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Private Activity Bonds: An Introduction

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Summary

The federal tax code classifies state and local bonds as either governmental bonds or private activity bonds. Governmental bonds are intended for governmental projects, and private activity bonds are for projects that primarily benefit private entities. Typically, the interest earned by holders of governmental bonds is exempt from federal income taxes.

The federal tax code allows state and local governments to use tax-exempt bonds to finance certain projects that would be considered private activities. The private activities that can be financed with tax-exempt bonds are called "qualified private activities." Congress uses an annual state volume cap to limit the amount of tax-exempt bond financing generally and restricts the types of qualified private activities that would qualify for tax-exempt financing to selected projects defined in the tax code.

The economic rationale for the federal limitation on tax-exempt bonds for private activities stems from the inefficiency of the mechanism to subsidize private activity and the lack of congressional control of the subsidy absent a limitation. This report explains the rules governing qualified private activity bonds, describes the federal limitations on private activity bonds, lists the qualified private activities, and reports each state's private activity bond volume cap.

Since private activity bonds were defined in 1968, the number of eligible private activities has been gradually increased from 12 activities to 22. The state volume capacity limit has increased from $150 million and $50 per capita in 1986 to the greater of $302.88 million or $100 per capita in 2016. Because of the $302.88 million floor, many smaller states are allowed to issue relatively more private activity bonds (based on the level of state personal income) than larger states. Also, more recent additions to the list of qualified activities have been exempt from a state-by-state cap and subject to a national aggregate cap.

For more on tax-exempt bonds generally, see CRS Report RL30638, *Tax-Exempt Bonds: A Description of State and Local Government Debt*, by (name redacted) and (name redacted) . This report will be updated as legislative events warrant.

Contents

Tables

Contacts

Overview and Issues for Congress

State and local governments issue debt for most large public capital projects such as new schools, public buildings, and roads. On occasion, state and local governments will issue debt for projects whose purpose is less public in nature, such as privately owned and operated multifamily residential housing. Nevertheless, these projects are often afforded the same tax privilege as debt issued for strictly government owned and operated projects. Congress limits the use of tax-exempt bonds for private activities because of concern about the overuse of tax-exempt, private activity bonds. The tax-exempt bonds issued for qualified private activities are limited by the type of activity financed and the volume of debt used for such activities.

Overview

The federal tax code classifies state and local government bonds as either governmental bonds or private activity bonds. Generally, the interest on state and local governmental bonds is exempt from taxation whereas the interest on private activity bonds is not tax-exempt.[1] However, the federal tax code allows state and local governments to use tax-exempt bonds to finance certain projects that would otherwise be classified as private activities.[2] The private activities that can be financed with tax-exempt bonds are called "qualified private activities."[3]

The current tax exemption for qualified private activities has evolved over time. Two events, however, critically shaped the current treatment of private activity bonds. First, in 1968, Congress passed the Revenue and Expenditure Control Act of 1968 (P.L. 90-364) which established the basis for the current definition of private activity bonds. Second, after persistent challenges to the right of the federal government to restrict state and local government debt following the 1968 act, the Supreme Court agreed to hear a case in 1988 that changed the nature of the federal tax treatment of state and local government debt. In that case, the state of South Carolina challenged the Tax Equity and Fiscal Responsibility Act of 1982 (P.L. 97-248). The 1982 act required that state and local government tax-exempt debt must be registered.[4] The registration requirement was viewed by the states, South Carolina in particular, as an unconstitutional intrusion on the ability of states to issue debt. The Supreme Court held that the registration requirement for non-federal government debt, though federally tax-exempt, was constitutional. In somewhat of a surprise to observers at the time, the Court went beyond the registration ruling and also held the following:

> The owners of state [and local] bonds have no constitutional entitlement not to pay taxes on income they earn from the bonds, and states have no constitutional entitlement to issue bonds paying lower interest rates than other issuers.[5]

[1] The tax-exemption is provided for in 26 U.S.C. 103.

[2] The Internal Revenue Service (IRS) uses a two part test to classify an activity as a private activity. This test will be explained in more detail later in the report. Generally, activities are classified as "private" because private individuals and businesses benefit directly from debt issued by the state or local government.

[3] 26 U.S.C. 141 describes requirements for qualified private activity bonds.

[4] Before this act was passed, state and local government usually issued bearer bonds that paid principal and interest to whomever presented the bond to the issuer (or the issuer's agent, usually a bank). In contrast, a registered bond includes the owner's name on the bond and a change in ownership must be registered with the issuer (or the issuer's agent). For a full discussion of the impact of the South Carolina vs. Baker case on tax-exempt bonds, see Bruce Davie and (name redacted), "Tax-Exempt Bonds After the South Carolina Decision," *Tax Notes*, vol. 39, no. 13, June 27, 1988, p. 1573.

[5] *State of South Carolina vs. J.A. Baker, Secretary of the Treasury*: Supreme Court of the United States, April 20, 1988. 485 U.S. 505.

The ruling confirmed that Congress can restrict issuance of state and local tax-exempt debt and could even rescind the tax-exemption altogether.[6] Nevertheless, outright repeal of the tax-exemption is unlikely. Instead, Congress has used legislative action to modify the existing rules and definitions governing tax-exempt bonds for private activities. Generally, Congress limits the *amount* of tax-exempt debt that can be used for private-activities and restricts the *type* of private activities that can be financed with tax-exempt bonds. Congress can, and does, encourage selected private activities by exempting the activity from the volume cap or by allowing tax-exempt financing for the private activity.

