



CRS Report for Congress

Tax Credit Bonds: A Brief Explanation

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Summary

This report explains the tax credit mechanism and describes the market for qualified zone academy bonds (QZABs), clean renewable energy bonds (CREBs), and gulf tax credit bonds (GTCBs). QZABs, which were the first tax credit bonds, were introduced as part of the Taxpayer Relief Act of 1997 (P.L. 105-34) and available for 1998. CREBs were created by the Energy Policy Act of 2005 (P.L. 109-58) and GTCBs by the Gulf Opportunity Zone Act of 2005 (P.L. 109-135). Tax Credit Bonds (TCBs) are a type of bond that offers the holder a federal tax credit instead of interest. Each type of TCB has a specific use. Issuers of QZABs are required to use the proceeds to finance public school partnership programs in economically distressed areas. CREBs are designated for clean renewable energy projects. GTCB proceeds are for the refinancing of outstanding government debt in Gulf Coast regions affected by Hurricane Katrina. GTCBs could only be issued in 2006. In December 2006, Congress extended the QZAB program, with modifications, for 2006 and 2007 with the Tax Relief and Health Care Act of 2006 (P.L. 109-432). In the 110th Congress, S. 912 would create a fourth tax credit bond for the construction and renovation of public schools. This legislation would authorize \$11 billion for each of 2007 and 2008 for these school construction bonds. This report will be updated as legislative events warrant.

Background

Almost all state and local governments sell bonds to finance public projects and certain qualified private activities. Most of the bonds issued are *tax-exempt* bonds because the interest payments are not included in the bondholder's (purchaser's) federal taxable income. Naturally, interest payments not included in taxable income escape federal income taxation. In contrast, interest payments from other types of bonds, such as corporate bonds, are included in a bondholder's taxable income. Because of the difference in taxability, state and local government tax-exempt (municipal) bonds offer a lower pre-tax interest rate than corporate bonds.¹ The federal government is providing

¹ For ease of exposition, the phrase "state and local tax-exempt bonds" is replaced by "municipal (continued...)"

a subsidy for projects that use tax-exempt financing of approximately 20% to 30% of the interest cost on the bonds. For example, on April 12, 2007, the average high-grade taxable corporate bond rate was 5.53%, and the average high-grade municipal bond rate was 4.29%.² The municipal bond rate is about three-quarters of the taxable bond rate, a considerable subsidy for the bond issuer.

In contrast, TCBs allow the holder to claim a federal tax credit equal to a percentage of the bond's par value (face value) for a limited number of years. This tax credit percentage is set (approximately) at the current yield on taxable corporate bonds. Thus, TCBs deliver a larger federal subsidy to the issuer than do municipal bonds. The subsidy to the issuer is the full 5.53% instead of the difference between the taxable rate and the lower tax-exempt rate of 4.29%.³ With tax credit bonds, the issuer does not pay any interest.

Currently, there are three types of tax credit bonds: qualified zone academy bonds (QZABs), clean renewable energy bonds (CREBs), and gulf TCBs (GTCBs). QZABs are not permanent though Congress has extended the program several times. In the 107th Congress, the Job Creation and Worker Assistance Act of 2002 (P.L. 107-147) extended the QZAB program through 2003. In the 108th Congress, P.L. 108-311 extended the program through 2005. In the 109th Congress, the Tax Relief and Health Care Act of 2006 (TRHCA P.L. 109-432) extended the program for 2006 and 2007. QZABs allow qualified issuers to carry forward unused capacity for up to two years. Thus, QZABs could be issued beyond 2007 if unused capacity were carried forward by qualified issuers.

CREBs were created by the Energy Policy Act of 2005 (P.L. 109-58) and the GTCBs by the Gulf Opportunity Zone Act of 2005 (P.L. 109-135). The TRHCA increased the volume cap for CREBs from \$800 million to \$1.2 billion and extended the authority to issue CREBs from December 31, 2007, to December 31, 2008. Authorization to issue GTCBs expired on January 1, 2007. The first section of this report examines the mechanics of QZABs, CREBs, and GTCBs, in more detail. The second section of this report analyzes the market for TCBs relative to municipal and corporate bonds.

