Tax Credit Bonds: Overview and Analysis

Steven Maguire
Specialist in Public Finance

April 16, 2009
Summary

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. In contrast, Tax Credit Bonds (TCBs) are a type of bond that offers the holder a federal tax credit instead of interest. This report explains the tax credit mechanism and describes the market for the bonds.

Currently, there are a variety of TCBs. Qualified zone academy bonds (QZABs), which were the first tax credit bonds, were introduced as part of the Taxpayer Relief Act of 1997 (P.L. 105-34) and were first available in 1998. Clean renewable energy bonds (CREBs) were created by the Energy Policy Act of 2005 (P.L. 109-58) and “new” CREBs by the Emergency Economic Stabilization Act of 2008 (EESA P.L. 110-343). Gulf tax credit bonds (GTCBs) were created by the Gulf Opportunity Zone Act of 2005 (P.L. 109-135). Authority to issue GTCBs has expired. Qualified forestry conservation bonds (QFCBs) were created by the Food, Conservation, and Energy Act of 2008 (P.L. 110-246). Qualified energy conservation bonds (QECBs) and Midwest Disaster Bonds (MWDBs) were created by the Emergency Economic Stabilization Act of 2008 (P.L. 110-343).

The American Recovery and Reinvestment Act of 2009 (P.L. 111-5, ARRA) included several bond provisions that use a tax credit mechanism. Specifically, ARRA created Qualified School Constructions Bonds (QSCBs) and a new type of bond that allows issuers the option of receiving a federal payment instead of allowing a federal tax exemption on the interest payments. These new bonds, Build America Bonds (BABs) and Recovery Zone Economic Development Bonds (RZEDBs), are also unlike other tax credit bonds in that the interest rate on the bonds is a rate agreed to by the issuer and investor. In contrast, the Secretary of Treasury sets the credit rate for the other TCBs based on current market parameters. The authority to issue BABs and RZEDBs expires after 2010.

Each TCB is designated for a specific purpose or type of project. Issuers use the proceeds for public school construction and renovation; clean renewable energy projects; refinancing of outstanding government debt in regions affected by natural disasters; conservation of forest land; investment in energy conservation; and for economic development purposes.

All of the TCBs are temporary tax provisions. Additional legislation may be introduced in the 111th Congress that would extend, expand, or modify existing TCBs, or create new tax credit bonds.

This report will be updated as legislative events warrant.
Contents

Introduction ................................................................................................................... 1

The Details of Tax Credit Bonds..................................................................................... 3

The Mechanics of TCBs ............................................................................................... 3

Tax Credit Bonds vs. Other Bonds ............................................................................. 4

Tax Credit Bond Stripping .......................................................................................... 5

The Term of TCBs ....................................................................................................... 5

Allocation and Purpose of Tax Credit Bonds .............................................................. 6

Qualified Zone Academy Bonds .................................................................................. 6

Qualified School Construction Bonds .......................................................................... 6

Clean Renewable Energy Bonds .................................................................................... 7

New Clean Renewable Energy Bonds .......................................................................... 8

Qualified Energy Conservation Bonds .......................................................................... 8

Forestry Conservation Bonds ....................................................................................... 8

Midwest Disaster Bonds .............................................................................................. 9

Build America Bonds .................................................................................................. 9

Recovery Zone Economic Development Bonds ......................................................... 11

State-by-State Allocation of Selected TCBs ................................................................. 11

Tables

Table 1. Authorization Levels of Tax Credit Bonds ....................................................... 2

Table 2. Tax Credit Bond Acronyms ............................................................................ 3

Table 3. State-by-State Allocation of Tax Credit Bond Authority ............................... 12

Contacts

Author Contact Information ......................................................................................... 14
Introduction

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 bonds—often referred to as municipal bonds—offer a lower pre-tax interest rate than corporate bonds.¹

Typically, the federal government provides a subsidy for projects that use tax-exempt financing of approximately 20% to 30% of the interest cost on the bonds, though the spread is variable. For example, on August 7, 2008, the average high-grade taxable corporate bond rate was 5.70%, and the average high-grade municipal bond rate was 4.75%.² The recent turmoil in financial markets, however, has closed this spread to almost zero. In early December 2008, the municipal bond rate was actually higher than the taxable high-grade corporate bond rate and the spread grew to 74 basis points (0.74%) by mid-December. This relationship has since reversed. On March 12, 2009, the municipal bond interest rate was 5.03% and the corporate bond rate 5.47% (highly rated AAA bonds).³

In contrast to tax-exempt bonds, most tax credit bonds (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 at the current yield on taxable corporate bonds. Meanwhile, issuers of tax credit bonds typically pay no interest to bondholders. Thus, TCBs can deliver a larger federal subsidy to the issuer than do municipal bonds. When the credit is the full 100% credit, the subsidy to the issuer is the full 5.47% instead of the difference between the taxable rate and the lower tax-exempt rate of 5.03%.⁴

Currently, there are a variety of TCBs. Table 1 below lists the existing TCBs and their authorization levels. A more detailed description of each type of bond is provided later in the report. Note that P.L. 110-246, enacted in June of 2008, created Section 54A of the tax code. This section contains many parameters common to all TCBs. This revision was intended to “standardize” some of the TCB parameters.

