## **6** Local Government Own-source Revenues and Debt Financing: Structure and Stress\*

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Federalism enables local governments to differ in their fiscal policies, including the raising, spending and borrowing of money. These decisions involve political and economic perspectives involving multiple levels of government and different markets. This chapter uses comparative tax analysis to highlight the choices embedded in local fiscal autonomy.

Comparative tax research is at best a cautionary endeavor. Although sovereign governments may have similar domestic and international rights and responsibilities, they differ on their geopolitical aspirations and power. Their tax structures vary, as do their economic foundations. Moving below the central level to a subnational level opens up many variations in the scope of responsibility and the discretion in carrying out those duties. Accordingly, this chapter dissects the ingredients of local own-source revenue policy to advance the major question: "Which Federalism?"

One approach is to answer that major question based upon the experience of one established federal system. However, even narrowing the focus to American subnational governments does not escape the difficulty of making meaningful within country comparisons. For example, there are as many comparative rankings of state and local government tax policy as there are fiscal analysts. Studies by taxpayer groups, tax authorities, and independent analysts abound. One common approach is to rank tax burden based on tax collections in relation to population and income (e.g., Taylor 2004). The problem with this method is that it measures tax results, not the direct characteristics of the tax structure that are most subject to change by policymakers. This approach is similar to judging education policy by an exclusive focus on per capita spending instead of the characteristics that interact to produce those results. If differences in tax structures matter, then ranking systems should reflect those differences. However, the other extreme is to provide numerous tables detailing differences without a summary measure (e.g., Advisory Commission on Intergovernmental Relations 1995). Accordingly, this chapter suggests a parsimonious method for ranking property and retail sales taxes that reflect strains on each tax structure. Although not

offered as a definitive approach, the goal of this approach is to offer insights into tax policy rankings within a federal form of government that enjoys large variations in tax structures.

The starting point for comparing tax policy is Adam Smith's (1776) four criteria for evaluating a tax. According to Adam Smith, subjects of the state should pay based on their ability, a measure of equity. Moreover, taxes should not unintentionally distort economic decisions. Tax administration should be efficient and, finally, the amount collected from the tax should be limited to only the amount needed.

Upon this foundation is built both the normative theory of optimal tax design and less formal methods of tax analysis. Alm (1996: 118) finds a schism "between those who work on the rarefied heights of optimal tax theory and those who toil in the trenches of practical tax design." Optimal tax design is "largely irrelevant" in tax policy practice because optimal theory ignores "relevant institutional features" that can lead to different tax policy trade-offs (Alm 1996: 118).

Tax structures, in fact, reflect an accumulation of political and economic decisions. Alt (1983) identifies five ways that tax structures can vary. The first way is by the level of revenues collected compared to the wealth base from which it is taken. The second method is the share of total revenues attributed to different taxes. Third, tax structures can vary by the extent of fragmentation of tax administration (centralization or decentralization). Fourth is the nature of redistribution achieved by the tax, with the incidence of the tax an issue. Fifth, Alt points to the complexity of a tax including the extent of tax expenditures.

Bird (1993) translates the issue of tax policy into one of fiscal decentralization. In drawing the distinction between central and local fiscal powers, Bird identifies four features of a "truly local" tax. Such a tax should be locally assessed, with rates set locally, and with revenues collected and budgeted locally. Such autonomy allows different communities to make different choices.

Government jurisdictions can use tax differences to compete for growth and development. The consumer/voter, in turn, can exploit these differences to satisfy a particular personal preference pattern (Tiebout 1956). However, tax structures can converge (Ashworth and Heyndels 2001). In fact, Annala (2003) provides evidence that American state and local tax policies have converged over time. His finding holds for total taxes as well as property and income taxes, but not the sales tax.

Federalism around the world is subject to different interpretations, various governmental frameworks, and diverse budget policies. Although countries can differ, there are three basic taxes to consider – income, consumption, and property. Therefore, the first section of this chapter compares local government tax sources in member countries of the Organization for Economic Co-operation and Development (OECD).

These results are compared to historical trends of local government finance in the United States.

Section two examines US local government property, sales and income tax structures. A review of the contemporary aspects of property and sales tax structures illustrate the forces that can strain the effectiveness of these taxes. Accordingly, this chapter introduces separate tax structure indexes for property and sales taxes. This design reflects the base, rate and yield features embodied in tax systems. One benefit is that it offers a way to observe the degree of policy convergence and tax design variation. More importantly, this research addresses the concluding point of Alt (1983: 215): "The simultaneous consideration of economic and political aspects of taxation can only improve future research."

Debt and taxes go together because both are sources of funding for public services and projects. However, there is a fundamental difference. Once a tax is levied by the governing body, taxpayers are obligated to pay if they engage in the taxed activity. In contrast, just because a governmental jurisdiction wants to borrow money, it does not mean that it will enjoy market access at an acceptable cost of capital. Therefore, acquiring money through the public capital markets depends upon the nature of the securities offered, the investors that are likely to purchase the securities, and the ability of the debt issuer to bring a successful offering to the market. To show that debt acquisition structures vary too, the third section of the chapter compares state and local borrowing in the US to provincial and municipal borrowing in Canada.

This chapter focuses on local taxation, specifically the use of property, income and sales taxes, and the acquisition of money through the capital markets. Although comparisons are made to other countries and higher levels in a federal system of government, American local governments remain the primary focus of attention.

## LOCAL GOVERNMENT TAX SOURCES

This section first compares the local tax mix in the 30 member countries of the OECD, and then examines local government tax trends in the United States. The focus is on income, sales and property taxes.

## Local governments in OECD countries

How balanced are local tax systems among property, sales and income taxes? A balanced tax system is defined as having none of the three primary taxes contribute more than 40 percent of revenues and no tax contributing less than 20 percent, whereas a more expansive definition of tax balance allows any of the three taxes to contribute as little as 15 percent of revenues or as much as 45 percent (Richardson and Hildreth 1999). Applying this concept to local governments in countries of the OECD (2006) reveals significant variability in own-source taxes (Kitchen

2002; OECD 2006). There is no country that meets the basic test of tax balance, although three countries – Japan, Spain, and Turkey – meet the broader measure, as reported in Table 6.1. Italy has balance between

	Tax sourd local tax	ce as a per revenues	Local taxes as a percentage of gross domestic product (GDP)		
Countries	Income	Sales	Property	Other	
Federal					
Australia	0.00	0.00	100.00	0.00	0.94
Austria	56.65	27.68	10.45	5.21	4.04
Belgium	86.48	13.28	0.00	0.25	2.41
Canada	0.00	2.06	93.78	4.16	2.91
Germany	74.67	6.44	18.62	0.27	2.41
Mexico	0.05	1.49	84.56	13.90	0.19
Switzerland	83.30	0.30	16.40	0.00	4.78
United States	4.83	22.16	73.01	0.00	3.75
Unweighted Average	38.25	9.18	49.60	2.97	2.68
Unitary					
Czech Republic	56.50	39.53	3.97	0.01	4.78
Denmark	93.03	0.06	6.91	0.00	17.23
Finland	94.90	0.05	4.88	0.16	9.44
France	0.00	10.71	54.12	35.18	4.48
Greece	0.00	33.06	66.94	0.00	0.32
Hungary	0.36	74.81	24.55	0.28	2.22
Iceland	78.09	8.94	12.97	0.00	9.81
Ireland	0.00	0.00	100.00	0.00	0.62
Italy	22.15	22.84	15.06	39.95	7.28
Japan	45.17	21.61	32.18	1.03	6.51
Korea	13.77	19.73	51.53	14.98	4.57
Luxembourg	93.53	1.15	5.05	0.27	2.44
Netherlands	0.00	43.44	56.56	0.00	1.49
New Zealand	0.00	9.61	90.39	0.00	1.94
Norway	89.22	2.07	8.71	0.00	6.37
Poland	47.09	2.58	50.34	0.00	2.72
Portugal	22.51	47.69	25.32	4.47	2.16
Slovak Republic	51.65	24.37	21.92	2.06	1.58
Spain	24.34	48.38	26.00	1.28	9.84
Sweden	100.00	0.00	0.00	0.00	16.53
Turkey	32.45	42.76	18.83	5.96	1.90
United Kingdom	0.00	0.00	100.00	0.00	1.69
Unweighted Average	39.31	20.61	35.28	4.80	5.27

Table 6.1 Relative importance of local taxes in OECD countries, 2003

*Source*: Based on Kitchen (2002) with updated information from the Organization for Economic Co-Operation and Development (2006).

income, property and sales taxes, but the largest source is a fourth tax structure based on business.