Issues for Congress

As noted above, Congress uses two primary means to restrain the use of state and local debt for private activities: an annual state volume limit (or separate national aggregate limit) and restrictions on the type of qualified private activities. The private activity bond volume limit, which originated in the Deficit Reduction Act of 1984 (P.L. 98-369), was implemented because "Congress was extremely concerned with the volume of tax-exempt bonds used to finance private activities."[7] The limit and the list of qualified activities were both modified again under the Tax Reform Act of 1986 (TRA 1986, P.L. 99-514). At the time of the TRA 1986 modifications, the Joint Committee on Taxation identified the following specific concerns about tax-exempt bonds issued for private activities:[8]

- the bonds represent "an inefficient allocation of capital";
- the bonds "increase the cost of financing traditional governmental activities";
- the bonds allow "higher-income persons to avoid taxes by means of tax-exempt investments"; and
- the bonds contribute to "mounting [federal] revenue losses."

The inefficient allocation of capital arises from the economic fact that additional investment in tax-favored private activities will necessarily come from investment in other public projects. For example, if bonds issued for mass commuting facilities did not receive special tax treatment, some portion of the bond funds could be used for other government projects such as schools or other public infrastructure.

The greater volume of tax-exempt private activity bonds then leads to the second Joint Committee on Taxation concern listed above, higher cost of financing traditional government activities. Investors have limited resources, thus, when the supply of tax-exempt bond investments increases, issuers must raise interest rates to lure them into investing in existing government activities. In economic terms, issuers raising interest rates to attract investors are analogous to a retailer lowering prices to attract customers. The higher interest rates make borrowing more expensive for issuers.

The final two points are less important from an economic efficiency perspective but do cause some to question the efficacy of using tax-exempt bonds to deliver a federal subsidy. Tax-exempt

[6] Ibid.

[7] U.S. Congress, Joint Committee on Taxation, General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984, 98th Cong., 2nd sess. (Washington: GPO, 1984), p. 930.

[8] U.S. Congress, Joint Committee on Taxation, General Explanation of the Tax Reform Act of 1986, 100th Cong., 1st sess. (Washington: GPO, 1987), p. 1151.

interest is worth more to taxpayers in higher brackets, thus, the tax benefit flows to higher income taxpayers, which leads to a less progressive income tax regime.

The revenue loss generated by tax-exempt bonds also expands the deficit (or shrinks the surplus). A persistent budget deficit ultimately leads to generally higher interest rates as the government competes with private entities for scarce investment dollars. Higher interest rates further increase the cost of all debt-financed state and local government projects.

Supporters of tax-exempt bonds for private activities counter that the benefit from tax-exempt bonds exceeds both the explicit (the revenue loss) and implicit (the inefficient allocation of capital) costs of the tax-exemption.

The debate surrounding use of tax-exempt bonds will continue well beyond the current Congress. Proponents and opponents of tax-exempt bonds generally, and private activity bonds specifically, both explore methods of modifying the rules for private activity bonds to advance their respective positions. Because the rules and definitions for private activity bonds are complex, uncertainty about the potential effects of the proposed modifications to those rules is common. This report will not attempt to either justify or criticize the existence of or use of tax-exempt private activity bonds.[9] Instead, the report provides a brief review of bond fundamentals and a more detailed examination of the rules and definitions surrounding private activity bonds to help clarify the impact of the of those modifications.

Fundamentals of Private Activity Bonds

Interest Rates on Tax-Exempt vs. Taxable Bonds

Tax-exempt bonds for governmental purposes and for qualified private activities are special because, unlike corporate bonds or U.S. Treasury bonds, the bond buyer does not have to include the interest income from the bond in federal gross taxable income.[10] The bond buyer is willing to accept a lower interest rate because the interest income is not subject to federal income taxes. The lower interest rate arising from the tax-exempt status subsidizes state and local investment in capital projects. For example, if the taxable bond interest rate is 7.00%, the after-tax return for a taxpayer in the 39.6% income tax bracket who buys a taxable bond is 4.23%.[11] Thus, a tax-exempt bond that offers a 4.23% interest rate would be just as attractive to the investor as the taxable bond, all else equal.[12] Researchers can derive an implied marginal tax rate based on current market data for taxable and tax-exempt debt. For more on tax-exempt bonds generally, see CRS Report RL30638, *Tax-Exempt Bonds: A Description of State and Local Government Debt*, by (name redacted) and (name redacted) .

[9] For a comprehensive economic assessment of private activity bonds, see (name redacted), *The Private Use of Tax-Exempt Bonds: Controlling Public Subsidy of Private Activity* (Washington, DC: The Urban Institute Press, 1991).

[10] The discussion here does not address the effect of state taxes on the tax-exempt debt of other states. For example, taxpayers in Virginia must pay Virginia income taxes on the tax-exempt (exempt from federal income taxes) debt of other states. However, Virginia taxpayers do not have to pay income taxes on interest earned on Virginia bonds.

[11] The calculation is 7.00% multiplied by (0.65 = 1.00-.35) equals 4.55%.

[12] Clearly, there are significant differences between corporate bonds and bonds issued by a governmental entity extending beyond the tax status. For example, a typical tax-exempt bond will include a call provision allowing the issuer to recall the bond after a fixed period (often 10 years). In addition, disclosure requirements for municipal issuers are usually less transparent than for public corporations.

Interest Rate Spread

The "interest rate spread" is the difference between the interest rate on tax-exempt bonds and some other taxable bond. **Table 1** below compares tax-exempt bonds to high-grade corporate bonds over the last 35 years.[13] The difference between the two interest rates is smaller empirically than the previous example because a large share of tax-exempt bond buyers is below the 39.6% marginal income tax bracket. Individuals in income tax brackets below 39.6% would require a higher tax-exempt bond interest rate because lower tax rates mean less tax savings from tax-exempt bonds.[14] The lower tax bracket taxpayers bid up the tax-exempt bond interest rate closer to the taxable bond interest rate. Generally, the two rates move in tandem, with the taxable corporate bond interest rate always higher than the tax-exempt municipal bond interest rate.[15]

In December of 2008, during unprecedented turmoil in financial markets and the economy, the average high-grade corporate bond rate was 5.05% and the average high-grade municipal (tax-exempt) bond rate was 5.56%.[16] The lower interest rate for taxable corporate bonds than for tax-exempt bonds in December 2008 was a short-lived phenomena that can be traced to the interaction of at least two factors. First, the Federal Reserve Bank (Fed) was injecting as much liquidity into the economy as possible, setting interest rates at their lowest level ever.[17] This tended to keep market interest rates on taxable debt low. Second, state and local governments were facing significant fiscal stress and the bond market reacted by requiring a risk premium on its debt. The risk premium means a higher interest rate for municipal debt. In addition, the municipal bond insurance market collapsed, further elevating the perceived risk of municipal bonds. Since then, the spread has moved closer to historical levels with average tax-exempt bond interest rates at 4.29% and taxable bonds at 4.64% for 2010. The ratio of tax-exempt debt to taxable debt is still very high at 0.81.

