

Name: anon anon	Attempt: 1	Max. Score: 21
Started: Oct 08, 1999 13:49	Finished: Oct 11, 1999 10:08	Time Spent: 68 hrs., 18 min., 52 sec.
Student Exceeded Allotted Time of 120 min. by 66 hrs., 18 min., 52 sec.		

Question 1 (1 marks)

If Credit Suisse quotes you spot Swiss Francs at 1.4780-92 per US dollar, how much would it cost to purchase 4 million Swiss francs?

0.0% 1. \$2,704,164.41

100.0%  2. \$2,706,359.90

Calculation:

We are *buying* SF with US\$, so we get the lower number in the bid-ask quote, i.e. 1.4780 per US\$1.

**So for SF4 million, we must pay 4,000,000(1/1.4780)
= \$2,706,359.90.**

0.0% 3. 5,912,000.00

0.0% 4. 5,9168,000.00

0.0% 5. None of the above

Score: 1.0 / 1.0

Override Mark:

Comments:

Question 2 (1 marks)

Wong, a FX trader at Hong Kong & Shanghai Bank(HK), has \$1 million to trade with and the following information:

the current spot exchange rate is Yen106.00/\$;

the 180-day forward rate is Yen103.5/\$;

the Eurodollar rate is 8.00% per annum;

the Euroyen rate is 4.00% per annum.

Is there a chance for Covered Interest Arbitrage? If yes, how much is the profit?

0.0% 1. \$0.00

0.0% 2. \$2,319.00

100.0% 3. \$4,638.00

There is an arbitrage profit to be made here. It goes like this:

1) Sell the dollars for Yen106,000,000;

2) Invest the Yen proceeds in an Euroyen account for 6 months and earning 2%(4% x 180/360);

3) Sell all the Yen(108,120,000) back at Yen103.5/\$ for \$1,044,638;

4) Calculate the cost of funds used at the Eurodollar rate of 8.00% per annum, or 4% for 180 days, with principal and interest then totaling \$1,040,000. Thus the profit is \$1,044,638 - \$1,040,000 = \$4,638

0.0% 4. \$6,957.00

0.0% 5. \$9,276.00

Score: 1.0 / 1.0

Override Mark:

Comments:

Question 3 (1 marks)

You have gone to work for Nike in the company's pension department. One morning you walk in and the new Fund Manager asks, "How much would it cost us to hedge the rand? What's the forward discount, in percent per annum, on three-month South African rand? There's some kind of crisis down there, and we may have to hedge our S.A. bonds." Although you cannot find a quote for 3-month rand, you are able to get the following: Spot: 4.93 rand per dollar Eurodollar 3-month interest rate: 5.85% Eurorand 3-month deposit rate: 12.77% What's the forward discount (estimated to the nearest basis point)?

Student Response: 6.39

Correct Answer: 6.71

Score: 0.0 / 1.0

Override Mark:

Comments:

Question 4 (1 marks)

Assume China adopts a "currency board" at 8.3 Yuan for one US dollar. If its trade deficit doubles, what will likely happen to the exchange rate and the money stock in China?

- 100.0% 1. The Yuan will appreciate
 -100.0% 2. The Yuan will depreciate
 -100.0% 3. The money stock will increase
 100.0%  4. The money stock will decrease

Correct. If the exchange rate is fixed, then the central bank will conduct open market transactions to maintain that parity. With strong imports and weak exports, the Yuan will tend to depreciate and thus to maintain the fixed exchange rate, the Central Bank will buy Yuan in the market. This will decrease the money stock at home (meaning the amount of Yuan in circulation will decline).

- 100.0% 5. None of the above

Score: 1.0 / 1.0

Override Mark:

Comments:

Question 5 (1 marks)

The central bank of Indonesia, Bank Negara, invests its reserves in US and German treasury bills. On one day in early 1996, the US Dollar and Deutsche Mark rates shown below were quoted on the Reuters screen. Where should Negara invest its spare cash? Can you identify a covered interest rate differential, in other words a deviation from interest-rate parity? What factors might account for this deviation from parity?