Local income taxes accounted for more than 45 percent of local taxes in 14 of the 30 OECD countries (Austria, Belgium, Czech Republic, Denmark, Finland, Germany, Iceland, Japan, Luxembourg, Norway, Poland, Slovak Republic, Sweden, and Switzerland). In contrast, US local governments received 4.83 percent of their own-source taxes from the local income tax. The averages for the federal and unitary countries were approximately the same (38.25 percent and 39.31 percent, respectively).

The property tax accounted for more than a majority of local tax revenue in 12 countries (Australia, Canada, France, Greece, Ireland, Korea, Mexico, Netherlands, New Zealand, Poland, United Kingdom, and the United States). According to the OECD, local governments in the US received 73.01 percent from the property tax. The average for the 22 unitary countries was lower (at 35.28 percent) than the amount for the eight federal countries (49.60 percent).

Hungary is the only country with a majority (74.81 percent) of funding from sales taxes. In comparison, local governments in the US depended upon this source for 22.16 percent of 2003 tax receipts.

In 2000, Italy received 60.6 percent of local taxes from "other taxes...paid solely by business" (OECD 2002: 239). By 2003, however, Italy had moved toward a more diversified local government revenue system, with 39.95 percent of revenues from this "other taxes" category (OECD 2006: 226). Interestingly, sales taxes climbed from 8.6 percent in 2000 to 22.8 percent in 2003. These results suggest significant change in the Italian local government finance system that deserves more inquiry.

## Local governments in the United States

The US Constitution is silent on the subject of local governments. Therefore, these political jurisdictions are legally the creatures of their respective state governments. The result is 87,525 local governments in the United States, with the governing body of each jurisdiction enjoying some discretion in implementing that organization's mission. Within the 50 states are different local government types, including 3,034 counties, 19,429 municipalities and 16,504 towns or township governments (US Census Bureau 2000). In addition, there were 13,506 independent school districts and 35,052 special districts, such as port authorities, watershed districts, rural fire protection districts, and many other forms of single-purpose districts. Although they differ, each local governmental entity has a mix of taxing, spending and borrowing authority.

Local discretion also emanates from not having to obtain prior approval from a higher level of government for every fiscal decision. Yet, there are constraints. For example, the federal government, increasingly, asserts jurisdiction over certain fiscal matters, such as prohibiting the taxation of Internet access in the name of interstate commerce (an expansive door to federal preemption), or effectively precluding the taxation of remote sales as by mail-order, telephone, or sales conducted over the Internet. More frequently, the state government constrains local fiscal decisions with explicit prescriptions or proscriptions. In the form of mandates, these restrictions include outright bans on certain taxes; limits on the tax base, rate or yield; restrictions on the use of the money generated from a particular source of revenue; and/or, myriad other requirements effectively restricting discretion. For example, local officials may have an obligation to convey their decisions through such methods as publishing the adopted tax rate, sending the adopted budget and the end-of-year audited financial statement to a central state depository, or other perfunctory duties. These indirect mechanisms can frustrate local officials and add inefficiency to the fiscal decision process. Fiscal federalism does not expect absolute local autonomy.

On a National Income and Product Accounts (NIPA) basis, local governments collected \$26.9 billion in current receipts in 1959 compared to state government collections of \$21.8 billion (Figure 6.1).<sup>1</sup> The positions changed in 1981 when states collecting more revenues than all local governments. By 2004, local governments collected \$941.9 billion



*Figure 6.1* State and local government current receipts, NIPA basis, 1959–2004 *Source:* Author's calculations based on data from the Bureau of Economic Analysis, US Department of Commerce.



*Figure 6.2* Local government current receipts and expenditures, year over year change, NIPA basis, 1959–2004

*Source*: Author's calculations based on data from the Bureau of Economic Analysis, US Department of Commerce.

compared to \$1,062.5 billion by the states. Examining the data by yearly change, however, conveys a different story. Although the absolute percentage change of local government current receipts remains above 4 percent (see Figure 6.2), the yearly change has softened considerably from significant levels of yearly increases in earlier decades. In comparison to current expenditures, there is a pronounced lag effect of large spending increases after large revenue increases. Whereas state revenues increased by only 1.78 percent from 2001 to 2002 (not shown here), the resilience of local governments to shocks such as 9-11 and the dot.com bust is illustrated by a local government revenue increase of 4.54 percent from 2001 to 2002. These trends are not adjusted for price changes because public budgets are not either; citizens are likely to react to reports of current dollar changes. These data offer a hint why citizens may have a concern about the size of, and growth of, (local) government.

Converting the series to a percent of GDP, as shown in Figure 6.3, reveals the significant decline in local government current receipts following the 1974 recession (highlighted by New York City's fiscal emergency of 1975) and a long period of recovery. More recently, the recent downturn reflects the post 9-11 environment. For example, New York City's personal income tax collections did not exceed the 2001 amount until 2005 (City of New



*Figure 6.3* Local government current receipts as percentage of GDP, NIPA basis, 1959–2004

*Source*: Author's calculations based on data from the Bureau of Economic Analysis, US Department of Commerce.

York 2005). Local governments, however, generally enjoy a healthy surplus position (Pagano 2002; Pagano and Hoene 2003), although some communities face significant fiscal problems. For example, in 2003, the City of Pittsburgh's bonds were downgraded to junk bond status after the city's external auditors warned that the city's viability was at risk without new revenue authority (Lucchetti 2003). On the other side of the country, San Diego's fiscal mismanagement continues to undermine its sunny façade (Wong 2004; San Diego Union Tribune 2006).

## Primary own-source revenues

State and local governments face a variety of revenue options, with taxes the most contentious ones in public debate. This section examines the structure of the property, income, and sales taxes (Carter and Hildreth 1992). The property tax remains the primary local revenue source for local governments, despite a decline in dependence over the last 40 years. In contrast, the sales tax has grown in use over the same period. Local income taxes remain a small segment of the overall fiscal picture of American local governments. Attention is roughly in proportion to their share of collections, as shown in Figure 6.4. A brief discussion of service charges concludes the section.



*Figure 6.4* Local government sources of funds as percentage of total, NIPA basis, 1959–2004

*Source*: Author's calculations based on data from the Bureau of Economic Analysis, US Department of Commerce.

#### Property tax

Glenn Fisher's (1996) sweeping history of the property tax in America traces the shifting political and economic support for equality of taxation. A shift from uniformity as a single rule of tax design to multiple rules reflects political responsiveness. Fisher finds the 19<sup>th</sup> century a period of uniformity, a symbol of equality. Property taxation encompassed real and personal property, tangible and intangible, all in proportion to value. Everyone was taxed, both the powerful and the politically weak. Accordingly, the tax was viewed as simple and fair, and easy to administer locally.

A retreat from the uniformity principle occurred at the turn of the 20<sup>th</sup> century with the mobility of people and the complexity of commerce. Voluntary compliance dropped, and locally elected assessors increasingly were prone to making exceptions despite laws to the contrary. These local decisions imperiled state budgets dependent upon the locally administered property tax. In addition, a rising sentiment that intangibles were subject to double taxation led to a movement to exempt that class of assets from the broad-based property tax. All of these factors, plus the Great Depression, con-

tributed to states finding refuge in the taxation of income and retail sales, leaving property primarily taxed locally. The one exception to states retreating from uniformity was the movement to centralize taxation of rateregulated railroads and utilities, both to protect that industry segment from local officials who might succumb to overtaxing out-of-town businesses and a more positive perspective that central administration was best for network utilities.

