

Three Aspects of the Administration's Tax Proposal:

Tax-Exempt Rates

The President's tax reform plan contains a number of provisions that would affect tax-exempt yields relative to taxable yields. Table 1 summarizes the effects of some of these proposals. The first three proposals listed—the reduction of the top marginal tax brackets, the elimination of the 80 percent deduction for commercial banks on interest to carry tax-exempt bonds, and the repeal of the tax exemption for nongovernmental bonds such as industrial development bonds—would probably have the largest effects. We construct estimates of the impacts of each proposal, with a bias toward underestimating those effects that would lower tax-exempt rates relative to taxable rates. Even so, we find that soon after the effective date, the three proposals combined might actually decrease tax-exempt yields by 60 basis points (approximately) relative to taxable yields. However, in the long run, relative tax-exempt rates could rise by as much as 135 basis points if commercial banks respond to the repeal of the interest deduction by allowing their existing holdings of tax-exempts to gradually, but completely, run off.

The effect of the proposed reduction of the highest individual tax rate from 50 percent to 35 percent and of the top corporate tax rate from 46 percent to 33 percent is not likely to be very large because the *marginal* investor in tax-exempts probably would not experience much of a marginal tax rate reduction. In recent years, the ratio of tax-exempt to taxable yields on similarly rated bonds has hovered between 0.70 and 0.80.

(chart) Currently, with the ratio at 0.74, one could argue that the marginal tax rate of the marginal investor in tax-exempts is 26 percent.¹ If this were so (and the tax rate consisted only of Federal taxes), approximately the same minimum taxable income would correspond to that tax rate under the current and proposed tax rates.² Thus, the change in the tax rates would probably not significantly alter the number of people who would find

¹If similar ratings imply the same credit risk for tax-exempt and corporate bonds, one would expect that, in equilibrium, the tax-exempt rate would equal the after-tax return from corporate bonds. That is $(1-t)r_t = r_x$, or $\frac{r_x}{r_t} = 1-t$, where t is the marginal tax rate,

r_t is the taxable interest rate, and r_x is the tax-exempt interest rate. Currently $\frac{r_x}{r_t} = 0.74$, so implicitly, $t = 0.26$

²Under the current law, single taxpayers with taxable income over \$19,640 have marginal tax rates of at least 26 percent. Under the proposed system, taxable incomes over \$18,000 would be taxed at roughly the same rate, 25 percent. For joint returns, taxable incomes over \$26,540 and \$29,000 under the current and proposed systems, respectively, are taxed at marginal rates of at least 25 percent.

