



## **FIN 360: PRINCIPLES OF FINANCIAL MANAGEMENT**

### **BOND VALUATION**

### **CRITICAL THINKING & CONCEPTUAL QUESTIONS**

1. Explain how time value of money is used in the process of valuing a bond. Why isn't the value of a bond always just the par value?
2. If the FED raises interest rates, what happens to the *value* of existing bonds. What if the FED lowers interest rates? Why?
3. If the FED raises interest rates, what do we expect will happen to the coupon payments that new bonds pay?
4. Given coupon rates on corporate bonds are fixed, why do we care if interest rates change in the economy if we will still continue to collect our same coupon payments?
5. Explain what discount, premium, and bonds "at par" are.
6. How does the bond's current yield differ from its yield to maturity?
7. What is the relationship between a bond's coupon rate, current yield, and yield to maturity if the bond is a premium bond? What is the relationship between a bond's coupon rate, current yield, and yield to maturity if the bond is a discount bond?
8. What's the difference between a real and nominal rate of return?
9. We can approximate the real rate of return on an investment by simply subtracting inflation from a nominal return. However, the Fisher equation gives us the actual real rate of return. When is it most important to use the Fisher equation instead of the approximation?
10. A friend of yours is a very conservative investor. They choose to only hold 20-year government bonds because they are free of default risk and will always pay their coupons. How would you explain to your friend that holding long term government bonds, even though they are backed by the federal government, can be very risky for their portfolio and potentially lose value?
11. Why do we use yields of other similar and newly-issued bonds if we want to determine what the value of another bond is today?
12. How and why might we adjust the discount rate we use in our bond valuation calculations?
13. Two firms want to issue bonds in the primary market to raise money. Both firms will issue senior unsecured callable debentures with 5% coupons, 30 years to maturity, and a \$1,000 par value. However, one of these firms is AAA rated while the other is BBB rated. What will the BBB rated company need to do in order for it to attract investors and sell these bonds in the primary market? (Hint: do bonds always need to be issued at par.)
14. Describe the four key risks influencing bond yields. Why are longer term bonds susceptible to more risk in each case?
15. How is it possible for different investors to compute different values for the same corporate bond?
16. Why does AAA rated debt have a lower yield than BBB rated debt? Why do government bonds yield the least? And what happens to yields as investors buy bonds? Why?