Fisher finds the modern property tax especially responsive to the political process and economic arguments, illustrated by a long, and growing, list of deviations from a uniform base. For example, homestead exemptions remove residential property from the tax rolls, use-value taxation protects agricultural property from valuation increases caused by adjacent development, and industrial tax exemptions remove targeted businesses from the tax list. Other exemptions spring forth almost yearly from nearly every state legislature. Fisher links this trend of tax personalization with the growth of voter discontent exemplified by various forms of tax and expenditure limits.

## Contemporary aspects of the property tax structure

Local governments still depend upon the property tax. The tax provides current operating revenues and is leveraged through debt financing to cover the acquisition and construction of capital assets and infrastructure. Therefore, the share of revenues generated by the property tax provides a measure of dependence on this source of funds. In 2002, local governments received 45 percent of own-source general revenue from the property tax, as reported in Table 6.2. School districts relied on the tax for almost

Type of government	Property tax	Own-source general	Property tax as a	
	(\$ in millions)	revenue (\$ in millions)	percentage of own-source general revenue	
All Local Governments	\$269,489	\$597,139	45.13%	
School Districts	\$119,970	\$151,249	79.32%	
General-purpose Governments	\$139,196	\$384,359	36.22%	
Special Districts	\$10,254	\$61,751	16.61%	
Counties 250,000+ population	\$37,469	\$93,687	39.99%	
Municipalities 200,000+ population	\$24,653	\$95,314	25.87%	

**Table 6.2** Property tax in local government finance by type of government unit,2002

*Source*: Based on Netzer (2003a) with updated information from Census of Governments, 2002, US Bureau of Census.

80 percent of own-source general revenues whereas for general-purpose local governments it was 36 percent. Showing their limited reliance on this tax, special district governments received 17 percent of own-source general revenues from the property tax. Large counties (defined as 250,000 or higher in population) received 40 percent of own-source general revenues from the property tax compared to 26 percent for large municipalities (defined as those with a population of 200,000 or higher). Similar calculations using 1997 data, the last prior data collection period, found similar results except that large counties relied more on the property tax then (45 percent) than in 2002 (40 percent). Although some state governments use the property tax, the aggregate amount is less than two percent of total taxes, an amount that could be understated due to the classification in some states of a state-wide mandated school property tax as a local tax whereas in other states the same mechanism is classified as a state tax (Kenyon 2003).

The property tax is called the *ad valorem* tax because the concept is to set taxable value according to physical value. Determining this physical value is the point that bothers many taxpayers. The income tax appears to have a clear tax base although the sales tax rate is applied against the market price of the taxable commodity or service. Short of an exchange in the market place to determine the market value, however, a property's value depends on a subjective evaluation that is open to dispute. Especially challenging the tax assessor's ability to assign an appropriate "market" value to such a property is when there are few trades of similar properties, as is the case in rural areas and small towns. Access to business-specific valuation guides and computerized data from other jurisdictions around the state can help these local assessors deal with this information deficiency. Solving this problem can lead to other problems. California's Proposition 13, for example, was fueled by taxpayer shock to an efficient valuation process. The horizontal equity problem with that famous citizen initiative was addressed by the US Supreme Court, in Nordlinger v. Hahn (505 US 1, 1992). The Court upheld California's "welcome neighbor" approach to assessment inequity that permits longterm residents to enjoy lower effective tax rates compared to owners of newly purchased properties (Sexton et al. 1999).

Proposition 13 is not the only situation that leads to tax inequity. In another common area, many states classify real property into categories such as residential, commercial, agricultural, and public utility, and in the process use different weighting schemes for each. For example, Kansas assesses residential property at 11.5 cents for every dollar of (estimated) market value, commercial property at 25 cents on the dollar and public utility property at 33 cents on the dollar. This arbitrary classification scheme violates tax fairness. Electric industry restructuring was delayed in several states until fiscal transition rules could be created to solve the problem caused by similar inequities in taxation. Commonly, a privately owned (merchant) power plant could be taxed at the lower commercial property value although a power plant owned by an integrated electric utility would be taxed on a unity basis, by the state, as part of the entire utility instead of the physical value of the single power plant (Seaman and Hildreth 2003). In another example, erosion of the tax base due to charity and non-profit exemptions have prompted communities to call for payments-in-lieu of taxes, if not reconsideration of the exemption altogether (Brody 2002).

An especially troubling exemption is termed the "homestead exemption." This reduction in tax base rewards home ownership, often stated as a dollar amount reduction of taxable value. In Louisiana, for example, the effect is to exempt the first \$75,000 of market value on a homestead from taxation. Since homeowners vote, this tax exemption resists any reduction, thereby rendering higher rates on the commercial and industrial properties – an anti-business tax of the first magnitude – which, of course, do not have the power to vote. This type of disparate treatment of commercial property relative to residential leads to different effective tax rates.

Property tax assessment is decentralized and fragmented. Although municipalities in some states have this responsibility, counties are the primary level where this administrative responsibility resides (Behrens 1998: 245). One very unusual setting is Orleans parish (county), Louisiana – the location of the City of New Orleans – where there are seven assessors elected by district.<sup>2</sup> There are substantial economies of scale in performing property tax assessments even when there is only one assessor per county. Sjoquist and Walker (1999) report cost savings in the magnitude of 20 percent from consolidating assessment functions in 68 smaller Georgia counties. In a study of Illinois counties, Giertz and Chicoine (1990) draw similar conclusions on the advantages of consolidating assessing jurisdictions. These results confirm the earlier recommendations on centralized assessment by the Advisory Commission on Intergovernmental Relations (1963).

Citizens dislike a government entity that does not temper its use of the taxing power. In lieu, or instead, of public officials addressing the matter, citizens turn to various mechanisms to exert control (Mullins 2003). Limits on the tax base can take the form of caps on the growth of the base. The tax rate can be limited by requiring citizens to vote on changes to the rate, as in a supermajority of citizens voting. Even the yield can be limited by restricting the amount that can be collected, as in the prior year's levy adjusted for inflation. Evidence is accumulating that property tax limitations have beneficial results in controlling the Leviathan model of government (McGuire 1999). Other implications include increased centralization of resources and budgetary decision-making at the state

level, increased use of service charges and other forms of non-tax local sources, and a lessening of ability to respond to local service preferences (Mullins and Joyce 1996).

#### Property tax structure index

This review of the contemporary aspects of the property tax structure illustrates the forces that can strain its effectiveness. Tax design, therefore, reflects tension on the structure. The local property tax policy structure index was constructed using four equally weighted factors to gauge the variation across the states.

*Complexity*. The number of counties in each state, as reported by the Census Bureau, provides a convenient measure of the administrative assignment of this tax, although in some states property tax administration may reside at the municipal level. The results are normalized by the mean of the series. This method neutralizes the scaling differences in this and other factors, thereby permitting the four factors to be added together to generate the overall index.

Adequacy. In a narrow view of efficiency, for a government to be dependent on one tax source subjects it to the vicissitudes of economic and political forces arrayed against that particular source of funding and the distorting effects that can arise. Therefore, the percentage of state and local property tax collections to total state and local taxes provides a measure of the level of dependency on this tax source (using Census Bureau data for 1997). The purpose of including state property tax receipts is to avoid the problems caused by the peculiar assignment of state-wide school property taxes to a type of government (Kenyon 2003). Even if there is a state property tax, administration remains at the local level (except, perhaps, for regulated public utility property). The results are normed by the mean of the series.

*Equity*. One measure of tax equity is the relationship between effective tax rates for commercial to residential properties in metropolitan areas of each state, as reported by Mullins (2003) for 1996–98. The results are normed by the mean of the series.