[13] Market participants also use the comparison between the interest rate on tax-exempt bonds and 10-year Treasury bonds.

[14] For example, someone in the 10% income tax bracket would find tax-exempt bonds attractive only if the interest rate were 6.37%. Or, looking at the problem from a different perspective, the marginal tax rate below which tax-exempt bonds are not attractive is 16.58%. Thus, taxpayers in marginal tax brackets below this rate would not find tax-exempt bonds attractive investments because the market interest rate on municipal bonds would be too low. Taxpayers in the 15% marginal tax bracket would receive a higher after-tax return though buying taxable bonds and paying taxes on the interest income at the 15% rate.

[15] A persistent anomaly exists for long-term, tax-exempt municipal bonds. The interest-rate spread between tax-exempt bonds and taxable bonds is smaller for long-term bonds (the long end of the so-called yield curve) than for short-term bonds. Thus, the implicit tax rate for long–term municipal bonds is smaller than for shorter term bonds. One explanation is that the tax treatment of tax-exempt bonds and taxable bonds is not symmetrical through the yield curve. The lower tax rate for capital gain income plays a role in this phenomena. For more, see Green, Richard C., "A Simple Model of the Taxable and Tax-Exempt Yield Curves," *The Review of Financial Studies*, vol. 6, no. 2, summer 1993, pp. 233-264.

[16] Interest rate averages are composites of a variety of bond issues and provide a good benchmark for market interest rates for municipal bonds.

[17] For more, see CRS Report 98-856, *Federal Reserve Interest Rate Changes: 2001-2009*, by (name redacted).

Table 1. Yield on Tax-Exempt and Corporate Bonds, the Yield Spread, and the Yield Ratio: 1980 to September 2015

Year	High Grade Tax-Exempt Yield (%)	AAA Corporate Yield(%)	Yield Spread (%)	Yield Ratio (tax-exempt/ corporate)
1980	8.51	11.94	3.43	0.71
1981	11.23	14.17	2.94	0.79
1982	11.57	13.79	2.22	0.84
1983	9.47	12.04	2.57	0.79
1984	10.15	12.71	2.56	0.80
1985	9.18	11.37	2.19	0.81
1986	7.38	9.02	1.64	0.82
1987	7.73	9.38	1.65	0.82
1988	7.76	9.71	1.95	0.80
1989	7.24	9.26	2.02	0.78
1990	7.25	9.32	2.07	0.78
1991	6.89	8.77	1.88	0.79
1992	6.41	8.14	1.73	0.79
1993	5.63	7.22	1.59	0.78
1994	6.19	7.96	1.77	0.78
1995	5.95	7.59	1.64	0.78
1996	5.75	7.37	1.62	0.78
1997	5.55	7.26	1.71	0.76
1998	5.12	6.53	1.41	0.78
1999	5.43	7.04	1.61	0.77
2000	5.77	7.62	1.85	0.76
2001	5.19	7.08	1.89	0.73
2002	5.05	6.49	1.44	0.78
2003	4.73	5.67	0.94	0.83
2004	4.63	5.63	1.00	0.82
2005	4.29	5.24	0.95	0.82
2006	4.42	5.59	1.17	0.79
2007	4.42	5.56	1.14	0.79
2008	4.80	5.63	0.83	0.85
2009	4.64	5.31	0.67	0.87
2010	4.16	4.94	0.78	0.84
2011	4.29	4.64	0.35	0.92
2012	3.14	3.67	0.53	0.85
2013	3.96	4.24	0.28	0.94
2014	3.78	4.16	0.38	0.91

Year	High Grade Tax-Exempt Yield (%)	AAA Corporate Yield(%)	Yield Spread (%)	Yield Ratio (tax-exempt/ corporate)
2015	3.15	3.89	0.74	0.81

Source: Council of Economic Advisors, *Economic Report of the President*, February 2016, Table B-25, and Federal Reserve Board, "Table H.15: Selected Interest Rates, Historical Data," available at http://www.federalreserve.gov/releases/h15/data.htm, visited March 3, 2016.

Tax-Exempt Bonds and the Alternative Minimum Tax

Before enactment of a temporary provision in the American Recovery and Reinvestment Act of 2009, (ARRA; P.L. 111-5), the alternative minimum tax (AMT) treated the interest income from qualified private activity bonds differently than the interest income from governmental bonds.[18] The AMT is an income tax that is levied in parallel with the income tax and is intended to ensure that taxpayers with many deductions and exemptions pay a minimum percentage of their gross income in taxes.

Before ARRA, the interest income from tax-exempt private activity bonds was included in the alternative minimum tax (AMT) base and thus taxable. The temporary provision suspending the AMT taxability expires on January 1, 2011. Because private activity bonds are now included in the AMT, the bonds carry a higher interest rate (approximately 50 basis points[19]) than do tax-exempt government-purpose bonds, all else equal.[20] However, the private activity bond rate is still lower than the taxable bond rate. For more on the AMT, see CRS Report RL30149, *The Alternative Minimum Tax for Individuals*, by (name redacted).

