Name and Student Number:

[VERSION A]

FOUR 2 POINT QUESTIONS:

I(2) Your U.S. firm has a UK pound denominated receivable due in 6 months. If related uncertainty about the spot rate in 6 months is hedged with a futures contract, then you must sell UK pounds in the spot market when you receive them from the customer and also:

A) sell UK pound futures today
B) buy UK pound futures today
C) sell UK pound futures in 6 months
D) buy UK pound futures in 6 months
E) A and C
F) B and C
(G) A and D
H) B and D

II(2) Your U.S. firm has a UK pound denominated receivable due in 6 months. To protect yourself against unexpected changes in the dollar/pound exchange rate you could:

(A) buy a pound put option
B) sell a pound put option
C) buy a pound call option
D) sell a pound call option

III(2) "Triangular Arbitrage" ensures that:

A) Interest Rate Parity holds
B) Purchasing Power Parity holds
(C) Direct Exchange Rates equal Cross Rates
D) Indirect Exchange Rates equal Direct Rates
E) FRUPES holds
F) International Fisher Effect holds

IV(2) With *covered interest arbitrage*,

A) the arbitrageur trades in both the spot and forward currency exchange markets.
B) the market must be out of equilibrium.
C) a "riskless" arbitrage opportunity exists.
(D) all of the above

FOUR 4 POINT QUESTIONS

I(4) One year ago the spot rate of U.S. dollars for Canadian dollars was $1/C$1. Since that time the rate of inflation in the U.S. has been 4% greater than that in Canada. Based on the theory of Relative PPP, the current spot exchange rate of U.S. dollars for Canadian dollars should be approximately _____.

A) $0.96/C$
(B) $1.04/C$1
C) $1/C$1
D) relative PPP provides no guide for this type of question

$1 (1.04)

II(4) *The Economist* publishes annually the "Big Mac Index" by which they compare the prices of the McDonald's Corporation's Big Mac hamburger around the world. The index estimates the exchange rates for currencies based on the assumption that the burgers in question are the same across the world and therefore, the price should be the same. If a Big Mac costs $2.54 in the United States and 294 yen in Japan, what is the estimated exchange rate of yen per dollar as hypothesized by the Hamburger index?

A) $0.0081/¥
(B) 115.75¥/$
C) $0.0086/¥
D) 124¥/$

$\frac{294}{2.54}$

III(4) Assume the current U.S. dollar-yen spot rate is 125¥/$. Further, the current nominal 6 month rate of return in Japan is 3% (or 6% per annum) and is 2% (or 4% per annum) in the United States. What is the approximate 6 month forward exchange rate?

A) 122.5 ¥/$
B) 123.75 ¥/$
(C) 126.25 ¥/$
D) 127.5 ¥/$

$A_1 = 125(1.01)$

$3\% - 2\%$.

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IV(4) Phillips NV produces DVD players and exports them to the United States. Last year the exchange rate was $1.25/euro and Phillips charged 120 euro per player in Euroland and $150 per DVD player in the United States. Currently the spot exchange rate is $1.45/euro and Phillips is charging $160 per DVD player. What is the degree of pass through by Phillips NV on their DVD players?

(A) 41.7% B) 6.7% C) 16% D) 33.3%

$$\frac{\%\ \text{price change}}{\%\ \text{XR change}} = \frac{\frac{160-150}{150}}{\frac{1.45-1.25}{1.25}} = \frac{6.67\%}{16\%} = 41.7\%$$

(6 POINT QUESTION)

Oregon Transportation Inc. (OTI) has just signed a contract to purchase light rail cars from a manufacturer in Germany for euro 2,500,000. The purchase was made in June with payment due six months later in December. OTI is considering several hedging alternatives to reduce the exchange rate risk arising from the sale. You have gathered the following information.

- The spot exchange rate is $1.40/euro
- The six month forward rate is $1.38/euro
- OTI's cost of capital is 11%
- The Euro zone 6-month borrowing rate is 9% (or 4.5% for 6 months)
- The Euro zone 6-month lending rate is 7% (or 3.5% for 6 months)
- The U.S. 6-month borrowing rate is 8% (or 4% for 6 months)
- The U.S. 6-month lending rate is 6% (or 3% for 6 months)
- OTI's forecast for 6-month spot rates is $1.43/euro

Which of the following statements about OTI's hedging opportunities is true?

A) If OTI borrows dollars today, converts to euro's in the spot market and invests the euro's in Germany for 6 months, their cost today will be $3,381,643 $(2.5/1.035)(1.4)$

B) If OTI remains unhedged, based on their own forecast, they would expect to pay $3,575,000 in 6 months time $(1.43)(2.5)$

C) If OTI locks in the purchase cost using a forward hedge, they will be certain to pay $3,450,000 in 6 months time $(1.38)(2.5)$

(D) A, B and C are true

E) only A and B are true

F) only A and C are true

G) only B and C are true