¹ For ease of exposition, the phrase “state and local tax-exempt bonds” is replaced by “municipal bonds” for the remainder of the report.
As Table 1 indicates, the American Recovery and Reinvestment Act of 2009 (P.L. 111-5, ARRA) included several bond provisions that use a tax credit mechanism. Specifically, ARRA created Qualified School Construction Bonds (QSCBs). It also created a new type of bond that allows issuers the option of receiving a direct payment from the U.S. Treasury instead of tax-exempt interest payments for investors. These new bonds, Build America Bonds (BABs) and Recovery Zone Economic Development Bonds (RZEDBs), are also unlike other tax credit bonds in that the interest rate on the bonds is a rate agreed to by the issuer and bond investor. In contrast, the Treasury Secretary sets the credit rate for the other TCBs based on current market conditions. In short, with BABs and RZEDBs, the two parties in the transaction establish the tax credit rate, not the Treasury Secretary. The resulting tax credit amount is equal to 35% of the interest payment for BABs and 45% for RZEDBs.

Each TCB (with the exception of BABs) is designated for a specific purpose or type of project. 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. MWDB proceeds are for the refinancing of outstanding government debt in regions affected by the Midwestern storms and floods in the spring and summer of 2008. QFCBs are intended to help
non-profits or government entities purchase and conserve forest land. QECBs are for investment in capital projects that improve energy conservation. QSCBs are for school construction, BABs are for any governmental purpose, and RZEDBs are for economic development purposes. This report will rely on acronyms to reference the numerous tax credit bonds. Table 2 summarizes the acronyms for the bonds examined in this report.

### Table 2. Tax Credit Bond Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Type of Bond</th>
</tr>
</thead>
<tbody>
<tr>
<td>BABs</td>
<td>Build America Bonds</td>
</tr>
<tr>
<td>CREBs</td>
<td>Clean Renewable Energy Bonds</td>
</tr>
<tr>
<td>MWDBs</td>
<td>Midwestern Disaster Bonds</td>
</tr>
<tr>
<td>QECBs</td>
<td>Qualified Energy Conservation Bonds</td>
</tr>
<tr>
<td>QFCBs</td>
<td>Qualified Forestry Conservation Bonds</td>
</tr>
<tr>
<td>QZABs</td>
<td>Qualified Zone Academy Bonds</td>
</tr>
<tr>
<td>RZEDBs</td>
<td>Recovery Zone Economic Development Bonds</td>
</tr>
<tr>
<td>TCBs</td>
<td>Tax Credit Bonds</td>
</tr>
</tbody>
</table>

The Details of Tax Credit Bonds

TCBs generally allow the bondholder to claim a tax credit equal to a specified credit rate as determined by the Secretary of the Treasury.\(^5\) 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 costs to the issuer. The government entity selling the bond is obligated to repay only the principal of the bond. The federal government effectively makes “payments” to the bondholder through the tax credits. The tax credits delivered through the bonds are unlike typical tax credits because the credit is included in taxable income as if it were interest income. The tax credit bond rate is set with the intent of compensating for the taxability. Title 26, Section 54A of the U.S. Code outlines the general structure of TCBs. Title 26, Section 54AA outlines the rules for BABs. Both structures are discussed below.

The Mechanics of TCBs

The method for determining the credit is generally the same for all TCBs.\(^6\) Since July 1999, the Secretary of the Treasury has established a national credit rate that is generally intended to allow issuers of TCBs to sell their bonds at par (face value) without additional interest expense. The rate calculation is

\[ \text{Rate} = \frac{\text{Yield of outstanding bonds}}{\text{Investment selection}} \]

\(^5\) BABs and RZEDBs are the exception.

\(^6\) See 26 U.S.C. 54A(b).
grade rating between A and BBB for bonds of a similar maturity for the business day immediately preceding the sale date of the tax credit bonds.\textsuperscript{7}

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 for QZABs was 7.92% on March 16, 2009 (the term is 15 years).\textsuperscript{8} The bonds sold on that day would allow the taxpayer to claim a federal tax credit equal to 7.92% multiplied by the face value of the bond. Thus, a $100,000 bond issued on February 25, 2009, would yield an annual tax credit of $7,920 for the bondholder, or $1,980 per quarter 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.\textsuperscript{9} The credit is limited to the bondholder’s current tax liability; it is “non-refundable.”

