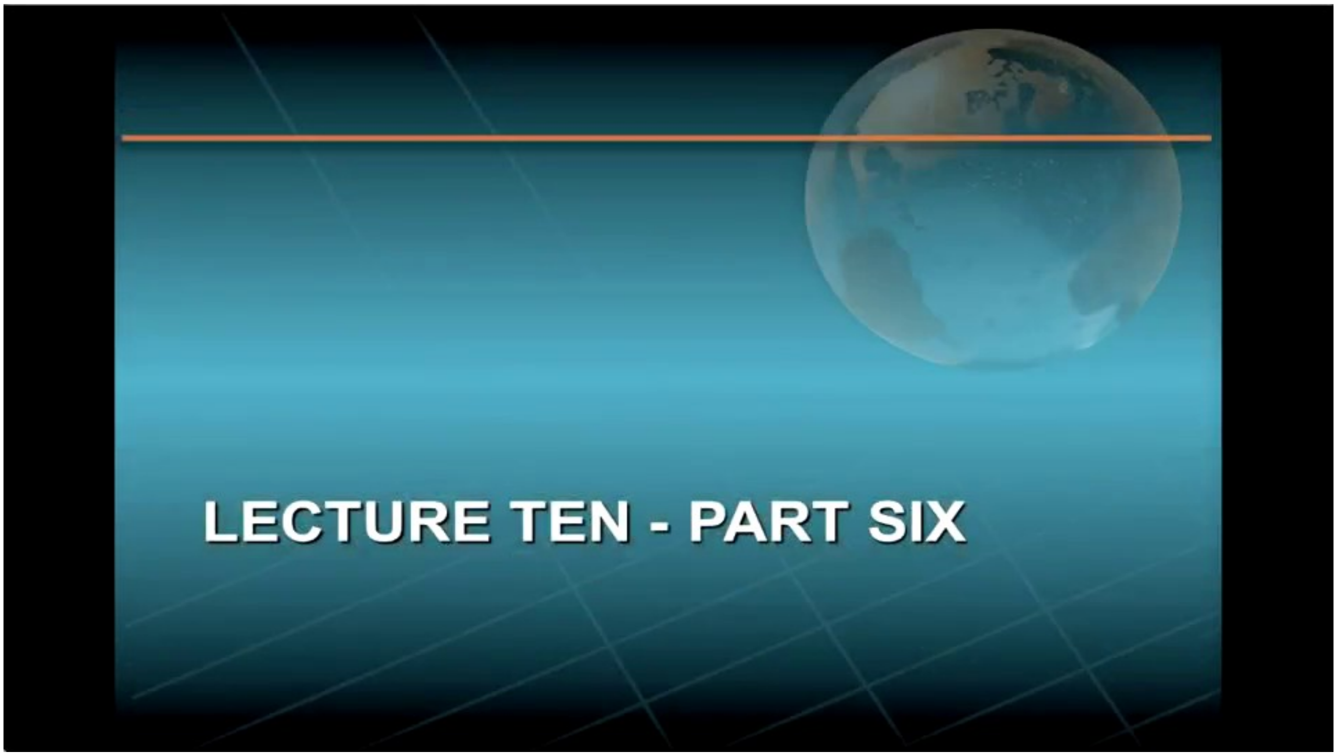

LECTURE TEN - PART SIX

Interest Rates In The Real World

- So far, we have assumed that there is only one interest rate in the economy and that it will stay stable over time.
- In fact, while economists often speak in terms of a single interest rate, there is actually a cluster or range of interest rates.

Various Factors

- This range of rates is based on a variety of factors:
  1. Degree of loan risk
  2. Length or maturity of the loan
  3. Size of the loan
  4. Taxability of the interest on the loan

The Risk Premium

- Suppose you have the choice of lending a $1000 to either General Motors or the Fly by Knight Corporation.
- Question: Which company is most likely to pay you back with interest?

General Motors

- If you lend your money to Fly By Knight, you would want to charge them a higher interest rate.
- This is to compensate for the risk of lending to a smaller, much less known company that might not repay the loan.
- That higher rate for risk is known as the risk premium.

