Chp 18 - Government Bonds

- First part of chapter is reviews

Inflation Indexed Treasury Securities
- Coupon is fixed at origination
- Coupon is a “real” coupon
- The face value of the bond is adjusted every 6 months to reflect inflation

US Treasury Auctions
- Bidders make either a competitive (i.e. state price and quantity) or non-competitive (state desired quantity only)
- Stop out bid - the highest bid (for T Bills) or the lowest yield (for T Notes & T Bonds) that results in all of the securities being sold. Everybody pays the stop out bid.

US Savings Bonds
- E E Savings Bonds - Face Value of $50 to $10,000. Sold at 1/2 of Face Value
- Interest rate is set at 93% of the 5 yr Treasury Note rate.
- have a number of tax advantages to make up for the lower rate

Series I Savings Bond
- Are sold at face value
- Pay a fixed rate, plus inflation; thus, are inflation protected

Municipal Bonds
- Bonds issued by non-Federal Governments, or agencies of the Govt.
  e.g., University of Texas System.
- Main attraction of Munis is that the coupon payment is typically tax-free (no Federal Tax and no local taxes for the "Municipality" for which they are issued.
- Only attractive to high tax rate (bracket) individuals/investors
- Are typically callable, pay semi-annual coupons and have a face value = $5,000
- Are often bought by "Buy and Hold" investors (i.e., those not a large market for trading munis)
Variable Rate Notes = Bonds whose coupon is adjusted each period based on some index such as the yield on Treasuries. These are also called "floaters.

Inverse Floaters - Are bonds whose coupon goes up when the index rate goes down and vice versa.

Types of Muni's

1) General Obligation Bonds - are backed by all the resources of the issuer.

2) Revenue Bonds - are secured by the revenues generated by the project the bond is financing. E.g. Taftton revenue bonds are a large source of the financing for the new buildings at UTSA.

3) Hybrid Bonds - Revenue Bonds that also include some backing from other sources.
Municipal Bonds issued since 1983 are "registered" so the coupon is paid to the registered owner. (Bearer bonds pay the coupon to whoever presents the bonds)

Credit Enhancement
- This is a term for upgrading the rating of the bond through purchasing insurance for the bond.
- Such bonds are called "Insured Municipal Bonds.

Equivalent Taxable yield
- Because the yield on munis is lower due to the tax savings, it's common to compute the "equivalent taxable yield. This is the yield that a taxable bond must pay to be "just as good"

\[
\text{Equivalent Taxable yield} = \frac{\text{Tax Exempt yield}}{1 - \text{Marginal Tax Rate}}
\]
Could rewrite by Algebra

\[(1 - \text{Morg Tax Rate}) = \frac{\text{Tax Exempt Yld}}{\text{Equiv. Taxable Yld}}\]

also by algebra (multiply both sides by \(-1\) and add \(1\) from both sides)

\[
\text{Morg Tax Rate} = 1 - \frac{\text{Tax Exempt Yld}}{\text{Equiv. Taxable Yld}}
\]

for Taxable Bond Yld

Can use this formula to compute the tax rates at which I'm indifferent between a Muni and a Taxable Bond. If my tax rate is higher than the computed rate, then I'm better off with the Muni (and vice versa).

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**Treasury Bond Quotes**

Treasury Bonds are quoted on a 100 basis (i.e. percent of Par or Face Value) with 32nds following the "": [colon]

Thus, a bond quote of 93:21 for a 1000 face value bond, the price is: \(\frac{21}{32} = 0.65625\)

so the decimal quote is: 93.65625. Multiplying by 10 for 1000 Face Value = \$9365.625