Repealing the AMT or exempting some bonds issued for qualified private activities from the AMT would increase investor demand for those bonds. The increased attractiveness of those bonds would eventually lead to lower interest costs for the issuer of qualified private activity bonds.

What Is a Private Activity Bond?

A private activity bond is one that primarily benefits or is used by a private entity. The 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."[21] Two conditions or tests are used to assess the status of a bond issue with regard to the private entity test. Satisfying both conditions would mean the bonds are taxable private activity bonds. Bonds are *private activity bonds* and *not* tax-exempt if both of the following conditions are met:[22]

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

[18] Interest income from qualified private activity bonds for 501(c)(3) projects and housing projects are excluded from the AMT.

[19] 50 basis points is equivalent to one-half of a percentage point or 0.50%.

[20] Jacob Fine, "AMT Spreads on the Rise," *The Bond Buyer*, July 26, 2000, p. 1.

[21] 26 U.S.C. 141(b)(6)(A)

[22] 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 passes both 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 refer to tax-exempt private activity bonds, the more technically correct reference is tax-exempt, *qualified* private activity bonds.

There is also a private loan financing test. Under this test, a bond is *not* tax-exempt if more than the lesser of 5% or $5 million of the proceeds of the issue is to be used directly or indirectly to make or finance loans to persons other than governmental persons.[23] For example, an issuer could not use the proceeds from a tax-exempt bond to loan money to small businesses for capital improvements.[24]

What Are the Qualified Private Activities?

A number of qualified private activities are granted special status in the tax code (see **Table 2**). These activities are called "qualified private activities" because they qualify for tax-exempt financing even though they would likely "pass" the two part private activity test or the private loan test which would otherwise disallow tax-exempt financing. The list of qualified private activities has gradually expanded to 22 activities from the 12 that were originally defined by the Revenue and Expenditure Control Act of 1968. The Tax Reform Act of 1986 kept most of the activities listed in the 1968 act and reorganized the private activity bond section of the federal tax code.

The Revenue and Expenditure Control Act of 1968

The 1968 act legislated that the interest payments on industrial development bonds (IDBs, the original private activity bonds) were to be included in taxable income. This was a shift from the previous Internal Revenue Service (IRS) position, which held that the interest on these bonds was not taxable income. The motivation behind the change offered in the 1968 act was based "on the theory that industrial development bonds described in the proposed [IRS] regulations were not 'obligations of a State or any political subdivision' within the meaning of section 103 since the primary obligor was a not a State or political subdivision."[25] The 1968 act also (1) established the basis for the current private use and private security tests; (2) created exceptions to the taxability provision for small issuers; (3) and specified a group of private activities that would qualify for tax-exempt bond financing.

[23] 26 U.S.C. 141(c).

[24] The tax code does allow some loan programs to be financed with tax-exempt bonds such as mortgage bonds. These special cases are described in more detail later in the report.

[25] U.S. Congress, Conference Committees, 1968, Revenue and Expenditure Control Act of 1968, conference report to accompany H.R. 15414, House Report No. 1533, 90th Cong., 2nd sess. (Washington: GPO, 1968), p. 32.

The Tax Reform Act of 1986

The 1986 act, which rewrote the Internal Revenue Code of 1954, renewed most of the previously defined private activities identified in the 1968 act. Notably, TRA 1986 added one private activity, qualified hazardous waste facilities, and limited the exemption for some previously acceptable private activities, including construction of sports facilities and privately owned (as opposed to government owned) airports, docks, wharves, and mass-commuting facilities. In **Table 2**, the activities that must be government owned to qualify for tax-exempt financing are identified in italics. After enactment of TRA 1986, there were several other additions to the list of qualified private activities. The date of introduction for each qualified private activity is included in the last column of **Table 2**.

Empowerment Zones and New York Liberty Zones

In addition to private activities listed in **Table 2**, there are special zones where tax-exempt private activity bonds can be issued for qualified economic development projects in that zone. The Empowerment Zone / Enterprise Community (EZ) program has been implemented in rounds and each round is subject to different debt rules. Round I EZ bonds are subject to the state volume cap and each zone can have only $3 million of EZ bonds outstanding.[26] There are also limits on the amount of Round I EZ bonds any one borrower can have outstanding. An EZ borrower can have an aggregate of $20 million outstanding for all EZ projects throughout the country.

Round II EZs (and all EZs established after December 31, 2001) are subject to designation "lifetime" caps depending on the urban vs. rural designation and population for urban EZs. For the lifetime of the EZ designation, rural EZs can issue up to $60 million; urban EZs with population less than 100,000 can issue up to $130 million; and urban EZs with population greater than 100,000 can issue up to $230 million. In contrast to Round I EZs, there are no limits on the amount any one entity can borrow for Round II EZs.[27]

The New York Liberty Zone (NYLZ) was established in the wake of the September 11, 2001, terrorist attacks upon New York City.[28] The tax benefits created to foster economic revitalization within the NYLZ included a "Liberty Bond" program. The program allows New York State (in conjunction and coordination with New York City) to issue up to $8 billion of tax-exempt, private activity bonds for qualified facilities in the NYLZ. Qualified facilities follow the exempt facility rules within section 142 of the IRC. The initial deadline to issue these bonds was January 1, 2005, however the deadline was extended three times until January 1, 2014. The most recent extension was made by P.L. 112-240.

The Safe, Accountable, Flexible, Efficient, Transportation Equity Act of 2005

This legislation created a new type of tax-exempt private activity bond for the construction of rail to highway (or highway to rail) transfer facilities. The national limit is $15 billion and the bonds

[26] A special EZ for the District of Columbia allows up to $15 million of outstanding EZ bond debt.