Length of Maturity

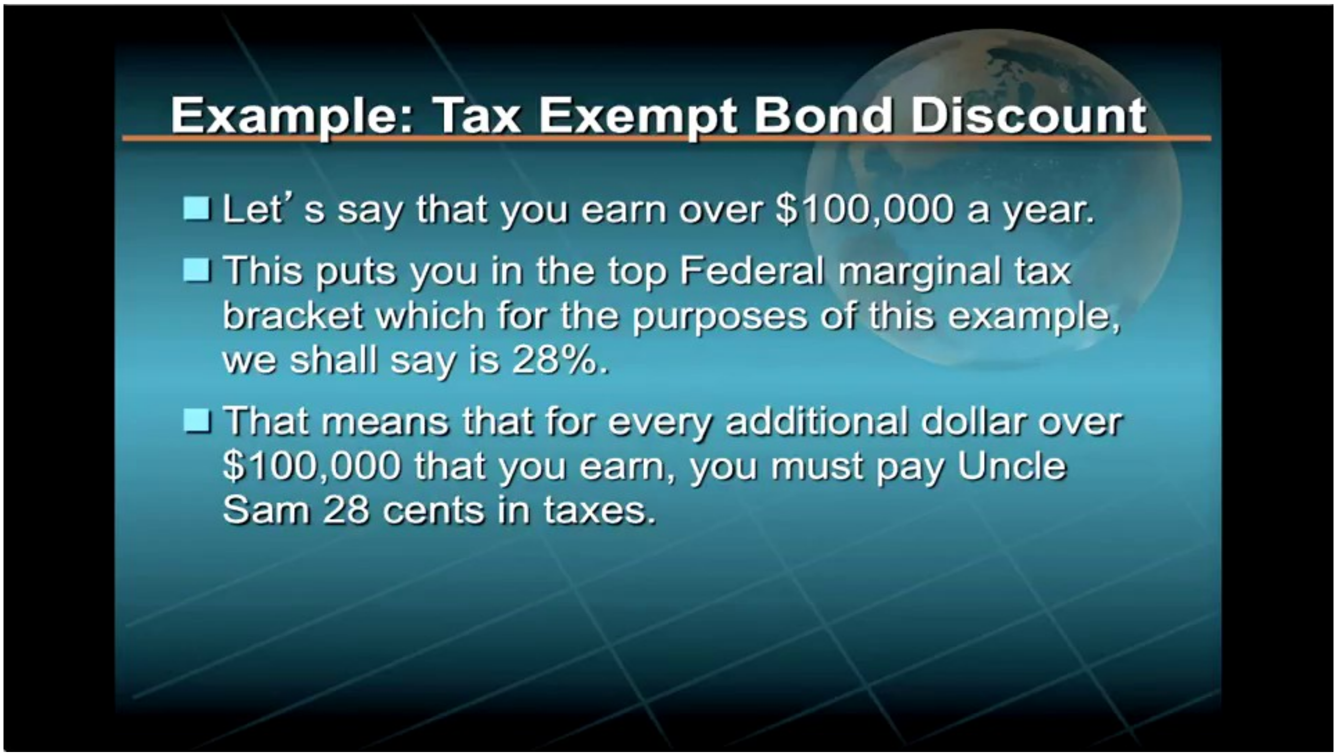
- By the same token, the longer the term of the loan, the higher usually is the interest rate.
- This is to compensate the long-term lender for the inconvenience and possible financial sacrifice of foregoing alternative uses of his or her money for a greater length of time.

