

Commentary

Gary A. Wagner

It is no surprise that the most recent economic downturn, which some have called the “Great Recession,” has had a substantial impact on the fiscal health of state and local governments. According to the National Governors Association (NGA) biannual report, *The Fiscal Survey of States*, state tax collections in fiscal year (FY) 2010 were almost 12 percent below 2008 levels and are expected to remain near that level for FY 2011.¹ More than 40 states have responded to the declining revenues by enacting midyear budget cuts in both FY 2009 and 2010. This is the first time widespread, back-to-back spending reductions have been enacted since the NGA began monitoring state fiscal conditions on a regular basis in 1979.

In addition to prompting state and local governments to reduce expenditures, periods of fiscal stress also provide the impetus for them to explore opportunities to generate additional revenues from both traditional and new sources. Professor William F. Fox’s (2010) article provides a careful analysis of some of the more recent trends and issues involved in generating revenue from non-traditional sources such as gambling and business gross receipts taxes (GRTs). My comments, for the most part, will complement and mirror Professor Fox’s article by providing an overview of state and local revenues, extending his analysis of GRTs, and, finally, exploring the use of alcohol, tobacco, and gambling taxes as revenue sources.

Before discussing the specifics of Professor Fox’s article, I believe it is important to first address an underlying issue that may provide additional context to the concerns at hand. Namely, state and local government revenue streams have become more sensitive to economic downturns since World War II. The implications are straightforward and significant—subnational governments will experience more fiscal strain (at least on the revenue side) from a 1 percent decline in economic activity today than they would have from the same decline 30 years ago. This structural change for local governments may partly explain the growing reliance on, or at least movement toward, nontraditional revenue sources.

Although a detailed discussion of why state and local revenue portfolios are becoming more sensitive to downturns is beyond the scope of this commentary, I believe we can look to two broad culprits. First, as Tannenwald (2001) so carefully documents, the U.S. economy has experienced a well-documented shift away from goods toward services in both production and consumption. Combined with the increasing importance of “knowledge-based” production, sales tax bases are shrinking relative to the value of economic activity. This is a serious concern for both state and local policymakers, and several states have attempted to broaden their sales tax bases to include services.²

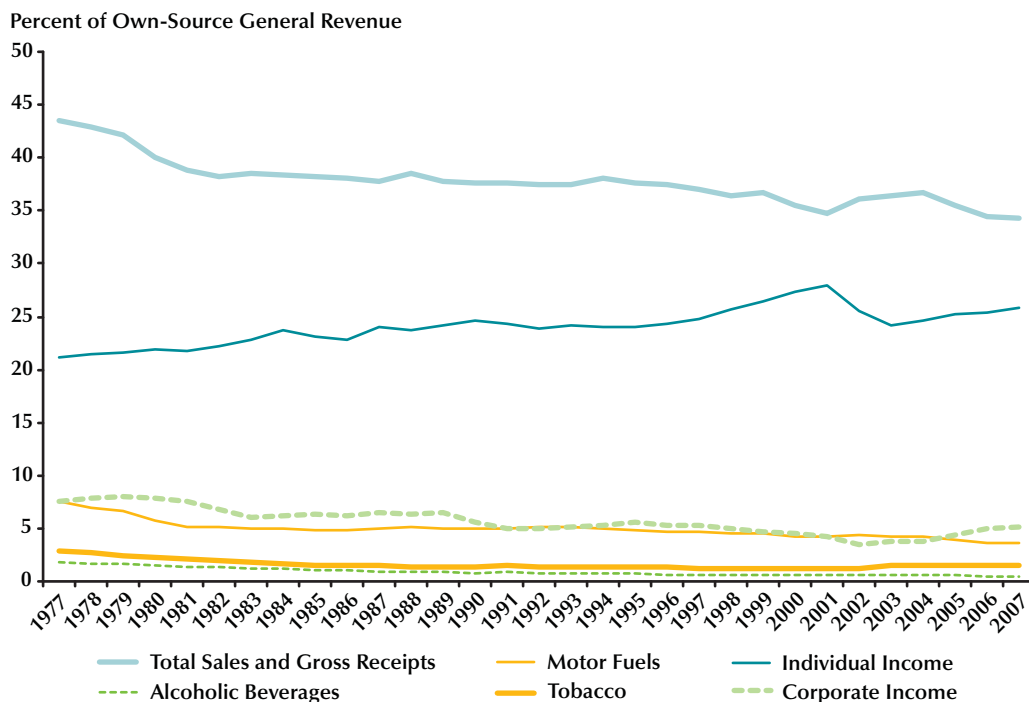
¹ National Governors Association and National Association of State Budget Officers (2010, executive summary, p. viii).