[27] See the following publication for more details on the EZ programs: U.S. Department of Housing and Urban Development, *Tax Incentive Guide for Businesses in the Renewal Communities, Empowerment Zones, and Enterprise Communities: FY2003.* The report is available at the Department of Housing and Urban Development website: http://www.hud.gov/offices/cpd/economicdevelopment/library/taxguide2003.pdf.

[28] Section 301 of the *Job Creation and Worker Assistance Act of 2002*, P.L. 107-147, created the various NYLZ tax benefits (26 U.S.C. 1400L). The tax-exempt bond component can be found in 26 U.S.C. 1400L(d).

are not subject to state volume caps for private activity bonds. The Secretary of Transportation allocates the bond authority on a project-by-project basis.

Gulf Opportunity Zone Act of 2005

The hurricanes that struck the gulf region in late summer 2005 prompted Congress to create a tax-advantaged economic development zone intended to encourage investment and rebuilding in the gulf region. The Gulf Opportunity Zone (GOZ) is comprised of the counties where the Federal Emergency Management Agency (FEMA) declared the inhabitants to be eligible for individual and public assistance. Based on proportion of state personal income, the Katrina-affected portion of the GOZ represents approximately 73% of Louisiana's economy, 69% of Mississippi's, and 18% of Alabama's.[29]

Specifically, the Gulf Opportunity Zone Act of 2005 (GOZA 2005; P.L. 109-35) contains two provisions that expanded the amount of private activity bonds outstanding and language to relax the eligibility rules for mortgage revenue bonds. The most significant is the provision to increase the volume cap (see **Table 3**) for private activity bonds issued for Hurricane Katrina recovery in Alabama, Louisiana, and Mississippi (identified as the Gulf Opportunity Zone, or "GO Zone"). GOZA 2005 added $2,500 per person in the federally declared Katrina disaster areas in which the residents qualify for individual and public assistance. The increased volume capacity added approximately $2.2 billion for Alabama, $7.8 billion for Louisiana, and $4.8 billion for Mississippi in aggregate over the next five years through 2010. The legislation defines "qualified project costs" that can be financed with the bond proceeds as (1) the cost of any qualified residential rental project (26 sec. 142(d)) and (2) the cost of acquisition, construction, reconstruction, and renovation of (i) non-residential real property (including fixed improvements associated with such property) and (ii) public utility property (26 sec. 168(i)(10)) in the GOZ. The additional capacity originally had to be issued before January 1, 2011, but was extended to January 1, 2012, by P.L. 111-312. The original provision was estimated to cost $1.556 billion over the 2006-2015 budget window, while extending the issuance deadline by one year was estimated to cost $0.226 billion over the 2009-2020 budget window[30]

The second provision allows for advance refunding of certain tax-exempt bonds. Under GOZA 2005, governmental bonds issued by Alabama, Louisiana, and Mississippi may be advance refunded an additional time and exempt facility private activity bonds for airports, docks, and wharves once. Private activity bonds are otherwise not eligible for advance refunding. Following is a brief description of advance refunding and how the GOZA 2005 provision confers a significant tax benefit to the gulf states.

Refunding is the practice of issuing new bonds to buy back outstanding bonds to potentially lower interest costs. *Advance* refunding is the practice of allowing the new bonds to be outstanding for longer than 90 days. Advance refunding, thus, allows for the existence of two sets of federally tax-exempt bond issues to be outstanding at the same time for a single project. GOZA 2005 allows the states of Alabama, Louisiana, and Mississippi to advance refund $1.125 billion, $4.5 billion, and $2.25 billion, respectively. This provision was estimated to cost $741 million

[29] See CRS Report RL33154, The Impact of Hurricane Katrina on the State Budgets of Alabama, Louisiana, and Mississippi, by (name redacted).

[30] The 10-year revenue loss estimates for GOZA 2005 are from the Joint Committee on Taxation, *Estimated Revenue Effects of H.R. 4440, the 'Gulf Opportunity Tax Relief Act of 2005,'* as passed by the House of Representatives and the Senate on December 16, 2005, JCX-89-05, December 20, 2005. The 10-year revenue loss estimates for P.L. 111-312 are from the Joint Committee on Taxation, *General Explanation of Tax Legislation in the 111th Congress*, JCS-2-11.

over the 2006-2015 budget window.[31] For more on advance refunding, see CRS Report RL30638, *Tax-Exempt Bonds: A Description of State and Local Government Debt*, by (name reda cted) and (name redacted) .

The Housing and Economic Recovery Act of 2008

In response to the housing crisis of 2008, Congress included two provisions in the Housing and Economic Recovery Act of 2008 (HERA; P.L. 110-289) that are intended to assist the housing sector. First, HERA provided that interest on qualified private activity bonds issued for (1) qualified residential rental projects, (2) qualified mortgage bonds, and (3) qualified veterans' mortgage bonds, would not be subject to the AMT. In addition, HERA also created an additional $11 billion of volume cap space for bonds issued for qualified mortgage bonds and qualified bonds for residential rental projects. The cap space was designated for 2008 but can be carried forward through 2010.

The American Recovery and Reinvestment Act of 2009

In response to the financial crisis and economic recession, Congress included several bond-related provisions in the American Recovery and Reinvestment Act of 2009 (ARRA; P.L. 111-5). The following three provisions are intended to make bond finance less expensive for the designated facilities. One expanded the definition of qualified manufacturing facilities (under Sec. 144(a)(12)(C)) to include the creation and production of intangible property including patents, copyrights, formulae, etc. Before ARRA, only tangible property was eligible. The second created a new category of private activity bond called "recovery zone facility bonds." The bonds are to be used for investment in infrastructure, job training, education, and economic development in economically distressed areas. The bonds, which are subject to a separate national cap of $15 billion allocated to the states based on the decline in employment in 2008, are to be issued in 2009 and 2010.

A third provision provided $2 billion for tribal governments to issue tax-exempt bonds for economic development purposes. The tax code currently allows tribal governments to issue debt for "essential government services" only. Many economic development projects would not qualify absent this ARRA provision.

