

Sample 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 (60%)

Choose the one alternative that best completes the statement or answers the question.

- 1) The spread between the interest rates on bonds with default risk and default-free bonds is called the
A) junk margin. B) default premium. C) risk premium. D) bond margin.

Answer: C

- 2) If the expected path of 1-year interest rates over the next five years is 1 percent, 2 percent, 3 percent, 4 percent, and 5 percent, the expectations theory predicts that the bond with the highest interest rate today is the one with a maturity of
A) five years. B) one year. C) two years. D) four years. E) three years.

Answer: A

- 3) The small-firm effect refers to the
A) lower than average returns earned by small firms.
B) fact that small firms earn low returns after adjusting for risk.
C) fact that small firms earn returns equal to large firms.
D) abnormally high returns earned by small firms.
E) fact that small firms generally earn negative returns.

Answer: D

- 4) In the generalized dividend model, a future sales price far in the future does not affect the current stock price because
A) the company may suffer bankruptcy.
B) the present value is almost zero.
C) the present value cannot be computed.
D) the stock may never be sold.
E) the sales price does not affect the current price.

Answer: B

- 5) A lesson of the Enron collapse is that
- A) government regulation can reduce but not eliminate asymmetric information.
 - B) better government regulation can eliminate the problem of asymmetric information.
 - C) government regulation increases the problem of asymmetric information.
 - D) government regulation should be reduced.
 - E) government regulation always fails.

Answer: A

- 6) Although restrictive covenants can potentially reduce moral hazard, a problem with restrictive covenants is that
- A) borrowers may find loopholes that make the covenants ineffective.
 - B) they are costly to monitor and enforce.
 - C) too many resources may be devoted to monitoring and enforcing them, as debtholders duplicate others' monitoring and enforcement efforts.
 - D) all of the above.
 - E) only A and B of the above.

Answer: E

- 7) The Federal Reserve System enjoys
- A) political independence.
 - B) goal independence.
 - C) instrument independence.
 - D) all of the above.
 - E) both A and C of the above.

Answer: D

- 8) Although it enjoys a high degree of autonomy, the Fed is still subject to the influence of Congress because
- A) Congress can remove members of the Board of Governors on a whim.
 - B) Congress can pass legislation that would restrict the Fed independence.
 - C) Congress can withhold the Fed appropriations.
 - D) of all of the above.

Answer: B

- 9) When the Fed wants to decrease the level of reserves of the banking system, it can
- A) sell government bonds to the general public.
 - B) decrease discount loans to banks.
 - C) sell government bonds to banks.
 - D) do any of the above.
 - E) do only A and B of the above.

Answer: D

- 10) The excess reserves ratio is _____ related to expected deposit outflows, and is _____ related to the market interest rate.
- A) negatively; negatively
 B) positively; positively
 C) negatively; positively
 D) positively; negatively

Answer: D

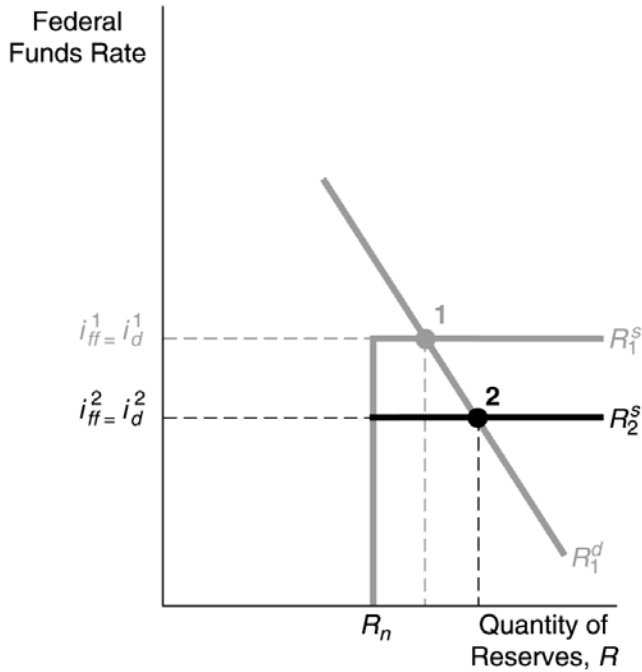


Figure 17-1

- 11) In Figure 17-1, a decrease in the discount rate
- A) shifts the horizontal section of reserves supply from R_2^S to R_1^S , increasing the equilibrium federal funds rate from i_{ff}^2 to i_{ff}^1 .
- B) shifts the horizontal section of reserves supply from R_2^S to R_1^S , reducing the equilibrium federal funds rate from i_{ff}^1 to i_{ff}^2 .
- C) shifts the horizontal section of reserves supply from R_1^S to R_2^S , increasing the equilibrium federal funds rate from i_{ff}^2 to i_{ff}^1 .
- D) shifts the horizontal section of reserves supply from R_1^S to R_2^S , reducing the equilibrium federal funds rate from i_{ff}^1 to i_{ff}^2 .