The credit is reduced for some TCBs. QSCBs and QECBs allow for a credit equal to 70% of the full credit described above. Thus, for these bonds, the investor receives 70% of the annual tax credit described above or $5,544 ($1,386 per quarter). In contrast, BAB and RZEDB credits are 35% and 45%, respectively, of a market-determined taxable bond interest rate for the specific issuer. Unlike all other TCBs, issuers of BABs and RZEDBs may elect to receive the credit in lieu of the investor receiving the tax credit.

**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 noted earlier. 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 4.89% interest rate on municipal debt. Investors in the 15% income tax bracket would need a credit rate of at least 5.75% (4.89% divided by (1 - 0.15) is 5.75%) to choose TCBs over municipal bonds. Investors in the 35% bracket would require a credit rate on TCBs of 7.52% (4.75% divided by (1 - 0.35) is 7.52%). Generally, the TCB credit rate would have to exceed the after-tax return on municipal bonds and the after-tax return on corporate bonds of like term to maturity, given an investor’s tax bracket.

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 TCBs (offering a 100% credit) and traditional tax-exempt municipal bonds depends on the bondholder’s tax rate. Bondholders in the highest tax bracket find the tax credit relatively less attractive than do bondholders in the lower brackets. However, the tax credit is fixed at the same rate for all buyers. For TCBs that offer a reduced credit rate, such as CREBs and QECBs, the issuer would augment the tax credit with an interest payment.

---

\textsuperscript{7} U.S. Department of the Treasury, Internal Revenue Service, Internal Revenue Bulletin 2009-6, February 9, 2009, p. 449.

\textsuperscript{8} Unlike other TCBs, CREBs have a range of possible maturities (term), but have the same credit rate as the other TCBs of like term.

\textsuperscript{9} 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.
Evaluating a Tax Credit Bond Investment

\[
\begin{align*}
t &= \text{income tax rate of bond holder} \\
r_{TCB} &= \text{pre-tax rate of TCB credit} \\
r_{mun} &= \text{prevailing interest rate on high grade tax-exempt municipal bonds} \\
r_{corp} &= \text{prevailing interest rate on corporate bonds}
\end{align*}
\]

Purchase a TCB if:

\[
r_{TCB} > \frac{r_{mun}}{(1-t)} \quad \text{or} \quad \frac{r_{TCB}}{r_{corp}}
\]

To attract investors, 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, “stripping” the tax credits from the bond and selling them to an entity with tax liability would be an option. This stripping technique is explained in the next section.

Tax Credit Bond Stripping

The credits on TCBs are “strippable,” or the credits can be separated from the underlying bond.\(^{10}\) Allowing the separation of the credit from the underlying bond improves the attractiveness and marketability of the TCBs to investors and financial intermediaries. Generally, a financial intermediary will buy the TCB, sell the principal to an investor looking for a longer term investment and sell the stream of credits to another investor seeking quarterly income. For example, assume a financial intermediary buys the $100,000 TCB presented above. The intermediary sells the right to the principal portion (the $100,000) of the TCB to a pension fund for $90,000 and sells the stream of credits ($1,980 every quarter for 15 years) to another investor for $90,000. The stripping provision makes TCBs more competitive with traditional bonds.

The Term of TCBs

The maximum term (the number of years for which the credit will be paid)

\[
\text{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.}\(^{11}\)
\]

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 TCBs issued on

\(^{10}\) 26 U.S.C. 54A(i).

\(^{11}\) 26 U.S.C. 54A(d)(5)(B). The term of TCBs 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.”
March 16, 2009, was set at 15 years. Midwest Disaster Bonds (MWDBs) have a maximum term of two years, and the interest rate would reflect the shorter term. The Treasury publishes the credit rate and term daily.

Allocation and Purpose of Tax Credit Bonds

The authority to issue TCBs is usually capped with a national limit or with a state-by-state cap. In addition, some of the TCBs include set asides for sub-state governments or other entities. What follows is a brief overview of how and to whom each bond program allocates the authority to issue the bonds.

Qualified Zone Academy Bonds

The limit for QZAB debt was $400 million annually from 1998 through 2008 and is $1.4 billion for 2009 and 2010. A limit is allocated to each state, the District of Columbia, and territory based upon their portion of the U.S. 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.

Individual public schools use QZABs, through their participating state and local governments, 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.” 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

\[
\text{such public school or program (as the case may be) is designed in cooperation with business to enhance the academic curriculum, increase graduation and employment rates, and prepare students for the rigors of college and the increasingly complex workforce.} \quad 12
\]

In addition, 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.

Qualified School Construction Bonds

These bonds have a national limit of $11 billion in each of 2009 and 2010. An additional $200 million in each of 2009 and 2010 is allocated to Indian schools. The bonds are allocated to states based on the state’s share of Title 1 Basic Grants (Section 1124 of the Elementary and Secondary Education Act of 1965; 20 U.S.C. 6333, BG). Because of the allocation scheme and the portion (40%) to be allocated to large local education agencies (LEAs), Hawaii and Puerto Rico are considered states and the District of Columbia an LEA. The possessions (American Samoa, Commonwealth of the Northern Mariana Islands, Guam, and U.S. Virgin Islands) are allocated an

\[12\] 26 U.S.C. 54E(d)(1)(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.
amount on the basis of the possession’s population with income below the poverty line as a portion of the entire U.S. population with income below the poverty line.