The Details of Tax Credit Bonds

A TCB allows the bondholder to claim a tax credit equal to a specified credit rate as determined by the Secretary of the Treasury. The rate of credit is intended to be set such that the bonds need not be sold at a discount (for a price less than the face value) or with interest cost to the issuer. The government entity selling the bond is obligated to repay only the principal of the bond. The federal government makes "payments" to the bondholder through the tax credits. The tax credits delivered through the bonds are unlike

¹ (...continued)

bonds" for the remainder of the report. "Municipal bonds" includes bonds issued by state and local education agencies.

² Federal Reserve Board, Table H. 15, "Selected Interest Rates," website visited April 17, 2007, [<http://www.federalreserve.gov/releases/H15/data.htm#top>].

³ See CRS Report RL30638, *Tax-Exempt Bonds: A Description of State and Local Government Debt*, by Steven Maguire.

typical tax credits because the credit is included in taxable income as if it were interest income. However, the tax credit bond rate is set with the intent of compensating for the taxability. The structure of QZABS and the two new bonds are explained briefly in this section.

QZABs. The first TCBs were introduced as a part of the Qualified Zone Academy Bond (QZAB) program in the Taxpayer Relief Act of 1997. Under this program, individual public schools, through their participating state and local governments, use the bond proceeds for school renovation (not including new construction), equipment, teacher training, and course materials. To qualify for the program, the school must also be a “Qualified Zone Academy.”

Qualified Zone Academy. A “Qualified Zone Academy” is any public school (or program within a public school) that provides and develops educational programs below the postsecondary level if:

such public school or program (as the case may be) is designed in cooperation with business to enhance the academic curriculum, increase graduation and employment rates, and prepare students for the rigors of college and the increasingly complex workforce⁴

The academy must also be located in an empowerment zone or enterprise community. Alternatively, the academy also qualifies if it is reasonably expected that at least 35% of the students qualify for the free or reduced price school lunch program. At least 95% of the bond proceeds must be used for rehabilitating or repairing public school facilities, providing equipment, developing course materials, or training teachers and other school personnel.

Annual QZAB Limit. The limit for new QZAB debt is \$400 million annually from 1998 through 2007. The limit is allocated to the states based upon their portion of the population below the poverty line. States are responsible for the allocation of the available credit to the local governments or qualified zone academies. Unused credit capacity can be carried forward for up to two years.

Term of QZAB Debt. The maximum term (the number of years for which the credit will be paid) “shall be the term which the Secretary estimates will result in the present value of the obligation to repay the principal on the bond being equal to 50% of the face amount of the bond.”⁵ Specifically, the maximum term of the bonds is determined by the prevailing interest rate for municipal debt with a maturity of greater than 10 years. The maximum term on QZABs issued on April 17, 2007, was set at 16 years.

⁴ 26 U.S.C. 1397E(d)(4)(A). The private entity must donate an amount equivalent to 10% of the bond proceeds. Services of employees as volunteer mentors satisfies the 10% private partnership requirement.

⁵ 26 U.S.C. 1397E. The term of QZABs is found by calculating the following: $\log(2)/\log(1+r)$. The variable r is the “discount rate of the average annual interest rate of tax-exempt obligations having a term of 10 years or more which are issued during the month.”