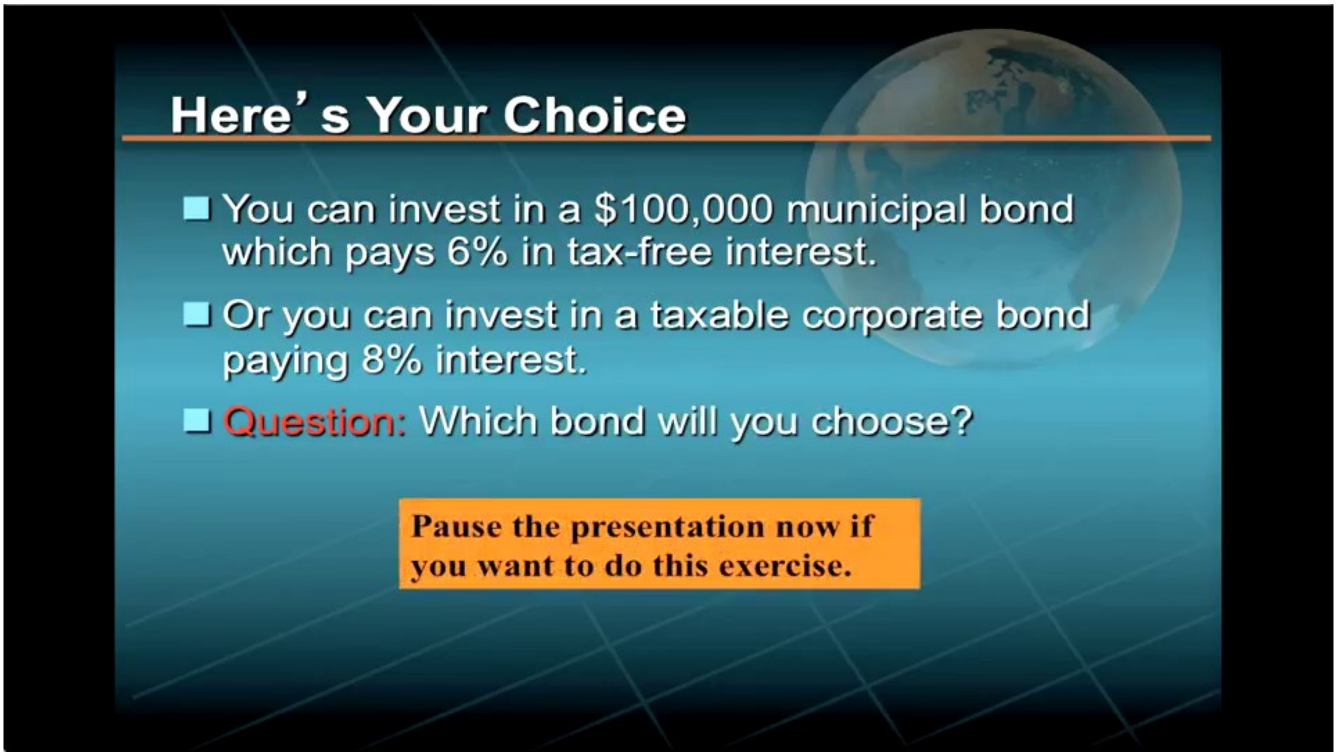
Loan Size

- Given two loans that are equal in both length and risk, the interest rate usually will be somewhat higher on the smaller of the two loans because the administrative costs of a large and a small loan are about the same.

Taxability

- Interest on certain state and municipal bonds is tax exempt.
- Because lenders are interested in their after-tax rate of interest, state and local governments can attract lenders even though they pay lower interest rates.


Example: Tax Exempt Bond Discount
Let’s say that you earn over $100,000 a year.
This puts you in the top Federal marginal tax bracket which for the purposes of this example, we shall say is 28%.
That means that for every additional dollar over $100,000 that you earn, you must pay Uncle Sam 28 cents in taxes.


Here's Your Choice
You can invest in a $100,000 municipal bond which pays 6% in tax-free interest.
Or you can invest in a taxable corporate bond paying 8% interest.
Question: Which bond will you choose?
Pause the presentation now if you want to do this exercise.

The Tax-Free Bond

- Provides you with $6,000 –less than the $8,000 you would receive from the corporate bond.
- If you opt for the corporate bond, you will owe $2,240 in taxes, which we calculate by multiplying the $8,000 in pre-tax interest times your marginal tax rate of 28%.
- You will prefer the lower interest rate with the tax-free bond!!!!!
- This is because you wind up, after taxes, with $240 more than you would with the corporate bond.