Impact of the FairTax on Tax-Exempt Bondholders

Synopsis

If the FairTax replaces the current tax system, a single rate national sales tax imposed only once on all new goods and services, then the value of municipal and other tax-exempt bonds will remain approximately what they are today. Corporate bond rates will fall to the tax-exempt interest rate, since corporate interest is neither deductible nor taxable. All bonds will be treated the same for tax purposes. Existing non-callable corporate bonds will appreciate.

Analysis

Under current law, interest received by owners of general-purpose municipal bonds is exempt from federal income tax. Interest on corporate bonds, in contrast, is taxable to the recipient and deductible to the payor. Interest is not subject to payroll tax.

Corporate bonds have a higher interest rate than municipal bonds: for the bondholder (i.e. the lender) to achieve a particular after-tax rate of return, the corporation must pay a higher rate. This difference between corporate bonds and municipal bonds is observable each day in the *Wall Street Journal*.

The interest rate on any particular bond is determined by what lenders (i.e. bondholders) demand to part with their money. The pre-tax interest rate demanded is a function of the following factors: (1) the normal return to capital (i.e. the time value of money---or, stated differently, the relative price of current compared to future consumption), (2) inflationary expectations over the term of the bond, (3) the risk of default, and (4) the tax due on the interest received.[1] The normal rate of return to capital is observed to be very stable over time.

The market clears so that marginal investors have no real preference between municipal or corporate bonds. This means that the after-tax return to corporate bonds for the marginal investor is equal to the return on municipal bonds. Those investors who are not at the margin will find either corporate bonds or municipal bonds clearly more attractive.

Municipal bonds would be treated the same under a national sales tax as under present law. If a national sales tax were instituted, interest on corporate bonds would no longer be taxed (or deductible). Corporate bonds and municipal bonds would be accorded the same tax treatment. In other words, the after-tax rate of return and the pre-tax rate of return on *all* bonds would be the same. Accordingly, the corporate rate would fall

[1] Interest rates may also include a price for financial intermediation services provided. In the case of bonds, underwriters usually explicitly charge this price to the bond issuer. In the case of bank loans, however, it is usually built into the interest rate.

because corporations could achieve the after-tax rate of return demanded by investors at a lower rate.[2]

Today, taxpayers who are in relatively high marginal tax brackets (compared to the tax rate of the marginal investor) find municipal bonds more attractive than taxable corporate bonds (excluding issues of risk). Taxpayers in relatively low marginal tax brackets (compared to the tax rate of the marginal investor) find corporate bonds more attractive than tax-exempt municipal bonds. High-bracket taxpayers would typically be high-income individual taxpayers. Low-bracket taxpayers would typically be lower- and middle-income taxpayers, or investors investing through a qualified account such as an IRA or 401(k) and pension plans.

Under the FairTax, the after-tax return to municipal bonds will be the same as under present law. Thus, some investors who presently find corporate bonds attractive will move into municipal bonds and other investors who presently find municipal bonds attractive will purchase corporate bonds.

Investors purchase municipal bonds today because the bonds provide an adequate return. [Under the sales tax,] they will continue to purchase municipal bonds because they will continue to provide an adequate return. The interest rates on corporate bonds must fall to the (risk adjusted) rate provided by municipal bonds because the tax treatment is the same and, assuming the risk is the same, investors will be indifferent towards the two types of bonds.

Market Value of Bonds

The market value of a municipal bond is the present discounted value of both the stream of interest payments it generates, and the return of principal at maturity. In the case of a zero coupon bond, interest payments are implicit, and the market value is the present discounted value of only the principal due at maturity. The discount rate is a function of market interest rates, and includes an inflation premium.[3]

Replacing the income tax with a sales tax will not affect the stream of interest and principal payments of a bond. It should not materially affect the risk of default. However, once the positive economic effects of a sales tax take hold, state and local revenues should increase and the demand for social services should decline, reducing the

[2] The cost to corporations of borrowing will not have changed appreciably once interest rates fall. Under an income tax, interest is deductible. The true cost of the corporation, after-tax, of borrowing is the before-tax interest rate reduced by the value of the tax deduction. The lower interest rates will not induce an increased demand for corporate borrowing since, on an after-tax basis, the cost will not have declined for profitable corporations. If interest rates did not fall, then the demand for borrowing (whether by corporations or homeowners) would fall dramatically.

