UNIVERSITY OF ESSEX DEPARTMENT OF ECONOMICS
Session 2011-2012 Ioannis Litsios

EC 247 Financial Instruments and Capital Markets

Class Exercise 7

These questions reflect the topic on futures contracts which is addressed in chapter 24 of the Frederic S. Mishkin and Stanley G. Eakins, *Financial Markets and Institutions*, 7th Edition, Pearson Prentice Hall, 2012.

Question 1
Explain the difference between (a) arbitrage (b) speculation and (c) hedging.

Question 2
A silver futures contract requires the seller to deliver 5000 ounces of silver. An investor sells one June futures contract at a price of $8 per ounce, posting a $2025 initial margin. If the required maintenance margin is $1500, what is the first price per ounce at which this investor would receive a maintenance margin call?

Question 3
Suppose an oil distributor is planning to sell 100,000 barrels of oil in December and wishes to hedge against a possible decline in oil prices. Assume that the futures oil contract price is $52.67.

a. If each futures oil contract is for 1,000 barrels how many contracts does he need to short?

b. Suppose that the only three possible prices for oil in December are $50.67, $52.67, and $54.67. Show that the oil distributor has completely eliminated risk of loss.

Question 4
Suppose that the pension you are managing is expecting an inflow of funds of $100 million next year and you want to make sure that you will earn the current interest rate of 8% when you invest the incoming funds in long term bonds. How would you use the futures market to do this?

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