

Name: _____

Final exam
266: Fi. Markets and Institutions
Spring 2011
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Directions:

You have 2 hours (120 min.) to do the exam unless other arrangements have been made.

You may write on the backs of the exam pages and request additional paper.

If your answer extends outside the space provided, you must label clearly where the additional portion is located.

NOTE: Some questions involve choice about which parts of the question you must complete. This is signified, e.g., by (Do 3 of 4) at the start of the question and (3 of 4) at the start of each part.

Each question part is worth 2 points.

1 (**Do 3 of 5**) Assorted short answer.

1.1 (**3 of 5**) Define 'insurable interest' as it applies in insurance markets.

1.2 (**3 of 5**) Define 'operational risk' in a financial firm.

1.3 (**3 of 5**) Name one difference between the roles market makers play on the NASDAQ vs. NYSE.

1.4 (**3 of 5**) Why is the bid ask spread (the difference between the bid price and the ask price) on an electronic exchange viewed as one measure of liquidity?

1.5 (**3 of 5**) Define VaR (value at risk) as it is often reported by financial firms.

2 (**Do 2 of 4**) Facts about the stock market

2.1 (**2 of 4**) What is the approximate market capitalization of stock markets in the United States?

2.2 (2 of 4) True/False and explain. What is index commonly known at the S&P an index of?

2.3 (2 of 4) True/False and explain. Stock markets all over the world have performed about equally well since the recent financial crisis.

2.4 (2 of 4) Describe one difference between common stock and preferred stock.

3 (**Do all parts**) More stock market.

3.1 (**all parts**) Suppose that a company is expected to pay an annual dividend of $d_{t+1}^e, d_{t+2}^e, d_{t+3}^e, \dots$, in years $t+1, t+2, t+3, \dots$. Give a formula for the value of the share price today, at time t , using our standard discounted present value relation.

3.2 (**all parts**) In practice, dividends are hard to predict so the above formula can be hard to apply. Thus, the Gordon growth model of stock prices makes a simplifying assumption about dividends. What assumption does the Gordon growth model make about dividends?

3.3 (**all parts**) The stock of LAX corp. is currently selling for \$21 per share. LAX is expected to pay an annual dividend of 73 cents per share. Analysts expect the price of LAX shares to be \$24 in one year. What is the expected annualized rate of return for holding LAX over the next year?

4 (**Do all parts**) You own 1,000 shares of stock in, say, Tokyo Electric Power (TEPCO). Some news event makes you worried the stock price may fall sharply. You don't want to simply sell the stock now because you are a big believer in nuclear power.

4.1 (**all parts**) You consider entering a stop loss order to sell the stock. True/False explain. With a stop loss order you put a certain floor on the price at which you will sell the stock?

4.2 (**all parts**) Instead of using a stop loss order, you consider buying an option on Tokyo Electric Power shares in order to hedge the risk of a sharp price drop. Explain the basic elements of a put option and of a call option.

4.3 (**all parts**) Explain whether you would buy a put or a call option on TEPCO shares in order to hedge the risk we are discussing in this question.

4.4 (**all parts**) A speculator suspects that the news about TEPCO will be much worse than the market generally expects. The speculator performs a short sale of TEPCO shares. Describe how a speculator could profit from a short sale of TEPCO shares.

5 (**Do all parts**) Hedge funds

5.1 (**all parts**) About what is the total value of funds in hedge funds world wide?

5.2 (**all parts**) Our basic portfolio equation from the CAPM says that for any asset A :

$$i_{A,t}^e = i_t^{rf} + \beta_A(i_{M,t}^e - i_t^{rf})$$

(You should know the meanings of the terms in this equation.)
By discussing β_A , explain how this CAPM equation implies that the only way you can expect to earn more than the risk free rate is by taking systematic risk.

5.3 (**all parts**) Many investors, including hedge funds, believe that we need to add an α to the basic CAPM equation:

$$i_{A,t}^e = \alpha + i_t^{rf} + \beta_A(i_{M,t}^e - i_t^{rf})$$

What is the interpretation of α ?

5.4 (**all parts**) One hedge fund strategy is to find two related assets that seem to be mispriced relative to each other—that is, one asset is relatively too cheap and the other is relatively too expensive. What trades might the hedge fund use to make money based on this mispricing?

6 (**Do all parts**) Liquidity/solvency and the crisis.

6.1 (**all parts**) Asymmetric information is an important reason why (in the era before deposit insurance) a completely honest and healthy bank might fail due to a bank run. True/False and explain.

6.2 (**all parts**) Central Banks traditionally play a 'lender of last resort' role for banks facing a bank run. Explain this role.