The QZAB Tax Credit Rate. Since July 1999, the Secretary of the Treasury establishes a national credit rate that is generally intended to allow issuers of QZABs to sell their bonds at par (face value) without additional interest expense. The credit rate published (by the U.S. Bureau for Public Debt) on the issue sale date is the bondholder's annual rate of credit. For example, the annual tax credit rate was 5.76% on April 17, 2007. The bonds sold on that day would allow the taxpayer to claim a federal tax credit in one year equal to 5.76% multiplied by the face value of the bond. Thus, a \$100,000 bond issued on April 17, 2007, would yield a tax credit of \$5,760 for the bondholder one year after the original issue and each following anniversary for the term of the bond. However, unlike interest on municipal bonds, which does not create a taxable income stream, the credit amount is included in the bond holder's gross income.⁶ The credit is limited to the bondholder's current tax liability; it is "non-refundable."

Arbitrage Rules. Before the 2006 extension of the QZAB program, QZABs were not subject to the same arbitrage rules as traditional tax-exempt bonds. The TRHCA Act of 2006 requires that QZABs follow the same arbitrage limits as traditional tax-exempt bonds. Generally, issuers of QZABs must ensure that 95% of the proceeds are spent within five years of issuance.

Other Tax Credit Bonds: CREBs and GTCBs.⁷ Clean renewable energy bonds (CREBs) are available to finance qualified energy production projects which include (1) wind facilities, (2) closed-loop bio-mass facilities, (3) open-loop bio-mass facilities, (4) geothermal or solar energy facilities, (5) small irrigation power facilities, (6) landfill gas facilities, (7) trash combustion facilities, (8) refined coal production facilities, and (9) certain hydropower facilities. The national limit on the bonds is \$1.2 billion of which a maximum of \$750 million can be granted to governmental bodies. The term and credit rate for CREBs are determined in the same manner as QZABs. The CREB credit is split into four quarterly payments in contrast to the annual QZAB credit. CREBs are also subject to the arbitrage rules that require the issuer to spend 95% of the proceeds within five years of issuance.

The third type of TCBs are gulf tax credit bonds (GTCBs). The authority to issue these bonds expired on January 1, 2007. GTCBs could have been issued by the states of Louisiana, Mississippi, and Alabama to (1) refund bonds outstanding on August 28, 2005, that were issued by the designated states or (2) to make a loan to a jurisdiction within the designated states to cover the principal, interest, or premium of debt issued by that jurisdiction. Unlike the other two types of bonds, the maximum maturity is capped at two years. The credit rate for the two-year bonds is set in the same manner as the other TCBs. Louisiana can issue up to \$200 million, Mississippi \$100 million, and Alabama \$50 million.

⁶ In special cases, some insurance companies may indirectly pay income tax on otherwise tax exempt debt. In addition, interest paid on private activity bonds may be subject to the alternative minimum tax.

⁷ For a more detailed description of the other tax credit bond programs, see U.S. Congress, Joint Committee on Taxation, "*Present Law and Background Relating to State and Local Government Bonds*," JCX-14-06, 109th Congress, March 14, 2006.

Investing in Tax Credit Bonds vs. Other Bonds

The credit rate for TCBs is set higher than the municipal bond rate to compensate for the credit's taxability. Generally, to attract investors, the credit rate should yield a return greater than the prevailing municipal bond rate and at least equal to the after-tax rate for corporate bonds of similar maturity and risk.

Consider the following example where we assume an average 5.25% interest rate on municipal debt. Investors in the 15% income tax bracket would need a credit rate of at least 6.18% (5.25% divided by (1 - 0.15) is 6.18%) to choose TCBs over municipal bonds. Investors in the 35% bracket would require a credit rate on TCBs of 8.08% (5.25% divided by (1 - 0.35) is 8.08%). Generally, the TCB credit rate would have to exceed the return on municipal bonds and the after-tax return on corporate bonds of like term to maturity.

The summary below describes how a potential bond investor would evaluate the attractiveness of a tax credit bond relative to two other bond investments. The choice between TCB and traditional tax-exempt municipal bonds is dependent upon the bondholder's tax rate. When compared to municipal bonds, bondholders in the highest tax bracket find the tax credit less attractive than those in the lower brackets. However, the tax credit is fixed at the same rate for all buyers.

