

# Qualified Zone Academy Bond Tax Credit Usage in 2005

by Thornton Matheson

The Qualified Zone Academy Bond (QZAB) program was established in 1998 in order to promote public school rehabilitation and public-private partnership in education in areas with constrained public resources. In contrast to existing Federal subsidies for State and local debt issuance, which exempt subnational government bond interest from Federal income taxation, the QZAB program is structured as a tax credit bond: Instead of yielding cash coupons exempt from Federal income tax, QZABs entitle investors to Federal income tax credits. The QZAB program was the prototype for six additional tax credit bond programs: Clean Renewable Energy Bonds (CREBs) and Gulf Opportunity Zone bonds, authorized in 2005; Qualified Forestry Conservation Bonds and Qualified Energy Conservation Bonds, authorized in 2008, and Qualified School Construction Bonds and Build America Bonds, authorized in 2009.<sup>1</sup>

This article, which evaluates data from Form 8860, Qualified Zone Academy Bond Credit, filed by financial institutions in Tax Year 2005, updates some of the 2004 Form 8860 data presented in Matheson (2007). Its goal is to provide a description of QZAB issuance and investment activity that will be of use in evaluating the performance of the QZAB program and other tax credit bond programs.

## The QZAB Program

The Qualified Zone Academy Bond (QZAB) program was established by the Taxpayer Relief Act of 1997 to promote investment in primary and secondary public education in areas with scarce public resources. The program has authorized the issuance in each year from 1998 through 2009 of \$400 million in principal amount of tax credit bonds by the United States and its territories.

In contrast to tax-exempt bonds, whose interest is exempt from Federal income taxation, tax credit bonds pay “interest” in the form of Federal income tax credits. Investors in QZABs include the amount

of the tax credit in their taxable incomes and deduct the same amount from their income tax liabilities. Their income tax is thus reduced by the amount of the credit multiplied by one minus their marginal tax rate, so that the after-tax yield on a tax credit bond is identical to that of a taxable bond.

Investment in QZABs is restricted to qualified financial institutions, including banks, insurance companies, and corporations actively engaged in the business of lending money. In addition to their value as tax credits, QZABs are also used to meet depository institutions’ obligations to serve low-income areas under the Community Reinvestment Act of 1977.

Maximum QZAB maturities and credit rates are set daily by the Treasury Department and published on the Bureau of Public Debt’s Web site.<sup>2</sup> The maximum QZAB maturity is set to equate the present value of total principal repayment with one-half of bond principal, with the applicable discount rate equal to the current long-term adjusted applicable Federal rate (AAFR). The QZAB credit rate is currently based on market single-A and triple-B corporate bond interest rates.<sup>3</sup>

The \$400 million in annual QZAB credits are allocated among the United States and territories according to the percentage of the total U.S. population in poverty living in that State or territory. Unused QZAB allocations could originally be carried forward by issuers for 3 years; this carryover period was shortened to 2 years for bonds issued after 1999.

QZAB credits may be used to offset both corporate income tax and corporate alternative minimum tax (AMT) liability. QZABs are legally transferable, so that a financial institution anticipating having insufficient taxable income to benefit from a tax credit can sell them. Alternatively, unused QZAB tax credits may be carried forward (but not backward) by investors for 1 year without interest.

There have been several legislative changes in the QZAB program since its inception. Initially authorized to run for 2 years, 1998 and 1999, the program has since been extended every 2 years through 2007. Delayed reauthorization in 2004 and 2006 resulted in retroactive QZAB allocations for those 2 years, such that allocations from those years could

*Thornton Matheson is a financial economist with the Treasury Department’s Office of Tax Analysis.*

<sup>1</sup> Different categories of tax-credit bonds vary in terms of the allowable tax credit rate, maturity, and other features.

<sup>2</sup> See <https://www.treasurydirect.gov/SZ/SPESQZABRate>.

<sup>3</sup> Until 1999, the QZAB credit rate was based on 110 percent of the long-term applicable Federal rate. From 1999 and to 2009, the credit rate will be based on market double-A corporate bond interest rates.

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only be issued in subsequent years due to the carryover provision. The Tax Relief and Health Care Act of 2006 subjected QZABs to the same arbitrage regulations as tax-exempt bonds and required issuers to file Form 8038 information returns.

For a more complete description of the QZAB program and Federal tax credit bonds in general, see Matheson (2007), Zimmerman (2004), and Davie (1998).

