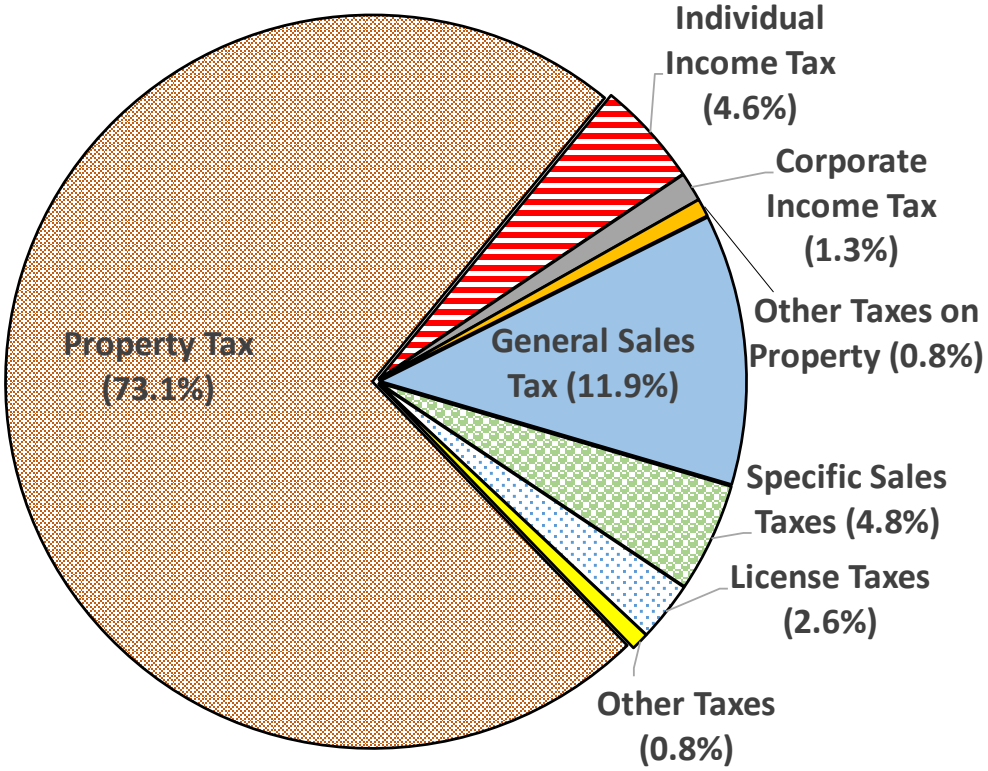
Note: NEC is an abbreviation for Not Elsewhere Classified

Source: Calculations using data from U.S. Census Bureau, *Annual State and Local Government Finances*, Fiscal years 2012, 2013, and 2014.

[6] For a comprehensive history of the use of property tax limitations in the U.S. see Paquin (2015).

One complication in assigning the tax autonomy codes is that within a single state, local government autonomy with regards to any given tax may differ among local governments. In some states, large cities may be granted more autonomy than smaller governments, or taxing power may be restricted when a tax is used by one type of local government, for example, independent school districts, but not when used by another type of local government, such as county governments. Our approach to this within-state heterogeneity was to assign the tax autonomy code that reflected the dominant situation (in terms of revenue). For example, if a state imposes property tax rate limitations on school districts, but not on county governments, and the school district property tax revenues exceeded that of the county government, we assign to the property tax the code that reflected the presence of tax rate limitation.

Figure 1
Local Government Tax Revenue by Type of Tax, 2012



Source: Calculations (explained in text) using data from U.S. Census Bureau (various years).

A further complication arises with respect to the treatment of local government consumptions taxes, specifically, general and specific sales taxes. With a few exceptions, when used by local governments these taxes are "local option" taxes. This means that a state legislature authorizes (provides permission) for local governments to levy a tax. Although the definition of the tax base is generally specified by the legislature, only in rare cases are local governments completely free to set their own tax rates. In some states, where legislatures authorize local sales or excise taxes, they set a maximum tax rate, while in other states, any government choosing to levy a local sales tax must apply a state-specified rate.

In states that authorize local government consumption taxes, these taxes are generally classified as being highly autonomous (either code "a1" or "a2") because local governments are free to decide whether to use the tax or not. The question arises about how to classify a local consumption tax that while formally a local option tax is in fact utilized by all, or nearly all, local governments within a state. In consultation with OECD staff, the decision was made to classify a local tax that is levied by 90 percent or more of local governments within a state at a state-mandated rate as a "e", meaning that local governments lack autonomy with regard to that tax.[7] In cases where all or nearly all local governments levy a local option tax, but at various rates, the tax was classified as "b1" or "b2" to reflect their limited tax autonomy.

It should be emphasized that given the complex nature of the local government tax systems used in most states, it was sometimes difficult to choose a single tax autonomy code that best described how a given tax functions within a state. However, to be consistent with the OECD approach for measuring tax autonomy, based on available information, a decision had to be made on which code best described how each tax operated.

After each tax in each state has been assigned a tax autonomy code, the following steps are taken to summarize local government tax autonomy. To be consistent with the summary tables produced by the OECD, I calculated the share of total 2012 local government tax revenue that is associated with the taxes assigned to each tax autonomy code.

The detailed information on individual taxes that provided the basis for assigning the tax autonomy codes came from a multitude of sources. For the property tax, the information gathering process was greatly simplified because of the existence of a comprehensive website, the *Significant Features of the Property Tax* (Lincoln Institute of Land Policy, 2018), on which one can find a broad array of information and data on the property tax systems in each state and the District of Columbia. Information that described the features of other taxes had to be compiled on a state-by-state basis. The most frequent source of this information came from state government websites associated with state departments of revenue, or other state government agencies.

Local Government Tax Autonomy in the U.S. Compared with OECD Member Countries

The summary results of the calculations described in the previous section are shown in Table 3. The first column of data displays the percentage of total local government tax revenue in the U.S. that has been assigned to each of the tax autonomy codes. The codes are arranged from the highest degree of tax autonomy to the lowest level of autonomy. The right-hand column shows the unweighted average among all OECD member countries other than the U.S. of the shares of local government tax revenue assigned to each tax autonomy code.