Answer: D

- 12) A decrease in the liquidity of corporate bonds will _____ the price of corporate bonds and _____ the yield of Treasury bonds.
- A) increase; reduce
 - B) reduce; reduce
 - C) reduce; increase
 - D) increase; increase
 - E) reduce; not affect

Answer: B

- 13) The functions of the regional Federal Reserve Banks include
- A) clearing checks.
 - B) rationing discount loans to banks.
 - C) "establishing" the discount rate.
 - D) all of the above.
 - E) both A and C of the above.

Answer: D

- 14) If a bank has excess reserves of \$10,000 and demand deposit liabilities of \$80,000, and if the reserve requirement is 20 percent, then the bank has actual reserves of
- A) \$16,000. B) \$26,000. C) \$6,000. D) \$36,000. E) \$20,000.

Answer: B

- 15) For a given level of the monetary base, a decrease in the required reserve ratio on checkable deposits will mean
- A) a decrease in checkable deposits. B) an increase in the money supply.
C) an increase in discount borrowing. D) a decrease in the money supply.

Answer: B

- 16) The Fed uses three policy tools to manipulate the money supply: _____, which affect reserves and the monetary base; changes in _____, which affect reserves and the monetary base by influencing the quantity of discount loans; and changes in _____, which affect the money multiplier.
- A) discount lending; open market operations; margin requirements
 - B) open market operations; discount lending; margin requirements
 - C) open market operations; discount lending; reserve requirements
 - D) discount lending; open market operations; reserve requirements

Answer: C

- 17) The behavior of which asset price(s) supports the efficient markets hypothesis?
- A) Bonds
 - B) Exchange rates
 - C) Stocks
 - D) All of the above
 - E) Both A and B of the above.

Answer: D

- 18) Expectations of _____ have a major impact on bond prices and interest rates through the _____ effect.
- A) money growth; Fisher
 - B) inflation; Fisher
 - C) inflation; Pigou
 - D) money growth; Pigou

Answer: B

- 19) The efficient markets hypothesis
- A) is based on the assumption that prices of securities fully reflect all available information.
 - B) is an application of rational expectations to the pricing of financial securities.
 - C) holds that the expected return on a security equals the equilibrium return.
 - D) holds that all of the above are true.
 - E) holds that only A and B of the above are true.

Answer: D

- 20) The federal funds rate is the
- A) interest rate on government debt.
 - B) interest rate on overnight loans of reserves between banks.
 - C) interest rate the government pays when borrowing from banks.
 - D) all of the above.
 - E) both A and C of the above.

Answer: B

Part B: SHORT ANSWER QUESTIONS (40%)

Write brief answers to the questions below being as succinct and clear as possible. Show any calculations as necessary in answering the questions.

21. (10%)

(a) (5%)

Assuming that the expectations theory is the correct theory of the term structure, calculate the interest rates in the term structure for maturities of one to five years for the following series of one year interest rates over the next five years:
5%, 7%, 8%, 7%, 7%

Answer:

The yield to maturity would be as the average of the sequence of 1 year bonds. The yields are as follows:

	<u>Yield to maturity</u>
1 year bond	5%
2 year bond	6%
3 year bond	6.67%
4 year bond	6.75%
5 year bond	6.8%

(b) (5%)

How would the yield curve change if people preferred shorter-term bonds over longer term bonds?

Answer:

The yield curve is upward sloping in part (a). It would be even steeper if people preferred short term bonds to long term bonds, because long term bonds would then have a positive liquidity premium.

22. (10%)

Evaluate the following statement:

“Forecaster’s predictions of inflation are notoriously inaccurate, so their expectations of inflation cannot be rational.” Is the statement true or false. Explain your answer as succinctly as possible. [Note: I am just looking for 4 – 5 lines outlining the reasoning behind your answer]

Answer.

False. Expectations can be highly inaccurate and still be rational, because optimal forecasts are not necessarily accurate. A forecast is optimal if it is the best possible (i.e. uses all available information in the most efficient manner to predict), even if forecast errors are large.

23. (20%)

For the following parts, assume that the required reserve ratio is 10%, that banks do not hold any excess reserves, and the public's holding of currency does not change.

a. (10%)

Using T-accounts (or otherwise), show what happens to checkable deposits in the banking system when the Fed injects \$1Million to the First National Bank.

First National Bank			
Assets	Liabilities		
Securities	- \$1M		
Reserves	+ \$1M		
Assets	Liabilities		
Securities	- \$1M	Deposits	+ \$1M
Reserves	+ \$1M		
Loans	+ \$1M		
Assets	Liabilities		
Securities	- \$1M	Deposits	+ \$1M
Loans	+ \$1M		

These \$1M in additional deposits then gets deposited at further banks, which hold a fraction according to reserve requirements, and then extend further liquidity. Total checkable deposits rise by $\$1M/0.1 = \10Million .

b. (10%)

Suppose that the Fed makes an open market purchase of \$1million of bonds from the First National Bank. Suppose that the First National Bank and all other banks use the resulting increase in reserves to purchase securities only, and not to make loans. What happens to checkable deposits?

Answer:

The \$1M open market purchase of bonds, increases reserves in the banking system by \$1M and the total increase in checkable deposits to \$10M as in part (a). The fact that banks buy securities rather than make loans with their excess reserves makes no difference in the multiple deposit creation process.