### Data Analysis

Figure A presents summary data from all Forms 8860 filed by firms in the 2005 Corporate Database, a stratified sample of the universe of corporate filers. A total of 123 financial institutions included in the 2005 Corporate Database filed Form 8860, up from 115 in the 2004 Corporate Database. Total QZAB tax credit claims rose from \$117 million in 2004 to \$135 million in 2005. The total QZAB principal underlying these credits was roughly \$2.1 billion, or 65 percent of the \$3.2 billion in QZAB principal authorized to have been issued through 2005.

All but three of the financial institutions that filed Form 8860 had either more than \$50 million in total assets or more than \$10 million in net income, and were therefore sampled in the Corporate Database with a probability of one.<sup>4</sup> The remaining three firms had assets of at least \$24 million and were therefore sampled with a probability of at least 0.27. By contrast, in Tax Year 2004, all Form 8860 filers in the Corporate Database were sampled with a probability

of one. In 2005, the lower bound for certain inclusion in the sample was raised from \$10 million in total assets to \$50 million in total assets, so that some QZAB investors with less than \$50 million in assets may have dropped out of the sample. Nonetheless, since most Form 8860 filers were still sampled with a probability of one, the 2005 data drawn likely represent nearly all QZAB tax credit claims for that year.

The 123 Form 8860 filers represented in the 2005 Corporate Database held at least 786 individual QZAB issues. Some firms did not provide detail on their specific QZAB holdings: \$134.5 million in QZAB credits were associated with detailed information, whereas a total of \$135 million in credits was claimed.<sup>5</sup> Where no detail was provided, filers were assumed to hold a single QZAB issue. The difference between the total credits owned and the total credits claimed, or \$74,000, indicates the amount of QZAB credits that exceeded taxable income.

As in 2004, QZAB holdings were highly concentrated among the largest financial institutions: Whereas most financial institutions with less than \$500 million in assets held a single QZAB issue, the eight financial institutions with more than \$100 billion in assets held an average of 65 QZAB issues. In terms of value, the former group claimed an average of \$621,000 in QZAB credits each, while the latter claimed an average of \$13.7 million each.

Figure B shows financial information on 2005 Form 8860 filers drawn from their Forms 1120, broken out by firm asset size. As in 2004, QZAB credits

**Figure A**

### QZAB Holdings Data from 2005 Form 8860, by Financial Institution Asset Class

[Money amounts in thousands of dollars]

| Item                             | All 2005 Form 8860 Filers | Less than \$100 million | \$100 million under \$500 million | \$500 million under \$1 billion | \$1 billion under \$10 billion | \$10 billion under \$100 billion | More than \$100 billion |
|----------------------------------|---------------------------|-------------------------|-----------------------------------|---------------------------------|--------------------------------|----------------------------------|-------------------------|
|                                  | (1)                       | (2)                     | (3)                               | (4)                             | (5)                            | (6)                              | (7)                     |
| <b>Number of corporations</b>    | <b>123</b>                | <b>14</b>               | <b>37</b>                         | <b>15</b>                       | <b>31</b>                      | <b>18</b>                        | <b>8</b>                |
| Total QZAB issues                | 786                       | 19                      | 48                                | 43                              | 73                             | 87                               | 516                     |
| Total QZAB principal             | 2,055,970                 | 7,156                   | 24,492                            | 36,430                          | 107,586                        | 197,389                          | 1,682,917               |
| Total QZAB credits - 8860 part 1 | 134,521                   | 466                     | 1,590                             | 2,270                           | 7,391                          | 13,546                           | 109,257                 |
| Total QZAB credits - 8860 line 3 | 135,031                   | 524                     | 1,670                             | 2,270                           | 7,523                          | 13,587                           | 109,457                 |
| Total QZAB credits - 8860 line 9 | 134,957                   | 507                     | 1,670                             | 2,270                           | 7,467                          | 13,587                           | 109,457                 |

<sup>4</sup> Some 103 of Form 8860 filers filed consolidated 1120 returns; six filed nonconsolidated returns. Fourteen filers were mutual savings banks or insurance companies.

<sup>5</sup> The total of itemized QZAB credits is taken from Form 8860, Part 1, whereas the total of nonitemized QZAB credits is taken from Form 8860, line 3. The total QZAB credits claimed is taken from Form 8860, line 9; this amount is also entered on Form 1120, Schedule J, line 6f.

