The Payoff From Payouts

Will the Bush administration's proposals to expand various tax-deferred savings plans and eliminate the double taxation of dividends unduly favor the rich? Let's hope so: The health of capital markets, so crucial to all segments of the global economy, depends on rewarding successful risk-takers, not on picking their pockets after the fact.

The tax proposals, if passed, will have radical effects on all aspects of financial markets. Let's take a look at how they will affect the supply of capital, tax-advantaged instruments such as municipal bonds, and the basis of single stock futures.

The topics of savings and investment are encountered by every Economics 101 student, and then often are forgotten quickly (are you ready to take a quiz on the IS and LM curves? Thought so). The Commerce Department defines it as the difference between personal income and personal outlays. The former does not include unrealized capital gains on real estate or financial assets. The latter includes taxes, some of which go toward public investment in capital projects, but under government accounting are expensed, not capitalized.

The failure to include unrealized capital gains in the personal savings rate is inconsistent with actual economic behavior. If we compare the reported savings rate to the deflated S&P 500 presented on a logarithmic scale, we find that personal saving is almost a mirror image of the stock market.



Make More, Save Less (And Vice-Versa)

This inverse relationship should surprise no one. Households have a demand for savings, and when one portion of their total portfolio surges, the need to maintain a certain growth rate to meet definite life-cycle targets such as education, housing or retirement falls.

The relationship between the savings rate and real estate, here represented by the logarithm of non-seasonally adjusted median sale prices for existing homes, is not quite as direct. After all, several million new homes are built each year, and real estate markets are by definition local in nature. In addition, the demand for real estate is far more stable than for equities: You don't have to own stocks, but you do have to live somewhere. This makes real estate prices "sticky" on the way down as homeowners take their property off the market.

Not A Bubble, Yet



Real estate and stocks have vastly different properties, and therefor their price histories are not parallel. Real estate prices spent close to 16 years going nowhere after their 1970s boom. This 16-year wandering in the wilderness is consistent with stocks' 16-year era of frustration between 1966 and 1982. However, the real prices of both stocks and real estate shot higher in the late 1990s, the very period when, unsurprisingly, the savings rate fell. If money chases performance, and it does, housing should continue to perform well for several years in what is likely to remain a poor stock market.

The Role of Rates

What role should the Federal Reserve play in the savings game? Hopefully very little: We have entered a zone where further rate reductions paradoxically may encourage increased saving as opposed to increased consumption. How can this be if, in classical financial theory, interest rates equilibrate the relative demands between current consumption and deferred consumption (save now, spend later)?

Let's return to households' demand for saving: Over the past three years, equity portfolios have been pounded, and while housing prices have risen, these are tough to monetize without incurring an additional debt burden from a cash-out refinancing. The returns on bonds and other fixed income vehicles have plummeted. So, in order to meet your savings goals you have to save more as rates fall. This is what is called a "backward bending" curve, a savings supply curve where the quantity starts to increase as the price of money falls.

The savings supply curve can have a backward bend at very high rates, too: If you are meeting your savings goals by virtue of high returns, then you do not have to save as much. This is evident in the chart below where savings remain higher than a linear trend at low rates and lower than a linear trend at high rates.

Bending Over Backwards To Save



Taxes And The MOB

Municipal bonds, once considered second only to Treasuries in safety, have been falling on increasingly hard times for more than a generation. It is tough to foreclose on a city or a state, and investors therefore must demand a higher yield in recompense. Munis got hit with other roadblocks, such as the 1986 tax law (the simplification to end all simplifications). Banks could no longer deduct the interest rate expenses involved in financing their municipal bond portfolios against their taxes. Finally, the interest earned on municipal bonds issued to finance private projects such as stadiums counts against the dreaded alternative minimum tax.

The yield spread between Treasury bonds, represented below by the long bond, and the Bond Buyer's index of 40 municipals narrowed precipitously in the late 1990s. The combination of a bull market in Treasuries created by fiscal discipline and low inflation and the periodic Treasury flight-to-quality rallies kept pushing this MOB (municipal over bond) spread lower and lower.

Treasuries Married To The MOB



These narrow or negative MOB spreads would have been regarded as impossible not too long ago. Munis generally are exempt from federal taxation, so their tax-equivalent yield should be their yield divided by (1 - marginal tax rate) adjusted for credit quality. This would place their yield at (1 - .386, or 61.4%) of the Treasury yield before adjustments are made for credit risk. Munis issued by high-tax states such as New York should yield even less as they are doubly tax-exempt.

However, the yields paid on general obligation bonds, those backed by the tax authority of the issuer and not linked to the revenue of a specific project, are much higher. Even AA-rated GO bonds are yielding more than the Treasury note at the ten-year horizon, which suggests that a great deal of risk, as much as the marginal tax rate, is being priced into the muni market at present.

Not Your Father's Muni Bond Yields



Muni Risks

Several reasons in addition to those above can push the MOB toward zero-to-negative levels? First, the large number of private activity revenue bonds subject to AMT treatment makes determination of a marginal tax rate difficult to determine, but it may place the real marginal tax rate well over the statutory rate. Nothing in the administration's tax proposal addresses the AMT, which is at least as unfair as the double taxation of dividends.