[3] Risk is usually accounted for by increasing the discount rate. Calculating the probability of a default and imputing a negative interest rate based on that probability could also account for it. The nominal discount rate is then held constant. Both methods produce the same result, although the latter is perhaps the better of the two, since it is more transparent.

risk of default somewhat. This reduced risk of default, however minor, will have a mildly positive impact on bond prices since the risk-adjusted return will have increased.

As discussed below, the U.S. market interest rates are determined by international capital markets and are not likely to change dramatically except for the tax effect. Thus, the present discounted value of existing municipal bonds will be comparable.[4]

The impact on existing corporate bonds is quite different, in the absence of any transition rules. Under the Fairtax system, corporate bonds that are not callable by the issuer will see a dramatic increase in their value. This increase will occur as the markets become convinced that a sales tax with no transition rules is going to be enacted. The reason for the increase is that the after-tax income stream to corporate bondholders will be higher by the amount of income taxes not paid. The bond was originally priced on the assumption that income taxes would be paid. As it becomes increasingly clear that the tax will not have to be paid, investors will bid up the price (adjusted for political risks of taxation) of the bond so that the present value of the corporate bond's income and principal payments equals that of other bonds.[5] As the price of the bond increases, its yield to maturity will drop. Callable bonds will not experience this appreciation since the market will anticipate that the issuer will call the bonds and issue new bonds at the lower tax-free interest rate. Bonds that are callable but only at a premium or at some future date will appreciate but to a lesser degree.

Savings and Investment

Interest rates are established by both the supply of capital (savings) and the demand for capital (investors, consumers and governments). Implementation of a national sales tax will remove the tax bias against savings, and thus increase the supply of savings.[6] Similarly, a national sales tax would increase the return to investment, and demand for investment would increase. If investment demand increased more than savings, interest rates could increase. If savings proved more responsive than investment, then interest rates could decline.

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[4] Inflation is a monetary phenomenon and should not be affected by the sales tax (although the Federal Reserve may choose to adjust its monetary policy by "accommodating" the sales tax, which would have a one-time impact on the price level, but no long-term effect on inflation).

[5] A hypothetical transition rule that would prevent such an effect would be to continue the taxation of interest on existing corporate bonds and provide a tax credit equal to value of the tax deduction for issuers.

[6] The degree of responsiveness of savings is unclear. Theoretically, the so-called income effect cuts the other way. Under this analysis, people have a particular amount of income from savings they want to achieve and they will respond to an increase in the return to savings by saving less, since it would take less savings to achieve the target income. Work by highly regarded Harvard researcher Michael Boskin, "Taxation, Saving and the Rate of Interest", Journal of Political Economy, April 1978, showed an elasticity of saving with respect to average after-tax rate of return of 0.3 to 0.4. Recent work updating his findings for more recent years shows elasticities in the 0.7 to 1.1 using various statistical methods, see Gary Robbins and Aldona Robbins, "Eating Out Our Substance: How Taxation Affects Savings", Institute for Policy Analysis, Policy Report No. 131, September, 1995. An elasticity of 0.3 means that a 10 percent increase in the rate of return to savings will result in an increase in savings of 3 percent. An elasticity of 1.1 means that a 10 percent increase in the rate of return to savings will result in an increase in savings of 11 percent.

However, the relative magnitudes of American savings and investment response is not likely to have anything but a very minor impact on interest rates, because of international capital markets. If U.S. investment demand exceeds savings response, as is quite possible since the U.S. will be such an attractive place to invest, then foreigners will supply the needed capital. If U.S. savings exceed U.S. investment demand, then some of our savings will be deployed abroad.

Market interest rates clear internationally (adjusted for expected changes in foreign exchange rates and transactions costs). The relevant capital market for judging the impact on interest rates is the international capital market. The international capital stock is so large relative to the excess of U.S. investment demand over savings supply or vice versa, that the impact will be quite small.

Conclusions

Existing municipal bonds will retain their value because the present discounted value of the bonds' interest and principal payments are unlikely to change appreciably. Nominal corporate bond yields will decline so that corporate bonds do not have any competitive advantage over municipal bonds. Risk adjusted returns to corporate and municipal bonds will be the same under the FairTax. The cost of borrowing for states and municipalities will remain comparable to borrowing costs today. The demand for municipal bond issues would remain comparable to the demand today, since the repeal of the income tax will not significantly affect the normal return to capital, the risk premium, or the inflation premium. The composition of investors in municipal bonds will change, since the advantage that various tax bracket taxpayers accrue from investing in either corporate (low bracket) or municipal bonds (high bracket) will disappear.