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**Tax-Exempt Bonds For Infrastructure and Private Activities: An
Analysis of Recent Data**

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Introduction

Good afternoon. My name is Steven Maguire and I am a Specialist in Public Finance at the Congressional Research Service. I would like to thank Chairman Kucinich, Ranking Minority Member Issa, and the committee for the allowing me the opportunity to testify before you today.

The Joint Committee on Taxation has recently estimated that the federal exclusion of interest on public purpose state and local government bonds will generate a tax expenditure of \$156 billion over the next 5 fiscal years, 2007 to 2011.¹ This tax expenditure includes the expenditure arising from tax-exempt bonds issued for public infrastructure — in many cases, sports stadiums and arenas. You asked me to describe how the relative mix of tax-exempt bonds issued for these purposes has changed over time. Today, I will present data from the U.S. Census Bureau's Governments Division and the *Bond Buyer Yearbook* from various years. I will first describe how tax-exempt bonds are classified as government or private activity and discusses how the mix has changed over time. For the remainder of my testimony, I will present analysis on the available data for possible changes in the types of projects that are financed by tax-exempt bonds.

Types of Tax-Exempt Bonds

State and local governments generally issue two types of tax-exempt bonds: (1) government bonds; and (2) private activity bonds. The federal government does not limit the use of tax-exempt bonds for governmental activities but does restrict the use of tax-exempt bonds for private activities. Most states have statutory or constitutional limits on state and local debt, including tax-exempt government bonds.

A private activity bond is one that primarily benefits or is used by a private entity. The federal tax code defines private business (or private entity) use as:

...use (directly or indirectly) in a trade or business carried on by any person other than a governmental unit. For purposes of the preceding sentence, use as a member of the general public shall not be taken into account.²

The federal limit on bonds issued for private activities is governed by a two-part test. Private activity bonds are not tax-exempt if **both** of the following conditions are met:³

- [use test] more than 10% of the proceeds of the issue are intended for any *private business use*,... [and]

¹ Joint Committee on Taxation, Estimates of Federal Tax Expenditures for Fiscal Years 2007-2011, JCS-3-07, Sept. 24, 2007.

² 26 U.S.C. 141(b)(6)(A)

³ 26 U.S.C. 141(b)

- [security test] if the payment on the principal of, or the interest on, more than 10% of the proceeds of such issue is (under the terms of such issue or any underlying arrangement) directly or indirectly secured by any interest in (1) property used or to be used for a private business use, or (2) payments in respect to such property. Or [if the payment is] to be derived from payments (whether or not to the issuer) in respect of property, or borrowed money, used or to be used for a private business use.

If a bond issue meets both conditions, (i.e., passes the tests), the bonds are taxable and would carry a higher interest rate. Nevertheless, bond issues that pass both tests can still qualify for tax-exempt financing if they are identified in the tax code as *qualified* private activities. Thus, when those in the bond community usually refer to tax-exempt private activity bonds, the more technically correct reference is tax-exempt, *qualified* private activity bonds.

If bonds fail one part of the two part test, they are identified as government bonds. It is often the case that bonds fail the security test. Bonds used to finance professional sports stadiums are a good example of the test application. Clearly, stadiums and arenas that host professional sporting events would pass the private business use test. Bonds used to finance the stadium must then fail the “security” test to retain federal tax-exempt status. In other words, repayment of the bonds must be derived from a revenue source unrelated to the private business use. Stadium and arena financing that is structured to ensure they fail the security test and are classified as government bonds. And, as described earlier, government bonds are not subject to federal volume limits.