The results in Table 3 indicate that local governments in the U.S. have somewhat more taxing power than the average OECD member country. Eighteen percent of local government tax

[7] Similarly, in states that set a maximum rate and where all or nearly all local governments utilize that maximum rate, the local tax is classified as "e" indicating no local government autonomy.

revenue in the U.S. comes from taxes with the highest level of tax autonomy. The corresponding figure in the average OECD country is 13 percent. On the other hand, only one percent of tax revenue in the U.S. is derived from taxes over which local governments have no control. In the average OECD country limits to taxing power are much more common, with 11.5 percent of revenue coming through tax sharing arrangements imposed by central governments, and 7.8 percent from taxes imposed on local governments.

Table 3

Taxing Power of Local Governments in the U.S. (2012) and Other OECD Countries (2014)

Taxonomy of Taxing Power		OECD Codes	Percent of Local Gov't Tax Revenue: United States	Percent of Local Gov't Tax Revenue: Other OECD Member Countries
Discretion on rates and reliefs	Full	**a1**	6.8%	10.2%
	Restricted	**a2**	11.4%	2.9%
Discretion on rates	Full	**b1**	13.6%	20.8%
	Restricted	**b2**	28.2%	41.0%
	Revenue Restrictions	**b3**	38.6%	–
Discretion on reliefs		**c**	0.4%	0.0%
Tax sharing arrangements	Revenue split set by local gov'ts	**d1**	0.0%	0.0%
	Revenue split set with local gov't consent	**d2**	0.0%	1.7%
	Revenue split set by states, pluriannual	**d3**	0.4%	8.5%
	Revenue split set by states, annually	**d4**	0.0%	3.0%
Rates and reliefs set by states governments		**e**	0.6%	7.8%
Other		**f**	0.0%	4.1%
Total			100.0%	100.0%

Source: For the U.S.: author's calculations (see text). For OECD member countries: OECD, Fiscal Decentralisation Database, Table 1: *Taxing Power of Sub-Central Governments, 2014.*

Table 4 provides detailed information on the taxing power of each OECD member country. The unweighted averages at the bottom of the table include the United States. It is interesting to note that a number of countries have a higher degree of local government taxing power (represented by codes a1 and a2) than the U.S. The list of those countries includes Australia, France, Mexico, New Zealand, and Spain. Countries with the lowest level of tax autonomy include Austria, Hungary, Israel, Latvia, Poland, Slovenia, and Turkey.

Table 4

Taxing Power of Local Governments in OECD Member Countries, 2014

		As % of local government tax revenues from each tax												
	Local government tax revenue as % of total tax revenue in each country	Discretion on rates and reliefs		Discretion on rates			Discretion on reliefs	Tax sharing arrangements				Rates and reliefs set by States	Other	Total
		Full	Restricted	Full	Restricted	Revenue Restrictions		Revenue split set by local gov'ts	Revenue split set with local gov't consent	Revenue split set by states, pluriannual	Revenue split set by states, annually			
		a1	a2	b1	b2	b3	c	d1	d2	d3	d4	e	f	
Australia	3.5%	100.0%	-	-	-	-	-	-	-	-	-	-	-	100.0%
Austria	3.1%	9.7%	-	-	15.1%	-	-	-	-	-	-	64.7%	10.4%	100.0%
Belgium	4.6%	8.2%	-	91.5%	-	-	-	-	-	-	-	0.3%	-	100.0%
Canada	10.4%	1.6%	-	95.6%	-	-	-	-	-	-	-	1.1%	1.7%	100.0%
Chile	7.6%	-	-	15.7%	26.3%	-	-	-	-	57.9%	-	-	0.1%	100.0%
Czech Republic	1.2%	-	-	-	100.0%	-	-	-	-	-	-	-	-	100.0%
Denmark	25.1%	-	-	88.7%	11.3%	-	-	-	-	-	-	-	-	100.0%
Estonia	1.1%	8.0%	-	-	85.1%	-	-	-	-	6.9%	-	-	-	100.0%
Finland	23.5%	-	-	86.1%	7.1%	-	-	-	-	-	6.7%	0.1%	-	100.0%
France	13.0%	45.6%	-	15.9%	3.2%	-	0.2%	-	-	-	14.2%	19.2%	1.7%	100.0%
Germany	8.2%	-	-	14.4%	41.6%	-	-	-	42.5%	-	-	-	1.4%	100.0%
Greece	2.5%	-	-	-	92.8%	-	-	-	-	-	-	7.2%	-	100.0%
Hungary	5.6%	-	-	-	95.7%	-	-	-	-	-	4.1%	0.2%	0.1%	100.0%
Iceland	24.5%	-	-	-	99.2%	-	-	-	-	-	-	-	0.8%	100.0%
Ireland	2.8%	-	-	-	91.5%	-	-	-	-	-	-	-	8.5%	100.0%
Israel*	8.2%	-	-	-	-	-	-	-	-	-	-	95.1%	4.9%	100.0%
Italy	5.9%	0.28	-	-	71.0%	-	-	-	-	-	-	0.9%	-	100.0%
Japan	23.4%	-	0.1%	58.4%	26.2%	-	-	-	-	-	-	15.2%	-	100.0%
Korea	16.9%	-	-	-	83.1%	-	-	-	-	-	-	16.0%	1.0%	100.0%
Latvia	19.5%	-	-	-	14.4%	-	-	-	-	85.6%	-	-	-	100.0%
Luxembourg	3.3%	6.3%	-	-	89.3%	-	-	-	-	-	-	0.9%	3.5%	100.0%
Mexico	1.7%	-	100.0%	-	-	-	-	-	-	-	-	-	-	100.0%
Netherlands	3.8%	-	-	67.6%	32.4%	-	-	-	-	-	-	-	-	100.0%
New Zealand	6.7%	99.3%	-	-	-	-	-	-	-	-	-	0.7%	-	100.0%
Norway	13.9%	-	-	-	98.7%	-	-	-	-	-	-	1.3%	-	100.0%
Poland	12.9%	-	-	-	30.1%	-	-	-	-	59.0%	-	3.6%	7.3%	100.0%
Portugal	7.2%	-	-	-	76.3%	-	-	-	-	8.1%	-	15.5%	0.1%	100.0%
Slovak Republic	2.7%	4.0%	-	-	95.7%	-	0.2%	-	-	-	-	-	-	100.0%
Slovenia	10.6%	15.0%	-	-	-	-	-	-	-	-	77.2%	7.6%	0.3%	100.0%
Spain	10.0%	30.0%	-	-	51.0%	-	-	-	18.0%	-	-	0.8%	0.2%	100.0%
Sweden	36.9%	-	-	97.5%	-	-	-	-	-	-	-	2.5%	-	100.0%
Switzerland	15.3%	2.5%	-	-	97.5%	-	-	-	-	-	-	-	-	100.0%
Turkey	9.4%	-	-	-	-	-	-	-	-	80.4%	-	19.6%	-	100.0%
United Kingdom	4.9%	-	-	96.3%	1.1%	-	-	-	-	-	2.6%	-	-	100.0%
United States**	14.1%	6.8%	11.4%	13.6%	28.2%	38.6%	0.4%	-	-	0.4%	-	0.6%	-	100.0%
Unweighted average	10.4%	10.4%	3.2%	21.2%	41.8%	1.1%	0.0%	0.0%	1.7%	8.5%	3.0%	7.8%	1.2%	