*Constraint*. Although there are many different forms of tax limits – limits on rates, base and yield – the one that imposes limits on the tax base, specifically on assessment increases, has proven the most troublesome for tax administration and equity concerns, as embodied by the "welcome neighbor" effect in California. This dichotomous measure is coded 1 if the constraint exists, and 0 if not (based on data from International Association of Assessing Officials 2000; Mullins 2003).

States are arrayed according to the local property tax structure index in Figure 6.5. With a national mean of 3.32, the Texas index of 7.2 is 2.17 times the national mean. The four states with the highest index (greater than 1.5 times the mean) are Texas, Illinois, New York and



*Figure 6.5* Property tax structure index *Source*: Author's calculations.

Florida. An examination of each of the factors of the index (see Table 6.3) reveals that Texas has a significantly higher number of counties than the other states, relies on the property tax for 38 percent of total state and local taxes, imposes a slightly higher effective tax rate on commercial properties than on residential properties, and copes with an assessment limitation. Illinois, New York, Florida and Minnesota impose significantly higher effective tax rates on commercial compared to residential properties, although having a heavy dependence on this tax source. At the opposite end of the index are states that generally have a low reliance on the property tax, higher residential effective tax rates compared to commercial properties, and no limits on assessed value increases.

The value of this index is that it provides a policy portfolio perspective to tax policy. As an exploratory effort, this index (and the following one for the sales tax) is not intended as a definitive index. Kelly (2000a, 2000b) posits an alternative conceptual model for determining the effectiveness of a property tax system. His model requires data on coverage, valuation, burden, and collection that are not easily found for each jurisdiction. Therefore, the current index lays the groundwork for future research. A desirable outcome of this (and similar) efforts would be to generate an overall way of evaluating the political and economic decisions involved in the tax structure. Such a perspective could add to the discussion about property tax reforms and the use of this tax relative to others (McGuire 2000; Netzer 2003a, 2003b).

State	Number of counties	Counties normed	State & local property tax to total state & local taxes	Share normed	Ratio commerical to residential effective property tax rate	Rate normed	Limits on increases of assessed value: 1 = yes, 0 = no	Index	Index normed
Texas	254	4.17	0.38	1.28	1.05	0.76	1	7.21	2.17
Illinois	102	1.68	0.38	1.29	3.36	2.42	1	6.39	1.92
New York	57	0.94	0.32	1.09	4.00	2.88	1	5.91	1.78
Florida	66	1.08	0.35	1.18	2.56	1.85	1	5.11	1.54
Minnesota	87	1.43	0.27	0.93	3.34	2.40	0	4.76	1.43
Iowa	99	1.63	0.32	1.10	1.26	0.90	1	4.63	1.39
Michigan	83	1.36	0.29	0.99	1.25	0.90	1	4.25	1.28
Missouri	114	1.87	0.22	0.76	2.18	1.57	0	4.20	1.27
Georgia	156	2.56	0.27	0.93	0.92	0.67	0	4.16	1.25
Kansas	105	1.73	0.31	1.05	1.83	1.32	0	4.10	1.23
California	57	0.94	0.26	0.87	1.42	1.03	1	3.84	1.16
New Jersey	21	0.35	0.47	1.59	1.24	0.89	1	3.83	1.15
Mississippi	82	1.35	0.23	0.80	2.24	1.62	0	3.76	1.13
Colorado	62	1.02	0.29	1.00	2.41	1.74	0	3.76	1.13
Alabama	67	1.10	0.13	0.44	1.67	1.20	1	3.75	1.13
Virginia	95	1.56	0.31	1.06	1.45	1.04	0	3.67	1.11
Oklahoma	77	1.27	0.15	0.52	1.09	0.78	1	3.57	1.08
Indiana	91	1.50	0.35	1.18	1.18	0.85	0	3.53	1.06
South Carolina	46	0.76	0.27	0.92	1.15	0.83	1	3.50	1.06
Arizona	15	0.25	0.29	0.98	1.75	1.26	1	3.48	1.05
Arkansas	75	1.23	0.16	0.54	0.90	0.65	1	3.42	1.03
Nebraska	93	1.53	0.35	1.21	0.93	0.67	0	3.41	1.03
Oregon	36	0.59	0.31	1.07	0.94	0.68	1	3.34	1.01
Tennessee	93	1.53	0.22	0.75	1.45	1.04	0	3.32	1.00
Kentucky	119	1.96	0.17	0.59	0.90	0.65	0	3.19	0.96
North Carolina	100	1.64	0.21	0.73	1.12	0.81	0	3.18	0.96
Maryland	23	0.38	0.26	0.88	1.25	0.90	1	3.16	0.95
Montana	54	0.89	0.43	1.46	1.12	0.80	0	3.15	0.95
Ohio	88	1.45	0.29	0.98	0.90	0.65	0	3.08	0.93
Massachusetts	12	0.20	0.33	1.12	2.34	1.68	0	3.00	0.90
New Hampshire	10	0.16	0.66	2.25	0.81	0.59	0	3.00	0.90
Pennsylvania	66	1.08	0.28	0.96	1.29	0.93	0	2.98	0.90
South Dakota	66	1.08	0.36	1.24	0.89	0.64	0	2.97	0.89
Wisconsin	12	1.18	0.33	1.14	0.83	0.60	0	2.92	0.88
Nevada	16	0.26	0.22	0.75	1.02	0.73	1	2.74	0.83
Vermont	14	0.23	0.45	1.52	1.22	0.88	0	2.63	0.79
North Dakota	53	0.8/	0.29	1.00	0.93	0.6/	0	2.54	0.77
Louisiana	00	0.99	0.15	0.51	1.35	0.97	0	2.47	0.74
Maille Dhodo Island	10	0.20	0.43	1.40	0.99	0.71	0	2.45	0.73
Wyoming	23	0.00	0.42	1.43	0.98	0.93	0	2.30 2.36	0.71
,, , , , , , , , , , , , , , , , , , ,	23	0.50	0.57	1.20	0.20	0.70	0	2.50	0.71

 Table 6.3
 Property tax structure index by state

State	Number of counties	Counties normed	State & local property tax to total state & local taxes	Share normed	Ratio commerical to residential effective property tax rate	Rate normed	Limits on increases of assessed value: 1 = yes,	0 = no Index	Index normed
Idaho	44	0.72	0.26	0.89	0.94	0.68	0	2.29	0.69
West Virginia	55	0.90	0.20	0.68	0.93	0.67	0	2.25	0.68
Hawaii	3	0.05	0.16	0.54	2.06	1.48	0	2.07	0.62
Alaska	12	0.20	0.29	0.97	1.15	0.83	0	2.00	0.60
Utah	29	0.48	0.23	0.80	0.90	0.65	0	1.93	0.58
Connecticut	0	0.00	0.36	1.22	0.82	0.59	0	1.81	0.54
Washington	39	0.64	0.32	1.09	0.10	0.07	0	1.80	0.54
New Mexico	33	0.54	0.12	0.42	0.88	0.63	0	1.60	0.48
Delaware	3	0.05	0.16	0.54	0.84	0.60	0	1.19	0.36
	60.86		0.29		1.39			3.32	1.00

 Table 6.3
 Property tax structure index by state – continued

*Source*: Author's calculations based on number of counties and tax shares (1997 Census of Governments), tax rates (Mullins 2003) and limits (IAAO 2003 and Mullins 2003).

## Sales tax

The Great Depression led the State of Mississippi to introduce the first retail sales tax to offset the loss of property tax revenue, and within six years 26 other states had adopted this innovative tax (Mikesell 1997; Fox 1997). Since then, all but five states have adopted the retail sales tax to support their budgets. Within limits, most states have authorized their local governments to impose a sales tax. In an example of fiscal federalism, Alaska does not levy a state sales tax but it permits its local governments to impose the tax. This section, therefore, examines basic characteristics about the retail sales tax used by local governments (Due and Mikesell 1994). Excluded from this discussion are excise taxes on particular commodities such as alcoholic beverages, tobacco products, motor fuel, or regulated public utilities.