As noted above, 40% of the bond volume ($4.4 billion) is dedicated to large LEAs. A “large” LEA is defined as one of the 100 largest based on the number of “children aged 5 though 17 from families living below the poverty level.” Also, one of not more than an additional 25 LEAs can be chosen by the Secretary if the LEA is in particular need of assistance, based on a low level of resources for school construction, high level of enrollment growth, or such other factors as the Secretary deems appropriate.13

Each large LEA, as defined above, would receive an allocation based on the LEA’s share of the total Title I basic grants directed to large LEAs. The state allocation is reduced by the amount dedicated to any large LEAs in the state.

Clean Renewable Energy Bonds

As authorized by P.L. 109-58, the original CREBs, which can be issued through 2009, have a national limit of $1.2 billion of which a maximum of $750 million can be granted to governmental bodies. In addition to governmental bodies, cooperative electric companies and a “clean renewable energy bond lender” can issue the bonds. A clean renewable energy bond lender is defined in the tax code as

a lender which is a cooperative which is owned by, or has outstanding loans to, 100 or more electric companies and is in existence on February 1, 2002, and shall include any affiliated entity which is controlled by such lender.14

The CREB lender would lend to co-ops or governmental bodies. The Secretary of Treasury reviews applications and selects projects “as the Secretary deems appropriate.”15 Thus, CREBs are not allocated by formula and there are no state minimums. The Internal Revenue Service, through IRS Notice 2005-98, described the allocation strategy of the Secretary.16 The smallest dollar amount projects are considered first and the allocations continue for ever larger dollar amount projects until the entire allocation is consumed.

The term and credit rate for CREBs are determined in the same manner as the other TCBs. These original CREBs offer a 100% credit.

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.

New Clean Renewable Energy Bonds

As authorized in P.L. 110-343, the new CREBs have a national limit of $2.4 billion to be issued before December 31, 2009. In contrast to the original CREBs, as noted in Table 1, the credit rate on new CREBs is 70% of the credit rate offered on the original CREBs. Not more than one-third of new CREBs may be allocated to any of the following: (1) public power providers, (2) governmental bodies, or (3) projects of cooperative electric companies. For public power providers, the Secretary determines the qualified projects which “are appropriate for receiving an allocation.” Each will receive a share of the allocation based on the ratio of the projected cost of the project relative to all other qualified projects receiving an allocation. Governmental bodies and co-ops receive an allocation in an amount the “Secretary determines appropriate.” As with original CREBs, there is not a state-by-state minimum or formula allocation mechanism.

Qualified Energy Conservation Bonds

QECBs were first created under P.L. 110-343 with a national limit of $800 million. The program was expanded with an additional $2.4 billion under P.L. 111-5 for a total available authority of $3.2 billion. Similar to the new CREBs, these tax credit bonds offer a credit rate that is 70% of the credit rate offered on old CREBs and other TCBs. The authority to allocate QECBs does not expire.

QECBs are allocated to states based on the state’s share of total U.S. population. The District of Columbia and the possessions of the U.S. are considered states for QECBs. Large local governments, defined as any municipality or county with population of greater than 100,000, are eligible for a direct allocation. Counties that contain a large city can be eligible if its population less the large city population is still greater than 100,000.

These bonds are to be used for capital expenditures for the purposes of (1) reducing energy consumption in publicly owned buildings by at least 20%; (2) implementing green community programs; (3) rural development involving the production of electricity from renewable energy resources; or (4) programs listed above for CREBs. Also included are expenditures on research facilities and research grants, to support research in (1) development of cellulosic ethanol or other nonfossil fuels; (2) technologies for the capture and sequestration of carbon dioxide produced through the use of fossil fuels; (3) increasing the efficiency of existing technologies for producing nonfossil fuels; (4) automobile battery technologies and other technologies to reduce fossil fuel consumption in transportation; and (5) technologies to reduce energy use in buildings. Energy saving mass commuting facilities and demonstration projects are also included in the list of qualified purposes.

Forestry Conservation Bonds

QFCBs are limited to $500 million to be allocated before May 22, 2010 (24 months after enactment of P.L. 110-246), in a manner “... as the Secretary determines appropriate.” Once the bonds are issued, the proceeds must be spent within three years. A unique feature of QFCBs is the

---

allowance for an allocation amount to be used to offset any taxes due the federal government. Any allocation amount used to settle outstanding federal tax debts cannot be used for bond issuance. A qualified issuer is a “State or any political subdivision or instrumentality thereof or a 501(c)(3) organization.”