*The statistical data for Israel are supplied by and under the responsability of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights,

**Data for the United States are for calendar year 2012.

Source: For OECD member countries other than the U.S.: OECD, Fiscal Decentralisation Database, Table 1: *Taxing Power of Sub-Central Governments, 2014*. For the U.S.: author's calculations (see text).

Understanding Local Government Taxing Power in the U.S.

Taxing Power by Type of Tax

Table 5 displays data separately for each tax on the share of revenue assigned to each tax autonomy code. The taxes are organized using the OECD tax classification scheme. Because nearly three-quarters of total local government tax revenue in the U.S. is raised through the property tax, the taxing power associated with the property tax dominates the overall taxing power results. The data indicate that over 90 percent of property tax revenues are subject to some type of state government-imposed tax rate or tax revenue restriction. This in turn explains why

the largest share of overall local government tax revenue in the U.S. is classified as b2 or b3, representing restrictions on rates or revenues. However, local governments have a considerable degree of taxing power with respect to several other types of taxes, such as license taxes (5200) and specific sales taxes (5100).

To explore how much of the tax autonomy results for U.S. local governments are a result of the heavy reliance of local governments in the U.S. on the property tax, I recalculated the distribution of taxing power among local governments in the U.S. under the assumption that they used the same mix of taxes as the average OECD member country. The results of this exercise are shown in Table 6. They indicate that if local governments in the U.S. raised own-source tax revenue using the same mix of taxes as used by the average OECD member country, local governments in the U.S. would have a substantially higher degree of tax autonomy than the average OECD country, with nearly half of local government tax revenue now characterized as having the highest degree of tax autonomy (codes a1 or a2). This result reflects the high degree of tax autonomy associated with income taxes, and as shown in Appendix Table 1, the much heavier reliance on income taxes in the average OECD country as compared to the U.S. (35.2 as compared to 5.9 percent). Clearly, the main factor that reduces tax autonomy in the U.S. is the widespread presence of limitations placed on the property tax, and the heavier than average reliance on property taxation (73.9 compared to 44.7 percent).

Table 5

Taxing Power of Local Governments in the United States by Type of Tax, 2012

		As % of local government tax revenues from each tax												
	Tax revenue as a % of total local government tax revenue	Discretion on rates and reliefs		Discretion on rates			Discretion on reliefs	Tax sharing arrangements				Rates and reliefs set by States	Other	Total
		Full	Restricted	Full	Restricted	Revenue Restrictions		Revenue split set by local gov'ts	Revenue split set with local gov't consent	Revenue split set by states, pluriannual	Revenue split set by states, annually			
		a1	a2	b1	b2	b3	c	d1	d2	d3	d4	e	f	
1000 Taxes on income, profits and capital gains	**5.9%**	**5.9%**	**89.9%**	**-**	**4.2%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**100.0%**
1100 of individuals	4.6%	5.9%	88.7%	-	5.4%	-	-	-	-	-	-	-	-	100.0%
1210 of corporation profits	1.3%	5.8%	94.2%	-	-	-	-	-	-	-	-	-	-	100.0%
2000 Social security contributions	**0.0%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**100.0%**
3000 Taxes on payroll and workforce	**0.0%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**100.0%**
4000 Taxes on Property	**73.9%**	**6.4%**	**0.5%**	**18.1%**	**22.1%**	**52.2%**	**0.5%**	**-**	**-**	**0.1%**	**-**	**0.1%**	**-**	**100.0%**
4100 Recurrent taxes on immovable property	73.1%	6.3%	-	18.2%	22.1%	52.8%	0.5%	-	-	-	-	-	-	100.0%
4300 Estate, inheritance and gift taxes	0.0%	12.7%	1.0%	-	-	-	-	-	-	68.1%	-	18.3%	-	100.0%
4400 Taxes on financial and capital transactions	0.7%	11.9%	51.3%	8.2%	20.1%	-	-	-	-	0.6%	-	7.9%	-	100.0%
5000 Taxes on goods and services	**19.4%**	**8.9%**	**25.5%**	**1.3%**	**59.7%**	**-**	**0.4%**	**-**	**-**	**1.6%**	**-**	**2.5%**	**-**	**100.0%**
5100 Taxes on production, sale, transfer, etc	16.7%	10.3%	13.8%	1.5%	69.2%	-	0.4%	-	-	1.9%	-	2.9%	-	100.0%
5112 General sales taxes	11.9%	10.6%	2.0%	-	83.3%	-	0.5%	-	-	2.6%	-	1.0%	-	100.0%
5120 Taxes on specific goods and services	4.8%	9.7%	42.9%	5.1%	34.2%	-	0.2%	-	-	0.2%	-	7.8%	-	100.0%
5121 Excises	2.7%	11.4%	39.8%	0.8%	36.4%	-	-	-	-	0.2%	-	11.4%	-	100.0%
5126 Taxes on specific services	0.2%	1.6%	60.5%	-	36.7%	-	-	-	-	1.2%	-	-	-	100.0%
5128 Other taxes on specific services	1.9%	8.2%	45.1%	12.2%	30.5%	-	0.5%	-	-	-	-	3.5%	-	100.0%
5200 Taxes on use of goods and perform activities	2.7%	-	99.8%	-	-	-	-	-	-	0.1%	-	0.1%	-	100.0%
5210 Recurrent taxes	2.6%	-	100.0%	-	-	-	-	-	-	-	-	0.0%	-	100.0%
5220 Non-recurrent taxes	0.0%	7.1%	55.7%	-	-	-	-	-	-	15.2%	-	0.4%	22.0%	100.0%
6000 Other taxes	**0.8%**	**-**	**100.0%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**100.0%**
Total	**100.0%**	**6.8%**	**11.4%**	**13.6%**	**28.2%**	**38.6%**	**0.4%**	**-**	**-**	**0.4%**	**-**	**0.6%**	**-**	**100.0%**

