**Second Midterm Mock Exam**

1. Yesterday, you entered into a futures contract to buy €62,500 at $1.21 per €. Suppose that the spot rate at maturity is $1.15. How much have you made/lost?
2. Three days ago, you entered into a futures contract to sell €62,500 at $1.21 per €. Suppose that the spot rate at maturity and $1.25. How much have you made or lost?
3. From the perspective of a put option holder, if the strike price is $1.25/€, and the option premium is $0.03/€, and the spot exchange rate at $1.23/€, how much money can you make (Or lose)?
4. From the perspective of a call option holder, if the strike price is $1.25/€, and the option premium is $0.03/€, and the spot exchange rate at $1.23/€, how much money can you make (or lose)?

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1. If the dollar is pegged to gold at U.S. $1100 = 1 ounce of gold, and the British pound is pegged to gold at £700= 1 ounce of gold. What should be the exchange rate between U.S. $ and British £ ? How much can you make without any risk, if this exchange rate is £1 = $1.3? Assume that your initial investment is £700.
2. The one-year interest rate is 5% in US., and the one-year interest rate in the euro zone is 8%, the spot exchange rate is $1.25/€. Calculate the one-year forward exchange rate.
3. Assume the GBP is equal to $1.50 and the Peruvian Sol is equal to $.30. The value of the Peruvian Sol in GBP is:

1. Under the gold standard, each currency was convertible into gold at a specified rate, and the exchange rate between two currencies was determined by their relative convertibility rates per ounce of gold. If one ounce of gold could trade for $30 or £20, then the exchange rate of dollar to £ should be $1.5 per £.
2. true.
3. false.
4. Suppose you observe the following exchange rates: €1 = $1.10; £1 = $1.50; and €1.80 = £1.00. With $1,500,000, how can you make money?
5. Assume the GBP is equal to $1.50 and the Peruvian Sol is equal to $.30. The value of the GBP in Peruvian Sol is:

11. Your company expects to receive 1,000,000 euro 60 days from now. You decide to hedge your position by selling euro forward. The current spot rate of the euro is $1.3, while the forward rate is $1.32. You expect the spot rate in 60 days to be $1.31. How many dollars will you receive for the 1,000,000 euro 60 days from now?

1. $1,300,000.
2. $1,320,000.
3. $1,310,000.
4. $1,347,500.
5. A German currency dealer can borrow 800,000 euro for 1 year. The one-year interest rate in the U.S. *i*$ = 2% and in the euro zone the one-year interest rate *i*€ = 6%. The spot exchange rate $1.25/ € and the one-year forward exchange rate $1.20/ €. Show how to realize an euro-denominated profit via CIA (covered interest arbitrage).

Hint: A graph of numbers and a graph

Description automatically generated with medium confidence

15. Bank A believes the New Zealand dollar will depreciate over the next 30 days from $.5 to $.48. Use the following annual interest rates.

**Currency Lending Rate Borrowing Rate**

Dollars 7.10% 7.50%

New Zealand dollar (NZ$) 6.80% 7.25%

Bank A has the capacity to borrow either NZ$11 million or $5 million. If Bank A’s forecast if correct, what will its dollar profit be from speculation over the 30 day period?

1. How can you make money? Assume you start with $22,000.



**Hint:**

First Strategy:

Convert USD to Yen.

Convert Yen back to Pound.

Convert Pound back to USD.

Calculate the profit based on the initial USD investment.

Second Strategy:

Convert USD to Pound.

Convert Pound to Yen.

Convert Yen back to USD.

Calculate the profit based on the initial USD investment.

After implementing both strategies and calculating the profits, we'll compare them to determine which strategy yields higher profits. This analysis will help us decide which currency exchange strategy is more profitable based on the current exchange rates and transaction costs.