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**Figure B**

## Selected Form 1120 Data for Form 8860 Filers, 2005

[Money amounts in thousands of dollars]

| Item                            | All 2005 Form 8860 filers | Less than \$100 million | \$100 million under \$500 million | \$500 million under \$1 billion | \$1 billion under \$10 billion | \$10 billion under \$100 billion | More than \$100 billion |
|---------------------------------|---------------------------|-------------------------|-----------------------------------|---------------------------------|--------------------------------|----------------------------------|-------------------------|
|                                 | (1)                       | (2)                     | (3)                               | (4)                             | (5)                            | (6)                              | (7)                     |
| <b>Number of corporations</b>   | <b>123</b>                | <b>14</b>               | <b>37</b>                         | <b>15</b>                       | <b>31</b>                      | <b>18</b>                        | <b>8</b>                |
| Total assets                    | 6,872,788,537             | 914,416                 | 9,850,063                         | 10,735,695                      | 112,228,113                    | 763,150,950                      | 5,975,909,300           |
| Total receipts                  | 430,057,114               | 153,687                 | 610,916                           | 656,269                         | 7,331,377                      | 62,707,533                       | 358,597,332             |
| Net income                      | 63,273,732                | 40,111                  | 118,207                           | 111,266                         | 1,714,229                      | 11,874,945                       | 49,414,975              |
| Total income subject to tax     | 59,380,487                | 34,808                  | 117,422                           | 108,036                         | 1,692,952                      | 11,683,962                       | 45,743,307              |
| Total income tax before credits | 20,780,087                | 12,004                  | 39,913                            | 36,808                          | 591,817                        | 4,089,387                        | 16,010,157              |
| AMT [1]                         | 141                       | 13                      | 129                               | 0                               | 0                              | 0                                | 0                       |
| Schedule J credits              | 4,380,899                 | 687                     | 2,019                             | 3,633                           | 22,879                         | 464,236                          | 3,887,445               |
| QZAB credits (line 9) [2]       | 134,957                   | 507                     | 1,670                             | 2,270                           | 7,467                          | 13,587                           | 109,457                 |
| General business credits        | 1,723,726                 | 8                       | 223                               | 1,217                           | 14,932                         | 207,899                          | 1,499,448               |
| Foreign tax credits             | 2,367,548                 | 0                       | 1                                 | 0                               | 16                             | 135,005                          | 2,232,526               |
| Total income tax after credits  | 16,430,743                | 11,330                  | 38,023                            | 33,175                          | 568,941                        | 3,640,216                        | 12,139,058              |

[1] Alternative Minimum Tax (AMT).

[2] Qualified Zone Academy Bond (QZAB).

constituted a much larger share of total Schedule J tax credits for smaller firms than for larger ones. For financial institutions with less than \$500 million in assets, QZABs accounted for more than 80 percent of all tax credits; conversely, for firms with more than \$10 billion in assets, QZAB credits accounted for less than 3 percent of total tax credits.

Figure C describes entry, exit, and holding variation among Form 8860 filers in 2004 and 2005. Some 14 firms filed in 2004 only, and 22 firms filed

in 2005 only; based on their asset and income size, almost all of these firms would have been captured with a probability of one in either year. Firms filing in 2004 only may have sold their QZAB position or had insufficient taxable income in 2005 to claim the credit in that year. Firms filing only in 2005 may have had insufficient taxable income in 2004 to file Form 8860 or may have been new investors in 2005. Of the 101 firms filing in both years, 59 claimed the same amount of credits in 2004 as 2005, indicating no change in their QZAB holdings. Some 24 firms decreased their QZAB credits by an average of \$300,000 each, while 18 firms increased their credits by an average of \$1.4 million each.

Figure D breaks out QZAB credits claimed in 2005 by the year of their issuance, where disclosed by the claimant. Data for Issuance Years 1998 and 1999 are consolidated to comply with confidentiality restrictions preventing the publication of data aggregated for fewer than three taxpayers. Of the total 786 QZAB issues for which credits were claimed in 2005, data on the year of issuance, credit rate, and credit were available for 776 issues. Comparing these 2005 data to the 2004 data reported in Matheson (2007), the total value of credits claimed in 2005 rose for QZABs issued in 1998-9 and 2002-2004, but fell for QZABs issued in 2000 and 2001. Specifically, between 2004 and 2005, the value of QZAB credits claimed rose from \$6.6 million to \$6.8 mil-