Census Data on Outstanding State and Local Government Debt

The U.S. Census, through its Census of Governments program, tracks and reports the volume of both types of outstanding tax-exempt debt. A consistent series of annual outstanding debt data are available for FY1993 through the FY2005. Total outstanding long-term debt increased from \$995 billion in FY1993 to \$2,036 billion in FY2005, an average annual increase of 6.1%. Tax-exempt debt issued for private activities also increased, though at a slower annual rate of 3.7%. Thus, private debt as a share of total debt outstanding actually declined over the 1993 to 2005 window. These data are reported in **Table 1** and represented graphically in **Figure 1**. The following is the Census definition for its category “public debt for private purposes”:

Public debt for private purposes comprises credit obligations of a government or any of its dependent agencies for the purpose of funding private sector activities, including debt that is backed solely by the private organization(s) involved. Such debt is assigned to the government whose bond-issuing authority was used to secure its tax-exempt status or, in the case of taxable debt, was used for its issuance. Examples of private sector activities funded include industrial and commercial development, pollution control, housing and mortgage loans, private hospital facilities, student loans, and such private ventures as sports stadiums [emphasis added], convention centers, and shopping malls.⁴

⁴ U.S. Census Bureau, Governments Division, Chapter 9 of the *Classification Manual*. Available (continued...)

The Census data, as reported in **Table 1**, do not disaggregate the “public debt for private purposes debt outstanding” into specific functions. In addition, Census does not report what portion of the outstanding private debt is taxable or what portion is for *qualified* private activities and tax-exempt. Nevertheless, it does appear as though public debt for private purposes as a share of total debt outstanding has declined significantly since 1993. Census does not report outstanding debt for infrastructure or sports stadiums. We next examine annual data from the *Bond Buyer Yearbook* to discern annual changes in bond volume, by function, e.g., infrastructure and sports stadiums.

Table 1. State and Local Government Debt Outstanding, 1993 to 2005

Fiscal Year	Outstanding Debt (in \$ millions)				Private Share
	Total	Percent Change	Private	Percent Change	
1993	994,968	--	305,974	--	30.75%
1994	1,047,994	5.33%	301,635	-1.42%	28.78%
1995	1,088,331	3.85%	300,614	-0.34%	27.62%
1996	1,145,666	5.27%	312,630	4.00%	27.29%
1997	1,204,943	5.17%	na	--	na
1998	1,266,308	5.09%	335,838	--	26.52%
1999	1,351,408	6.72%	351,072	4.54%	25.98%
2000	1,427,524	5.63%	372,642	6.14%	26.10%
2001	1,531,897	7.31%	395,131	6.04%	25.79%
2002	1,642,864	7.24%	415,906	5.26%	25.32%
2003	1,772,197	7.87%	431,361	3.72%	24.34%
2004	1,913,286	7.96%	448,359	3.94%	23.43%
2005	2,035,717	6.40%	472,983	5.49%	23.23%

Source: U.S. Census Bureau, Governments Division. The data are available online at: [<http://www.census.gov/govs/www/estimate.html>].

⁴ (...continued),
online at: [http://www.census.gov/govs/www/class_ch9.html]. The manual notes that the definition used is broader than the tax code definition of qualified private activity bonds.

Bond Buyer Yearbook Data on Annual Issuance of State and Local Government Debt

The Census data, described above, does not provide the detail offered by the annual data published in the *Bond Buyer Yearbook* (BBY). The BBY compiles recent market data and is published by Source Media Inc., headquartered in New York, NY. The BBY reports annual bond issuance by bond characteristics and by function. The bond characteristic at issue here is the treatment of the bond interest for purposes of calculating the alternative minimum tax (AMT).

AMT bonds are private activity bonds whose interest must be added back when calculating AMT liability. These bonds roughly correspond to the Census defined “public bonds for private purposes.” **Figure 2** plots total bond issuance and as a subset of that total, AMT bonds. The annual issuance as exhibited in **Figure 2** roughly follows the pattern for bonds outstanding in **Figure 1**. The secondary (on the right-hand side) axis in **Figure 2** reports the AMT share of total and an estimated trend line. The trend line clearly shows a decline in the annual issuance of private activity bonds’ share of total volume from 1987 to 2006, reinforcing the findings gleaned from the Census data.