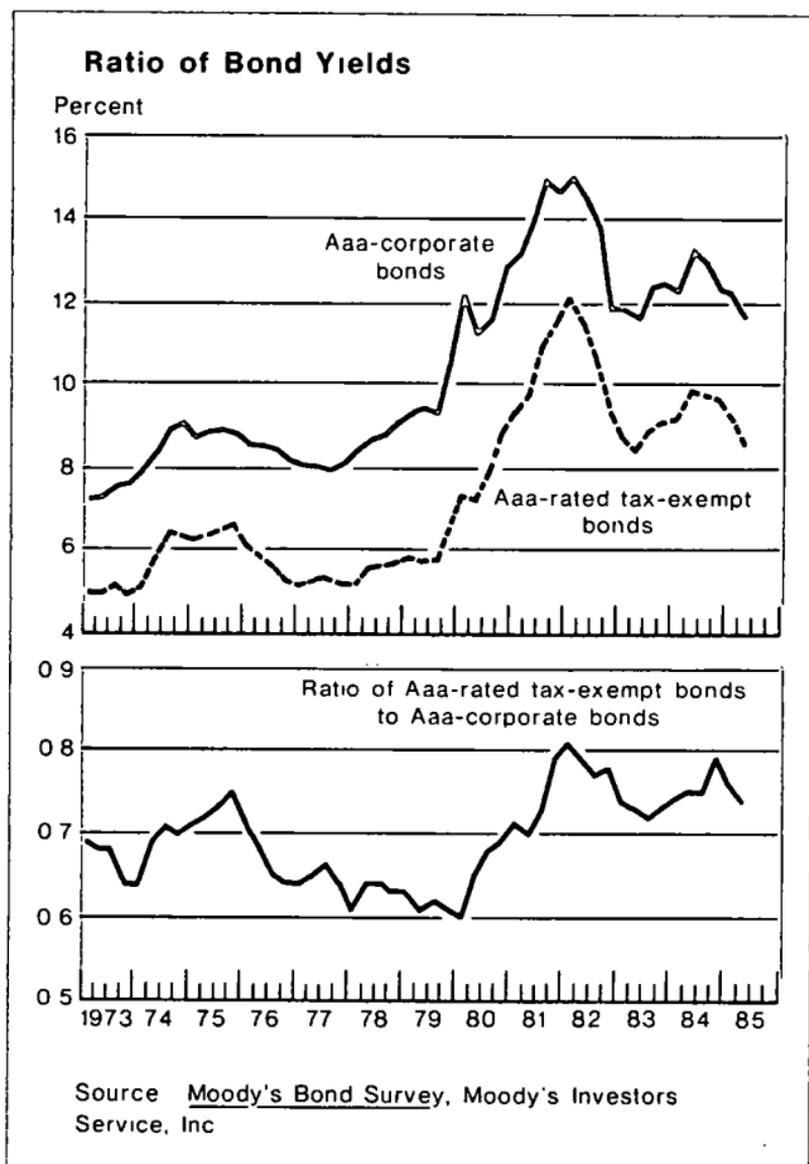


Table 1

Summary of Impacts of Administration's Proposals on Tax-Exempt Rates

Proposal	Effect on tax-exempt yield (with taxable yields constant)	Assumptions
Reduction of top marginal tax rates	+ 100 basis points for long-term issues, more for short-term	1 Current marginal tax rate of marginal investor is 33% 2 No base broadening of taxable income 3 No interest elasticity of supply
Elimination of 80% commercial bank interest deduction for carrying tax-exempts	+ 8 basis points in short-run + 200 basis points in long-run	1 Entire commercial bank (stock) demand is eliminated as existing holdings mature
Repeal of exemption for nongovernmental bonds	- 167 basis points	1 Less than half of actual recent flow of nongovernmental bonds is actually eliminated (i.e., total tax-exempt supply reduced by 25 percent)
Elimination of deduction for state and local government taxes		1 Rates might rise some if municipalities were forced to reduce taxes without compensating cuts in expenditures 2 Increases attractiveness of tax-exempt bonds for residents of issuing states, especially those with high tax rates
Tightening of tax arbitrage provision		1 Less supply, so rates could fall, but less income to states, so risk premiums may rise
Elimination of advance refundings		1 Reduction of supply could reduce yields, but yields could rise if call protection provisions curtailed
Base broadening of income		1 For households and property and casualty insurance companies, could mitigate effect of cut in top marginal tax brackets 2 Could reduce risk premiums for those states that tie taxable income to Federal taxable income

Table 2

Volume of Long-Term Tax-Exempt Bonds by Type of Activity, 1975-84

In billions of dollars

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Total issues, long-term tax exempts*	30.5	35.0	46.9	49.1	48.4	54.5	55.1	84.9	93.3	115.1
Nongovernmental tax exempts	8.9	11.4	17.4	19.7	28.1	32.5	30.9	49.6	57.1	72.5
Housing bonds	1.4	2.7	4.4	6.9	12.1	14.0	4.8	14.6	17.0	20.8
Single-family mortgage subsidy bonds	†	0.7	1.0	3.4	7.8	10.5	2.8	9.0	11.0	13.5
Multi-family rental housing bonds	0.9	1.4	2.9	2.5	2.7	2.2	1.1	5.1	5.3	5.1
Veterans general obligation bonds	0.6	0.6	0.6	1.2	1.6	1.3	0.9	0.5	0.7	2.2
Private exempt entity bonds‡	1.8	2.5	4.3	2.9	3.2	3.3	4.7	8.5	11.7	11.6
Student loan bonds	*	0.1	0.1	0.3	0.6	0.5	1.1	1.8	3.3	1.1
Pollution control industrial development bonds	2.1	2.1	3.0	2.8	2.5	2.5	4.3	5.9	4.5	7.5
Small-issue industrial development bonds	1.3	1.5	2.4	3.6	7.5	9.7	13.3	14.7	14.6	17.4
Other industrial development bonds§	2.3	2.5	3.2	3.2	2.2	2.5	2.7	4.1	6.0	14.0
Other tax-exempt bonds	21.6	23.6	29.5	29.3	20.3	22.0	24.2	35.3	36.2	42.6

Totals may not add due to rounding

*Total reported volume from *Credit Markets* (formerly the *Bond Buyer*) adjusted for privately placed small-issue IDBs

†\$50 million or less

‡Private-exempt entity bonds are obligations of Internal Revenue Code Section 501(c)(3) organizations such as private nonprofit hospitals and educational facilities

§Other IDBs include obligations for private businesses that qualify for tax-exempt activities, such as sewage disposal, airports, and docks

||Some of these may be nongovernmental bonds

Source For data from 1975-83 *The President's Tax Proposals to the Congress for Fairness, Growth, and Simplicity* (May 1985), page 284
For 1984 data Office of Tax Analysis, United States Department of the Treasury

the current tax-exempt rate attractive relative to the after-tax return available on taxable securities.

However, if the marginal Federal tax rate of the marginal investor were higher, say at 33 percent, then it is possible that some current investors in tax-exempts would no longer find it advantageous to invest in them under the proposed law. For example, taxpayers with single returns with taxable incomes of \$31,070 are currently taxed at a marginal rate of 34 percent. With joint returns, incomes in excess of \$37,980 are taxed at a rate of 33 percent. Under the proposed tax rate structure, those same investors would have marginal tax rates of 25 percent. With current tax-exempt rates at about 8.35 percent, the rates would have to rise by about 100 basis points to remain competitive with taxable instruments yielding 12.46 percent (the taxable equivalent of 8.35 percent tax-free with a 33 percent tax rate).