**Figure C**

## Corporations' Form 8860 Filing Status, 2004-2005

[Money amounts in thousands of dollars]

| Filing status                                | Number of corporations | Average 2005 QZAB credits |
|--|------------------------|---------------------------|
| Firms filing Form 8860 in 2004 and/or 2005   | 137                    | 937                       |
| Firms filing Form 8860 in 2004 only          | * 14                   | 0                         |
| Firms filing Form 8860 in 2005 only          | ** 22                  | 141                       |
| Firms filing Form 8860 in both 2004 and 2005 | 101                    | 1,383                     |
| Firms with no change in credits              | 59                     | 230                       |
| Firms with fewer credits in 2005             | 24                     | 1,254                     |
| Firms with greater credits in 2005           | 18                     | 5,604                     |

\*All sampled with probability of 1 in 2004; all but 1 would have been sampled with probability of 1 in 2005.

\*\*All but 1 sampled with probability of 1 in 2005; all would have been sampled with probability of 1 in 2004.

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**Figure D**

## QZAB Principal and Credits from 2005 Form 8860 by Year of Issue, 1998-2005

[Money amounts in thousands of dollars]

| item                                 | Total      | 1998-1999 | 2000      | 2001 [1]   | 2002       | 2003       | 2004       | 2005     |
|--------------------------------------|------------|-----------|-----------|------------|------------|------------|------------|----------|
|                                      | (1)        | (2)       | (3)       | (4)        | (5)        | (6)        | (7)        | (8)      |
| <b>Number of issues</b>              | <b>776</b> | <b>35</b> | <b>71</b> | <b>206</b> | <b>170</b> | <b>166</b> | <b>124</b> | <b>4</b> |
| Total principal                      | 2,048,128  | 99,791    | 272,534   | 717,199    | 306,733    | 351,825    | 297,454    | 2,592    |
| Total credits                        | 133,360    | 6,858     | 20,937    | 49,716     | 19,335     | 19,797     | 16,594     | 123      |
| Average credit rate (percentage) [2] | 6.35       | 6.95      | 7.67      | 7.00       | 6.31       | 5.58       | 5.50       | 5.59     |

[1] The amount of QZABs issued in 2001 exceed \$400 million due to the use of carryforwards.

[2] The average credit rate is an unweighted average of the credit rate per QZAB issue, calculated by summing the individual issue credit rates and dividing by the number of issues. Using the ratio of the chart data, Total Credits/Total Principal, produces a weighted average credit rate, weighted by principal size of issue.

NOTE: This figure excludes data for 10 bond issues in which sufficient data did not exist on year of issuance, credit rate, and credit.

lion for QZABs issued in 1998 and 1999 (aggregate); it fell from \$22.6 million to \$20.9 million for QZABs issued in 2000 and from \$51.7 million to \$49.7 million for QZABs issued in 2001. The value of credit claims for QZABs issued in 2002 rose sharply from \$17.6 million to \$49.7 million between 2004 and 2005, and, similarly, it rose from \$4.9 million to \$19.3 million for QZABs issued in 2003 and from \$59,000 to \$16.6 million for QZABs issued in 2004.

These data suggest that credits from QZABs issued in a particular year are likely to be utilized with a lag, since credits for many QZABs issued in 2002-2004 were apparently not claimed until 2005, although they would have been available to offset taxes in 2004. Since QZAB year of issue is not part of the tax credit calculation, it may not be reported with great accuracy. However, the patterns described by the 2004 and 2005 Form 8860 data are strong enough to suggest that QZAB issuance and credits are less than fully utilized.

### Conclusion

Like the 2004 Form 8860 data analyzed in Matheson (2007), the 2005 Form 8860 data suggest that QZAB issuance and tax credits are not fully utilized: Total QZAB principal reported in 2005 was roughly 65 percent of the total authorized to have been issued through that year, and QZAB credits claimed in 2005 for tax-credit bonds issued in 2002 and 2003 were

substantially higher than credits claimed for such bonds in 2004, although those bonds were presumably already outstanding. QZAB holdings are concentrated among very large financial institutions: 80 percent of credits are claimed by eight institutions with more than \$100 billion in assets. However, QZABs are a more important source of tax credits for financial institutions with less than \$500 million in assets, for whom they constitute more than 80 percent of tax credits. There appears to be a fair amount of entry and exit in the QZAB market, with more than half of investors increasing or decreasing their credit claims between 2004 and 2005.

### Sources

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