Bond Buyer Yearbook Data on Transportation and Sports Facility Bonds

The BBY also reports the activity financed by the bonds. Transportation bonds, as defined by the BBY, includes issues sold for: airports, seaports and marine terminals, roads, highways, toll roads bridges, tunnels, parking facilities, mass transit systems, and miscellaneous transportation projects. These projects are often considered “infrastructure” bonds. The sports facility bonds are included in the broader BBY category “Public Facilities.” Notably, the largest public facility issue in 2006 reported by BBY was the New York Convention Center Development Corporation’s \$943 million sale on August 16, 2006 for Yankee Stadium.

Table 2 shows BBY data for 1987 through 2006. Generally, bonds for transportation infrastructure appear to consume roughly 10% of total bond volume and bonds for stadiums approximately 0.4% in any given year. **Figure 3** charts the annual volume of bonds for transportation projects and stadiums, as defined by BBY, as a percentage of total annual bond volume for the 1987 to 2006 time period. Bonds for transportation infrastructure seem to be trending upward as with stadiums. The trend for stadiums, however, is not as robust. In fact, the bonds for Yankee Stadium, accounting for one-fourth of the total for stadia, likely generated a one-time spike in the stadia percentage, generating the upward slope.

The data, as presented here, do not support the notion that bonds used for stadia could have been used for transportation projects. If so, one would have expected a negative relationship between the two variables. Nevertheless, the national data may mask state specific or local tradeoffs between bond funding for stadia and transportation infrastructure.

Conclusions

The cause of the increase in debt, and the declining share of debt identified as public debt for private purposes, cannot be traced to one primary factor. The following factors may help explain the growth and possibly the relative decline of private purpose debt: (1) changes in the market interest rates; (2) the private activity bond volume cap; and (3) broad macroeconomic cycles.

Table 2. Bonds Issued for Transportation and Stadiums, 1987 to 2006

Year	Total Volume (in 000's)	Transportation Bonds (in 000's)	Stadia Bonds (in 000's)	Percent of Total	
				Transit	Stadia
1987	\$105,485,500	\$6,015,600	\$122,700	5.7%	0.1%
1988	\$119,367,800	\$9,902,500	\$88,000	8.3%	0.1%
1989	\$125,530,500	\$10,881,300	\$478,000	8.7%	0.4%
1990	\$128,045,800	\$13,370,400	\$913,200	10.4%	0.7%
1991	\$173,071,500	\$16,581,200	\$284,100	9.6%	0.2%
1992	\$235,413,100	\$26,845,100	\$975,200	11.4%	0.4%
1993	\$293,052,200	\$28,549,700	\$637,600	9.7%	0.2%
1994	\$165,101,300	\$14,912,100	\$472,200	9.0%	0.3%
1995	\$161,817,100	\$16,908,700	\$601,500	10.4%	0.4%
1996	\$185,207,400	\$16,832,200	\$1,403,400	9.1%	0.8%
1997	\$220,671,700	\$24,347,000	\$1,867,400	11.0%	0.8%
1998	\$286,816,900	\$31,709,100	\$2,269,900	11.1%	0.8%
1999	\$227,740,500	\$23,436,000	\$1,163,200	10.3%	0.5%
2000	\$200,880,000	\$26,743,400	\$1,238,400	13.3%	0.6%
2001	\$288,082,900	\$32,080,900	\$1,806,000	11.1%	0.6%
2002	\$358,568,600	\$45,013,800	\$789,800	12.6%	0.2%
2003	\$383,559,300	\$40,435,700	\$704,000	10.5%	0.2%
2004	\$359,717,200	\$32,527,500	\$478,000	9.0%	0.1%
2005	\$408,265,600	\$45,251,400	\$1,525,600	11.1%	0.4%
2006	\$388,716,700	\$42,362,000	\$3,996,300	10.9%	1.0%
Average Annual Percentage Share				10.2%	0.4%

Source: The *Bond Buyer Yearbook*, various years.