3-month interest rates	Treasury-bill rate	
New York (US dollar)	5 7/16 - 5 5/16	
Frankfurt (Deutsche mark)	3 7/16 - 3 1/4	
Exchange rates against dollar	Spot	3-month forward points
Deutsche mark	1.4769-1.4777 DM/\$	0.73-0.69 pfennigs discount

Student Response:

xxx

Correct Answer:

The outright forward rates on the DM are 1.4696-1.4708. The bid-side forward premium is $(0.0073/1.4769)*4=1.9771\%$

A quick-and dirty calculation suggests it **pays to buy US bills** at 5.3125%. In dollar terms, a covered investment in German bills gets Negara roughly $3.25\% + 1.9771\% = 5.2271\%$ per annum--an inferior return.

Let's check it out. The transaction would be:

Buy US bills at $5\frac{5}{16}\%$, getting an effective return of 5.3840% (remember T bills are quoted on a discount basis)

Or

Convert the dollars to DM at the spot rate of 1.4769

Invest in German treasuries at $3\frac{1}{4}\%$, earning an effective return of 3.2766%

In 3 months, change the DM back into US dollars at the forward rate of 1.4708

This gives a return of 4.9492%.

Why does this arbitrage opportunity persist? Because T-bill arbitrage is only quasi-arbitrage: Treasury bill investors are not generally permitted or able to do it. The forward premium or discount is determined by Eurocurrency rates, not T-bill rates. Indeed, T-bills are not necessarily equivalent--they bear sovereign risk. See "Tea in Canada," a similar example.

Mark:

Comments:

Question 6 (1 marks)

The Hong Kong dollar is fixed against the US dollar. If Hong Kong doubles its export surplus, what is likely to happen to the money stock in Hong Kong?

- 0.0% 1. The Hong Kong dollar will appreciate.
- 0.0% 2. The Hong Kong dollar will depreciate.
- 0.0% 3. The Hong Kong money stock will decrease.

100.0% ▶ 4. The Hong Kong money stock will increase.

Export surplus = Change in central bank reserves + Private capital outflows.
Thus, if the exchange rate is fixed against the US dollar, presumably the central bank conducts open market transactions to maintain that parity. With strong exports, the HK dollar will tend to appreciate and thus to maintain the fixed exchange rate, the central bank will sell HK dollars in the foreign exchange market. Thus the domestic implications are an increase in the money stock (the amount of HK dollars in circulation).

- 0.0% 5. None of the above.

Score: 1.0 / 1.0

Override Mark:

Comments:

Question 7 (1 marks)

Southwestern Bell needs to hedge a royalty payment from Mexico. If the dollar is trading at a spot price of 8.27 and the 6-month Eurodollar and EuroPeso rates are 7.57% and 20.16%, per annum, respectively, then what should the 6-month peso-dollar forward exchange rate be? (Calculate to two decimal points, like 8.25)

Student Response: 8.82

Correct Answer: 8.77

Score: 0.0 / 1.0

Override Mark:

Comments:

Question 8 (1 marks)

What of the following is NOT a difference between the forward and futures contract?

- 0.0% 1. Customized terms and conditions of forward contracts vs. standardized futures contracts.
- 0.0% 2. Dispersed trading in forwards vs. centralized trading of futures contracts.
- 0.0% 3. Variable risks with forwards vs. standardization of counterparty risk with futures written against the Clearinghouse.
- 100.0%  4. Only the futures contracts can be used effectively for hedging.
1,2,3 are right. Plus: there is initial and ongoing cash flows associated with marking-to-market of futures contracts, but not so with the forwards.
- 0.0% 5. None of the above.

Score: 1.0 / 1.0

Override Mark:

Comments:

Question 9 (1 marks)

The following table provides information about futures on the Canadian dollar at the Chicago Mercantile Exchange.