² See Zodrow and Hendrix (2003) and Fox and Murray (1988) for an overview of states’ attempts to broaden their sales tax bases to include services.

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Figure 1**State Own-Source Revenues (1977-2007)**

SOURCE: Data from State & Local Government Finance Query System (www.taxpolicycenter.org/slf-dqs/pages.cfm); the Urban Institute–Brookings Institution Tax Policy Center (www.taxpolicycenter.org/); U.S. Census Bureau, Annual Survey of State and Local Government Finances (www.census.gov/econ/overview/go0400.html); Government Finances, Volume 4; and Census of Governments (www.census.gov/econ/overview/go0100.html).

Second, since World War II, state and local revenue portfolios have become increasingly dependent on revenue sources that vary more over the business cycle. As Figure 1 shows, state governments have become increasingly reliant on individual income tax revenue and less reliant on alcohol, tobacco, and motor fuel tax bases that are significantly less volatile over the business cycle. This trend is even more pronounced in figures dating back to 1950.³ Moreover, a similar picture emerges on the local government front. While

local governments are far less diverse in their revenue sources than state governments, a point noted by Professor Fox, there has been movement away from the highly stable property taxes toward the more volatile user fees/charges (Figure 2).⁴

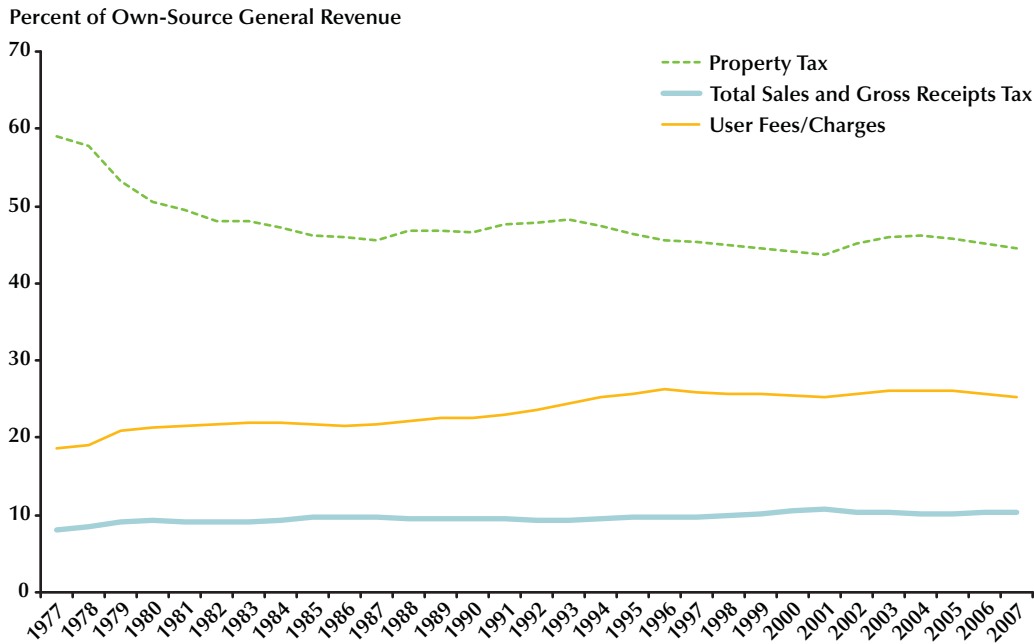
One of the more popular “alternative” tax sources—and the focus of much of Professor Fox’s article—is the use of business GRTs. In its purest form, a GRT is a tax applied to all business income with no deductions for any type of expenses, which is equivalent to a tax on all business profits and costs. Although Professor Fox devotes considerable attention to explaining the (sometimes) subtle dis-

³ The corporate income tax (CIT) also receives attention as a factor in the fiscal stress that states bear. While there is little doubt that changes in business structure (limited liability corporations and so on) and the growing use of business tax incentives have narrowed the corporate tax base, CIT revenue has been a relatively modest source of state revenue over the past 50 years. See Cornia et al. (2005) for an overview of the issues surrounding state CITs.

⁴ Clearly, pressures on the expenditure side of state and local budgets may also contribute to periods of fiscal strain. See Garrett and Wagner (2004) for a more detailed analysis of state expenditure and revenue trends since World War II.

