

Midterm Exam II

Name _____

Id # _____

Instructions: There are two parts to this midterm. Part A consists of multiple choice questions. Please mark the answers to the multiple choice questions on the exam paper and fill in the relevant bubble on the Scantron sheet. Part A is worth 60%.

Part B is worth 40% and consists of short answer questions. Please answer in the space provided. Please attempt both parts and turn the exam in at the end.

Part A: MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) Factors that increase the demand for bonds include
 - A) a decrease in the inflation rate.
 - B) an increase in the volatility of stock prices.
 - C) an increase in the liquidity of stocks.
 - D) all of the above.
 - E) only A and B of the above.

- 2) When bond interest rates become less volatile, the demand for bonds _____ and the interest rate _____.
 - A) decreases; rises
 - B) decreases; falls
 - C) increases; falls
 - D) increases; rises

- 3) A decrease in the liquidity of corporate bonds, other things being equal, shifts the demand curve for corporate bonds to the _____ and the demand curve for Treasury bonds shifts to the _____.
 - A) right; left
 - B) right; right
 - C) left; left
 - D) left; right

- 4) Bonds with no default risk are called
 - A) flower bonds.
 - B) default-free bonds.
 - C) zero-risk bonds.
 - D) no-risk bonds.

- 5) The concept of adverse selection helps to explain
 - A) which firms are more likely to obtain funds from banks and other financial intermediaries, rather than from the securities markets.
 - B) why indirect finance is more important than direct finance as a source of business finance.
 - C) why direct finance is more important than indirect finance as a source of business finance.
 - D) only A and B of the above.
 - E) only A and C of the above.

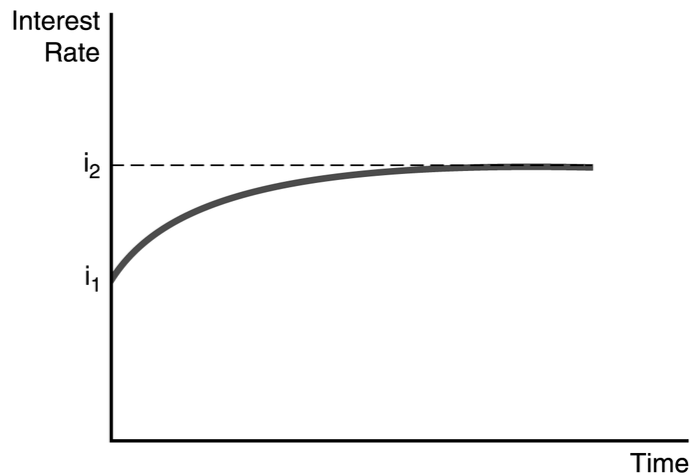


Figure 1

- 6) Figure 1 above, illustrates the effect of an increased rate of money supply growth. From the figure, one can conclude that the
- A) Fisher effect is smaller than the expected inflation effect and interest rates adjust quickly to changes in expected inflation.
 - B) liquidity effect is dominated by the Fisher effect and interest rates adjust slowly to changes in expected inflation.
 - C) liquidity effect is dominated by the Fisher effect and interest rates adjust quickly to changes in expected inflation.
 - D) Fisher effect is dominated by the liquidity effect and interest rates adjust slowly to changes in expected inflation.
- 7) If a corporation begins to suffer large losses, then
- A) the default risk on the corporate bond will increase and the bond's return will become less uncertain, meaning the expected return on the corporate bond will fall.
 - B) the default risk on the corporate bond will decrease and the bond's return will become less uncertain, meaning the expected return on the corporate bond will fall.
 - C) the default risk on the corporate bond will decrease and the bond's return will become less uncertain, meaning the expected return on the corporate bond will rise.
 - D) the default risk on the corporate bond will increase and the bond's return will become more uncertain, meaning the expected return on the corporate bond will fall.
- 8) If bad credit risks are the ones who most actively seek loans and, therefore, receive them from financial intermediaries, then financial intermediaries face the problem of
- A) adverse selection.
 - B) free-riding.
 - C) moral hazard.
 - D) costly state verification.
- 9) The spread between the interest rates on default-free bonds and those with a positive default risk is called the
- A) junk premium.
 - B) capitalized risk.
 - C) default premium.
 - D) risk premium.