IRS Review of Tax-Exempt Status

The IRS often reviews the tax-exempt status of outstanding bonds issued for *qualified* private activities. If the bonds that were originally issued as tax-exempt are found to no longer qualify (meaning that they pass both the security and use tests) the interest on the bonds becomes taxable. Technically, bond holders are the recipient of the tax benefit and are responsible for remitting forgone taxes to the Treasury when a tax-exempt bond fails to qualify. A *retroactive* taxability finding means all previous tax benefits to the bond holder would have to be returned to the Treasury. A *prospective* taxability finding means all future interest payments would be taxable to the bond holder. However, in most cases, the IRS will settle the apparent violation by requiring that the issuer, not the bond holders, pay a monetary penalty and that the issuer change the circumstances that led to the non-compliance finding.[32]

[31] JCT, December 20, 2005.

[32] See the following IRS website for more information on tax-exempt bond rulings and findings: http://www.irs.gov/compliance/index.html.

What Is the Private Activity Volume Cap?[33]

The federal government has limited the amount of private activity bonds that states can issue to a subset of the 22 activities listed in **Table 2** and to EZ bonds. The third column of **Table 2** identifies the 13 activities (of the 22) that are subject to an annual state volume cap. The annual cap was increased from the greater of $50 per capita or $150 million in 2000, to the greater of $100 per capita or $302.88 million in 2016 (and is adjusted annually for inflation). For small states, the $302.88 million minimum provides a more generous volume cap than the per capita allocation. **Table 3** lists the volume cap amount in 2015 and 2016 for all states and territories and compares the 2016 cap to state personal income in 2015.

Of the 13 activities subject to an annual volume cap, two are treated differently than the others, and four others are subject to a separate cap. First, states are required to count only 25% of the bonds issued for high-speed intercity rail facilities (26 U.S.C. 142(I)) against the annual cap. If the facility is government owned and operated, no cap allocation is required. Second, bonds issued for solid waste disposal facilities (26 U.S.C. 142(a)(6)) are not subject to the cap if the facility is government owned and operated.

Table 2. Qualified Private Activities

Internal Revenue Code Section	Type of Private Activity (Italicized activities must be owned by the issuing government to qualify)	Subject to Volume Cap	Year Established
Sec. 142	**Exempt facility bonds**		
Sec. 142(c)	*Airports*	No	1968
Sec. 142(c)	*Docks and wharves*	No	1968
Sec. 142(c)	*Mass commuting facilities*	Yes	1981
Sec. 142(e)	Water furnishing facilities	Yes	1968
Sec. 142(a)(5)	Sewage facilities	Yes	1968
Sec. 142(a)(6)	Solid waste disposal facilities	Yes/No[a]	1968
Sec. 142(d)	Qualified residential rental projects	Yes[b]	1968
Sec. 142(f)	Local electric energy or gas furnishing facility	Yes	1968
Sec. 142(g)	Local district heating and cooling facilities	Yes	1982
Sec. 142(h)	Qualified hazardous waste facilities	Yes	1986
Sec. 142(I)	High-speed intercity rail facilities	Yes[c]	1988
Sec. 142(j)	*Environmental enhancements of hydroelectric generating facilities*	No	1992
Sec. 142(k)	Qualified public educational facilities	No[d]	2001
Sec. 142(l)	Qualified green building and sustainable design projects	No[d]	2005
Sec. 142(m)	Qualified highway and surface freight transfer facilities	No[d]	2005
Sec. 1400U-3	Recovery zone facility bonds	No[d]	2009
Sec. 143	**Mortgage revenue bonds**		
Sec. 143(a)	Qualified mortgage bond	Yes[b]	1968
Sec. 143(b)	Qualified veterans' mortgage bond	No	1968

[33] 26 U.S.C. 146.

Internal Revenue Code Section	Type of Private Activity (Italicized activities must be owned by the issuing government to qualify)	Subject to Volume Cap	Year Established
Sec. 144(a)	**Qualified small issue bond**	Yes	1968
Sec. 144(b)	**Qualified student loan bond**	Yes	1976
Sec. 144(c)	**Qualified redevelopment bond**	Yes	1968
Sec. 145	**Qualified 501(c)(3) bond**	No	1968

a. Exempt from the cap if governmentally owned. Subject to the cap if privately owned.

b. Bonds for residential rental projects and mortgages were allocated an additional $11 billion for 2008 that can be carried forward through 2010 by the Housing Assistance Tax Act of 2008.

c. 25% of the bond issue is included in the cap. If the facility is owned by a governmental unit, no cap allocation is required. In addition, if the facility is not governmentally owned, to qualify for tax-exempt status, the owner must elect not to claim any depreciation deductions or investment tax credits with respect to the property financed with the bonds.

d. Educational facility bonds are subject to a separate state cap: the greater of $10 per capita or $5 million. Green building bonds are subject to a national aggregate amount of $2 billion through the expiration of the program, scheduled for October 1, 2009. Highway bonds are subject to the following annual issuance limits: $130 million in 2005; $750 million each year for 2006 through 2009; $1.87 billion in 2010; and $2 billion each year for 2011 through 2015, zero thereafter. Recovery zone facility bonds are subject to a separate cap of $15 billion.

