Mini-case 2: The Behaviour of Interest Rates

CONCEPTS IN THIS CASE

effect of interest-rate changes
Fisher effect
bond values
expected return equation
market equilibrium
loanable funds framework
asset market approach
liquidity preference framework
demand and supply curves

Your company is interested in analyzing the behaviour of interest rates and the models used to predict interest rates in the future. As an initial project in this area, you have been assigned the task of creating a presentation that will show the top management team assigned this project the basics of what affects interest rates and how equilibrium prices change over time. The better your presentation to this group, the more likely you are to become a voting member of the team. To begin your work, you have decided to identify a series of questions that you think this team will ask, including tables and graphs that will satisfy their concerns about the final presentation to the CFO. You decide to start by answering the following questions, assuming that the face value of a discount bond is $1000 and the time to maturity is one year.

1. What is the expected return for this bond if the market price is
   a. $800?
   b. $850?
   c. $900?
   d. $950?
   e. $1000?
2. If the market-clearing price (market equilibrium) of this bond has a return of 20% what is the market price where the quantity demanded equals the quantity supplied? (Hint: Use the same expected return equation, solve for P.)
3. Which factors would cause the demand curve for bonds to shift?
4. Which factors would cause the supply curve for bonds to shift?
5. Explain what the Fisher effect is and how it would be reflected in rising interest rates.
6. Explain the meaning and differences between the loanable funds framework and the liquidity preference framework in estimating the equilibrium interest rate. (Include the effects of changes in income, price levels, and expected inflation.)
7. Predict the supply and demand changes for bonds and money that usually occur with the following events:
   Bonds:
   a. business cycle expansion with growing wealth
   b. expected rise in interest rates
   c. increase in expected rate of inflation
   d. increased risk for bonds
   e. increased liquidity for bonds
   f. higher government deficits
   Money:
   g. increase in level of income
   h. rise in the price level
   i. income rising during an expansion
   j. expected inflation increases