For purposes of the QFCB program, a qualified forestry conservation purpose must meet the following criteria:

1. Some portion of the land acquired must be adjacent to United States Forest Service Land.
2. At least half of the land acquired must be transferred to the United States Forest Service at no net cost to the United States and not more than half of the land acquired may either remain with or be conveyed to a State.
3. All of the land must be subject to a native fish habitat conservation plan approved by the United States Fish and Wildlife Service.
4. The amount of acreage acquired must be at least 40,000 acres.

**Midwest Disaster Bonds**

MWDBs are designated for areas impacted by the severe storms and flooding in the Midwest that occurred between May 1, 2008, and August 1, 2008. Each affected area can issue an amount based on the population of the affected area. States with over 2 million affected residents are authorized to issue up to $100 million and those with less than 2 million and more than 1 million can issue $50 million. States with an affected population under 1 million are not eligible to issue MWDBs. Based on IRS guidance, Illinois, Missouri, and Nebraska can issue up to $50 million each. Indiana, Iowa, and Wisconsin can issue up to $100 million. These bonds can be issued in calendar year 2009 only and unlike the other TCBs, have a maximum term of two years. The credit rate on the bonds would reflect the relatively short term of the bonds.

The bonds are intended for states to use to help those sub-state jurisdictions which are under fiscal stress. Specifically, the proceeds from MWDBs are to be used to pay the principal and interest on any outstanding state bonds or the bonds of any affected political subdivision within the state. The proceeds can also be loaned to a jurisdiction for the same purpose. The provision requires the issuer to issue an equal amount of general obligations for the same purpose, akin to a matching requirement.

**Build America Bonds**

BABs are not as targeted in their designation as other TCBs. The volume of BABs is not limited and the purpose is constrained only by the requirement that “the interest on such obligation would (but for this section) be excludible from gross income under section 103.” Thus, BABs can be issued for any purpose that would have been eligible for traditional tax-exempt bond financing.

---

21 26 U.S.C. 54B(e).
other than private activity bonds. The bonds must be issued before January 1, 2011. Because BABs are an a unique type of TCBs, additional analysis follows below.

**BAB Mechanics**

Unlike the other TCBs, the BAB credit amount is 35% of the interest rate established between the buyer and issuer of the bond, not the Secretary of Treasury. The issuer and investor agree on terms either as a result of a competitive bid process or through a negotiated sale. For example, if the negotiated taxable interest rate is 8%, on $10,000 of bond principal, then the credit is $280 (8% times $10,000 times 35%). The issuer has the option of keeping the credit or allowing the buyer to claim the credit. If the issuer keeps the credit, the after-credit interest rate paid by the issuer is 5.2%. In this specific case, which party receives the credit would not change the subsidy to the issuer. For example, if the investor is the credit recipient, and is in the 35% tax bracket, then the interest cost to the issuer would be the same. The issuer would pay $520 in interest and the buyer would claim the taxable credit of $280. Thus, the after-tax return would be equivalent because the credit just covers the taxes generated by the bond.

As long as the marginal tax rate that clears the municipal bond market is lower than the credit rate on BABs of 35%, then municipal issuers would likely choose the BAB option. However, if the market clearing marginal tax rate rises, the alternative to BABs, traditional tax-exempt bonds, would be more attractive to issuers and investors alike. Increases in statutory marginal tax rates would likely induce such an outcome, reducing the attractiveness of BABs relative to traditional tax-exempt bonds.

**BABs: The New Taxable Bond Option**

The BAB, in cases where the issuer keeps the credit, is modeled after the “taxable bond option,” which was first considered in the late 1960s. In 1976, the following was posited by the then President of the Federal Reserve Bank in Boston, Frank E. Morris:

> The taxable bond option is a tool to improve the efficiency of our financial markets and, at the same time, to reduce substantially the element of inequity in our income tax system which stems from tax exemption [on municipal bonds]. It will reduce the interest costs on municipal borrowings, but the benefits will accrue proportionally as much to cities with strong credit ratings as to those with serious financial problems.

It is unclear how the taxable bond option will be received by issuers and investors in today’s market environment. Both parties may be unwilling to use an untested, non-traditional method to finance government activities. In addition, the relatively short window for issuers to sell BABs, which expires after 2010, may limit investor interest. The prospects for congressional action that would enhance the traditional tax-exempt bond market, such as federal guarantee of municipal debt or higher marginal rates, may further diminish the relative attractiveness of BABs.

---

24 Note that if the credit is claimed by the issuer, the transfer to the issuer is an outlay of the federal government, not a tax credit.

