

Instructions:

- 1) The part of the exam is closed book and closed notes. No scrap paper is allowed; use the back of the exam if necessary.
- 2) Partial points are based on readily observable evidence that you know at least part of the solution concept. The more evidence presented (and the clearer the evidence), the better the chance for partial points. In other words, SHOW ALL WORK!
- 3) True/False questions are worth 3 points. Multiple-choice questions are worth 4 points. Short answer questions usually take less than three sentences and are worth 5 points.

1. The project's NPV is -\$60M (M = million) and the net advantage of leasing (NAL) is \$55M. Should the project be undertaken?
 - a. No, but only because the NPV is negative.
 - b. Yes. When the NAL is positive it does not matter if the NPV is negative.
 - c. No, but only because (NPV + NAL) is negative.
 - d. Yes, but only because (NPV + NAL) is positive.
 - e. We do not enough information to make a correct judgment on undertaking the project.
2. If the lessee fails to make timely lease payments, the lessee does not run the risk of bankruptcy.
 - a. True
 - b. False
3. An advantage of leasing is that the lessee must usually forgo residual value.
 - a. True
 - b. False
4. Which of the following statement is true?
 - a. With a full-service lease, the lessee is responsible for maintaining and insuring the assets, and paying any property taxes due on them.
 - b. Operating leases represent an important source of long-term financing. Entering into a financial lease is like entering into a loan agreement.
 - c. Financial leases represent an important source of short-term financing.
 - d. all of the above.
 - e. none of the above.
5. If certain guidelines are met, the lessee can deduct for tax purposes the full amount of each lease payment, and the lessor is entitled to the tax deductions and tax credits of asset ownership. These guidelines do NOT include which of the following?
 - a. The lessee does not pay any portion of the purchase price of the asset.
 - b. The term of the lease cannot exceed 80% of the useful life of the asset.
 - c. The lessee must hold title to the property.
 - d. The lessor can grant the lessee a purchase option.
 - e. None of the above are within the guidelines.
6. For United States issued bonds that are issued using dollars, the stated principal amount is _____.
 - a. the date the borrower must repay the money it borrowed.
 - b. the amount the borrower must repay.
 - c. usually a fixed rate, but it can be a variable rate that's adjusted according to a specified formula.
 - d. another name for the trustee.
 - e. None of the above.
7. The _____ the time to maturity for a bond, the _____ is its price change in response to a given change in interest rates.
 - a. Longer; smaller
 - b. Longer; greater
 - c. The relationship between the time to maturity and price sensitivity of bonds depends on how stock prices change upon a change in interest rates.
 - d. The relationship between the time to maturity and price sensitivity of bonds depends on how the par value of the bond changes upon a change in interest rates.
 - e. There exists no relationship between time to maturity and price sensitivity of bonds.

8. If the United States were running a trade deficit with Europe, we would expect the value of the Euro to depreciate against the U.S. dollar.

a. True

b. False

9. A domestic firm importing a product to a foreign country will purchase the foreign currency in the foreign exchange market.

a. True

b. False

10. A _____ covers the purchase and sale of an item, such as a currency, for future delivery based on a price (the exchange rate) that is agreed to today.

A) LIBOR contract

B) forward contract

C) a currency swap

D) Fisher effect

E) International Fisher effect.

11. The objective of the managers of a multinational corporation is to maximize the wealth of shareholders.

a. True

b. False

12. Using the Exchange Rate Table, list all currencies that depreciated against the dollar on Tuesday.

13. Using the Exchange Rate Table, list all countries that have lower inflation rates than the United States.

Exam 2 Spring 2005 FINC 4532 Your Name _____
YOU HAVE 105 MINUTES TO COMPLETE BOTH PARTS OF THIS EXAM

Instructions:

- 1) The part of the exam is open book and open notes.
- 2) Point values are listed with the question.
- 3) Look over the entire exam before starting. The best strategy is generally to “cherry pick”. In other words, solve the easiest (and/or most familiar) problems first. This will save time (and energy) that can be expended on the more difficult problems.
- 4) Partial points are based on readily observable evidence that you know at least part of the solution concept. The more evidence presented (and the clearer the evidence), the better the chance for partial points. In other words, **SHOW ALL WORK!**
- 5) If you have additional time remaining, give your work one last check.

1. RedRock Corporation is considering a leasing arrangement to finance some special manufacturing tools that it needs for production during the next four years. A planned change in the firm's production technology will make the tools obsolete after 4 years. The firm will depreciate the cost of the tools using the MACRS 3 year schedule. The firm can borrow \$7,500, which is 100% of the purchase price, at 7.5 percent on an amortized loan to buy the tools, or it can make four equal beginning-of-year lease payments of \$2,100. The firm's tax rate is 40 percent. If the firm buys the equipment, the annual maintenance costs associated estimated at \$270. The lessor will pay the annual maintenance costs of \$150 per year. The salvage value of the machine at the end of 4 years is \$250. The firm's pre-tax cost of all types of debt is 8%, weighted average cost of capital 8.8%, and the levered cost of equity is 12%. Should the firm lease or buy the piece of equipment (1 point)? Numerical evidence that your answer is correct (16 points)

2. (3 points) A \$1,000 par value bond has coupon rate of 9.5% and the coupon is paid semi-annually. Currently the bond is trading at \$1,197.93 per bond and the market rate is 6.9%. How many years does this bond have until it matures?

3. (4 points) Modata corp is planning to raise \$10,000,000 in funds by issuing zero coupon, \$1,000 par value bonds with a 20-year maturity. Assuming that Modata is able to issue these bonds at cost of debt of 10%, how many bonds must they issue?

4. (3 points) The U.S. dollar suddenly changes in value against the euro moving from an exchange rate of \$0.8909/€ to \$0.8709/€. Thus, the dollar has _____ by _____.

- a. appreciated; 2.30%
- b. depreciated; 2.30%
- c. appreciated; 2.24%
- d. depreciated; 2.24%

5. (3 points) If the current exchange rate is 134 Japanese yen per U.S. dollar, the price of a Big Mac hamburger in the United States is \$2.99, and the price of a Big Mac hamburger in Japan is 294 yen, then other things equal, the Big Mac hamburger in Japan is _____.

- a. correctly priced
- b. under priced
- c. over priced
- d. not enough information to determine if the price is appropriate or not.

6. (6 points) Based on the Exchange rate table using the 6-months forward rate, complete the following sentences.

- a. The Japanese Yen is expected to _____ (appreciate or depreciate) at an annualized rate of _____ %.
- b. The annualized interest rate on Canadian bonds is _____ (higher/lower) than the rate of U.S. bonds by _____ %.
- c. The annualized inflation rate in Switzerland is _____ (higher/lower) than the rate of U.S. bonds by _____ %.

Use the below information to answer the next 4 questions. 2.5 points for each blank (24 points).

Spot rate is \$0.0095691=1 yen.

The one-year futures price is \$0.009381=1 yen

The 1-year Japanese Treasury rate is 2.4%

Inflation in the United States is expected to be 1.1%.

7. A Japanese person investing 100,000 yen in the United States expects to invest _____ Dollars today in United States Treasury Bonds. They would earn _____% on their United States Treasury Bonds. At the end of one year, they would redeem their bond for _____ dollars and convert their \$ back into _____ yen. During this period, the yen appreciated/depreciated _____% against the \$.

8. The 1-year forward rate for \$1 is _____ yen.

9. The 1-year treasury rate in the United States is _____%

10. The inflation rate in Japan is _____%