Canadian Dollar (CME) - 100,000 dlrs.; \$ per Can \$								
	Open	High	Low	Settle	Change	LifeHigh	LifeLow	Open Interest
Mar	0.6984	0.705	0.6982	0.7048	0.0066	0.767	0.6807	59050
June	0.7005	0.706	0.7001	0.7059	0.0067	0.747	0.6825	7162
Sept.	0.702	0.7065	0.6994	0.7069	0.0068	0.7463	0.6845	2220
Dec.	0.703	0.7065	0.703	0.7078	0.0069	0.74	0.686	1013
Mr99				0.7087	0.007	0.7247	0.6875	390

(WSJ, 02/20/98)

Based on the quotations in the table, how much would a corporate foreign exchange trader at the 3M Company have gained or lost if she had shorted 10 nearby Canadian dollar futures contracts the day before?

0.0% 1. +\$6,600

100.0% 2. -\$6,600

The nearby contract is March and the change in the settle price is "+0.0066". Since the trader was shorting C\$ futures, he lost from the drop by 0.0066 cents per C\$. 10 contracts at 100,000 C\$ per times 0.0066 gives him a total loss of \$6,600.

0.0% 3. -\$1,750

0.0% 4. +\$3,125

0.0% 5. None of the above

Score: 1.0 / 1.0

Override Mark:

Comments:

Question 10 (1 marks)

Suppose a foreign exchange rate wants to hedge a forward transaction. Which one of the following does NOT work?

0.0% 1. Currency options

0.0% 2. Money market hedge: borrow in the currency that the trader is long in, convert to the other currency in the spot market and invest in the money market.

0.0% 3. Offsetting forward contracts.

0.0% 4. Offsetting currency futures transaction.

100.0% 5. None of the above. (They all work.)

Actually, all four methods can be used to hedge a forward transaction. Additional methods include spot plus swap transaction, spot plus roll-over swap, etc.

Score: 1.0 / 1.0

Override Mark:

Comments:

Question 11 (1 marks)

Solvay, a Belgian company, needs to fund a U.S. investment. It obtains the following quotations: 3-month domestic funds in the United States 5.6125-5.6625 percent, 3-month EuroBfr. 3.70-3.71. The \$/Bfr spot rate is 0.02695 -0.027 and the 3 month forward points for the dollar are .00010-.00015. What is the cost of funding through the EuroBfr. market? Express your results in percentage points and keep two decimal points (e.g 4.05).

Student Response: 5.96

Correct Answer: 5.95

Score: 1.0 / 1.0

Override Mark:

Comments:

Question 12 (1 marks)

The relationship between domestic and Eurodeposit interest rates is best explained by

0.0% 1. exchange rate expectations.

0.0% 2. the forward premium or discount.

50.0%  3. relative regulatory costs.

Regulatory costs, such as taxes, reserve requirements and deposit-insurance fees, affect the bank's *willingness and ability* to offer higher interest rates in the Eurodeposit market.

Relative risk explains why some depositors prefer to keep their funds in banks within the country of the currency, despite the perceived lower return.

50.0%  4. relative risks, as perceived by depositors.

Regulatory costs, such as taxes, reserve requirements and deposit-insurance fees, affect the bank's *willingness and ability* to offer higher interest rates in the Eurodeposit market.

Relative risk explains why some depositors prefer to keep their funds in banks within the country of the currency, despite the perceived lower return.

0.0% 5. none of the above.

Score: 1.0 / 1.0

Override Mark:

Comments:

Question 13 (1 marks)

If the dollar is trading at a spot price of Yen130, and the 6-month Eurodollar and Euroyen rates are 10% and 7.5%, per annum, respectively, what is the 6-month yen-dollar forward-exchange rate?

0.0% 1. 127.045

0.0% 2. 131.567

100.0%  3. 128.452

This is a standard exercise of the Interest- rate-parity theorem. Pay attention to the time span (6 months) in question.

$$\begin{aligned} F &= S(1 + I_{ey})/(1 + I_{e\$}) \\ &= 130 * (1 + 7.5\%/2)/(1 + 10\%/2) \\ &= 128.452 \end{aligned}$$

0.0% 4. 133.023

0.0% 5. 127.5

Score: 1.0 / 1.0

Override Mark:

Comments:

Question 14 (1 marks)

What of the following statements are true about the Eurocurrency market?