Evaluating a Tax Credit Bond Investment

t = income tax rate of bond holder

r^{TCB} = pre-tax rate of TCB credit

r^{muni} = prevailing interest rate on high grade tax-exempt municipal bonds

r^{corp} = prevailing interest rate on corporate bonds

Purchase a TCB if:

$$r^{\text{TCB}} > r^{\text{muni}} / (1-t)$$

or

$$r^{\text{TCB}} > r^{\text{corp}}$$

The TCB tax credit rate must be greater than (a) alternative tax-exempt municipal bond interest rate divided by one minus the income tax rate, or (b) the prevailing corporate bond rate.

The choice between a tax credit bond and a taxable corporate bond is not as dependent upon the bondholder's tax bracket. At comparable levels of default risk, TCBs and corporate bonds are equally attractive to purchasers that anticipate tax liability. However, a corporation without tax liability that holds a tax credit bond would not be allowed to claim a credit for future tax liability. For these investors, this risk may not be sufficiently covered by the potential for a future tax credit.

The Bond Market and TCBs. There are two agents in the market for bonds: the bond seller and the bond buyer. The price and yield of bonds is determined by the interaction of supply (bond sellers) and demand (bond buyers). Bond prices and interest rates determine the yield or rate of return on bonds. In all cases, the yield on bonds moves in the opposite direction from bond prices. If investors believe the expected yield on bonds is greater than what the current prices and interest rates reflect, bond prices will

rise, lowering the yield. Alternatively, if investors believe the expected yield on bonds is too low, bond prices will fall, raising the yield.

The market for TCBs is not like the market for traditional tax-exempt bonds and corporate bonds. In contrast to traditional bonds, which are available to almost all investors, QZAB credit is only available to certain financial institutions. The limited number of potential buyers would likely put downward pressure on the demand for QZABs. CREB and GTCB credits are available to any taxpayer.

Also, the federal credit from TCBs cannot be adjusted to reflect the perceived riskiness of individual bond issuers. In traditional bond markets, issuers with strong credit ratings can offer bonds at lower interest rates whereas issuers with weak credit ratings typically offer higher interest rates to compensate for the higher default risk. QZAB issuers with relatively weak credit ratings can and have offered supplemental interest payments or original issue discounts to investors to compensate for the greater risk. Some issuers and observers have noted that these additional payments seem contrary to the intent of Congress to “permit the issuance of qualified zone academy bonds without discount and without interest cost to the issuer.”⁸

The relatively small annual TCB volume capacity — \$400 million of QZABs per annum; \$1.2 billion total of CREBs; and \$350 million of GTCBs compared to \$389 billion (in 2006) of municipal bonds — also limits the market attractiveness of TCBs. Investors generally prefer deep secondary markets for assets.⁹ However, the unique nature of the TCB tax credit and the limited volume make it difficult for investors to justify devoting resources necessary to properly evaluate TCBs.

Even with potential weakness in the market for TCBs (the Department of Education reported as of May 2001, 21 states had active QZAB programs), Congress has extended the program several times and added two new types of TCBs since QZABs were first issued in 1998.¹⁰ Analysts in the bond community generally agree that the tax credit mechanism may need adjustments before TCBs are widely accepted by investors as alternatives to municipal bonds or taxable bonds. To date, no comprehensive study of the TCB programs has been undertaken.

⁸ 26 U.S.C. 1397E(b)(2).

⁹ Source Media, Inc., *The Bond Buyer/Thompson Financial 2007 Yearbook*, New York, NY, 2007.

¹⁰ P.L. 106-170, enacted on December 17, 1999, extended the QZAB program two years, through 2001. P.L. 107-147, enacted on March 9, 2002, extended the program another two years, through 2003. P.L. 108-311, enacted on October 4, 2004, extended the program through 2005. P.L. 109-432, enacted on December 20, 2006, extended the program through 2007.