This is an overestimate of the required increase, for three reasons. First, as noted earlier, the marginal investor's marginal Federal tax rate is likely to be lower than 33 percent, especially after taking into account the possibility that the relevant marginal tax rate might include state and local income taxes.³ Thus the proposed change in the tax rate structure would probably not significantly alter the number of people who would find tax-exempts more attractive than taxables. Second, some taxpayers could find themselves in higher marginal tax brackets because of the proposed broadening of the definition of taxable income, through such changes as the elimination of the deduction for state and local taxes and the taxation of the inside buildup in the value of life insurance policies. Finally, we implicitly assume a zero interest elasticity of the supply of tax-exempt securities—a negative elasticity would tend to mitigate the necessary interest rate response.

The other proposal tending to raise tax-exempt rates the most relative to taxable yields is the repeal of the 80 percent deduction for commercial banks on interest to carry newly acquired tax-exempt bonds. This proposal would probably completely eliminate bank demand for tax-exempt securities since it would most likely eliminate the spread earned on tax-exempts and would certainly make the spread lower than could be earned on taxable investments.⁴

For example, at the end of May 1985, the cost of three-month large CDs was about 7.6 percent. Tax-exempt notes were paying 4.9 percent during the same

³However, since the ratio of short-term tax-exempt to taxable yields is much lower than the long-term ratio, the marginal rate for marginal investors in short-term tax-exempts might actually be higher than 33 percent.

⁴In the short-run, however, bank demand for tax-exempts might increase as they attempt to stock up before the December 31, 1985 deadline.

period, however. Thus, with the 80 percent interest cost deductibility, banks could have earned 10 basis points after taxes by funding the notes with CDs. But without deductibility, banks would have lost money on such a transaction. If, instead, banks invested in longer-term A-rated tax-exempt bonds paying 8.81 percent (and accepted the asset-liability maturity mismatch) they could have earned a positive spread of 121 basis points, even without interest cost deductibility. But they could have earned an even larger after-tax spread of 178 basis points (at a 46 percent marginal tax rate) by investing in 20-year Treasury securities (paying approximately 10.9 percent). At the proposed maximum corporate rate of 33 percent, the spread earned on taxable investments would have been even higher, approximately 221 basis points after taxes. Therefore, if banks were not able to deduct interest costs, they would not purchase tax-exempt instruments at current rates.

What would be the impact on relative tax-exempt yields if commercial banks no longer demanded new tax-exempt bonds? Suppose commercial banks cut back on demand for tax-exempts by the average annual amount they had purchased from 1981 through 1984, \$6.5 billion, or 1.1 percent of the total outstanding stock. Then, using an interest elasticity of -1.27 from a study by Hendershott and Koch,⁵ we would expect tax-exempt interest rates to rise by 0.9 percent, or 8 basis points based on a current interest rate of about 8.35 percent. In addition, commercial banks would probably not replace holdings as they mature. Given that banks currently hold \$168 billion of tax-exempt securities, or 30.2 percent of the total, the resulting longer-run decline in demand could raise tax-exempt rates by 23.8 percent, or 200 basis points.

Offsetting these effects is the proposed repeal of the tax exemption for nongovernmental bonds. This would severely curtail the supply of tax-exempt securities after the enactment date (although there might be a rush of issues to beat the deadline). The Treasury estimates that in each of the years from 1979 to 1984, over 55 percent of the long-term tax-exempt market was comprised of nongovernmental issues (Table 2). A reduction of the supply of this amount, or some significant portion thereof, would have a major impact on relative tax-exempt rates.

In fact, quite probably the supply would not fall by the full volume of recent nongovernmental issues, since it is likely that various exceptions would be allowed in a final tax bill and that some of the functions financed by nongovernmental units would be taken over, and

⁵Patric H. Hendershott and Timothy W. Koch, "An Empirical Analysis of the Market for Tax-Exempt Securities: Estimates and Forecasts", Monograph Series in Finance and Economics, Monograph 1977-4.

financed directly, by municipalities. But even if supply were reduced by, say, only 25 percent, the interest elasticity of -1.27 implies that tax-exempt rates would have to fall by about 20 percent, or 167 basis points on an 8.35 percent level, to clear the market.

It is difficult to provide specific estimates of the effects of other parts of the tax plan, such as the proposed elimination of the itemized deduction for state and local taxes, the prohibition against advance refunding issues, the tightening of arbitrage provisions, and the broadening of the taxable income base for businesses such as property and casualty insurance companies (Table 1). As a result, it is difficult to quantify the total net impact of the tax plan or even to determine with certainty the direction of the overall impact. However, since the full impact of the elimination of the carrying cost deduction for commercial banks would probably not be felt for quite some time, it is much less likely that tax-exempt rates would rise relative to taxable rates in the short run than in the long run.

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