Recovery Zone Economic Development Bonds

RZEDBs are a special type of BAB. Instead of the 35% credit, RZEDBs offer a 45% credit and are targeted to economically distressed areas. Specifically, these bonds are for any area designated by the issuer (1) as having significant poverty, unemployment, rate of home foreclosures, or general distress; (2) economically distressed by reason of the closure or realignment of a military installation pursuant to the Defense Base Closure and Realignment Act of 1990; or is (3) an empowerment zone or renewal community. The purpose of the bonds is, as the name implies, economic development. Specifically, the bonds are to be used for:

1. Capital expenditures paid or incurred with respect to property located in such zone [recovery zone],
2. Expenditures for public infrastructure and construction of public facilities, and
3. Expenditures for job training and educational programs.

The volume limit for RZEDBs is $10 billion to be allocated to states (including DC and Puerto Rico) based on the state’s employment decline in 2008. All states that experienced an employment decline in 2008 receive an allocation that bares the same ratio as the state’s share of the total employment decline in those states. However, all states, regardless of employment changes, are guaranteed a minimum of 0.90% of the $10 billion.

Large municipalities and counties are also guaranteed a share of the state allocations based on the jurisdiction’s share of the aggregate employment decline in the state. A large jurisdiction is defined as one with a population of greater than 100,000. For counties with large municipalities receiving an allocation, the county population is reduced by the municipal population for purposes of the 100,000 threshold.

State-by-State Allocation of Selected TCBs

The recently enacted American Recovery and Reinvestment Act of 2009 (P.L. 111-5) included new TCBs and expanded existing TCBs. As noted earlier, some of the new TCBs in addition to existing TCBs include state-by-state allocations. Table 2 below provides state-by-state allocations as determined by IRS for QZABs, QSCBs, and QECBs. For RZEDBs, preliminary estimates of how much will be allocated to each state is provided in lieu of official IRS guidance. The Treasury will soon issue guidance that provides the actual amount to be allocated. A brief review of the allocation mechanism and the data used to produce the estimates follows below.

QZABs are allocated to each state based upon their portion of the U.S. population below the poverty line. QSCBs are allocated to states based on each state’s share of Title 1 Basic Grants (Section 1124 of the Elementary and Secondary Education Act of 1965; 20 U.S.C. 6333). The law stipulated that $11 billion be allocated for 2009 and $11 billion in 2010. Table 3 reports the allocation for just 2009. The 2010 allocation will likely be similar. The allocations for the 100 LEAs with the greatest number of children ages 5 to 17 living in families with incomes below the poverty line are included in Table 3. In addition, as noted earlier, the Secretary of Education could have chosen an additional 25 LEAs for a direct allocation in 2009, but did not. The

---

Secretary may exercise that option in 2010. Of the $22 billion (for both 2009 and 2010), 40% will go to LEAs based on their respective (of the other large LEAs) share of Title I Basic Grants (BG). A state with a large LEA receiving a direct allocation has its allocation reduced by the amount of the LEA’s allocation.

### Table 3. State-by-State Allocation of Tax Credit Bond Authority

(in $ millions)

