

A
CBO
REPORT

**A Comparison of Tax-Credit Bonds,
Other Special-Purpose Bonds, and Appropriations
in Financing Federal Transportation Programs**

June 2003

PREFACE

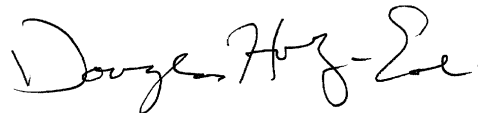
As the Congress considers legislation to reauthorize the federal highway and mass transit programs, policymakers and analysts have been seeking new sources of financing that do not require increasing taxes on motor fuels. One set of proposals involves issuing a special type of bonds whose proceeds would be earmarked for transit programs.

The Senate Committee on the Budget asked the Congressional Budget Office (CBO) to provide an economic analysis of three hypothetical but representative proposals and to describe their budgetary treatment. Under those proposals, the federal government would:

- Create a government-sponsored enterprise authorized to issue bonds on which “interest” was paid in the form of credits against federal income taxes;
- Issue special tax-credit bonds for transit programs; and
- Issue conventional bonds whose proceeds were earmarked for transit programs.

CBO’s analysis concludes that financing transit programs through the proposed bonds would generally be more expensive to the federal government than financing an equivalent amount through appropriations.

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As the Congress considers reauthorizing the Transportation Equity Act for the 21st Century (TEA-21), many supporters of federal highway and transit programs are seeking ways to provide additional financing for those programs without increasing taxes on gasoline and diesel fuel. The Senate Committee on the Budget has asked the Congressional Budget Office (CBO) to provide an economic analysis of three hypothetical proposals that would shift motor-fuel tax receipts away from the transit programs they currently fund to highway programs and that would finance those transit programs through different types of bonds.

Two of the proposals would authorize tax-credit bonds, which differ from conventional bonds in that their owners receive “interest” in the form of credits against their federal income tax liabilities. The third proposal would create a new category of special-purpose Treasury bond—on which interest would be paid in cash, not tax credits—whose proceeds would be earmarked for transit programs. Although those proposals would finance transit programs, CBO’s analysis would apply to any similarly constructed financing proposal using tax-credit or special-purpose bonds.¹

CBO concludes that financing transit spending through tax-credit and other special-purpose bonds would generally be more expensive to the federal government than financing an equivalent amount through appropriations would be. Investors would likely view the proposed bonds as more risky and less liquid than Treasury bonds and therefore would demand a higher return—making financing through the tax-credit or special-purpose bonds more costly than conventional financing. Even under the most favorable circumstances, those bond mechanisms would impose costs for issuance and administration that appropriations would not.²

Issuing bonds (that is, borrowing) to finance transit programs could shift the cost of those programs from the Highway Trust Fund to the general fund of the Treasury because the general fund would pay the interest or tax-credit costs.³ Even though the Highway Trust Fund is essentially an accounting mechanism that shows how much tax revenue is received from highway users and how much is spent on highways and mass transit, it influences spending on surface transportation programs. Reducing the amount of money in the trust fund that is designated for transit programs would probably result in more spending for highways.

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1. Tax-credit bonds are also being discussed as a way to finance investments in railroad infrastructure. Bills introduced in the 107th Congress would have authorized such bonds for Amtrak and other rail ventures. For an analysis of one of those bills, see Congressional Budget Office, *A Financial Analysis of H.R. 2329, The High-Speed Rail Investment Act of 2001* (September 2001).
 2. The federal government’s existing mechanisms for disbursing appropriations and issuing Treasury bonds to finance them would not incur additional costs.
 3. That shift would happen unless the law authorizing the bonds required the Highway Trust Fund to cover the interest or tax-credit costs.

WHAT ARE TAX-CREDIT BONDS?

In contrast to conventional bonds, which pay interest annually (or semiannually) in the form of cash, tax-credit bonds pay “interest” in the form of credits against federal income tax liability.⁴ The Treasury would set the credit rate for the bonds before they were issued. An investor holding a \$1,000 tax-credit bond with a credit rate of 5 percent would report \$50 in income on his tax return even though he would not actually receive \$50 in cash. After calculating his tax liability, the bondholder would be entitled to claim a credit of \$50. If his marginal tax rate was 30 percent, the tax liability on the \$50 of income would be \$15. But after taking into account the tax credit of \$50, the investor would net \$35. That is exactly the same amount that he would net after taxes if he had received the \$50 in cash income on a conventional \$1,000 bond paying 5 percent interest.

From the standpoint of the federal budget, tax-credit and conventional bonds (of the same principal, maturity, and interest or tax-credit rate) issued by the federal government would both have similar effects on the deficit or surplus. In the case of conventional bonds, the interest would be counted as an outlay; in the case of tax-credit bonds, the tax credit would be reflected as a reduction in tax revenues. In either case, the financing of such spending would increase budgetary costs.