- 10) Other things being equal, an increase in the default risk of corporate bonds shifts the demand curve for corporate bonds to the _____ and the demand curve for Treasury bonds to the _____.
- A) left; left B) left; right C) right; right D) right; left
- 11) In actual practice, short-term interest rates and long-term interest rates move together; this is the major shortcoming of the
- A) expectations theory. B) liquidity premium theory.
 C) segmented markets theory. D) separable markets theory.
- 12) Using the one-period valuation model, assuming a year-end dividend of \$0.11, an expected sales price of \$110, and a required rate of return of 10%, the current price of the stock would be
- A) \$100.00. B) \$100.10 C) \$110.11. D) \$100.11 E) \$121.12.
- 13) Reasons why an expectation might fail to be rational include the fact that
- A) people might fail to use available information in making their expectation the best guess possible of the future.
 B) people may be unaware of available information.
 C) people might fail to use information that is not yet available.
 D) both A and B of the above are true.
- 14) Terrorist attacks on the United States caused a(n)
- A) decrease in stock prices due to lower expected growth and greater risk.
 B) increase in stock prices due to an increased required return.
 C) decrease in stock prices due to lower expected dividend growth and reduced uncertainty.
 D) decrease in stock prices due to lower future sales prices.
 E) increase in stock prices due to higher expected dividend growth.
- 15) You observe that both short-term and long-term interest rates rise after an announcement by the Federal Reserve that the economy appears to be growing rapidly. You might speculate that
- A) the efficient markets hypothesis has been refuted.
 B) market participants expect a surge in inflation in the next few months.
 C) market participants do not expect a surge in inflation in the next few months.
 D) both B and C of the above are true.
- 16) When bonds become more widely traded, and as a consequence the market becomes more liquid, the demand curve for bonds shifts to the _____ and the interest rate _____.
- A) left; falls B) right; falls C) right; rises D) left; rises
- 17) Expectations of _____ have a major impact on bond prices and interest rates through the _____ effect.
- A) money growth; Fisher B) money growth; Pigou
 C) inflation; Pigou D) inflation; Fisher

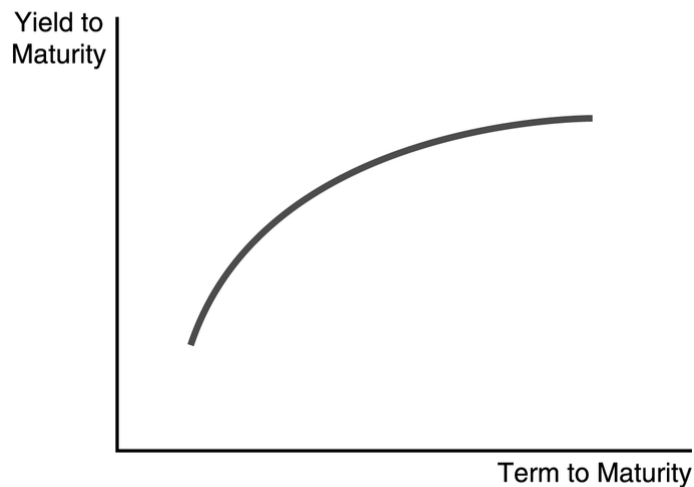


Figure 2

- 18) The steeply upward sloping yield curve in Figure 2 indicates that _____ interest rates are expected to _____ in the future.
- A) short-term; fall moderately
 - B) long-term; remain unchanged
 - C) long-term; fall moderately
 - D) short-term; remain unchanged
 - E) short-term; rise
- 19) According to the liquidity premium theory
- A) a steeply rising yield curve indicates that short-term interest rates are expected to remain unchanged in the future.
 - B) a downward sloping yield curve indicates that short-term interest rates are expected to fall sharply in the future.
 - C) a flat yield curve indicates that short-term interest rates are expected to rise moderately in the near future, then fall moderately in the distant future.
 - D) a moderately rising yield curve indicates that short-term interest rates are expected rise moderately in the future.
- 20) Which of the following is the primary source of external funds used by American businesses to finance their activities?
- A) Other loans
 - B) Bank loans
 - C) Stock
 - D) Bonds and commercial paper

- d. [5 pts] Suppose that the short term rates on 1 year bonds today were 6% and that the expected short term rates on 1 year bonds in the future were: 8%, 7%, 7% and 7% over the subsequent 4 years. Calculate the implied yields on 2 year, 3 year, 4 year and 5 year bonds below:
- e. [5 pts] Using your answers to part (d), draw the term structure of interest rates, as predicted by the **Liquidity Premium Theory**.

22. (20%) Suppose you are considering buying an apple tree. Historically, each year this apple tree has produced an average of 20 apples per year, and is expected to continue doing so. Suppose that apples sell for \$0.50 in the market today; apple trees cost \$100 today and the annual rate of apple tree inflation is 5.5%
- a. [4 pts] Suppose that the rate of apple tree inflation has remained constant over time. What would you expect the price of this apple tree to be 1 year from today?
- b. [6 pts] Suppose your required rate of return from holding any asset is 10%. What is your valuation of the price of the apple tree? [Hint: You may assume you keep the entire profits from selling apples and that there are no costs for you to sell apples]
- c. [4 pts] Based on your answer to part (b), would you buy this apple tree? Why (or why not)? [Hint: Relate your answer here to the current price of apple trees today.]

d. [2 pts] Suppose that on May 1, 2006, the news service announces a swarm of locusts heading your way. It is likely to affect you and other apple producers in your area. What will happen to the price of apple trees as a result?

e. [4 pts] In the diagram below, show what happens to the price of apple trees if the market for apples was *inefficient*?