Qualified public educational facilities (26 U.S.C. 142(k)) are subject to a separate annual cap which is the greater of $10 per capita or $5 million. The three activities, bonds for green buildings (26 U.S.C. 142(l)), highway-freight transfer facilities (26 U.S.C. 142(m)), and recovery zone facilities (26 U.S.C. 1400U-3) are subject to a separate cap. Green buildings are subject to a $2 billion lifetime (not annual) cap and transfer facilities are subject to annual national caps ranging from $130 million for 2005 rising to $2 billion from 2011 through 2015 (for a total of $15 billion).[34] The $15 billion of recovery zone facility bonds are allocated to the states by formula then are further sub-allocated to local jurisdictions, also by formula. Generally, a jurisdiction receives an allocation that matches its ratio of the total decrease in employment relative to the national decline in employment in 2008.[35]

The total 2016 private activity bond volume cap for all states and the District of Columbia is over $35 billion. California is allowed to issue over one-tenth of total new volume in 2016 or $3.9 billion (see **Table 3**). However, as measured against total California personal income, the new volume cap is considerably less than the national average. For every $100 of 2015 personal income in California, approximately $0.19 of private activity debt can be issued in 2016 whereas the U.S. average is $0.34.[36] In contrast, Vermont could issue up to $1.01 of private activity debt for every $100 of personal income (see the last column of **Table 3**). The less populous states are more likely to not use the entire annual cap amount for this reason.[37]

[34] For more on the transfer facility private activity bond program, see U.S. Department of Transportation, "Applications for Authority for Tax-Exempt Financing of Highway Projects and Rail-Truck Transfer Facilities," 71 *Federal Register* 642, January 5, 2006.

[35] The IRS has established the following website to report those allocations: http://www.irs.gov/pub/irs-tege/rzblocalreallocations.pdf.

[36] The states were each given equal weight for the average calculation. The values in the last column of **Table 3** were summed then divided by 51.

[37] For more on state use of the volume cap, see out-of-print CRS Report RL34159, Private Activity Bonds: An Analysis of State Use, 2001 to 2006, by (name redacted) (available upon request).

Table 3. Annual State Private Activity Bond Volume Cap, 2015 and 2016

State	2015 Volume Cap ($ millions)	2016 Volume Cap ($ millions)	2015 Personal Income ($ millions)	2016 Cap per $100 of Personal Income
Alabama	484.94	485.90	189,357	0.26
Alaska	301.52	302.88	41,312	0.73
Arizona	673.15	682.81	266,756	0.26
Arkansas	301.52	302.88	116,485	0.26
California	3,880.25	3,914.48	2,061,337	0.19
Colorado	535.59	545.66	275,107	0.20
Connecticut	359.67	359.09	240,519	0.15
Delaware	301.52	302.88	45,093	0.67
District of Columbia	301.52	302.88	48,070	0.63
Florida	1,989.33	2,027.13	894,190	0.23
Georgia	1009.73	1,021.49	414,274	0.25
Hawaii	301.52	302.88	68,373	0.44
Idaho	301.52	302.88	62,083	0.49
Illinois	1,288.06	1,286.00	636,281	0.20
Indiana	659.69	661.97	271,426	0.24
Iowa	310.71	312.39	140,501	0.22
Kansas	301.52	302.88	133,591	0.23
Kentucky	441.35	442.51	172,550	0.26
Louisiana	464.97	467.07	202,048	0.23
Maine	301.52	302.88	55,941	0.54
Maryland	597.64	600.64	337,174	0.18
Massachusetts	674.54	679.44	414,724	0.16
Michigan	990.99	992.26	421,044	0.24
Minnesota	545.72	548.96	277,483	0.20
Mississippi	301.52	302.88	106,075	0.29
Missouri	606.36	608.37	260,123	0.23
Montana	301.52	302.88	42,647	0.71
Nebraska	301.52	302.88	91,040	0.33
Nevada	301.52	302.88	121,973	0.25
New Hampshire	301.52	302.88	72,948	0.42
New Jersey	893.82	895.80	535,604	0.17
New Mexico	301.52	302.88	80,201	0.38
New York	1,974.62	1,979.58	1,142,485	0.17
North Carolina	994.4	1,004.28	408,364	0.25
North Dakota	301.52	302.88	41,166	0.74

State	2015 Volume Cap ($ millions)	2016 Volume Cap ($ millions)	2015 Personal Income ($ millions)	2016 Cap per $100 of Personal Income
Ohio	1,159.42	1,161.34	504,993	0.23
Oklahoma	387.81	391.13	173,187	0.23
Oregon	397.02	402.90	173,170	0.23
Pennsylvania	1,278.72	1,280.25	629,710	0.20
Rhode Island	301.52	302.88	52,905	0.57
South Carolina	483.25	489.61	186,286	0.26
South Dakota	301.52	302.88	38,637	0.78
Tennessee	654.94	660.03	277,707	0.24
Texas	2,695.70	2,746.91	1,284,262	0.21
Utah	301.52	302.88	116,992	0.26
Vermont	301.52	302.88	29,968	1.01
Virginia	832.63	838.30	437,111	0.19
Washington	706.15	717.04	366,790	0.20
West Virginia	301.52	302.88	68,329	0.44
Wisconsin	575.76	577.13	263,301	0.22
Wyoming	301.52	302.88	32,417	0.93
U.S. Total	35,233.65	35,488.37	15,324,109	0.34

Sources: Personal income data are from the Bureau of Census, State Annual Personal Income, available at http://www.bea.gov/bea/regional/spi/. Bond volume cap information for 2015 and 2016 is from the *Bond Buyer, SourceMedia Inc.*, 2016.

This disparity arises from the two part volume capacity calculation which provides for a minimum of $302.88 million, regardless of state population. In addition, states that have total personal income below the national average would also have a relatively high debt allowance as measured against personal income. The last column of **Table 3** provides a comparative measure of the state-by-state volume capacity based on 2015 personal income.

Allocation by Type of Activity

Each state independently determines the allocation of its volume capacity. **Table 4** identifies the total cap distribution for private activities from 2008 through 2014. The category names were used by the *Bond Buyer* newspaper and were continued by the Council of Development Finance Agencies (CDFA). The CDFA assumed control of the survey from the *Bond Buyer* beginning in 2008.[38] The names used by the *Bond Buyer*/CDFA differ from the more detailed names for the private activities used in the tax code and listed in **Table 2**. Nevertheless, the data roughly reflect the cap allocation preferences of the states and their subdivisions. Note that roughly half of the available volume capacity in any given year is carried forward to the following year. In 2008 and 2009, HERA included an additional $11 billion in volume capacity for housing that is not included in the table.