CHARACTERISTICS COMMON TO ALL OF THE BOND PROPOSALS

Several elements are common to all three of the hypothetical proposals that the Senate Budget Committee asked CBO to analyze:

- Instead of directing 2.86 cents per gallon of the 18.4-cents-per-gallon federal tax on gasoline to the transit account of the Highway Trust Fund, the Treasury would direct only one-half cent to the transit account.⁵ The rest would go to the highway account of the trust fund.
- To compensate for reducing the amount of funds available for transit programs, the proposals would authorize the sale of bonds that would raise funds to provide transit spending at the levels consistent with the

4. The only existing tax-credit bonds are Qualified Zone Academy Bonds, which were authorized by the Taxpayer Relief Act of 1997 to provide aid to state and local governments. Those bonds were intended to substitute for tax-exempt debt. In contrast, the proposals analyzed in this paper are intended to substitute for federal appropriations. Unless the authorizing legislation specified otherwise, the tax credits would not be refundable.

5. The same reduction to one-half cent would apply to the 24.4 cents-per-gallon tax on diesel fuel and to the taxes of various rates on gasohol and other fuels.

budget authority assumed in the budget resolution for fiscal year 2004.⁶ CBO estimates that spending from budget authority assumed for fiscal years 2004 through 2009 would result in outlays of \$23.1 billion over the 2004-2008 period and \$48.4 billion over the 2004-2013 period.

- To raise those funds, bonds with a maturity of 20 years would be sold beginning in 2004. For its analysis, CBO assumed that the timing of those sales would match that of the outlays assumed under the budget resolution.

PROPOSAL 1: TAX-CREDIT BONDS ISSUED BY A NONFEDERAL ENTITY

Under the first proposal, the Congress would authorize the creation of a new government-sponsored enterprise, the Transportation Financing Corporation (TFC). Each year, the TFC would be authorized to issue tax-credit bonds with a term of 20 years. Neither the federal government nor the states would be liable for the repayment of the bonds' principal. Instead, when the bonds were issued, a portion of the proceeds would be set aside in a sinking fund held by the TFC and would be invested in federal agency or other high-grade investments, which, at maturity, would be sufficient to repay the principal. The TFC would spend the rest of the bonds' proceeds—presumably on transit projects, but without direction by the federal government.

For purposes of this analysis, CBO assumed that the Transportation Financing Corporation would be characterized as a nonfederal entity. Qualifying for budgetary treatment as a nonfederal entity would be extremely difficult, however. Such an entity would have to be largely independent of the federal government, and the federal government could not maintain operational control over the way the entity spent the bonds' proceeds.

Economic Analysis of Proposal 1

Table 1 shows the amount of TFC bonds that would have to be sold each year to finance the transit spending assumed in the budget resolution. This example assumes that the sinking fund would be invested in Treasury bonds yielding 5 percent; therefore, 37.7 percent of the proceeds from selling the bonds would need to be reserved in the sinking fund to repay the principal in 20 years. Because

6. The Statement of Managers for the 2004 budget resolution includes the total amount of transit funding assumed over the 2004-2009 period. CBO's assumptions about annual funding were based on information from Senate Budget Committee staff.

investors would view repayment of the TFC bonds' principal as slightly more risky than repayment of Treasury bonds, they would demand a higher yield. In addition to that risk premium, investors might also require a premium that reflected the relative illiquidity of TFC bonds compared with Treasury bonds.⁷ For this hypothetical analysis, CBO assumed that TFC bonds would be priced to yield a return of 5.1 percent.⁸

If the TFC is assumed to be nongovernmental, the effect of this proposal on the federal government's finances would be the stream of tax credits over the 31 years of the bond program.⁹ The estimated present value of that stream, discounted at 5 percent, is \$40.1 billion.

Comparison of Proposal 1 with Appropriations

If instead of being made available through TFC bonds, the funds designated for transit programs by the budget resolution were appropriated, the economic cost to the federal government would be the present value of that stream of outlays, which (at an assumed Treasury rate of 5 percent) totals \$39.3 billion. Thus, the proposal in this example would be about 2 percent more costly than appropriations. The difference in cost between the TFC bonds and appropriations would vary depending on the yield that bond investors demanded.

Budgetary Treatment of Proposal 1

If the TFC was a nonfederal entity, the federal budget would reflect only the cost of the tax credits; the entity's spending would not be counted in the federal budget. Under those circumstances, CBO would consider this proposal to be a form of loan

7. Assuming that the tax credit was not refundable, a bondholder with no tax liability would presumably want to sell the tax-credit transit bonds and reinvest in Treasury bonds or other securities that paid interest income.

8. CBO used a premium of 10 basis points to simplify the analysis and discussion. If the TFC was required to invest in Treasury bonds, then the spread would probably be similar to that for bonds that finance the Resolution Funding Corporation. A recent analysis found that interest rates on those bonds averaged 10 to 16 basis points higher than the rates on comparable Treasury bonds. See Francis A. Longstaff, *The Flight-to-Liquidity Premium in U.S. Treasury Bond Prices* (University of California, Los Angeles, Anderson Graduate School of Management, May 2001), p. 5, available at <http://repositories.cdlib.org/anderson/fin/5-01>. If the TFC was given broader latitude, the spread would probably be higher—perhaps closer to that for debt of Fannie Mae. Over the past two years, interest rates on debt issued by Fannie Mae were, on average, about 66 basis points higher than those on comparable Treasury debt.