Source: Based on author's calculations (see text).

Taxing Power by State

With a few exceptions, local governments in the U.S. cannot utilize taxes that have not been explicitly authorized through state legislation.[8] Generally, once a tax has been authorized, individual local governments are free to decide whether to levy the tax. Some taxes are authorized only for certain types of local governments, for example, for regional governments, such as counties, but not for municipal governments. In other cases, taxes can be authorized only for local governments that meet some criteria, usually defined by minimum population size. The only local government tax that is utilized by almost all local governments is the property tax. Given the tax-specific results shown in Table 5, the degree of local government tax autonomy in each state will depend in part on the mix of taxes used in each state.

Table 6

Taxing Power of Local Governments in the U.S., if the U.S. Used the Same Mix of Taxes as the Average OECD Country

Taxonomy of Taxing Power		OECD Codes	Percent of Local Gov't Tax Revenue: United States	Percent of Local Gov't Tax Revenue: Other OECD Member Countries
Discretion on rates and reliefs	Full	a1	5.8%	10.2%
	Restricted	a2	42.6%	2.9%
Discretion on rates	Full	b1	7.5%	20.8%
	Restricted	b2	15.8%	41.0%
	Revenue Restrictions	b3	20.6%	–
Discretion on reliefs		c	0.2%	0.0%
Tax sharing arrangements	Revenue split set by local gov'ts	d1	0.0%	0.0%
	Revenue split set with local gov't consent	d2	0.0%	1.7%
	Revenue split set by states, pluriannual	d3	0.3%	8.5%
	Revenue split set by states, annually	d4	0.0%	3.0%
Rates and reliefs set by states governments		e	0.7%	7.8%
Other		f	6.6%	4.1%
Total			100.0%	100.0%

Source: For the U.S.: author's calculations (see text). For OECD member countries: OECD, Fiscal Decentralisation Database, Table 1: *Taxing Power of Sub-Central Governments, 2014.*

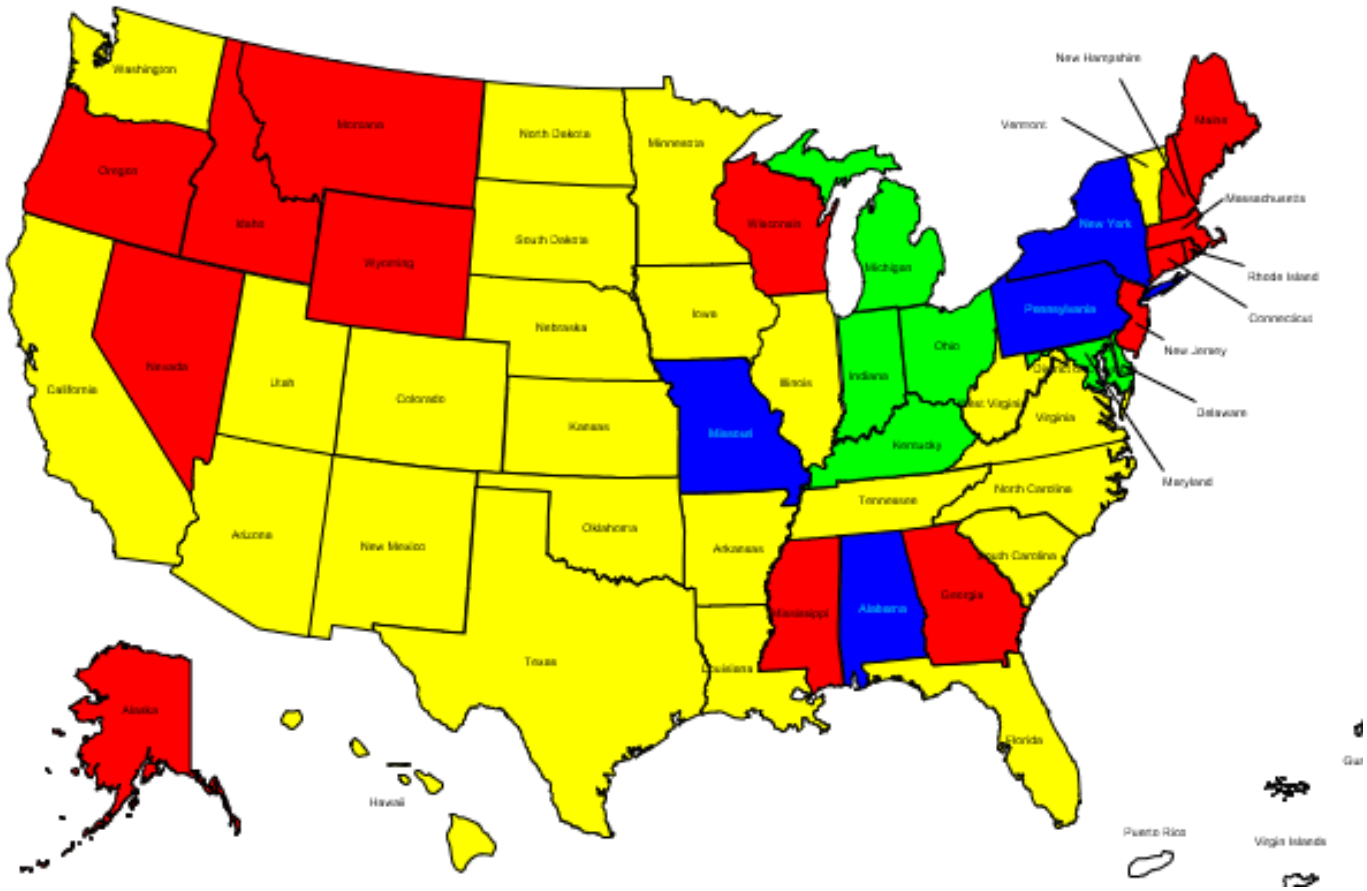
[8] Most states adhere to *Dillon's Rule*, a legal principle that limits the authority of local governments. Even in non-Dillon's Rule states, the authority of local governments to establish new taxes is usually quite limited.

