Quiz For Lecture # 13

Hedge a Swiss watches transaction

Use the following information below to answer questions a through g: [1]

An American importer places an order with a Swiss watch manufacturer. The order, to be delivered in August, is value at 2`000`000 Swiss Francs. The cash price for the franc is $ .5975 and September futures are trading at $ .5715.

(Reminder: Showing the *essential* steps along the way will enhance your chances of partial credit in case you make an error.)

1a.   (3 pts) The total value of the order on the day it is pace is:
a $ 2`000`000
b $ 1`195`000
c $ 1`143`000
d   non of the above

1b.   (3 pts) The most effective hedge for the importer would be:
a   Buy Swiss francs in the cash market and sell Swiss franc futures.
b   Sell Swiss francs in the cash market and buy Swiss franc futures.
c   Buy Swiss franc futures.
d   Sell Swiss franc futures.

1c.   (3 pts) If the importer were to take a position in the futures market, and the Swiss franc contract size is 125`000, he would take a position of
a   4 contracts
b   6 contracts
c   8 contracts
d   16 contracts

1d.   (3 pts) On the day the watches are delivered, the cash market price of the Swiss franc is $ .6135 and September futures are $ .5855. If the importer did not take any action in the futures market when he place the order, it would now cost him:
a $ 2`000`000
b $ 1`227`000
c $ 1`195`000
d $ 1`169`000

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[1]   This question is taken from a former final exam. It was worth 25% of the entire final exam.

1e.   (3 pts) If the importer did not take any action in the cash or futures market on the day he placed the order, his cost would be:
a   the same
b   increased by $ 32`000
c   decreased by $ 32`000
d   non of the above

1f.   (3 pts) If the importer hedged his position, his net result on the hedge would be:
a   a profit of .016
b   a loss of .016
c   a profit of .002
d   a loss of .002

1g.   (3 pts) If the importer had hedged when he placed the order, his net cost would have:
a   increased by $ 9`000
b   decreased by $ 17`000
c   increased by $ 4`000
d   decreased by $ 4`000

1h.   (4 pts) As a result of the change in the cash and futures prices, how was the importer's hedge affected?
a.   a favorable change from 0.026 under to 0.028 under
b.   a favorable change from 0.026 over to 0.028 over
c.   an adverse change from 0.026 under to 0.028 under
d.   an adverse change from 0.026 over to 0.028 over

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1a.   The correct answer is (b). on the day the order is placed, the spot price for the Swiss franc is $.5975 (59.75 cents). In order f or the importer to buy 2,000,000 Swiss francs, he would require $1,195,000 (2,000,000 times .5975).

1b.   The correct answer is (c). The importer is short the Swiss franc (short the basis). He is concerned with a rise in the price of the Swiss franc. If the price rises, he will have to pay more dollars to acquire the same number of francs. Therefore, he will buy Swiss franc futures.

1c.   The correct answer is (d). The importer needs 2,000,000 francs. The contract size is 125,000 francs. Therefore, he will buy 16 contracts (2,000,000 divided by 125,000).

1d.   The correct answer is (b). The importer must buy 2,000,000 francs in order to make payment to the Swiss exporter. The current price for the franc in the cash market is $.6135 (61.35 cents). It would cost him $1,227,000 to purchase 2,000,000 francs.

1e.   The correct answer is (b). If the importer did not hedge his position, he would have to absorb the full amount of the increase in the value of the franc. At the time payment is due, the dollar value is $1,227,000 (.6135 times 2,000,000). The initial cost when the order was placed was $1,195,000 (.5975 times 2,000,000). The importer would have an increased cost of $32,000 if he did not hedge.

1f.   The correct answer is (d). When the importer first placed the order, he was short the Swiss franc (short the basis) and placed a buying hedge. He would close out his position by buying the franc in the cash market and selling his futures. His position would appear as follows:

	Cash			Futures	
Short	0.5975		Buy	0.5715
Buy	0.6135		Sell	0.5855
Loss	0.016		Profit	0.014

The loss on the cash position is .016 (1.6 cents) on each franc. The profit on futures is .014 (1.4 cents) on each franc. Therefore, the net loss on each franc is .002 (2/10th of I cent).

1g.   The correct answer is (c). Referring to the preceding question, the importer has a loss of $.002 (2/10th of 1 cent) on each franc4 As the order totaled 2,000,000 francs, the total loss would be $4,000 (2,000,000 times .002). Note that if the importer had not hedged, his added cost would have been $32,000. As a result of having hedged, he limited his increased cost to $4,000.

1h.   The correct answer is (a). When the importer placed the order, the basis was 0.026 (2.6 cents) under. Cash was 2.6 cents higher than futures (0.5715 minus 0.5975). When the hedge was lifted, the basis changed to 0.028 (2.8 cents) under. Cash was 2.8 cents higher than futures (0.5855 minus 0.6135). As we have already seen, the hedger had a profit of .002 (2/10th of 1 cent) on his hedge. Therefore, the basis change was favorable.