9. That is, when the 20-year bonds issued in the 11th year of the program matured.

TABLE 1. TRANSIT SPENDING AND BOND FINANCING BY A NONFEDERAL ENTITY
(In billions of dollars)

	2004	2005	2006	2007	2008	Total, 2004- 2008	Total, 2009- 2013	Total, 2004- 2013
Proceeds of Bonds Issued by the Transportation Financing Corporation ^a	1.8	5.3	8.0	10.2	12.1	37.4	40.8	78.2
Minus Amount Reserved in the Sinking Fund for Repayment of Principal	<u>0.7</u>	<u>2.0</u>	<u>3.0</u>	<u>3.9</u>	<u>4.6</u>	<u>14.3</u>	<u>15.6</u>	<u>29.8</u>
Amount Available for Transit Programs	1.1	3.3	4.9	6.3	7.5	23.1	25.2	48.4
CBO Estimate of Transit Outlays Assumed in the Budget Resolution ^b	1.1	3.3	4.9	6.3	7.5	23.1	25.2	48.4

SOURCE: Congressional Budget Office.

- a. The face value of such bonds would probably be greater than the bonds' proceeds because investors would require a higher yield to compensate for risk.
- b. From budget authority in 2004 and subsequent years.

guarantee, which the Federal Credit Reform Act of 1990 describes as “any guarantee, insurance, or other pledge with respect to the payment of all or a part of the principal or interest on any debt obligation of a nonfederal borrower to a nonfederal lender.”¹⁰ Credit programs such as loan guarantees are presented in the budget on a net-present-value basis, unlike most budgetary transactions, which are recorded on a cash basis. Because the tax credits would constitute a commitment to pay interest on the debt of the nonfederal TFC, the cost of the tax credits would be scored (on a present-value basis) when the bonds were sold rather than over the life of the bonds. As a result, the pattern of outlays would be very similar to what would result from direct appropriations.

10. Public Law 101-508, 2 U.S.C. 661a(3).

PROPOSAL 2: TAX-CREDIT “TRANSIT BONDS”
ISSUED BY THE U.S. TREASURY

Under the second proposal, the federal government would issue special tax-credit “transit bonds” and would spend the proceeds on transit projects. As with all Treasury debt, the federal government would be responsible for repaying the principal. Unlike standard Treasury bonds, the transit bonds would provide tax credits instead of cash interest.

Economic Analysis of Proposal 2

This proposal would be an unusual, and potentially more expensive, form of Treasury borrowing to finance government spending, equivalent to adding to the deficit to pay for transit programs. The proposal would probably be somewhat more expensive to the federal government than appropriations for two reasons. First, it would entail costs of issuing the special transit bonds and administering the tax-credit program. Second, investors in transit bonds might demand a tax-credit rate that was higher than the interest rate on comparable Treasury bonds to compensate for the reduced liquidity associated with owning nonstandard bonds that were not widely marketed. In that case, the federal government would incur the higher cost of the tax credits.

Under one version of this proposal, a portion of the proceeds would be reserved in a special sinking-fund account to repay the bonds’ principal after 20 years; the rest would be deposited in the transit account of the Highway Trust Fund. The sinking fund would be invested in Treasury bonds of the same maturity as the transit bonds in order to ensure repayment. A sinking fund to guarantee federal borrowing would not be necessary, however, because investors would realize that all forms of federal borrowing would entail the same minimal credit risk.

Budgetary Treatment of Proposal 2

If the federal government issued tax-credit bonds and spent the proceeds on transit programs, the budget would reflect the cost of the tax credits (just as it would ordinary interest costs) as well as spending on the transit programs. Both of those costs would be recorded on a cash basis. The proceeds from the sale of the bonds and the repayment of the principal 20 years later would be considered a means of financing (just like other forms of Treasury borrowing) and thus would not be recorded in the budget as either receipts or spending.

PROPOSAL 3: SPECIAL-PURPOSE BONDS

Under the third proposal, the Congress would authorize either the Department of Transportation or the Treasury to issue a special type of Treasury bond. The federal government would spend the proceeds on transit projects. In contrast to the tax-credit bonds described above, these bonds would pay cash interest in the same fashion as conventional Treasury bonds.¹¹

Economic Analysis of Proposal 3

The economics of this proposal are the same as for the second proposal—the result would be additional spending financed by government borrowing. Because the federal government would be responsible for paying both the principal and the interest, the debt should cost about the same as conventional Treasury financing. It could be somewhat more expensive, however, because of added administrative costs and the bonds' reduced liquidity, as in the second proposal.

Budgetary Treatment of Proposal 3

The budgetary treatment of this proposal would be similar to the treatment of the second proposal. If the federal government issued bonds that paid cash interest and spent the proceeds on transit programs, then the budget would reflect the cost of the interest payments as well as spending on the transit programs. Under this proposal, however, the interest payments would be recorded as an increase in federal outlays rather than as a decrease in tax revenues.

11. The interest would be subject to the federal income tax, just as interest on regular Treasury bonds is.



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