Figure 2 presents a map of the United States, with states divided into four categories indicating the type of major taxes general purpose municipal governments are authorized to use. Among the three broad-based taxes--property, individual income, and general sales--municipal governments in the 15 states shown in red are only allowed to use the property tax. Municipal governments in the six states shown in green are authorized to use both the property and the income tax, and governments in the 25 states shown in yellow can use the property and the general sales tax. Finally, city governments in the four states and the District of Columbia (shown in blue) are authorized to use all three taxes.

For states in which local governments are authorized to use multiple taxes, the reliance on the property tax revenue depends both on the number of local governments actually using alternative taxes, and on the revenue raised from each of those taxes. Based on calendar year 2012 data, Figure 3 illustrates the percentage of local government tax revenue in each state and the District of Columbia coming from the property tax. It is evident that the importance of the property tax varies tremendously among states. Only 32 percent of the tax revenue raised by the District of Columbia comes from the property tax. Three states, Alabama, Arkansas, and Louisiana generate less than half of their tax revenue from the property tax. At the other extreme, in 13 states, local governments raise more than 90 percent of their tax revenue from the property tax. These include all six New England states, but also states from most regions of the country.

Although differences across states in the mix of local taxes and the degree of reliance on the property tax are important in explaining differences in tax autonomy across states, a myriad of state-specific policies that explicitly limit taxing power of their local governments also plays a substantial role in explaining across-state variations in taxing power. Table 7 illustrates these differences in tax autonomy in the 50 states and the District of Columbia.

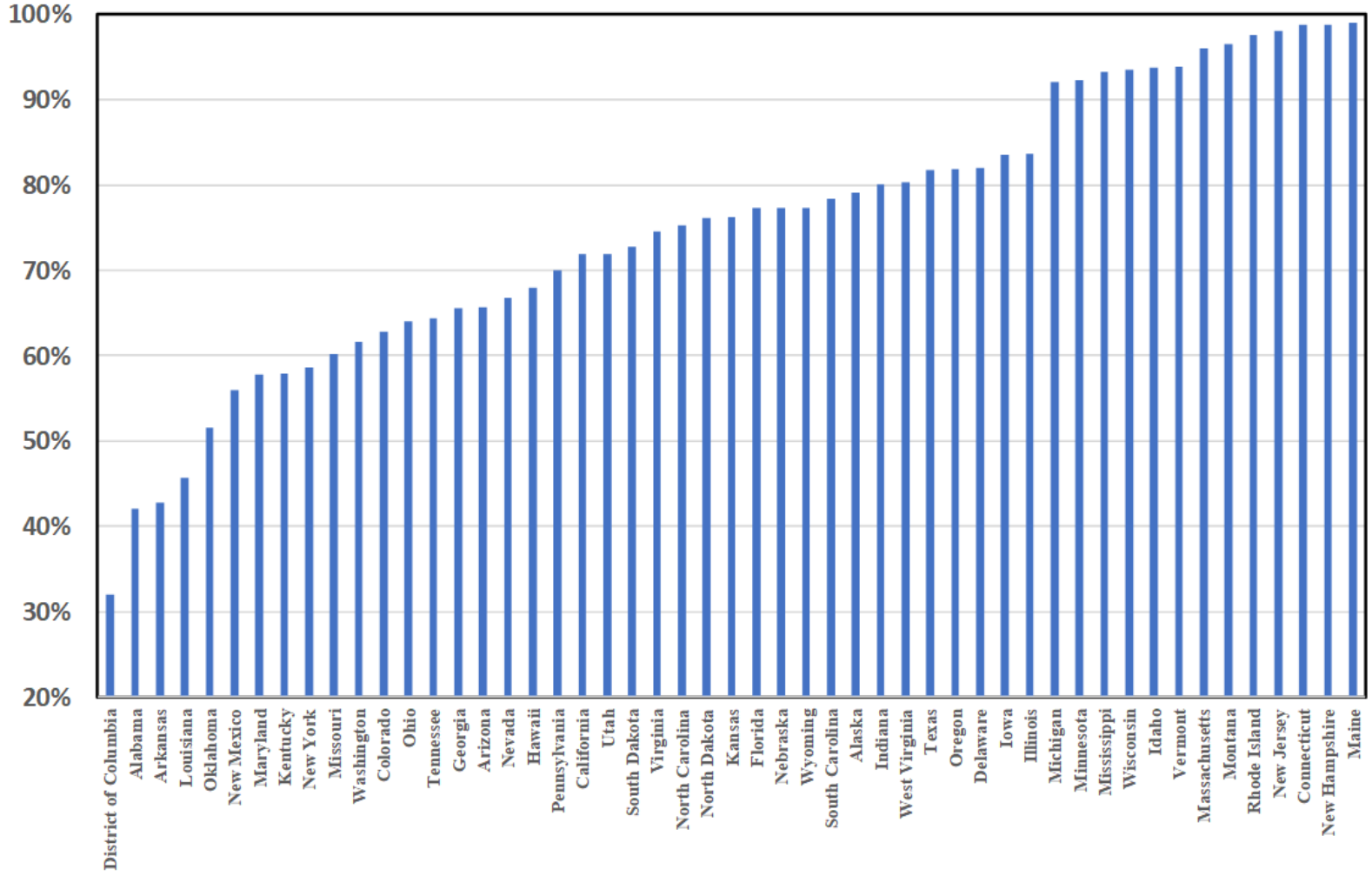
Figure 2
Major Taxes Used by Municipal Governments in the 50 States



Property tax only **Property and income tax** **Property and sales tax**
Property, income, and sales tax

Figure 3

Percentage of Local Government Tax Revenue from the Property Tax, 2012



Source: U.S. Census Bureau (various years).