Figure 2

Local Own-Source Revenues (1977-2007)



SOURCE: Data from State & Local Government Finance Data Query System; the Urban Institute–Brookings Institution Tax Policy Center; U.S. Census Bureau, Annual Survey of State and Local Government Finances; Government Finances, Volume 4; and Census of Governments.

inctions among corporate income taxes (CITs), value-added taxes, GRTs, and net receipts taxes, in my opinion, this portion of his paper really centers on the bigger issue of finding the appropriate method to use to tax businesses. Hence, much of my discussion focuses on the GRT in general and some of the pros and cons of the GRT relative to the CIT (currently the most common form of business taxation).

Given that some form of business taxation is necessary so that individuals cannot simply form corporations and be exempt from taxes, the ideal form of business tax would be one that generates a “sufficient” amount of revenue, is relatively stable and grows with the economy, adheres to established principles of equity, and is as efficient as possible. This is not a simple matter in practice because even though a certain tax may perform well by one or more measures, no form of business taxation performs well on *all* measures. The obvious challenge

for policymakers is therefore to weigh the relative performance of various taxes when making a decision, and, I believe, the challenge for public finance economists is to provide the most accurate measures possible in terms of efficiency, equity, and the like.

In addition to Professor Fox’s analysis, several researchers, most recently Mikesell (2007) and Chamberlain and Fleenor (2006), point out several real advantages of a GRT relative to a CIT. Compared with other forms of business taxation, such as value-added taxes and CITs, since a GRT is applied to all (or most) business transactions, the tax base can be larger than the total market value of production (gross domestic product [GDP]). As an illustration, Table 1 shows gross income, taxable income, and nominal GDP figures for Washington State, which has had a GRT for many years.

As the table shows, Washington estimates that the ratio of the total (nominal) value of all transactions to the state’s GDP averaged 1.81 over the

Table 1
Washington State Business and Occupation Tax

Year	Gross income (\$ millions)	Taxable income (\$ millions)	Nominal GDP (\$ millions)	Gross income- to-GDP ratio	Taxable income- to-GDP ratio
1995	289,484	236,991	151,338	1.91	1.57
1996	311,486	253,317	161,760	1.93	1.57
1997	342,802	278,212	178,334	1.92	1.56
1998	351,049	290,606	195,794	1.79	1.48
1999	375,799	307,214	214,375	1.75	1.43
2000	401,638	326,770	221,961	1.81	1.47
2001	398,769	322,006	225,765	1.77	1.43
2002	385,593	312,178	231,463	1.67	1.35
2003	401,014	318,877	240,813	1.67	1.32
2004	444,585	348,867	253,247	1.76	1.38
2005	480,557	381,616	272,734	1.76	1.40
2006	535,121	420,215	289,070	1.85	1.45
2007	591,953	460,102	310,279	1.91	1.48
2008	603,744	464,684	322,778	1.87	1.44
Average (mean)				1.81	1.45

SOURCE: Nominal GDP figures from Bureau of Economic Analysis. Gross income and taxable income figures subject to Washington's business and occupation tax are from the *Quarterly Business Review*, Washington State Department of Revenue (calendar years 1995-2008).

period from 1995 to 2008. Focusing on taxable transactions (since some transactions such as government purchases are exempt), the ratio of taxable transactions to GDP averaged 1.45. This means that the GRT base in Washington is roughly 45 percent larger than GDP and potentially could be as large as 81 percent of GDP!

So, while a GRT base would obviously include all service sector transactions, which has proved problematic for traditional sales taxes, the sheer size of the tax base means that a relatively low tax rate could generate considerable revenues. Furthermore, since a pure GRT is applied to the broadest possible tax base, which is a multiple of the state's GDP, in theory this type of tax should be far more stable than other forms of business taxation over the business cycle.

In a testament to the completeness of his article, Professor Fox also addresses the major concerns of cascading and integration with regard to GRTs. Since the tax is applied to every transaction, products and/or services that require more steps in the

production chain are subject to higher effective tax rates than products or services with fewer steps. Washington State's study,⁵ which Professor Fox also cites, found cascading averaged 2.5 times the statutory tax rate and ranged from 1.4 times all the way up to 6.7 times the statutory tax rate.

In terms of cascading, there are several channels for efficiency losses to occur. According to economic theory, differential tax rates on products or services will be as close to efficient as possible if those rates are based on the product's price elasticities. A GRT applies differential rates based on the number of stages of production, which is unrelated to the product's price elasticity. Moreover, as Mikesell (2007) and Chamberlain and Flenor (2006) note, the cascading may provide an incentive for firms to integrate to avoid the tax, encourage producers to move production chains out of state, or prompt businesses to expand their reliance on out-of-state suppliers. Finally, unlike CITs, GRTs

⁵ The 2002 Washington State Tax Structure Study Committee report.