<table>
<thead>
<tr>
<th>State</th>
<th>QZABs&lt;sup&gt;a&lt;/sup&gt;</th>
<th>QECBs&lt;sup&gt;c&lt;/sup&gt;</th>
<th>RZEDBs&lt;sup&gt;d&lt;/sup&gt;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>1,400.0</td>
<td>3,200.0</td>
<td>10,000.0</td>
<td>25,600.0</td>
</tr>
<tr>
<td>Alabama</td>
<td>26.6</td>
<td>48.4</td>
<td>170.5</td>
<td>214.0</td>
</tr>
<tr>
<td>Alaska</td>
<td>2.1</td>
<td>7.1</td>
<td>90.0</td>
<td>129.0</td>
</tr>
<tr>
<td>Arizona</td>
<td>30.9</td>
<td>67.4</td>
<td>376.8</td>
<td>414.9</td>
</tr>
<tr>
<td>Arkansas</td>
<td>17.2</td>
<td>29.6</td>
<td>90.0</td>
<td>250.3</td>
</tr>
<tr>
<td>California</td>
<td>155.3</td>
<td>381.3</td>
<td>1,247.1</td>
<td>1,973.6</td>
</tr>
<tr>
<td>Colorado</td>
<td>19.9</td>
<td>51.2</td>
<td>104.3</td>
<td>266.6</td>
</tr>
<tr>
<td>Connecticut</td>
<td>9.4</td>
<td>36.3</td>
<td>104.0</td>
<td>254.9</td>
</tr>
<tr>
<td>Delaware</td>
<td>3.1</td>
<td>9.1</td>
<td>90.0</td>
<td>122.9</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>3.2</td>
<td>6.1</td>
<td>90.0</td>
<td>133.3</td>
</tr>
<tr>
<td>Florida</td>
<td>75.6</td>
<td>100.5</td>
<td>241.8</td>
<td>425.8</td>
</tr>
<tr>
<td>Georgia</td>
<td>46.4</td>
<td>145.2</td>
<td>362.7</td>
<td>554.2</td>
</tr>
<tr>
<td>Hawaii</td>
<td>3.5</td>
<td>13.4</td>
<td>90.0</td>
<td>136.9</td>
</tr>
<tr>
<td>Idaho</td>
<td>6.2</td>
<td>15.8</td>
<td>90.0</td>
<td>149.7</td>
</tr>
<tr>
<td>Illinois</td>
<td>52.4</td>
<td>133.8</td>
<td>374.0</td>
<td>660.2</td>
</tr>
<tr>
<td>Indiana</td>
<td>26.6</td>
<td>66.2</td>
<td>241.8</td>
<td>334.6</td>
</tr>
<tr>
<td>Iowa</td>
<td>11.1</td>
<td>31.2</td>
<td>90.0</td>
<td>152.3</td>
</tr>
<tr>
<td>Kansas</td>
<td>10.5</td>
<td>29.1</td>
<td>90.0</td>
<td>229.6</td>
</tr>
<tr>
<td>Kentucky</td>
<td>25.0</td>
<td>44.3</td>
<td>140.2</td>
<td>199.5</td>
</tr>
<tr>
<td>Louisiana</td>
<td>27.1</td>
<td>45.8</td>
<td>90.0</td>
<td>162.9</td>
</tr>
<tr>
<td>Maine</td>
<td>5.4</td>
<td>13.7</td>
<td>90.0</td>
<td>129.1</td>
</tr>
<tr>
<td>Maryland</td>
<td>15.9</td>
<td>58.4</td>
<td>138.8</td>
<td>203.1</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>21.8</td>
<td>67.4</td>
<td>179.1</td>
<td>268.3</td>
</tr>
<tr>
<td>Michigan</td>
<td>48.2</td>
<td>103.8</td>
<td>546.5</td>
<td>708.5</td>
</tr>
<tr>
<td>Minnesota</td>
<td>16.9</td>
<td>42.4</td>
<td>152.7</td>
<td>111.1</td>
</tr>
<tr>
<td>Mississippi</td>
<td>20.4</td>
<td>46.0</td>
<td>199.6</td>
<td>266.0</td>
</tr>
<tr>
<td>Missouri</td>
<td>26.0</td>
<td>61.3</td>
<td>99.6</td>
<td>187.9</td>
</tr>
<tr>
<td>Montana</td>
<td>4.6</td>
<td>10.0</td>
<td>90.0</td>
<td>104.6</td>
</tr>
<tr>
<td>Nebraska</td>
<td>6.8</td>
<td>18.5</td>
<td>90.0</td>
<td>115.3</td>
</tr>
<tr>
<td>Nevada</td>
<td>9.5</td>
<td>27.0</td>
<td>157.3</td>
<td>193.8</td>
</tr>
</tbody>
</table>
### Table