Table 7

Taxing Power of Local Governments by State, 2012

		As % of total local government tax revenue in each state								
	Total local government tax revenue (in $'000)	Discretion on rates and reliefs		Discretion on rates			Discretion on reliefs	Tax sharing arrangements	Rates and reliefs set by States	Total
		Full	Restricted	Full	Restricted	Revenue Restrictions		Revenue split set by states, pluriannual		
		a1	a2	b1	b2	b3	c	d3	e	
Alabama	$5,281,562	5.7%	15.7%	-	36.5%	-	42.0%	-	0.1%	100.0%
Alaska	$1,656,756	15.2%	2.3%	79.1%	-	-	3.4%	-	0.1%	100.0%
Arizona	$9,186,877	27.0%	4.3%	-	1.9%	65.7%	-	-	1.0%	100.0%
Arkansas	$2,179,949	7.2%	3.6%	-	89.2%	-	-	-	-	100.0%
California	$69,541,742	-	12.6%	-	87.4%	-	-	-	-	100.0%
Colorado	$11,218,809	29.3%	7.5%	-	0.2%	62.8%	-	-	0.1%	100.0%
Connecticut	$9,677,406	98.7%	1.0%	-	0.3%	-	-	-	-	100.0%
Delaware	$878,590	1.0%	10.9%	81.9%	6.2%	-	-	-	-	100.0%
District of Columbia	$6,229,835	72.3%	27.7%	-	-	-	-	-	-	100.0%
Florida	$30,796,310	-	5.2%	-	17.3%	77.3%	-	-	0.2%	100.0%
Georgia	$15,459,915	-	6.2%	-	93.8%	-	-	-	-	100.0%
Hawaii	$1,941,042	68.0%	10.8%	3.8%	9.4%	-	-	-	8.0%	100.0%
Idaho	$1,542,919	2.0%	4.2%	-	-	93.8%	-	-	-	100.0%
Illinois	$30,546,420	5.3%	3.6%	3.2%	-	83.7%	-	-	4.3%	100.0%
Indiana	$7,988,528	-	2.4%	-	97.6%	-	-	-	-	100.0%
Iowa	$5,497,149	-	3.1%	83.6%	9.0%	-	-	-	4.2%	100.0%
Kansas	$5,181,894	3.9%	1.3%	76.3%	17.0%	-	-	-	1.5%	100.0%
Kentucky	$4,542,794	-	29.9%	-	70.0%	-	-	-	0.2%	100.0%
Louisiana	$8,116,666	-	6.4%	-	93.6%	-	-	-	-	100.0%
Maine	$2,389,897	0.3%	0.7%	99.0%	-	-	-	-	-	100.0%
Maryland	$14,094,842	-	39.2%	60.4%	0.4%	-	-	-	-	100.0%
Massachusetts	$14,589,638	-	3.9%	-	0.0%	96.0%	-	-	0.1%	100.0%
Michigan	$12,209,286	-	5.5%	-	1.7%	92.0%	-	-	0.8%	100.0%
Minnesota	$7,915,343	2.2%	2.7%	92.3%	2.8%	-	-	-	0.1%	100.0%
Mississippi	$2,821,967	-	6.0%	-	0.7%	93.2%	-	-	-	100.0%
Missouri	$9,595,119	4.7%	8.0%	1.4%	25.5%	60.1%	-	0.2%	0.1%	100.0%
Montana	$1,186,080	-	3.5%	-	96.5%	-	-	-	-	100.0%
Nebraska	$4,043,847	-	10.2%	-	88.5%	-	-	-	1.3%	100.0%
Nevada	$3,790,567	-	22.1%	-	77.9%	-	-	-	0.0%	100.0%
New Hampshire	$3,129,612	98.7%	1.3%	-	-	-	-	-	-	100.0%
New Jersey	$26,978,004	-	1.2%	-	0.4%	98.0%	-	-	0.3%	100.0%
New Mexico	$2,406,239	-	2.5%	2.3%	95.3%	-	-	-	-	100.0%
New York	$82,799,085	-	22.6%	-	18.8%	58.6%	-	-	-	100.0%
North Carolina	$11,681,885	-	2.8%	77.4%	19.1%	-	-	-	0.7%	100.0%
North Dakota	$1,066,909	0.9%	4.6%	76.1%	18.4%	-	-	0.1%	-	100.0%
Ohio	$21,328,593	0.0%	25.8%	64.0%	9.1%	-	-	1.1%	-	100.0%
Oklahoma	$4,469,735	-	2.6%	51.5%	45.8%	-	-	-	0.1%	100.0%
Oregon	$6,131,194	0.2%	14.1%	-	85.7%	-	-	-	-	100.0%
Pennsylvania	$24,635,875	-	27.2%	70.0%	-	-	-	-	2.8%	100.0%
Rhode Island	$2,430,265	-	1.4%	97.6%	-	-	-	-	1.1%	100.0%
South Carolina	$6,301,325	-	15.5%	-	78.4%	-	5.9%	0.2%	-	100.0%

Table 7 (continued)