Changes Interest Rates. Generally, governments issue more debt when interest rates are relatively low. Changes in interest rate, however, are unlikely to influence the *composition* of debt. **Figure 4** charts total bond volume and interest, and the relationship between the two variables appears very robust. Using a straight-forward statistical

technique, one can confirm the relationship between bond volume and interest rate. A correlation coefficient measures the “...strength of the association between...” two paired variables.⁵ In this case, pairing bond volume with the interest rate and estimating the correlation coefficient should yield a strong and significant linear relationship. Correlation coefficients generate values between negative one (-1) and positive one (1), inclusive. A result of one or negative one implies perfect correlation; zero implies no correlation, and thus no association or relationship. The correlation coefficient for these variables is negative 0.91, which means there is a very strong inverse (or negative) relationship between bond volume and interest rate. The decline in interest rates is a likely contributor to the growth in total bond volume.

The Private Activity Bond Volume Cap. In 1986, Congress implemented the private activity bond volume cap as it is currently structured. This action raised the “price” to state and local governments of issuing debt for qualified private activities.⁶ As such, incentives exist for bond issuers, particularly governments in populous state where the cap is binding, to structure bond financed projects to avoid claiming cap space.⁷ The relative decline of public bonds for private purposes, as suggested by the Census and *Bond Buyer* data, appears to reinforce the notion that the cap has been effective in limiting these types of bonds *as they are defined in the tax code*.

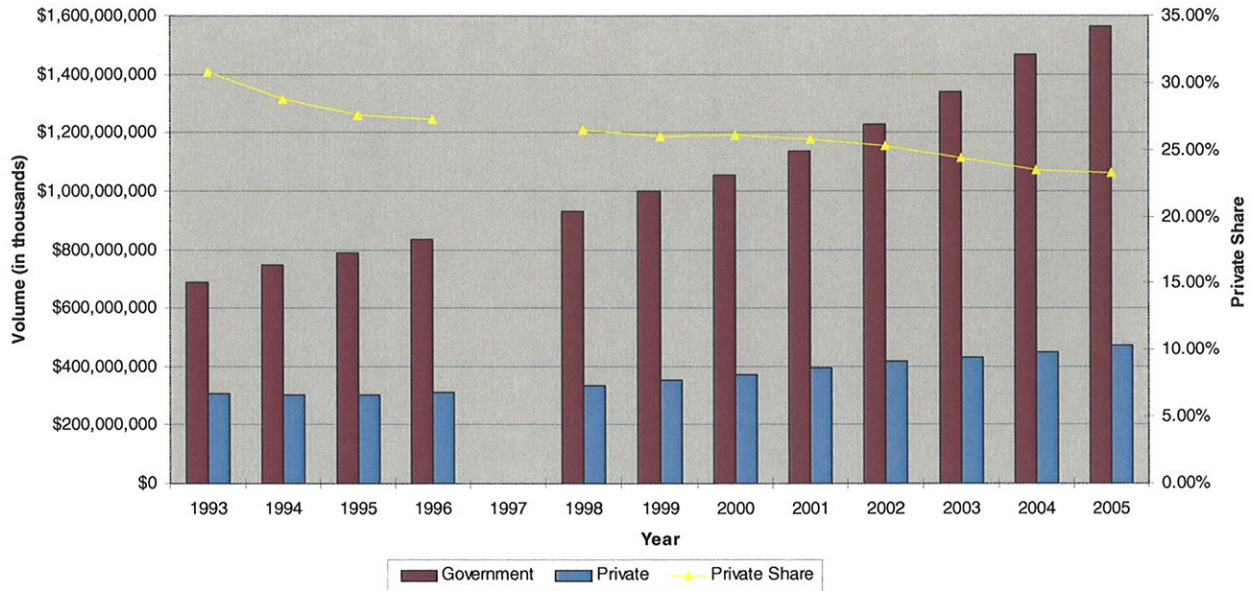
Other Macroeconomic Factors. The business cycle is characterized by periods of expansion and contraction. During expansionary phases, one would expect that public investment in both infrastructure and sports stadia would also expand. To the extent sports stadia are considered a public “luxury” good, economic expansion may induce more investment in sports stadia relative to infrastructure. The data on government debt, however, do not show definitively a cyclical investment pattern in either sports stadia or public infrastructure.