- 0.0% 1. This market is for deposits of European currencies that are deposited outside Europe.
- 0.0% 2. This market is for deposits of non-European currencies that have been deposited in Europe.
- 0.0% 3. Words like "Eurodollar" and "Euroyen" are oxymorons--they do not make sense.
- 0.0% 4. When companies need foreign exchange, they seldom go to the Eurocurrency market. Instead, they always go to the home country of that currency.

100.0% ▶ 5. None of the above.

Eurocurrency refers to bank deposits denominated in a currency other than the that of the country in which the bank or bank branch is located. Eurocurrency

market is the market for such bank deposits. And it is a very active market that dominates the domestic money markets.

Score: 1.0 / 1.0

Override Mark:

Comments:

Question 15 (1 marks)

You work for Citigroup in London. You are considering selling a bond to a Russian client. It is a European Investment Bank triple-A Yen-denominated Eurobond at a discount from par of 2.5%. The bond has an annual coupon of 0.5% and will mature in exactly 5 years and 3 months. You offer him five bonds, each with a face value of Y500,000.

How much money changes hands if you sell the bond? State the amount to the nearest yen. (Example: 12345)

Student Response: 2656250

Correct Answer: 2446875

Score: 0.0 / 1.0

Override Mark:

Comments:

Question 16 (1 marks)

Which of the following are key features in differentiating Eurobonds from domestic bonds?

- 20.0% ▶ 1. Eurobonds are issued in bearer form.
- 20.0% 2. Eurobonds are underwritten by non-domestic investment banks.
- 20.0% 3. Eurobonds are issued by borrowers outside their home country
- 20.0% 4. Unlike the domestic market, the Eurobond market is largely unregulated
- 20.0% ▶ 5. The bond issues are structured in such a way that interest is not subject to withholding taxes
- 20.0% ▶ 6. Eurobond issues are given the form of private placements rather than broadly advertised in public markets
- 20.0% ▶ 7. Eurobonds are placed through syndicates made up of issuing houses and banks in many countries who sell the bonds, often to nonresident investors
- 20.0% ▶ 8. Eurobonds are sold principally in countries other than that of the currency in which they are denominated

Score: 1.0 / 1.0

Override Mark:

Comments:

Question 17 (1 marks)

Assume Unilever issues a Euro 300 million Eurobond. In the underwriting of the bond, if it is issued at par (100), and the management fee, underwriting fee and selling concession are 0.38, 0.30 and 0.70 respectively, what is the price paid by Hamburger Landesbank, a member of the underwriting group?

State your answer as a percent of 100 to two decimal points, eg simply 78.50)

Student Response: 99.16

Correct Answer: 99.00

Score: 0.0 / 1.0

Override Mark:

Comments:

Question 18 (1 marks)

Which of the following provide linkages between the markets for Eurobonds denominated in different currencies?

- 50.0% 1. The Eurocurrency market
- 50.0% 2. The spot foreign exchange market
- 50.0% ☒ 3. The market for currency swaps
- 50.0% ☒ 4. The forward foreign exchange market
- 50.0% 5. The private placement market.

Score: 1.0 / 1.0

Override Mark:

Comments:

Question 19 (1 marks)

Clarient, the specialty chemicals company, engages in a five year interest-rate swap paying 11% annual, receiving 6-month LIBOR+0.25% semi-annual. Three years later the two year swap rate has fallen to 9%. Is Clarient's swap "in the money" (positive value) or "out of the money" (negative value)? By how much?

- 0.0% 1. "in of the money" by 1.75% per annum
- 0.0% 2. "out of the money" by 2.25% per annum
- 0.0% 3. "in of the money" by 1.35% per annum
- 100.0% ☒ 4. "out of the money" by 1.75% per annum

Right.