Taxing Power of Local Governments by State, 2012

		As % of total local government tax revenue in each state								
	Total local government tax revenue (in $'000)	Discretion on rates and reliefs		Discretion on rates			Discretion on reliefs	Tax sharing arrangements	Rates and reliefs set by States	Total
		Full	Restricted	Full	Restricted	Revenue Restrictions		Revenue split set by states, pluriannual		
		a1	**a2**	**b1**	**b2**	**b3**	**c**	**d3**	**e**	
South Dakota	$1,418,603	-	4.2%	72.7%	23.0%	-	-	-	-	100.0%
Tennessee	$8,222,139	0.1%	5.0%	64.4%	30.5%	-	-	-	-	100.0%
Texas	$51,889,831	-	5.4%	-	12.8%	81.8%	-	-	-	100.0%
Utah	$3,867,905	-	3.3%	-	71.9%	-	-	16.7%	8.1%	100.0%
Vermont	$463,111	93.9%	6.1%	-	-	-	-	-	-	100.0%
Virginia	$15,345,883	83.7%	8.5%	-	-	-	-	7.8%	0.1%	100.0%
Washington	$12,104,207	1.2%	5.0%	-	32.1%	61.6%	-	0.1%	-	100.0%
West Virginia	$1,800,929	-	19.2%	-	80.3%	-	-	-	0.5%	100.0%
Wisconsin	$9,821,549	-	6.3%	-	-	93.5%	-	0.1%	-	100.0%
Wyoming	$1,260,981	-	3.7%	-	96.3%	-	-	-	-	100.0%
Total	$599,655,608	6.8%	11.4%	13.6%	28.2%	38.6%	0.4%	0.4%	0.6%	100.0%

Source: Author's calculations (see text).

The first thing one observes in Table 7 is the wide variation in local government tax autonomy among U.S. states. In some states, such as Vermont, New Hampshire, Hawaii, and Virginia, local governments have a high degree of tax autonomy, while in other states such as California, Florida, Colorado, and Idaho, local governments taxing power is quite limited. While local governments in all six New England states—Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, and Maine—rely on the property tax for more than 90 percent of their tax revenue, they vary tremendously on the restrictions they place on local government autonomy, with New Hampshire, Rhode Island, and Vermont placings no limits on their local governments' taxing power, while local governments in Massachusetts are subject to both rate and tax revenue restrictions. Overall, no clear regional pattern emerges, although Southern states tend to restrict the taxing power of their local governments more than many other states.

Conclusions

During the mid-1990s, the OECD developed a methodology for assessing the tax autonomy of sub-central governments. Since then that OECD has applied this methodology to assess the tax autonomy of both state/regional and local governments in OECD member countries. The most recent results apply to 2014 data. In the Unites States federal system, local governments are subservient to their state government. In most cases, local governments cannot levy taxes unless they are authorized to do so by their state government. As a result, any assessment of local government tax autonomy requires a separate investigation in each state. Given this complexity, the OECD tax autonomy analysis was not able to include local governments in the U.S.[9] The

[9] State governments in the U.S. have a high degree of tax autonomy and are coded as "a1" in OECD analyses.

goal of this paper is to assess local government tax autonomy in the U.S. by applying the established OECD methodology to the taxes used in each state.

The results of the analysis indicate that on average local governments in the U.S. have slightly more tax autonomy than local governments in the average OECD country. These results are primarily driven by the fact that nearly three-quarters of local government tax revenue in the U.S. comes from the property tax and compared with local consumption and income taxes, property taxes in many states are subject to a wide range of state-imposed limits and restrictions. Local governments in the average OECD country rely more heavily on income taxes and less heavily on property taxation. If local governments in the U.S. utilized the same mix of taxes as the average OECD country, local government tax autonomy in the U.S. would be substantially greater than tax autonomy in the average OECD country.

Given the federal structure of government in the U.S., it is not surprising that the degree of local government tax autonomy varies substantially across U.S. states. In some states, local governments have substantial taxing power, while in other states, local governments' control over their own taxes is quite constrained. The differences across states reflect in part different mixes of local government taxes. While in a few states, the property tax accounts for under half of local government tax revenues, in several other states over 95 percent of local government tax revenue comes from the property tax. In addition, state-imposed restrictions on the property tax vary substantially across states. Some states do nothing to impede local government control of the property tax, while other states impose strict limits on the ability of local governments to define their property tax base, set rates, and raise property tax revenues.

One way to potentially increase tax autonomy in the U.S. would be for local governments to increase their reliance on local income taxes. Economists have debated both the efficiency and the equity implications of moving from the property tax to a local income tax (McGuire, 2001; Oates and Schwab, 2004; Reschovsky, 2013). Regardless of the conceptual debates, there is no evidence that local governments in the U.S. have reduced their reliance on the property tax. According to U.S. Census Bureau statistics, in fiscal year 2006, property tax revenue accounted for 71.9 percent of total local government tax revenue. In fiscal year 2016 (the latest data available), the share of tax revenue from the property tax remained essentially unchanged at 72.0 percent.

A more promising way to increase local government tax autonomy in the U.S. would be to encourage states to reduce or eliminate some of the restrictions currently imposed on local property taxes. Over the past few decades, state legislators have often responded to voter complaints about the property tax by placing broad restrictions on the property tax rather than directly addressing taxpayer criticism of the tax. For example, to address complaints that some taxpayers, especially the elderly, face high annual property tax bills relative to their current incomes, states could establish or expand the use of tax credits, called "circuit breakers," designed to limit the burden of the property tax relative to income (Bowman, et al, 2009). To address complaints that similar houses in the same local jurisdiction often face very different property tax bills, state governments could mandate more frequent and higher quality assessment of property values.

Appendix A

The Conversion of Census Fiscal Year Data to 2012 Annual Data

In reporting fiscal data for any given fiscal year, the Census Bureau includes the fiscal data for all local governments using fiscal years that end between July 31st of one year and June 30th of the following year. Thus, the tax revenue data reported for fiscal year 2014 includes data for local governments using fiscal year that end anywhere between July 2013 and June 2014. Consequently, each fiscal year data set can include revenues and expenditures that occurred during a 23-month reporting period.