<table>
<thead>
<tr>
<th>State</th>
<th>QZABs&lt;sup&gt;a&lt;/sup&gt;</th>
<th>State Share</th>
<th>LEA Share&lt;sup&gt;e&lt;/sup&gt;</th>
<th>QECBs&lt;sup&gt;c&lt;/sup&gt;</th>
<th>RZEDBs&lt;sup&gt;d&lt;/sup&gt;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Hampshire</td>
<td>3.2</td>
<td>29.8</td>
<td>-</td>
<td>13.7</td>
<td>90.0</td>
<td>136.6</td>
</tr>
<tr>
<td>New Jersey</td>
<td>25.5</td>
<td>223.3</td>
<td>27.3</td>
<td>90.1</td>
<td>235.7</td>
<td>601.9</td>
</tr>
<tr>
<td>New Mexico</td>
<td>12.2</td>
<td>64.6</td>
<td>22.0</td>
<td>20.6</td>
<td>90.0</td>
<td>209.4</td>
</tr>
<tr>
<td>New York</td>
<td>90.0</td>
<td>192.0</td>
<td>763.8</td>
<td>202.2</td>
<td>262.0</td>
<td>1,510.1</td>
</tr>
<tr>
<td>North Carolina</td>
<td>44.1</td>
<td>187.2</td>
<td>88.6</td>
<td>95.7</td>
<td>351.7</td>
<td>767.2</td>
</tr>
<tr>
<td>North Dakota</td>
<td>2.6</td>
<td>25.7</td>
<td>-</td>
<td>6.7</td>
<td>90.0</td>
<td>125.0</td>
</tr>
<tr>
<td>Ohio</td>
<td>51.3</td>
<td>267.1</td>
<td>151.7</td>
<td>119.2</td>
<td>394.2</td>
<td>983.4</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>19.5</td>
<td>87.0</td>
<td>32.2</td>
<td>37.8</td>
<td>90.0</td>
<td>266.5</td>
</tr>
<tr>
<td>Oregon</td>
<td>16.6</td>
<td>112.9</td>
<td>-</td>
<td>39.3</td>
<td>151.7</td>
<td>320.5</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>48.8</td>
<td>315.7</td>
<td>146.9</td>
<td>129.1</td>
<td>190.9</td>
<td>831.5</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>4.3</td>
<td>22.1</td>
<td>22.3</td>
<td>10.9</td>
<td>90.0</td>
<td>149.6</td>
</tr>
<tr>
<td>South Carolina</td>
<td>22.5</td>
<td>131.4</td>
<td>28.6</td>
<td>46.5</td>
<td>187.8</td>
<td>416.7</td>
</tr>
<tr>
<td>South Dakota</td>
<td>3.5</td>
<td>29.8</td>
<td>-</td>
<td>8.3</td>
<td>90.0</td>
<td>131.7</td>
</tr>
<tr>
<td>Tennessee</td>
<td>33.4</td>
<td>121.7</td>
<td>62.9</td>
<td>64.5</td>
<td>229.2</td>
<td>511.7</td>
</tr>
<tr>
<td>Texas</td>
<td>132.8</td>
<td>538.6</td>
<td>465.9</td>
<td>252.4</td>
<td>90.0</td>
<td>1,479.7</td>
</tr>
<tr>
<td>Utah</td>
<td>8.8</td>
<td>51.0</td>
<td>-</td>
<td>28.4</td>
<td>90.0</td>
<td>178.1</td>
</tr>
<tr>
<td>Vermont</td>
<td>2.1</td>
<td>24.8</td>
<td>-</td>
<td>6.4</td>
<td>90.0</td>
<td>123.4</td>
</tr>
<tr>
<td>Virginia</td>
<td>26.0</td>
<td>191.1</td>
<td>-</td>
<td>80.6</td>
<td>179.1</td>
<td>476.9</td>
</tr>
<tr>
<td>Washington</td>
<td>25.4</td>
<td>164.1</td>
<td>-</td>
<td>67.9</td>
<td>122.8</td>
<td>380.3</td>
</tr>
<tr>
<td>West Virginia</td>
<td>10.4</td>
<td>78.2</td>
<td>-</td>
<td>18.8</td>
<td>90.0</td>
<td>197.5</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>20.6</td>
<td>98.6</td>
<td>72.1</td>
<td>58.4</td>
<td>168.1</td>
<td>417.8</td>
</tr>
<tr>
<td>Wyoming</td>
<td>1.5</td>
<td>24.1</td>
<td>-</td>
<td>5.5</td>
<td>90.0</td>
<td>121.1</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>61.8</td>
<td>-</td>
<td>376.1</td>
<td>41.0</td>
<td>-</td>
<td>478.8</td>
</tr>
<tr>
<td>American Samoa</td>
<td>1.4</td>
<td>10.7</td>
<td>-</td>
<td>0.7</td>
<td>-</td>
<td>12.8</td>
</tr>
<tr>
<td>CNMI</td>
<td>1.4</td>
<td>11.0</td>
<td>-</td>
<td>0.9</td>
<td>-</td>
<td>13.3</td>
</tr>
<tr>
<td>Guam</td>
<td>1.4</td>
<td>10.7</td>
<td>-</td>
<td>1.8</td>
<td>-</td>
<td>13.9</td>
</tr>
<tr>
<td>USVI</td>
<td>1.3</td>
<td>10.0</td>
<td>-</td>
<td>1.1</td>
<td>-</td>
<td>12.4</td>
</tr>
</tbody>
</table>

### Sources:

b. Data for 2009 are from IRS Notice 2009-35. The 100 LEAs are included in the IRS Notice.
c. Data are from IRS Notice 2009-29.
d. CRS estimate for RZEDBs for both 2009 and 2010 are based on employment data that are available at http://stats.bls.gov/news.release/laus.t06.htm.
e. As explained in the body of the report, some states have one or more large local education agency (LEAs) that are eligible a direct allocation of bond authority.

QECBs are allocated to states based on each state’s share of total population and large jurisdictions; those with over 100,000 are eligible to receive a direct allocation. The most recent
estimated population data by state is for 2008. As previously noted, for a city that receives an allocation, the host county can also receive an allocation if the county population less the city population still exceeds 100,000.

The estimated $10 billion of RZEDBs are allocated based on each state’s share of the total decline in employment in 2008. For states that did not experience an employment decline or a relatively small decline, a minimum of 0.9% ($90 million) is guaranteed. Large jurisdictions, counties and municipalities with population of greater than 100,000, are eligible for a share of the state allocation based on its relative employment decline.

Author Contact Information

Steven Maguire
Specialist in Public Finance
smaguire@crs.loc.gov, 7-7841

29 The population data are from U.S. Census Bureau, Table 1: Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April, 2000 to July 1, 2008 (NST-EST2008-01), December 22, 2008.
30 The employment data are available at http://stats.bls.gov/news.release/laus.t06.htm.