Table 2
Gambling Shares of Revenue: Top 10 and Bottom 10 States

Top 10	Percent of revenue	Bottom 10	Percent of revenue
Nevada	13.60	Utah	0.0
West Virginia	9.2	Hawaii	0.0
Rhode Island	7.7	Alaska	0.0
South Dakota	6.3	Wyoming	0.0
Delaware	6.1	Alabama	0.0
Indiana	5.5	Arkansas	0.1
Oregon	5.3	Montana	0.2
Missouri	4.5	North Dakota	0.3
Louisiana	4.4	Minnesota	0.4
Illinois	4.2	Nebraska	0.5

SOURCE: Dayayan and Ward (2009).

are completely independent of a company's profitability and therefore unrelated to its ability to pay. The CIT is not without problems, but it is easily plausible that a low-production chain, high-profit margin firm (such as an information technology firm) could face a substantially lower tax rate than a high-production chain, low-profit margin firm.

I want to be clear that I am not arguing against GRTs per se, nor am I advocating for them. My primary concern is this: Given that GRTs are not widespread, in my opinion we have an incomplete understanding of the efficiency losses of such a business tax system relative to the CIT. Combine this with the political appeal associated with a low-rate, broad-base tax, and I fear that policymakers

will move rapidly toward some form of a GRT without a solid understanding of the consequences.

Finally, turning our attention to alcohol, tobacco, and gambling taxes, state and local governments have a long history of generating revenue from these sources. However, as Table 2 and Figure 2 show, for most states, the so-called sin taxes simply do not generate a sizable enough portion of state revenues to be viable, long-term solutions to revenue problems. However, considering that "sin tax" bases tend to range from acyclical to somewhat countercyclical, the use of nontraditional revenue sources can play a key role in balancing state revenue portfolios by reducing short-term variability.

REFERENCES

- Chamberlain, Andrew and Fleenor, Patrick. "Tax Pyramiding: The Economic Consequences of Gross Receipts Taxes." Tax Foundation Special Report No. 147, December 2006; www.taxfoundation.org/files/sr147.pdf.
- Cornia, Gary; Edmiston, Kelly D.; Sjoquist, David L. and Wallace, Sally. "The Disappearing State Corporate Income Tax." *National Tax Journal*, March 2005, 58(1), pp. 115-38.
- Dayayan, Lucy and Ward, Robert B. "For the First Time, a Smaller Jackpot: Trends in State Revenues from Gambling." Nelson A. Rockefeller Institute of Government Fiscal Studies, September 2009; www.rockinst.org/pdf/government_finance/2009-09-21-No_More_Jackpot.pdf.
- Fox, William F. "Can State and Local Governments Rely on Alternative Tax Sources?" Federal Reserve Bank of St. Louis *Regional Economic Development*, October 2010, 6(1), pp. 88-101.
- Fox, William F. and Murray, Matthew. "Economic Aspects of Taxing Services." *National Tax Journal*, March 1988, 41(1), pp. 19-36.
- Garrett, Thomas A. and Wagner, Gary A. "State Government Finances: World War II to the Current Crises." Federal Reserve Bank of St. Louis *Review*, March/April 2004, 86(2), pp. 9-25; <http://research.stlouisfed.org/publications/review/04/03/Garrett.pdf>.
- Mikesell, John L. "Gross Receipts Taxes in State Government Finances: A Review of Their History and Performance." Tax Foundation Background Paper No. 53, January 2007; www.taxfoundation.org/research/show/2180.html.
- National Governors Association and National Association of State Budget Officers (NASBO). *The Fiscal Survey of the States*. Washington, DC: NASBO, June 2010; www.nga.org/Files/pdf/FSS1006.PDF.
- Tannenwald, Robert. "Are State and Local Revenue Systems Becoming Obsolete?" Federal Reserve Bank of Boston *New England Economic Review*, 2001, Issue 4, pp. 27-43; www.bos.frb.org/economic/neer/neer2001/neer401b.pdf.
- Washington State Tax Structure Study Committee. "Tax Alternatives for Washington State: A Report to the Legislature." Volume 1. November 2002; www.mrsc.org/GovDocs/W3taxalts1.pdf.
- Zodrow, George R. and Hendrix, Michele E. "Sales Taxation of Services: An Economic Analysis." *Florida State Law Review*, 2003, 30(3), pp. 411-33.