#### Contemporary aspects of the sales tax structure

As illustrated earlier in Figure 6.4, American local governments rely on the sales tax for less than 8 percent of current receipts, but reliance grows. This dependence varies by state and by type of government, with municipalities more reliant on the local option sales tax than counties (McGuire 2000).

As designed, the sales tax is applied on retail sales of goods and services. However, states often exempt food, pharmaceutical products, and most services (e.g., legal, accounting, and advertising) from the tax. The incentive for governments, then, is to recruit "big box" retailers or destination stores – such as Wal-Mart, AutoNation, and Cabela's – to locate in their community in order to gain the retail sales generated by these large retailers.

Ease of administration arises by having the retailer collect the tax and remit collections to the tax administrator. To avoid consumers shopping outside the taxing area, a "use" tax accompanies the "sales" tax (used interchangeably here), thereby making the consumer liable for the amount of tax that otherwise would have been imposed.

Most states require local governments to piggyback on the state sales tax, thereby achieving base uniformity and one central tax administration. State and local officials lament the erosion of the tax base due to Internet sales and other remote vendor sales, but their cry for legislative relief from Congress has fallen short of their quest to overturn the US Supreme Court case of *Quill Corp. v. North Dakota* (504 US 298, 1992). In that case, the Supreme Court ruled that North Dakota could only require businesses to collect the sales tax that had a "substantial nexus" with the state.

Given the amount of sales conducted over the Internet, much less by telephone and mail, many states have entered into an interstate compact agreement to simplify the sales and use tax structures. Participating states in the Streamlined Sales Tax Project have modified their sales and use taxes to make the tax easy for remote retailers to instantly, electronically determine if an item is taxed at the destination site, and, if so, the rate and jurisdiction to whom remittance is due. The longer-term goal of the streamlining project is to win Congressional action requiring remote vendors to collect and remit the appropriate use tax amount, or, short of that, to win Supreme Court reconsideration of its prior holding, which was premised, in part, on the complexity of the retail sales tax around the country (Reese 2003).

Without having the retailer serve as the collector, tax administrators are left hoping that consumers will voluntarily report their mail order or e-commerce purchases and remit the use tax on such purchases. Few consumers comply, except for the purchase of automotive vehicles where there is a registration process that can serve as a point of discovery and collection of the tax.

Given that most state governments rely on the sales tax to finance their own budgets, states place limits on the rates that can be imposed by their local governments. This barrier is often expressed as a local option tax, meaning it is not a mandatory tax but up to local citizens to impose the local tax, but only up to the allowed rate. Consumers, however, are unlikely to focus on the assigned rate for a particular jurisdiction because the tax on the purchase price of a taxed commodity or service is the combined state and local tax rate.

#### Sales tax structure index

Local government retail sales taxes have a strong state orientation because most states require the local sales tax to be based on the same taxable items as the state tax, and the tax collected by the state with receipts (often minus an administrative fee) remitted back to the taxing jurisdiction. Moreover, state tax rates are constrained by the existence of local sales tax rates since it is the combined tax rate that the consumer pays. Accordingly, the sales tax structure index uses three equally weighted factors.

*Tax base*. A broad-based retail sales tax includes services, groceries, clothing, pharmaceutical products, and intangible items, compared to a narrow base excluding most, if not all, of these items. Although a few states permit their local governments to deviate from the state sales tax base in one or more ways, for our purposes we treat them the same. Mikesell (2000) presents an estimate of the implicit sales tax base for each state in 1998 as a percent of state personal income. This measure is then normed by the mean of the series.

*Tax rate.* Given that consumers pay the combined state and local sales tax rate, this factor uses the maximum state and local tax rate (Federation of Tax Administrators 2003). The results are normed by the mean of the series.

Adequacy. Dependency on a single tax source renders the jurisdiction vulnerable to shifts in economic and political forces that could endanger the budget. Because local sales taxes are tied so closely to state sales taxes, the measure used here is the share of state and local sales tax collections to total state and local tax receipts (based on Census Bureau data for 1997). The results are normed by the mean of the series.

States with a state sales tax are arrayed according to the normalized index in Figure 6.6. There is more convergence on the sales tax index than on the property tax index, although states at the higher end generally rely on a broader base, have higher tax rates and depend on this tax more than those at the opposite end of the index (as revealed by the details in Table 6.4). New Mexico and Hawaii have particularly broad sales taxes because they tax a range of consumer services, unlike most other state sales taxes. Alabama has the highest maximum sales tax rate but a relatively narrow tax base, so it is more dependent on this tax than the average state. Louisiana and Tennessee, in contrast, have relatively high combined tax rates on broader bases, yielding even more dependency. At the lower end of the index, states have relative lower tax rates, narrower tax bases, and lower reliance on the tax. Not included in the chart are four states – Delaware, Montana, New Hampshire and Oregon – without a state sales tax although



Figure 6.6 Sales tax structure index Source: Author's calculations.

State	Maximum state & local tax rate	Rate normed	Implicit sales tax base to personal income	Base normed	State & local sales tax to total state & local taxes	Share normed	Index	Index normed
New Mexico	7.25	1.00	0.89	1.80	0.52	1.37	4.17	1.39
Louisiana	9.50	1.31	0.64	1.28	0.54	1.42	4.02	1.34
Tennessee	9.75	1.35	0.52	1.06	0.60	1.59	3.99	1.33
Hawaii	4.00	0.55	1.01	2.04	0.51	1.34	3.94	1.31
Arkansas	9.88	1.37	0.63	1.28	0.47	1.24	3.88	1.29
Nevada	7.25	1.00	0.57	1.15	0.63	1.65	3.80	1.27
Oklahoma	9.85	1.36	0.67	1.36	0.40	1.06	3.78	1.26
Washington	8.90	1.23	0.48	0.97	0.59	1.55	3.75	1.25
Alabama	11.00	1.52	0.43	0.87	0.51	1.33	3.72	1.24
S Dakota	6.00	0.83	0.69	1.39	0.51	1.34	3.56	1.19
Florida	7.50	1.04	0.56	1.12	0.52	1.36	3.53	1.18
Texas	8.25	1.14	0.49	0.98	0.51	1.34	3.46	1.15
Mississippi	7.25	1.00	0.56	1.12	0.50	1.33	3.45	1.15
Arizona	8.60	1.19	0.47	0.95	0.46	1.20	3.35	1.12
Utah	7.00	0.97	0.61	1.23	0.42	1.10	3.30	1.10
Wyoming	6.00	0.83	0.75	1.52	0.35	0.93	3.27	1.09
N Dakota	7.50	1.04	0.53	1.07	0.41	1.07	3.17	1.06
Missouri	8.35	1.16	0.47	0.94	0.40	1.06	3.16	1.05