⁵ Mario Triola, *Elementary Statistics*, 7th ed. (Reading, MA: Addison Wesley, 1998), p. 479.

⁶ For more on private activity bonds, see: CRS Report RL31457, *Private Activity Bonds: An Introduction*, by Steven Maguire.

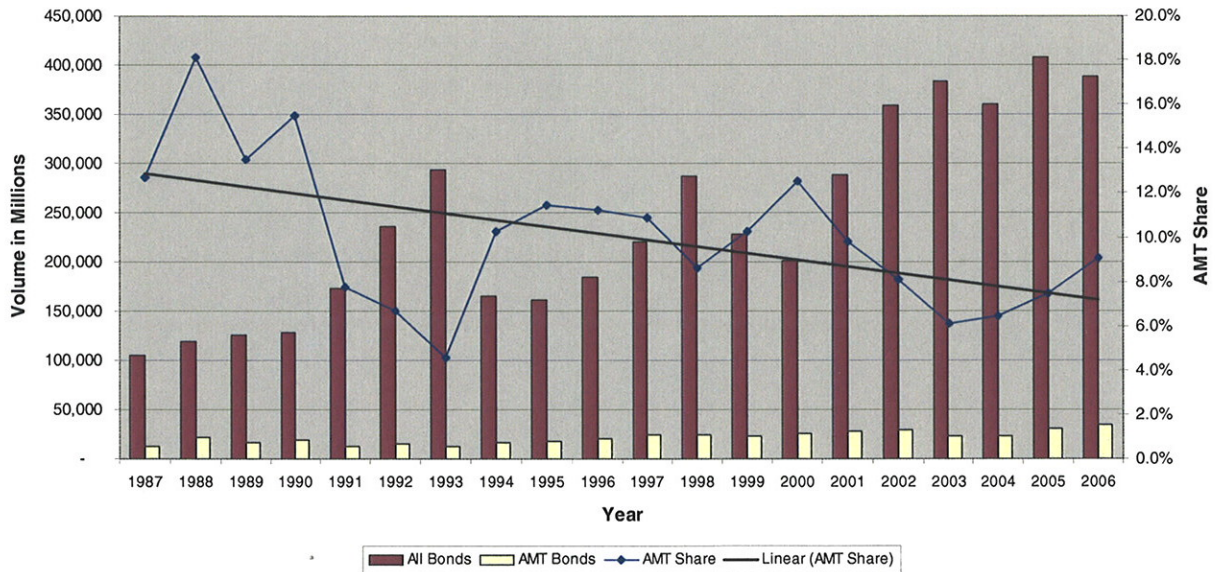
⁷ For more on state use of the private activity bond volume cap, see CRS Report RL34159, *Private Activity Bonds: An Analysis of State Use, 2001 to 2005*, by Steven Maguire and Heather Negley.