6.3 (**all parts**) True/False and explain. If the market will not lend to a bank, then the central bank shouldn't either. Thus, the 'lender of last resort' role is an example of an unjustified government intervention in the free market.

6.4 (**all parts**) In the aftermath of the Lehman Brothers bankruptcy, money market mutual funds were subject to the mutual fund equivalent of bank runs. How did the Fed (Federal Reserve) respond to the runs on money market mutual funds?

7 (**Do 3 of 4**) Regulation.

7.1 (**3 of 4**) Describe one good and one bad effect (from the standpoint of society) of providing deposit insurance.

7.2 (**3 of 4**) Describe one good and one bad effect (from the standpoint of society) of laws prohibiting insider trading.

7.3 (**3 of 4**) Describe one good and one bad effect (from the standpoint of society) of limited liability laws that protect shareholders (from being liable for the mistakes made by the firms they own.

7.4 (**3 of 4**) Describe one good and one bad effect (from the standpoint of society) of a law separating commercial banking from investment banking.

8 (**Do 3 of 4**) Investment banking.

8.1 (**3 of 4**) Name three core investment banking activities. (Hint: You do not need to explain them.)

8.2 (**3 of 4**) Name two major investment banks in the U.S. that became commercial banks during the crisis (that is, became bank holding companies with both commercial and investment banking parts).

8.3 (3 of 4) Why is the reputation of the investment bank important to the firms that want help issuing a new security?

8.4 (3 of 4) You are an investment bank and someone brings you a major IPO that they want you to conduct. Why might you form a syndicate with other investment banks in order to complete the IPO?

9 (**Do all parts**) Monetary policy.

9.1 (**all parts**) What are the two mandates of a 'dual mandate' central bank?

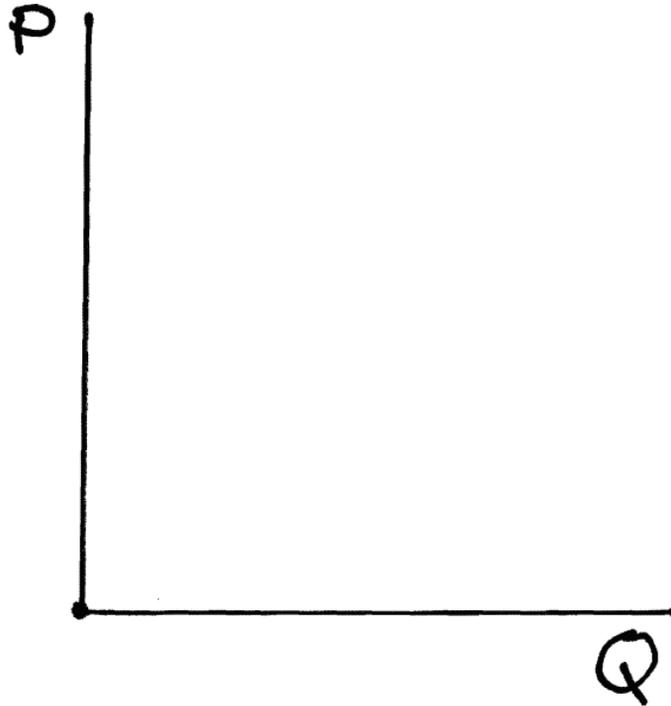
9.2 (**all parts**) In normal times, a dual mandate central bank that anticipates high unemployment and very low inflation would do what to the main monetary policy interest rate?

9.3 (**all parts**) Currently the consensus at the Fed is that inflation is quite low and the unemployment rate is too high. Why can't the Fed do what it would do in normal times?

9.4 (**all parts**) Quote: 'The program which policy wonks call quantitative easing, but nearly everyone else calls QE2, was designed to keep bond prices high. . . .' Why would the Fed want to push up long-term bond prices?

9.5 (all parts) Using the figure below **and words** explain what actions the Fed undertook in QE2 and how these might tend to push up long-term bond prices.

Supply of and Demand for
Long-term Government Bonds



10 (**Do all parts**) Exchange rate policy.

10.1 (**all parts**) What does it mean to say that the dollar 'strengthened' against other currencies?

10.2 (**all parts**) Who in the U.S. benefits from a strengthening of the dollar? Who in the U.S. is hurt by a strengthening of the dollar?

- 10.3 (**all parts**) A quote from former Treasury Secretary Paul O'Neill:
“When I was secretary of the Treasury I was not supposed to say anything but strong dollar, strong dollar. I argued then and would argue now that the idea of a strong-dollar policy is a vacuous notion.” Discuss.