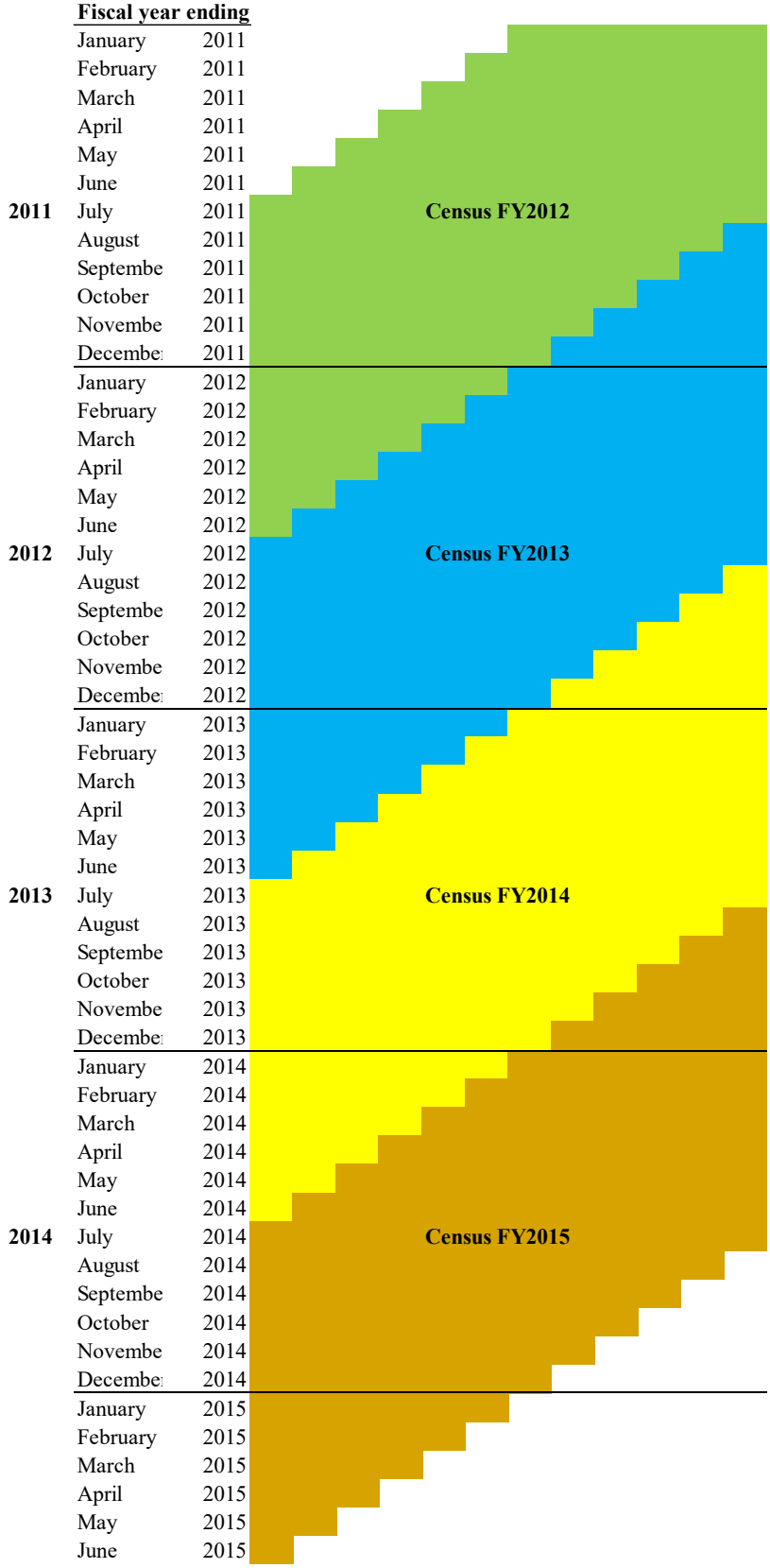
The tax autonomy analysis in this paper is based on calendar year 2012 data. I followed a three-step procedure to convert 2012, 2013, and 2014 fiscal year data into 2012 calendar year data. The first step involved calculating for each state, the share of local government tax revenue that was collected by local governments using each definition of fiscal year found in that state.

The second step in estimating tax revenue for calendar year 2012 requires the combination of revenue data from different Census fiscal years, with the way these data are combined depending upon the definitions of fiscal years used by local governments. For example, for local government fiscal years ending in June 2013, we would combine 6 months (0.5) of FY2013 data representing July through December 2012 and 6 months of FY2012 data representing January to June 2012. For local government fiscal years ending in March 2013, we would combine 9 months (0.75) of FY2013 data, representing April to December 2012, with 3 months of FY2012 data, representing January to March 2012. For local government fiscal years ending in October 2013, we would combine 2 months (0.167) of FY 2014 data, representing November and December 2012, with 10 months (0.833) of FY2013 data, representing January to October 2012. For a graphical representation of this process, see Appendix Figure 1.

The final step in estimating calendar year 2012 tax revenue data for each state involves taking a weighted average of the local fiscal year-specific revenue estimates calculated in step two using as weights the revenue shares calculated in step 1. The result is a tax revenue estimate for each local government tax in each state.

Appendix Figure 1

Local Government Fiscal Years Included in Census Fiscal Year Definition



Appendix Table 1

Percentage of Local Government Tax Revenue by Type of Tax, 2012
United States and OECD Average

Type of Tax	USA	OECD
1000 Taxes on income, profits and capital gains	**5.9%**	**35.2%**
1100 of individuals	4.6%	29.1%
1200 of corporations	1.3%	6.1%
2000 Social security contributions	**0.0%**	**0.5%**
3000 Taxes on payroll and workforce	**0.0%**	**2.1%**
4000 Taxes on Property	**73.9%**	**44.7%**
4100 Recurrent taxes on immovable property	73.1%	39.0%
4200 Recurrent taxes on net wealth	0.0%	2.2%
4300 Estate, inheritance and gift taxes	0.0%	0.1%
4400 Taxes on financial and capital transactions	0.7%	2.5%
4500 Non-recurrent taxes	0.0%	0.8%
4600 Other recurrent taxes on property	0.0%	0.1%
5000 Taxes on goods and services	**19.4%**	**16.8%**
5100 Taxes on production, sale, transfer, etc	16.7%	8.2%
5110 General taxes-sales and value added	11.9%	4.6%
5120 Taxes on specific goods and services	4.8%	3.6%
5200 Taxes on use of goods and perform activities	2.7%	7.7%
5210 Recurrent taxes	2.6%	7.0%
5220 Non-recurrent taxes	0.0%	0.7%
5300 Unallocable between 5100 and 5200	0.0%	0.9%
6000 Other taxes	**0.8%**	**0.7%**
Total local government tax revenue	**100.0%**	**100.0%**

Source: For U.S. calculations: U.S. Census Bureau (2018); for OECD calculations: OECD.Stat (2018).

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