

CHAPTER 20

Comparison of the Interest Cost Saving and Revenue Loss on Tax-Exempt Securities*

The exemption of interest paid to holders of State and local government securities from Federal income tax lowers the borrowing costs to State and local governments since holders attach a premium to the exemption feature in the form of lower interest. This chapter examines the relative magnitudes of (1) the interest cost saving to State and local governments and (2) the reduction in Federal revenues due to tax exemption.

A. THEORETICAL ANALYSIS OF THE BASIS OF THE YIELD DIFFERENTIAL BETWEEN TAXABLE AND TAX-EXEMPT SECURITIES

The differential in yield between taxable and tax-exempt bonds of comparable quality depends chiefly upon the value of the exemption to marginal investors.¹

The relative return on investment at the margin on a taxable security yielding 5 percent or a tax-exempt security of comparable quality yielding 30 percent of this, 5 percent or 1.5 percent, would be a matter of indifference to an investor with a marginal tax rate of 70 percent. Both offer the same after-tax marginal return. However, an investor whose marginal tax rate was 50 percent would find that unless the return on the tax-exempt security reaches at least 50 percent of the yield on a comparable taxable security, the after-tax yield on the taxable security would be better than that on the tax-exempt security. For an investor taxable at 20 percent the break-even yield on tax-exempts would be 80 percent of the yield on taxable securities. The term "investors" in these comments covers both individual and institutional investors.

Given their investment preferences, investors whose income is taxed at the highest marginal tax rate, will hold increasing amounts of tax-exempt securities as the yield on tax-exempts rises above 30 percent of the yield on taxables. Similarly, investors whose income is taxed at 50 percent will demand an increasing amount of tax-exempts only if the yield on tax-exempts rises above 50 percent of the yield on taxables.

Given the supply of outstanding State and local securities, the relative yield will be determined by the amount of tax-exempt securities which investors in all tax brackets desire to hold. Suppose the actual supply of tax-exempt securities to be relatively small, and all of them

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¹ Any two securities will in fact have different yields depending on all the differences between the securities, risk, liquidity, etc. In the following discussion comparisons are made between securities that are alike in all features except taxability. Assuming competitive capital markets this is a reasonable device for isolating the value of the exemption feature.