Figure 1. Total Outstanding Debt and the Share of Private Debt



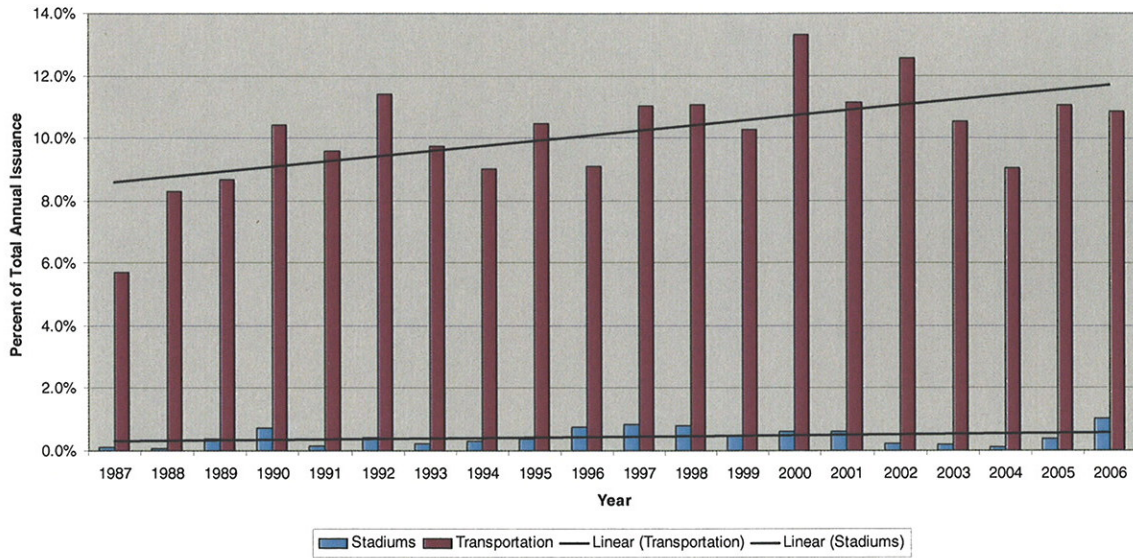
Source: U.S. Census Bureau, Governments Division.

Figure 2. Bond Buyer Data for Annual Issuance of State and Local Government Debt, 1987 to 2006



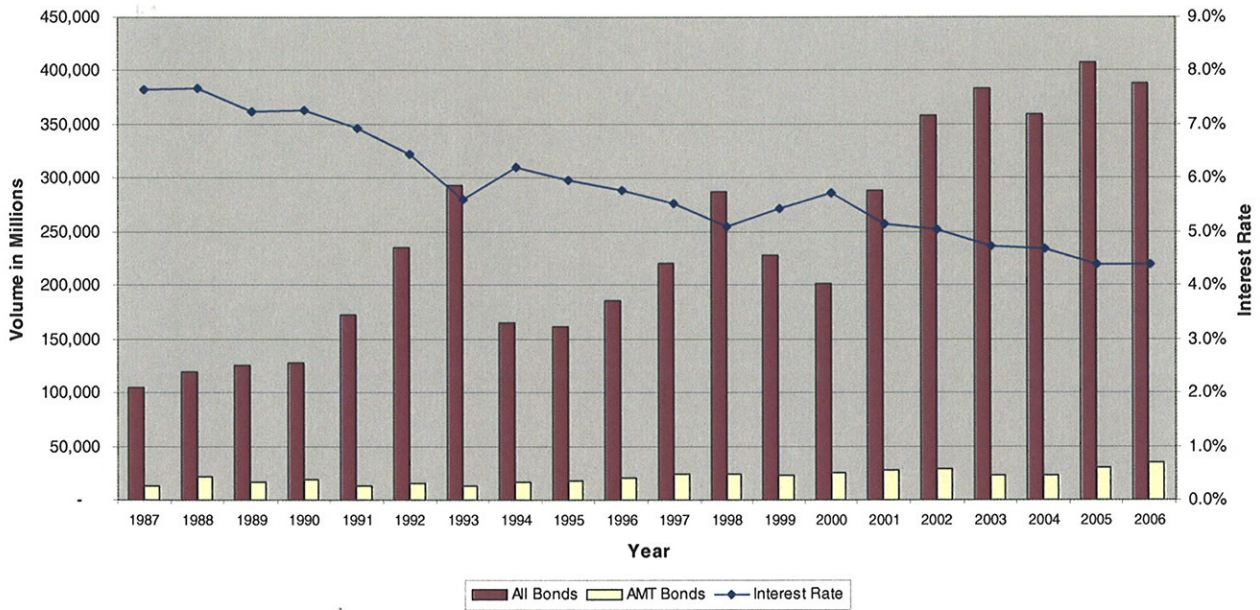
Source: Bond Buyer Yearbook, various years.

Figure 3. Percent of Bonds Issued for Transportation and Stadiums, 1987 to 2006



Source: *Bond Buyer Yearbook*, various years.

Figure 4. Bond Buyer Data on Bond Volume and Interest Rates



Source: *Bond Buyer Yearbook*, various years.