Table 6.4 Sales tax structure index by state

State	Maximum state & local tax rate	Rate normed	Implicit sales tax base to personal income	Base normed	State & local sales tax to total state & local taxes	Share normed	Index	Index normed
Kansas Georgia Idaho S Carolina Colorado N Carolina California West Virginia Illinois Nebraska Kentucky Minnesota Iowa Michigan Ohio New York Indiana Connecticut Wisconsin Maine Pennsylvania Alaska Rhode Island Vermont Virginia	$\begin{array}{c} 8.30\\ 7.00\\ 8.00\\ 7.00\\ 7.90\\ 7.50\\ 8.50\\ 6.00\\ 9.25\\ 7.00\\ 6.00\\ 7.50\\ 7.00\\ 6.00\\ 7.00\\ 8.50\\ 6.00\\ 5.60\\ 5.00\\ 7.00\\$	$\begin{array}{c} 1.15\\ 0.97\\ 1.11\\ 0.97\\ 1.09\\ 1.04\\ 1.18\\ 0.83\\ 1.28\\ 0.97\\ 0.83\\ 1.04\\ 0.97\\ 0.83\\ 0.97\\ 1.18\\ 0.83\\ 0.97\\ 1.18\\ 0.83\\ 0.97\\ 0.97\\ 0.97\\ 0.97\\ 0.97\\ 0.97\\ 0.83\\ 0.62\\ \end{array}$	$\begin{array}{c} 0.50\\ 0.52\\ 0.50\\ 0.53\\ 0.45\\ 0.45\\ 0.39\\ 0.49\\ 0.32\\ 0.44\\ 0.46\\ 0.44\\ 0.45\\ 0.50\\ 0.39\\ 0.34\\ 0.44\\ 0.41\\ 0.46\\ 0.48\\ 0.33\\ 0.50\\ 0.28\\ 0.40\\ 0.42\\ \end{array}$	$\begin{array}{c} 1.01\\ 1.04\\ 1.02\\ 1.07\\ 0.90\\ 0.91\\ 0.80\\ 0.98\\ 0.64\\ 0.90\\ 0.93\\ 0.88\\ 0.90\\ 1.01\\ 0.79\\ 0.69\\ 0.83\\ 0.93\\ 0.93\\ 0.93\\ 0.98\\ 0.66\\ 1.00\\ 0.57\\ 0.81\\ 0.85\\ \end{array}$	$\begin{array}{c} 0.37\\ 0.39\\ 0.34\\ 0.37\\ 0.37\\ 0.35\\ 0.34\\ 0.40\\ 0.32\\ 0.33\\ 0.37\\ 0.31\\ 0.32\\ 0.31\\ 0.31\\ 0.32\\ 0.31\\ 0.31\\ 0.26\\ 0.30\\ 0.33\\ 0.29\\ 0.29\\ 0.29\\ 0.30\\ 0.13\\ 0.29\\ 0.25\\ 0.29\\ 0.25\\ 0.29\\ \end{array}$	0.98 1.03 0.88 0.96 0.93 0.90 1.06 0.84 0.84 0.84 0.84 0.82 0.81 0.84 0.82 0.81 0.69 0.80 0.86 0.76 0.75 0.78 0.35 0.77 0.65 0.77	3.14 3.05 3.01 3.00 2.96 2.87 2.87 2.76 2.72 2.72 2.72 2.71 2.67 2.57 2.56 2.52 2.51 2.47 2.42 2.41 2.31 2.30 2.25	$\begin{array}{c} 1.05\\ 1.02\\ 1.00\\ 1.00\\ 0.99\\ 0.96\\ 0.96\\ 0.96\\ 0.92\\ 0.91\\ 0.91\\ 0.91\\ 0.91\\ 0.91\\ 0.90\\ 0.88\\ 0.84\\ 0.82\\ 0.84\\ 0.82\\ 0.81\\ 0.80\\ 0.77\\ 0.77\\ 0.77\\ 0.75\\ \end{array}$
New Jersey Maryland Massachusetts	6.00 5.00 5.00 7.23	0.83 0.69 0.69	0.29 0.35 0.29 0.50	0.58 0.70 0.59	0.26 0.25 0.21 0.38	0.67 0.67 0.54	2.08 2.06 1.82 3.00	0.69 0.69 0.61

 Table 6.4
 Sales Tax Structure Index by State – continued

*Note*: Alaska does not have a state sales tax but local governments can impose the tax. The base is assumed to be the mean of the series.

*Source*: Author's calculations based on tax rates from Federation of Tax Administrators (2003), base from Mikesell (2000) and shares (Bureau of the Census 1997–98).

the Census reports some sales-related tax collections. In addition, Alaska does not have a state sales tax but it does permit local sales taxes.

Mikesell (2005) offers an alternative way to grade the state sales tax structure after acknowledging that it involves many judgments. In constructing his state government sales tax "quality index," Mikesell codes tax base and tax rate characteristics by category and unique weighs. Moreover, Mikesell's index does not incorporate features of adequacy, as suggested by Adam Smith (1776) and Alt (1983). Although Mikesell's results for state governments differ from those reported here for local governments, it is instructive to recognize that "(t)here is no uniform structural definition of the U.S. retail sales tax" (Mikesell 2005: 135). Both the current effort and Mikesell's rating scheme rest on the following cautious advice: "It is possible to have different evaluations..., but an effort is made to provide a degree of process transparency so that those with differing standards can create their own measure" (Mikesell 2005: 132).

## Income tax

Few local governments in America enjoy the ability to levy a local income tax, consistent with the results shown in Figure 6.4. At least ten states allow a local income tax of some type (it may be termed an occupational tax defined as a tax on wages, or the net income of business). The most frequent use of the local income tax is found in Pennsylvania municipalities and Ohio municipalities. Other states bestow special taxing authority to particular jurisdictions, such as particular cities in Alabama and Missouri, and school districts in Iowa and Ohio.

Given its low utilization around the country, the brief focus here is on key characteristics in the design of the local income tax. The simplicity principle of taxation is violated when local governments administer their own income taxes. Electric industry restructuring in Ohio, for example, was delayed until an agreement was reached that made it easier for firms desiring to enter the retail electricity market to use a uniform municipal income tax form and to rely on a central webpage for links to each particular jurisdiction's locally administered corporate income rules and instructions (Seaman and Hildreth 2003). This simple reform advanced the transparency of the tax not only for this segment but all multi-state firms doing business in Ohio local communities.

An alternative administrative approach is for the local income tax to be piggybacked on the state income tax. The loss of local administration is offset by the state's broader tax base. That is because, unlike most states that link their tax to the federal government's broad definition of taxable income, most local government income taxes are on enumerated forms of earned income, such as wages, salaries, tips, and commissions. Such a narrow base violates the equity principle by excluding non-earned sources, such as interest, rents, royalties, capital gains, and inheritance. Moreover, a local income tax is more likely to tax proprietary income (from unincorporated business and professional activities) instead of corporate income, therefore distorting business tax policy. Complicating the use of the local income tax is its impact on economic development. When there are areas within a region or metropolitan area where the tax is not levied, there are opportunities for individuals and businesses to vote with their feet, that is, to locate outside the boundaries of the income tax jurisdiction. A remedy is to offer a metropolitan-wide tax sharing agreement. Marginal economies, such as found in many poor, rural and small communities, will be unable to gain much from a local income tax, although there may be more income to tax in one of these communities than retail sales captured by a sales tax.

## Service charges

Bird (1993: 212) asserts that the "first rule of local finance should be: 'Whenever possible, charge.'" Given the twin pressures of the ever-present anti-tax sentiment and the drive to instill more market pricing into public services, more government entities have turned to service charges and user fees as an alternative revenue raising method. Charging for services is the norm for business-type enterprise operations, such as city owned water, sewerage, electricity, or gas distribution services. An issue for these enterprise operations is whether the general treasury will reap any subsidies from cash-rich utility services, and, if so, how much and under what justification (for example, recovery of overhead, citizen dividends, in-lieu-of property tax payments, etc.).

A market economy charges prices, providing signals to producers on what to provide and rationing goods and services among competing consumers. Governments can use prices for goods and services in a similar manner. Service charges can help avoid substantial waste by making users temper their consumption. Some programs offered by the government benefit the individual with little spillover effects on others, thus making it easier to assign a price. However, there are other public services that benefit the individual as well as the general society, such as public health immunization programs to avoid an epidemic. Assigning a price, without any provision for discounts or waiver, may harm society by discouraging widespread use that otherwise might prevent the spread of an infectious disease. Setting a price at an amount to recover the cost of the particular service allows the use of variable pricing, such as peak-pricing differentials (one price during peak-periods and another one at off-peak periods), but limits the ability of program managers to charge the fee-payer more than the cost of the service. More troubling from an equity standpoint is that service charges place a disproportionate burden on lower-income people, especially if the normal consumption pattern varies little by income.

