

## DEPARTMENT OF THE TREASURY WASHINGTON, D.C. 20220

ASSISTANT SECRETARY

Dear Senator Hetzenbaum:

This is in response to your letter requesting estimated revenue losses resulting from the issuance of industrial revenue bonds (IRBs). In general, the loss is incurred because investors purchase tax-exempt rather than taxable securities and, therefore, the Treasury loses revenues that would be generated by the taxable securities. Following is a discussion of the methodology for calculating these revenue losses, and the components of the estimates.

The revenue loss in any one year from an IRB equals the average amount of debt which remains outstanding times the interest rate on comparable taxable debt prevailing at the time of the issue times the marginal tax rate of the investor. The total revenue loss over the life of the issue equals the sum of the annual losses, which may also be expressed in terms of its present value -- i.e., its value in today's dollars -- by use of an appropriate discount rate.

As a general rule, based on current economic conditions a \$1 billion IRB issue will result in an estimated revenue loss of \$36 million for each year that the total amount remains outstanding. This figure is based on a 12 percent interest rate on taxable securities and a 30 percent marginal tax rate of investors. Assuming that the bond is completely retired at the end of 20 years, such that 5 percent of the original issue is retired each year, the revenue loss equals \$36 million the first year, \$34.2 million the second, \$32.4 million the third, \$30.6 million the fourth, and \$28.8 million the fifth year. The cumulative revenue loss over the 20-year period equals \$378 million in nominal, or undiscounted dollars, the present value of which equals \$217 million, assuming a 10 percent discount rate.

Alternatively, municipalities may issue bonds with shorter or longer maturities. For an issue which is completely retired after 10 years, the annual revenue losses for each of the first 5 years equals \$36, \$32.4, \$28.8, \$25.2, and \$21.6 million, with the cumulative revenue loss over the life of the issue equal to \$198 million in nominal dollars, whose present value equals \$146 million. Also, if interest rates decline, the tax loss from IRBs issued in the future will decline.

The marginal tax rate of investors may vary from year to year, depending on the financing requirements of state and local governments and market conditions. It should be noted that the appropriate income tax rate for measuring the revenue losses from IRBs differs depending upon whether one is measuring the loss from a small change in the stock of tax-exempt debt or the loss from the entire stock currently outstanding. While the tax rate of the holders of all tax-exempt debt outstanding is estimated to equal about 40 percent, that of investors in newly-issued securities may be lower, perhaps 30 percent. This difference between the two marginal tax rates arises as the financing needs of municipalities expand and higher-income taxpayers are no longer willing to acquire additional tax-exempt debt, forcing municipalities to attract funds from lower-income investors, or those who are in lower tax brackets.

I hope that the above provides a useful indication of the magnitude of the revenue effect of the use of tax-exempt financing, and an appreciation of the difficulties in formulating a general measure for a calculation dependent upon variables which may change from year to year or among issues.

Sincerely,

Emil M. Sunley Deputy Assistant Secretary

The Honorable Howard M. Metzenbaum United States Senate Washington, D. C. 20510