Clarient is paying 11% to receive 6-mo. LIBOR + 0.25% whereas such a swap today (3 years later) would cost Clarient only 9% in return for LIBOR. Thus the swap is "out of the money" by 1.75% per annum, or 3.08% present value.

- 0.0% 5. None of the above

Score: 1.0 / 1.0

Override Mark:

Comments:

Question 20 (1 marks)

Anglo American, the global natural resources company, has to raise a lot of money to invest in gold mines in Africa. It has three choices. Which is cheapest?

	USD swaps vs 6-month LIBOR	CHF Swaps vs 6-month USD LIBOR	Exchange rates, CHF/USD
Spot	-	-	1.620
1 year	7.82-7.86	4.80-4.86	1.578
2 years	7.90-7.95	4.83-4.89	1.525
3 years	7.86-7.92	5.10-5.14	1.490

- 0.0% 1. Issue a 3-year Swiss franc foreign bond at 5% with 0.75% fees
- 100.0%  2. sell a 3-year floating-rate medium-term note at US\$ LIBOR - .25% and swap into Swiss francs
Right.

Working in Swiss franc terms the cost of the different options are as follows:

(a) 5% plus 0.75% up front fee. 0.75% as a 3 year annuity is 0.275%. So all-in cost is 5.275% p.a.

(b) 5.14% minus 0.25% in US \$, i.e. 0.23% measured in Swiss franc terms, gives a cost of 4.91%.

(c) The basis of computation here would be to convert the principal at the spot rate and buy the coupons forward using Swiss francs. These coupons would amount to (in today's SF):

Year 0: receive 1.62

Year 1: pay $0.08 \times 1.578 = 0.12624$

Year 2: pay $0.08 \times 1.525 = 0.122$

Year 3: pay 0.08×1.49 plus 1.62 principal $\times 1.49 = 1.6092$

IRR = 5.02% Swiss Franc cost

Option (b), which works out to less than 5% in Swiss franc terms, is the cheapest.

- 0.0% 3. sell a 3-year fixed rate U.S. dollar MTN at 8.00% annual and convert to Swiss francs via the forward-exchange market.
- 0.0% 4. both 1. and 2.
- 0.0% 5. None of the above

Score: 1.0 / 1.0

Override Mark:

Comments:

Question 21 (1 marks)

Niigata Life, a Japanese life insurance company, has been offered a newly-issued 7-year Republic of Korea Eurobond at par. The bond, denominated in U.S. dollars, pays an annual coupon of 9.55%. The total amount of the issue is \$3 billion, and each bond has a face value of \$5,000. Total issuance fees are 1.35%.

Niigata is interested in buying \$5 million of the paper, and using a currency swap to create a synthetic yen

floating-rate note. If the US dollar 7-year swap rate is 6.20% and the corresponding Japanese rate is 1.5%, what spread (in basis points) over quarterly yen Libor can Niigata expect to achieve if it buys the bond?

- 0.0% 1. 350
0.0% 2. 402.5
0.0% 3. 322
0.0% 4. 292.5

100.0%  5. None of the above

General Feedback:

$9.55\% - 6.20\% = 335$ bp in dollars which translates into 280 bp in yen.

First currency

NUMBER OF BASIS POINTS (US\$) 335

US\$ INTEREST RATE 6.20%

NUMBER OF PAYMENT PERIODS PER YEAR 1

NUMBER OF YEARS 7

PRESENT VALUE OF BASIS POINTS (US\$) 1857

Second currency

Euro INTEREST RATE 1.50%

NUMBER OF PAYMENT PERIODS PER YEAR 4

NUMBER OF YEARS 7

NUMBER OF BASIS POINTS (Euro) (ANNUITY EQUIV) 279.9

Score: 1.0 / 1.0

Override Mark:

Comments:



Quiz Mark Adjustment:

General Quiz Comments:



Total Score: 16.0 / 21 = 76.2%

Update Grade

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