Study Questions No. 1 (January 13, 2010)
Economics 130
Winter 2011

These key terms and questions are designed to help you in your understanding of the material covered in class and in the textbook.

Key terms:

Adverse selection
Moral hazard
Asymmetric information
OTC
Money Market
Capital market
Primary market
Leverage
Underwriting
Fiat money
M1, M2
Unit of Account
Medium of Exchange
Cash Flow
Consol
Coupon Bond
Coupon Rate
Current Yield
Discount Bond
Face (Par) Value
Fixed Payment Loan
PDV
Rate of Capital Gain
Simple Loan
Yield to Maturity
Asset Market Approach to Interest rate determination
Liquidity Preference Framework of interest rate determination
Fisher Effect
Excess Supply of Bonds equals Excess Demand for Money
1. Rank the following assets from least liquid:
   a. Checking account deposits
   b. Houses
   c. Currency
   d. Washing machines
   e. Savings deposits
   f. Common stock

2. Which of the Federal Reserve’s measures of the monetary aggregates – M1 or M2 – is composed of the most liquid assets? Which is the largest measure?

3. What is the “monetary base”? How has it grown since 2008 and why?

4. What happened to the “money multiplier” during 2008-2010? Why?

5. What happens to the “velocity of money” (both M1 and M2) during recessions? What happened to it during the recent recession? Why?

6. Explain the moral hazard problem as it relates to bank lending? How do banks try to limit moral hazard in housing construction loans?

7. What is a “consol” debt instrument? Why is the yield to maturity on a consol the same as the current yield?

8. Why do corporate bonds with the same years to maturity (e.g. n = 10 years), the same coupon payment (C) and the same face value (F) as a U.S. Treasury Note trade at a lower price? What does this imply about the yield to maturity?

9. What is “indirect” finance? What is “direct” finance? Give examples of different forms of indirect and direct finance?

10. Would a dollar tomorrow be worth more to you today when the interest rate is 20% or when it is 10%?

11. You have just won $10 million in the state lottery, which promises to pay you $1 million (tax free) every year for the next ten years. Have you really won $10 million?

12. If the interest rate is 10%, what is the present value of a security that pays you $1,000 next year, $1,210 the year after, and $1,331 the year after that?

13. Write down the formula that is used to calculate the yield to maturity on a twenty-year 10% coupon bond with $1,000 face value that sells for $2,000.

14. What is the yield to maturity on a $1,000-face-value discount bond maturing in one year that sells for $800?

15. Which $1,000 bond has the higher yield to maturity, a twenty-year bond selling for $800 with a current yield of 15% or a one-year bond selling for $800 with a current yield of 5%?

16. You are offered two bonds, a one-year U.S. Treasury bond with a yield to maturity of 9% and a one-year U.S. Treasury bill with a yield on a discount basis of 8.9%. Which would you rather own?

17. If mortgage rates rise from 5% to 10% but the expected rate of increase in housing prices rises from 2% to 9%, are people more or less likely to buy houses?
18. Interest rates were lower in the mid-1980s than they were in the late 1970s, yet many economists have commented that real interest rates were actually much higher in the mid-1980s than in the late 1970s. Does this make sense? Do you think that these economists are right?

19. Explain why you would be more or less willing to buy long-term AT&T bonds under the following circumstances:
   a. Trading in these bonds increases, making them easier to sell.
   b. You expect a bear market in stocks (stock prices are expected to decline)
   c. Brokerage commissions on stock fall.
   d. You expect interest rates to rise.
   e. Brokerage commission on bonds fall.

20. An important way in which the Federal Reserve decreases the money supply is by selling bonds to the public. Using a supply and demand analysis for bonds, show what effect this action has on interest rates. Is your answer consistent with what you would expect to find with the liquidity preference framework?

21. Using both the liquidity preference framework and the supply and demand for bonds framework, show why interest rates are procyclical (rising when the economy is expanding and falling during recessions).

22. Why should a rise in the price level (but not in expected inflation) cause interest rates to rise when the nominal money supply is fixed?

23. How might a sudden increase in people’s expectations of future real estate prices affect interest rates?

24. Explain what effect a large federal deficit might have on interest rates.

25. Using both the supply and demand for bonds and liquidity preference frameworks, show what the effect is on interest rates when the riskiness of bonds rises. Are the results the same in the two frameworks?

26. If the next chair of the Federal Reserve Board has a reputation for advocating an even slower rate of money growth than the current chair, what will happen to interest rates? Discuss the possible resulting situations.