A recent development that will encourage state and local governments to focus more on service charges is the new generally accepted accounting standards (GAAP) that require the reporting of cost of service by function (Governmental Accounting Standards Board 1999). The new "statement of activities" (that replaces the "income statement") reveals for the first time the difference between program revenues and cost, with the (typically) reported deficit covered by general revenues. As public officials become more familiar with this new accrual accounting application, the probability increases that annual budget discussions will devote more time to setting charges for services at or near the cost of service, where feasible.

## Debt financing

Debt and taxes go together because both are sources of funding for public services and projects. There is a fundamental difference, however. Once a tax is levied by the governing body, taxpayers are obligated to pay if they engage in the taxed activity. Just because a governmental jurisdiction wants to borrow money does not mean that it will enjoy market access at an acceptable cost of capital. Therefore, acquiring money through the public capital markets depends upon the nature of the securities offered, the investors that are likely to purchase the securities, and the ability of the debt issuer to bring an offering to the market (and, of course, to pay the resulting debt service on time and in full).

Instead of focusing exclusively on American local governments, this section reviews the basic similarities and differences in the capital market experiences of subnational governments in America and Canada (Hildreth 2005, 2006; Hildreth and Zorn 2005). These governments have long enjoyed the power to enter the private capital markets to finance capital assets and, in some cases, operating deficits. In return, investors have experienced few economic defaults on these direct obligations. The structure of subnational borrowing may help explain this success yet suggest the nature of the market-based stress that local governments face in debt financing.

American state and local governments issue debt securities – generically labeled *municipal* securities – in a domestic capital market comprised of investors seeking to benefit from an exemption from federal (and usually the state) income taxes on the interest earned from loaning the money to the governmental entity. The American tax-exempt capital market permits state and local governments to borrow money at a lower cost than the national government that issues sovereign securities in the taxable capital market. Unlike in America, there is no domestic tax-exempt capital market in Canada. In fact, the debt issuance experiences of Canadian provincial and municipal governments are exclusively taxable and often conducted in foreign capital markets. American state and local governments look at any alternatives to the tax-exempt domestic market – namely, the taxable market, whether domestic or foreign – with great trepidation. Many state and local governments in America have some experience with the taxable domestic market by issuing private activity bonds that benefit private business, but only a few large and well-known issuers (such as New York City) have experimented with foreign debt issuance.

## Nature of the securities

US tax laws specify that the interest on the obligations of a state, a territory, or a possession of the US, or any political jurisdiction of any of the foregoing, or of the District of Columbia, is not subject to income taxes as part of gross income. This definition permits an ever increasing number of sub-state political jurisdictions (including limited purpose special districts) to enjoy the benefit of issuing tax-exempt debt. Congress, repeatedly, has narrowed the allowable purposes in order to save the revenue loss. State income taxes typically exclude in-state interest only. Although no other country has repeated this market design, the province of Ontario issued one series of 5-year bonds in 2003 that enjoyed only a provincial taxexemption. However, political changes undermined the program before it could get established as a viable debt instrument for both the issuer and the investing public.

American state and local governments must issue "taxable" securities when the purpose provides substantial private business benefits, as defined from time to time by the US Congress. Moreover, the interest paid to investors by US sovereign bonds and private business securities is taxable under income tax laws. In contrast, Canadian provincial, municipal, sovereign, and private business securities are issued in the taxable market.

State and local governments, on average, borrow at a rate about 40 basis points (with each basis point equal to one hundredth of a percent) *below* the sovereign bonds – due to the tax-exempt nature of the market. In contrast, Canadian subnational debt has a quality spread that averages about 55 basis points *higher* than Canada's sovereign bonds.

State and local government securities are exempt from direct federal securities regulation, unlike corporate and foreign (including Canadian sovereign and subnational) borrowers in America. However, the US Securities and Exchange Commission has indirectly regulated municipal securities. Indirect regulation occurs by placing the burden on the original buyers of state and local government debt – the wholesalers known as broker-dealers or underwriters – to enter into business only with debt issuers that agree to make certain specific primary and secondary market disclosures. Unlike the centralized US securities system, publicly traded corporate securities are regulated at the provincial level in Canada, although more coordination is emerging. These provincial systems exempt governmental securities.

Only one-fifth of all subnational debt in America is issued in the form of "general obligation" bonds that carry a legal pledge of the jurisdiction's full

faith and credit taxing power. More frequently, bonds are secured by a legal pledge of a dedicated local revenue stream – thereby earning the "revenue" bond label. Examples of pledged revenues include net receipts of public enterprise operations; expected receipts from dedicated local taxes (such as tourism-related taxes); agreements to pay lease obligations sufficient to retire the debt on a building, facility or major piece of equipment (with or without a mortgage on the property); or, obligations secured by some other type of contractual agreement. When the security behind the bonds represent an essential service, such as a water or sewer system, the revenue bonds gain added value, especially when the general obligation credit is judged to have more political risk (unwillingness to pay). In contrast, revenue bonds require more investor scrutiny since the collateral is tied to specific, but estimated, revenue flows and there is no legal recourse to the general taxpayers. Many of these obligations are designed to circumvent the more onerous rules that limit the use of the general obligation pledge. Investors may accept this non-debt legal interpretation, but, nevertheless, expect the issuer to meet its financial obligation.

In Canada, most debt is direct and unconditional. Traditionally, even provincial enterprises, such as the capital-intensive hydroelectric operations, pledged the general credit of the controlling province. Recent efforts to deregulate provincial enterprises, such as Ontario Hydro, evidence a move to borrowing that is backed solely by the enterprise's own credit quality.

American state and local governments issue bonds for capital assets and infrastructure with the maturity tied to the life of the asset. Although 30-year maturities are common, most credit standards encourage a shorter average maturity. Canadian provincial and municipal governments traditionally use intermediate maturities, with eight to ten years frequent. Canadian provincial governments have a history of borrowing for consolidated deficits, so this intermediate length makes sense. Canadian municipalities must explicitly tie debt maturity to asset life.

Debentures issued as sinking fund securities are common in Canada, meaning that maturity is at the end of the term, with only semi-annual interest payments during the interim. In contrast, American state and local governments typically issue serial bonds, with principal and interest due each year.

Generally, state and provincial rules prohibit local governments from borrowing to cover year-end operating deficits. Instead, borrowing is for the acquisition of capital assets. Canadian provincial governments have borrowed to finance consolidated deficits, fostered by an accounting system that consolidates operating deficits with capital acquisition. In recent years, some state governments have resorted to deficit borrowing, including Louisiana (in 1988), Connecticut (in 1991 and 2002), California (in 2002 and 2003), and New York City (in 2002). In such cases, the securities were widely understood as deficit financing bonds, with intermediate terms.

#### Investors

In the US, about 65 percent of state and local government securities are held either by households or in retail-traded financial instruments. In contrast, Canadian provincial bonds are held primarily by foreign investors (29 percent in 2004) and personal pension plans (21 percent), consistent with a taxable investment that has yields higher than the sovereign government but with low credit risk. Canadian municipal bonds are primarily held by individuals (37 percent) and by provincial and municipal accounts (combined for 20 percent). A municipality holding its own bonds raises arms-length transaction concerns. Provincial holding of municipal debt reflects another tradition of placement instead of public debt sales.

Pension plans in America have no economic incentive to invest in lower-yielding tax-exempt securities, and Congressional proposals to change that by giving the Social Security system a federal interest rate subsidy has failed repetitively. In contrast, the Canadian Pension Plan (CPP) traditionally invested in non-marketable 20-year securities of participating provinces (all but Ouebec that has its one pension system), at a lower than market price. Each participating province received a yearly allocation tied to that province's worker contributions, with the province able to reallocate that amount among its various agencies. For example, in 1992, the CPP held 31 percent of Ontario's provincial purpose debt and 35 percent of Ontario Hydro's debt. For years, Alberta municipalities received the benefits of the lower CPP-related borrowing rates because that province allowed local governments to pool their borrowing needs through a provincial financing authority; however, the province later reclaimed the full allocation to meet its own needs. Nationally, in response to anemic investment results, the Canadian Parliament enacted in 1997 a pension investment board charged with active management of the CPP portfolio to achieve market results. Targeted investments in provincial bonds were limited, only allowing each province to roll over its bonds for one further 20-year term. Still, the Canada Pension Plan offers a pool of patient capital that is not available, in parallel fashion, to subnational borrowers in the United States.

