CHAPATER 6

Risk structure of interest rates : the relationship among these, bonds with the same term of maturity have different interest rates.

Term structure of interest rates: A bond’s term of maturity also affects its interest rate, and the relationship among interest rates on bonds with different terms to maturity.

Risk of default : Default occurs when the issuer of the bond is unable or unwilling to make interest payments when promised or pay off the face value when bond matures.

U.S. Treasury bonds have usually been considered to have no default risk b/c the fed government can always inc taxes or print money to pay off its obligations.

Default-free bond : bonds with no default risk.

The spread between interest rates on bonds with default risk and interest rates on default-free bonds, both of the same maturity, is called the risk premium. The risk premium indicates how much additional interest people must earn to be willing to hold the risky bond. Bond with default risk always has a positive risk premium.

The theory of portfolio choice predicts that b/c the expected return on the corporate bond falls relative to the expected return on the default-free Treasury bond while its relative riskiness rises, the corporate bond is less desirable and demand for it will fall.

At the same time, the expected return on default-free Treasury bonds inc relative to the expected return on corporate bonds, while relative riskiness declines. The Treasury bonds thus become more desirable, and demand rises, by the rightward shift in the demand curve for these bonds from D1 to D2

A bond with default risk will always have a positive risk premium, and an inc in its default risk will raise the risk premium.

Credit-rating agencies : investment advisory firm that rate the quality of corporate and municipal bonds in terms of their probability of default.

Junk bonds : have higher default risk and have been aptly dubbed speculative-grade or junk bonds; they also referred to as high-yield bonds.

The most liquid an asset is, the more desirable it is.

U.S. Treasury bonds are the most liquid of all long-team bonds, b/c they are so widely traded, easiest to sell quickly, cost of selling them is low. Corporate bonds are not as liquid b/c fewer bonds for any one corporation are traded. In an emergency

Lower liquidity of corporate bonds relative to Treasury bonds inc the spread between the interest rates on these two bonds.

If the corporate bond become less liquid than the Treasury bond, then demand for it will fall, shifting its demand curve leftward from Dc1 to Dc2; the Treasury bond now becomes relatively more liquid in comparison with the corporate bond, so its demand curve shifts rightward from Dt1 to Dt2; the shift in the curve show the price of the less liquid corporate bond falls and its interest rates rises, while the price of the most liquid treasury bond rises and its interest rate falls.

The result is : the spread between the interest rates on the two bond types rises. The differences between interest rates on corporate bonds’ default risk but also their lesser liquidity.

Once the municipal bonds are givin a tax advantage that raises their after-tax expected return relative to Treasury bonds and make them more desirable, demand for them rises, and their demand curve shifts to the right, from Dm1 to Dm2. Their equi bond price then rises from pm1 to pm2, and their equi interest rate falls.

By contract, Treasury bonds have now become less desirable relative to municipal bonds; demand for Treasury bonds have now become less desirable relative to municipal bonds; demand for Treasury bonds decreases, and D1t shifts to the left to D2T. The Treasury bond price falls from pt1 to pt2. And the interest rate rises. The default income tax exemption, which leads to a higher expected return for municipal bonds relative to Treasury bonds, explains why municipal bonds can have interest rates below those of Treasury bonds.

Yield Curve : A plot of the yield on bonds with differing terms to maturity but the same risk, liquidity, and tax consideration; it describe the term structure of interest rates for particular type of bonds.

Upward slopping : long-term interest rates are above short-term interest rates;

Flat yield curve : short- and long-term interest rates are the same;

Inverted yield curve : long-term interest rates are below short-term interest rates.

Three important empirical facts:

1. Interest rates on bonds of different maturities move together over time.
2. When short-term interest rate are low, yield are more likely to have an upward slope; when short-term interest rate are high, yield curve are more likely to slope downward and be inverted.
3. Yield curves always slope upward, as appears in the following the financial news box.

Expectation theory : the interest rate on the long-term bond will equal the average of the short-term interest rates that people expect to occur over the life of the long term bond.

Expectation theory predicts that interest rates on bonds of different maturities differ b/c short-term interest rates are expected to have different values at future dates. That, buyers do not prefer bonds of one maturity over another bond with a different maturity.

Bond that have this characteristic are said to be perfect substitutes.