Second and similar, the phase-out of Schedule A exemptions raises the effective marginal rate as well. These phaseouts are a slap in the face to all those facing them and are nothing more than a back-door way of hiding real tax rates.

Third, the IRS can challenge all municipal issues' tax status at any time, and this requires greater yield protection. Who wants to fight the IRS?

Fourth, many municipal issues are callable, whereas Treasuries are not; this lowers the bonds' yield-to-worst and injects an element of negative convexity into the calculations. The sharp drop in yields over the past two years has led to many issues being called away from investors, who then had to reinvest the proceeds at lower yields.

Fifth, Treasuries have a permanent liquidity advantage to munis, and this advantage becomes especially pronounced during bond bear markets like 1994 and 1999. As an aside, the next bear market in bonds, whenever it comes, is going to be a doozy: Who is going to rush to lock in these yields once the market turns?

Finally, the proposal to end the double taxation of dividends will make dividend-paying stocks a formidable alternative to munis. Not only are the yields on many stocks comparable, but the dividend can grow, and the stock can appreciate. Moreover, nearly all stocks are more liquid than nearly any muni.

The Effects on Security Futures

Taxes affect behavior and create trading opportunities. Most investors have tried wherever possible to stuff taxadvantaged accounts with higher-yielding instruments. If the dividend tax is in fact eliminated, then putting highyielding stocks in a 401-K or an IRA will be as irrational as putting municipal bonds therein.

At zero-taxation and if we add in the increase in cost basis that will serve to reduce capital gains taxes, (retained earnings not paid as dividends will be added to the per-share cost basis) dividends will have an advantage with

respect to both bond interest and capital gains. This is a major sea change in tax policy, and you will have to learn new ways of thinking to prosper.

The still-new business of single stock futures (SSFs), already affected heavily by tax rules (see "Death, Taxes And Single Stock Futures," *Futures*, December 2002) will have to adjust once more. The price of a stock future is the price of the stock plus the interest rate cost of carry minus the future value of the expected dividend. If the dividend yield is higher than the short-term interest rate, as is almost always the case at today's tiny T-bill rates, then the SSF will trade at a discount to the stock. This discount accrues to the capital gain or loss on the stock until expiration.

If the long SSF position on a dividend-paying stock was profitable, the ordinary income of the dividend was converted into the appropriate capital gain. If the long position lost money, the accrued dividend got buried in the capital loss, a distinct advantage to those infuriating situations when you have to pay dividend taxes on a money-losing stock or mutual fund. In either case, being long the SSF of a dividend-paying stock was preferable from the dividend taxation point of view to owning the stock.

At zero-taxation, a profitable long position on a dividend-paying stock will always have an advantage over a profitable long SSF. The stock's dividend will be tax-free and the cost basis of the stock will be adjusted higher for capital gains purposes, while the SSF's capital gain will be taxed at the appropriate capital gains rate and no adjustment in cost basis is contemplated at present. Of course, capital gains on SSFs can be offset by losses elsewhere

For short positions, the outcome is different. The seller of an SSF on a high-dividend stock pays the (dividend - interest rate) on the stock over time in the form of the same accrual noted above. A short SSF on a dividend-paying stock whose price declines by less than this (dividend - interest rate) amount, adjusted for ex-dividend trading, over the life of the trade will lose money and throw off a short-term capital loss than can be used to offset gains elsewhere. This is the critical dividend yield; should the stock fall further a short-term capital gains tax liability can be created.

Hedging

If this short SSF is combined with a long position in the stock, a classic hedge that is margined at only 5% of the current market value if the SSF is held in a securities account instead of a futures account, a tax arbitrage appears.

Let's take Altria Group, the renamed Philip Morris (MO), and its 6.80% dividend yield. On February 7, the stock settled at \$37.62, and a September 2003 future settled at \$35.98. If MO does not move between now and the September 19 expiration date of the future, the seller of the future will lose \$1.64. The holder of the stock should receive three \$0.64 quarterly dividend payments. The remaining \$0.28 is the interest rate differential paid by the MO holder. We should expect a drop of \$1.92 in MO's price to reflect the dividend payouts; this will benefit the short future and hurt the long stock. Prior to tax treatment, everyone is equal.

But after taxes, you win: The \$1.92 in dividends is yours tax-free and you deliver the MO stock against the short September 2003 future at \$35.98 for a \$1.64 short-term capital loss. Your risk in the trade is that MO will slash its dividend by more than \$0.09 (\$0.28/3) per quarter.

So long as the September 2003 future can be sold for any amount over \$35.70, the tax arbitrage remains open. If traders start piling onto the long stock / short SSF trade, we could see the forward curve for SSFs invert (see "Both A Borrower And A Lender Be," *Futures*, November 2002) with September trading below \$35.70. How low could it go? The marginal buyer with a 38.6% short-term capital gains rate would need to pay (\$35.98 - ((1-.386) * \$1.64)), or \$34.97, to achieve complete parity with the long stock owner.