A government should not make a market for its own debt. Although infrequent in America (except for cash-flow notes in some cases), significant market-making activities have occurred in Canada in the recent past. Because most American municipal securities are tax-exempt, with lower yields, there is no incentive to hold them in the asset accounts of an entity that does not pay taxes. However, Canadian provinces have used their captive pension funds and other controlled assets as a buyer of their subnational securities. For example, until 1990, the investment rules of Ontario's public pension funds favored the purchase of provincial bonds through private placement. Due to anemic returns, however, the pension systems must now purchase provincial and municipal securities on the open market based on competitive returns.

In Canada, the financial intermediary that fosters home ownership – the Canada Mortgage and Housing Corporation (CMHA) – serves as a large purchaser of provincial securities whereas similar government-sponsored corporations in America – such as FannieMae – have no incentive to invest in tax-exempt securities. As Canada's national housing agency, CMHC borrows money from the capital markets and the Government of Canada to lend to private borrowers. One program provides insurance against borrower default on certain mortgages. Premiums are invested in various securities, with provincial bonds comprising 15 percent of their holdings in 2004, second only to those backed by the Government of Canada and guaranteed.

Very few American state and local governments have ventured into foreign capital markets to issue taxable debt. Provincial (and some municipal) borrowers in Canada have made extensive use of foreign capital markets, including, but not limited to, the US taxable market (termed "Yankee" bonds), but they have dramatically reduced their foreign offerings in recent years. Canadian subnational governments were hurt by foreign currency exposure prior to the development of currency swaps.

## Debt issuance process

Canadian finance executives tend to enjoy more discretion within their own governments to engage in debt acquisition and liability management than their American counterparts, likely due to the parliamentary form of government. In contrast, American states exhibit more pronounced legislative inquiry into alternatives, increased opportunities for vocal public disagreements and political repercussions, and even direct voter approval.

Although most state constitutions in America impose a legal limit on the amount of property-tax supported debt, revenue bonds are not similarly limited. North Carolina is the only state that schedules and conducts the sale of general obligation bonds on behalf of its local governments. More commonly, a state may have a nominal state notice requirement but more stringent local approval requirements, such as voter approval for long-term debt that obligates future taxpayers. Local policies, independent credit ratings, and the cost of capital serve to ration the debt creation appetite of most local officials. Moreover, rating changes can influence reelection probabilities. In contrast, Canadian municipalities face more provincial control, with pre-approval required. For example, Alberta has required provincial approval for local debt with maturity beyond three years. Recent trends suggest Canada is following the American practice of delegated local control within bulk borrowing limits and credit-rating defined debt capacity ranges.

Buying bonds from the issuer and selling them to the ultimate investor is the role of the market intermediary. In Canada, the term is "fiscal agent," whereas the term used in America is "underwriter" of the security offering. When American state and local governments sell their obligations by auction, they select the underwriter offering the lowest cost of capital. To do so, however, requires that the debt issuer assume the burden of debt structuring and market timing, a skill beyond the expertise of many internal staff. This condition has led to the use of independent financial advisors to help guide the decision-making. With 65 percent of state and local debt volume sold by negotiation, picking the underwriter(s) is open to selection on a basis other than economic pricing, and with duties that extend into structure and timing matters. Most academic research conducted on the US tax-exempt market finds competitive sales more efficiently priced than negotiated sales. Canadian municipal and provincial bonds are sold by negotiated sale. For example, market-savvy provinces are known to make their own market-timing decisions, call one of the preselected co-managers of a large syndicate, and announce it wants to sell bonds into the market at an appointed time in a matter of hours. These actions illustrate the range of decisions involving capital markets that can flow from fiscal decentralization.

## Which federalism?

From a local government perspective, the big question – "Which Federalism?" – is best answered by the governmental structure that allows locally elected officials to tailor fiscal decisions to local needs. This local power should include the ability to design, levy, collect, and use locally incurred taxes. A counterpart to the power to tax is the power to incur debt. Debt imposes a future obligation on taxpayers or ratepayers to generate sufficient revenues to cover the debt service. In essence, debt securitizes future revenue flows. Thus, the political and economic choices embodied in local tax structures influences both tax policy and debt policy.

Tax structures are not static; they are revised frequently to adapt to changing circumstances. Moreover, when analysts rank tax systems they must be cognizant of the many ways tax structures can influence the results. A review of the contemporary aspects of property and sales tax structures illustrate the forces that can strain the effectiveness of each tax. Accordingly, this chapter introduces separate tax structure indexes for the property and sales tax. This design reflects the base, rate, and yield features embodied in tax systems. One benefit is that it offers a way to observe the degree of policy convergence and tax design variation.

Interesting findings emerge from a comparison of the two indexes. The high side of the property tax structure index could be considered negative and indicative of the pressures to reform the tax. In contrast, the high side of the sales tax structure index could represent the preferred sales tax policy habitat. This last observation derives from the repeated efforts (but often failure) in most states with a sales tax to expand the sales tax base in response to the general shift in the economy from goods to services (Tannenwald 2002; Duncombe 1992). At the high end of the sales tax structure index are the states that tax a broad range of services. Different index elements may affect the results.

The current chapter offers a single period perspective, instead of a multiperiod test of tax policy variation and convergence.<sup>3</sup> Still, these results suggest less variation in the index measure for the sales tax than the property tax. In contrast, Annala (2003) finds just the opposite over a 20-year period. One explanation for these different results is Annala's approach of measuring each tax as a ratio to gross state product instead of using a measure that captures the multi-faceted tax structure as suggested by Alt (1983).

As an exploratory effort, the two indexes (one for the property tax and the other for the sales tax) are not intended to be definitive. Instead, the constructed indexes lay the groundwork for future research. Index components can be refined and calibrated, with the sensitivity of results discussed. Changes over time could yield clues to policy shifts. Case studies could clarify decisions behind the data. Differences between cities and counties suggest the value of different measures on the strain placed on their particular tax structures (Pagano and Johnston 2000). In addition, explicit measures of tax incidence could be incorporated. A desirable outcome from refining each tax structure index is to advance the discussion of an overall metric for viewing the simultaneous effect of political and economic choices, as suggested by Alt (1983).

In summary, fiscal decentralization should translate into options for generating own-source revenues and issuing debt to finance local preferences. The goal is for accountability to rest with voters and markets, not with hierarchy.

## Notes

- \* I appreciate the comments on my tax policy indexes by Ed Flentje, John Wong and Glenn Fisher, and the spreadsheet assistance of Felany Opiso and Anthony Swartzendruber, both George Van Riper Endowed Fellows in Public Finance. I remain responsible for what I have written.
- 1 Determining the details of local government finance in America is not as easy as it is for state government finance because a census of government finance is not taken yearly. Traditionally, the National Income and Product Accounts (NIPA) only reported a combined state and local government sector. Starting in 2005, however, the US Department of Commerce (specifically, the Bureau of Economic Analysis) plans to publish details on the yearly estimates of local government data (Baker 2003, 2005).

- 2 Even the need for administrative simplification and cost efficiencies due to Hurricane Katrina made it difficult to overcome the political support in the State Legislature for protecting the seven elected officials (New Orleans Times-Picayune 2006). A change requires a state constitutional amendment which is before state voters in November 2006.
- 3 Using comparable data for the 1991 period for a sales tax stress index finds similar results as the 1997 period, with little change among states in the high and low ends of the ranks.

# The Dynamics of Federalism in National and Supranational Political Systems

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