Proposed Problems

(Week 4)

Financial Investments
Lecturer: Axel Araneda, PhD.
Masaryk University

1. An investor who owns a bond with a 10% coupon rate that pays interest semiannually and matures in three years is considering its sale. If the required rate of return on the bond is 12%, the price of the bond per 100 of par value is closest to?

   - Sol. \$95.08 per \$100 of par value.

2. A bond with maturity equal to 4 years, is traded at 92.98 per 100 of par value. If the holder of the bond will receive semiannual payments with a counpon rate of 4%, how much is the yield?

   - Sol. 6%.

3. A zero-coupon bond matures in 15 years. At a market discount rate of 4.5% per year and assuming annual compounding, the price of the bond per 100 of par value is closest to:

   - Sol. \$51.67 per \$100 of par value.

4. Determine if the following bonds are traded at par, discount, or premium, according to the values of the table.

Bond	Present value (\$)	Par value (\$)	Discount rate (%)	Coupon rate (%)
a	825	800		
b			10	12
c	90	100		
d			3	2
e	800	800		
f			5	5

   - Sol. a: premium, b: premium, c: discount, d: discount, e: par, f: par.