[38] The *Bond Buyer* administered the survey to collect the data for 2004 through 2006. In 2007, the Council of Development Finance Agencies began administering the survey and publishing the results.

The amount of capacity dedicated to mortgage revenue bonds (MRBs) varies significantly over the seven years examined. For example, in 2011, $5.6 billion was used for MRBs and in 2013 the amount had dropped to $1.8 billion.

Unused volume capacity can be carried forward for up to three years, as long as the state identifies the project for which the cap space is dedicated. Bond capacity that has not been used after three years is then abandoned. Abandoned bond capacity rose considerably in 2013 and 2014.

Table 4. State Use of Volume Capacity 2008 to 2014

(in millions)

Bond Allocation	2008	2009	2010	2011	2012	2013	2014
Total Volume Capacity Available	$45,802	$53,603	$64,966.6	$83,036.6	$79,295.5	$87,223.5	$92,075.1
New Volume Capacity	28,571	30,252	30503.7	31,267.8	30,872.7	32,748.3	34,532.3
Carryover from previous years	*17,231*	*23,351*	*41,577.7*	*53,177.9*	50,611.1	*56,445.3*	*59,123.5*
Carry forward to next year	24,262	34,367	43,506.2	54,235.8	46,678.7	60,220.0	60,793.1
Single-family Mortgage Revenue	3,705	3,571	4,551.5	5,606.4	2,654.4	1,828.2	2,840.9
Abandon Capacity	3,620	2,318	4,256.6	6,637.2	6,604.8	11,751.6	11,994.8
Exempt Facilities	2,578	2,352	1,802	5,627.5	7,391.3	6,076.0	7,535.4
Student Loans	1,548	1,369	1,110.8	1,003.4	772.0	480.2	754.3
Multi-family Housing	1,286	1,154	2,388.2	4,558.4	5,003.9	4,722.3	6,475.5
Industrial Development	1,266	947	665.9	373.9	240.4	355.8	269.5

Source: Council on Development Finance Agencies, "National Volume Cap Map & Report, https://www.cdfa.net/cdfa/volumecap.nsf/search.html.

Notes: The totals may not sum precisely because of rounding and small survey changes from year to year. In addition, some states may report totals with specifying purpose.

Other Restrictions on Private Activity Bonds

The use of private activity bonds is also limited by other technical restrictions. In general, loosening the restrictions would allow issuers to reduce administrative and compliance costs. However, the relaxed restrictions would exacerbate the concerns (i.e., the economically inefficient allocation of capital) surrounding tax-exempt bonds that were discussed earlier in the report. Following is a list of the more technical rules along with the section in the tax code where the rule appears.

- The maturity of the bonds cannot be greater than 120% of the economic life of the asset purchased with the bonds (26 U.S.C. 147(b));
- less than 25% of the bond proceeds can be used to acquire land (except for qualified first-time farmers) (26 U.S.C. 147(c));
- proceeds of the bond issue cannot be used to purchase existing property unless greater than 15% of the cost of acquiring the property is spent on rehabilitating the property (26 U.S.C. 147(d));
- public approval of bonds, either through public hearing and notice or voter referendum, is required for private activity bonds (26 U.S.C. 147(f)); and
- issuance costs cannot be any greater than 2% of the bond proceeds (3.5% for mortgage bond issues of less than $20 million) (26 U.S.C. 147(g)).
- private activity bonds cannot be advance refunded.[39]

Conclusion and Further Reading

The history, tax laws, financial properties, and economic effects of tax-exempt bonds are all exceedingly complex and continually evolving. This report is intended to clarify part of the tax-exempt bond labyrinth. Nevertheless, the reader may wish to explore tax-exempt bonds in more depth or from a more general, less technical perspective. The following reading list should equip the reader with a good foundation for pursuit of either objective.

Bruce Davie and (name redacted), "Tax-Exempt Bonds after the South Carolina Decision," *Tax Notes*, vol. 39, no. 13, June 27, 1988, p. 1573.

Peter Fortune, "Tax-Exempt Bonds Really Do Subsidize Municipal Capital!," *National Tax Journal*, vol. 51, no. 1, March 1998, p. 43.

Roger H. Gordon and Gilbert E. Metcalf, "Do Tax-Exempt Bonds Really Subsidize Municipal Capital?," *National Tax Journal*, vol. 44, no. 4, part 1, December 1991, p. 71.

Walter Hellerstein and Eugene W. Haper, "Discriminatory State Taxation of Private Activity Bonds After *Davis*," *State Tax Notes*, April 27, 2009, p. 295.

George J. Marlin and Joe Mysak, *The Guidebook to Municipal Bonds: The History, The Industry, The Mechanics* (New York: The American Banker/Bond Buyer, 1991).

Joe Mysak, *Encyclopedia of Municipal Bonds: A Reference Guide to Market Events, Structures, Dynamics, and Investment Knowledge* (New York: Bloomberg, 2012).

Judy Wesalo Temel, *The Fundamentals of Municipal Bonds, 5th Edition* (New York: John Wiley and Sons, 2001).

(name redacted), *The Private Use of Tax-Exempt Bonds: Controlling Public Subsidy of Private Activity* (Washington, DC: The Urban Institute Press, 1991).

[39] Current refunding is the practice of issuing bonds to replace existing bonds. Issuers typically do this to "lock-in" lower interest rates or more favorable borrowing terms. Current refunding is allowed as long as the "old" bonds are redeemed within 90 days of the issuance of the refunding bonds. Advance refunding is the practice of issuing new bonds to replace existing bonds, but not immediately (within 90 days) retiring the old bonds. Thus, two sets of tax-exempt bonds are outstanding for the same project.

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