Question 1 (5 marks)

Since Estonia adopted a currency board, the kroon has been fixed against the Euro. Now if Estonia's reduces its balance of trade deficit, what is likely to happen to the money stock in Estonia?

1. The currency will appreciate. 0.0%
2. The currency will depreciate. 0.0%
3. The money stock will decrease. 0.0%
4. The money stock will increase. 100.0%
5. None of the above. 0.0%

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 local currency will tend to appreciate and thus to maintain the fixed exchange rate, the central bank will sell the currency in the foreign exchange market. Thus the domestic implications are an increase in the money stock (the amount of local currency in circulation).

Score: 5.0 / 5.0

Override Mark: 

Comments: 

10/24/99 9:26 PM
Question 2  (5 marks)

Toronto Dominion Bank gives you, the treasurer of Ho Inc., a quote for the Canadian dollar at C$1.1465-75/US$, what quote would it give in so-called "U.S. terms"?

100.0%  1. $0.8714-22/C$

TD is willing to buy $ at 1.1465 C$ and sell $ at 1.1475 C$. This means that TD is willing to sell C$ at 1/1.1465 = US$0.8722 and it will buy C$ at 1/1.1475 = US$0.8714. Therefore the quote in U.S. terms will be US$0.8714-22/C$.

0.0%  2. $0.8722-14/C$

0.0%  3. $1.1475-65/C$

0.0%  4. $0.8714-1.1465/C$

0.0%  5. None of the above

Score: 5.0 / 5.0

Override Mark: 

Comments:

Question 3  (5 marks)

Swatch wants to bring money out of South Africa in one month. SBC gives them 1-month forward rates as follows:

SF/USD 1.7100-1.7114
SAR/USD 5.5430-5.5505

What is the price of SF in terms of SA Rand? Calculate your answer to two decimal points (example: 1.24).
Student Response: 0.31
Correct Answer: 3.24

General Feedback:

SF/USD 1.7100-\{x\}
SAR/USD \{r\}-5.5505

Formula: \{r\}/\{x\}

Score: 0.0 / 5.0

Override Mark: □
Comments:

Question 4 (5 marks)

In the course of one year, inflation in Peru has been 14.5% while in the U.S. inflation has been 1.7%. On the basis of relative PPP, what would you expect the currencies to do?
100.0%  1. The dollar appreciates by 12.59%

The Peruvian currency is the sol. On the basis of the purchasing-power parity theory, (PPP), the rate of change of the exchange rate expressed in Peruvian sol per U.S. dollar will be given by the following relation:

\[ \frac{I_{\text{Peru}} - I_{\text{US}}}{1 + I_{\text{US}}} = \frac{14.5\% - 1.7\%}{1 + 1.7\%} = 12.59\% . \]

0.0%  2. The dollar depreciates by 12.59%
0.0%  3. The dollar appreciates by 12.80%
0.0%  4. The dollar depreciates by 12.80%
0.0%  5. None of the above.

Score: 5.0 / 5.0

Override Mark:  
Comments:  

Question 5 (10 marks)

Your company's Treasurer walks into your office in the morning, throws today's Financial Times on your desk, and demands to "have the DM's forward premium by lunch". So you try to figure it out. Here is the quote:

the spot is DM/$=2.1790-2.1800;
three-month DM forward is quoted at a premium of 1.18-1.12 pfennig(1 pfennig = 1/100 mark).
What is your answer?
We take the middle value of the premium, 1.15 pfennig (the average of 1.18 and 1.12), and divide it by the middle value of the spot rate, 2.1795. Then we annualize the result.

\[(0.0115/2.1795)\times(12/3)=2.11\%

Question 6 (10 marks)

Standard Chartered Bank in Hong Kong needs to fund a U.S.$ loan. It obtains the following quotations: 3-month Eurodollars 6.25-6.125, 3-month Euroyen 7.75-7.6875, Yen/$ spot 140.25-140.35, 3-month forward points .49-.52. Which is the cheapest way to borrow?
1. Borrow in the Euroyen market and then swap into dollars.

2. Borrowing in the Eurodollar market directly at 6.25%.
   - The offer rate on the 3-month Euroyen market is 7.75% (i.e., StanChart can borrow yen at this rate). The forward premium is 0.52/140.35. So the effective cost of yen funding is:
   \[\frac{(1+\text{foreign interest rate})(1+\text{forward premium})-1}{4}\]
   \[=\frac{(1+7.75/4)(1+0.52/140.35)-1}{4} \times 4 = 9.26\%\]
   which is higher than 6.25%, the cost of dollar funding.

3. The two methods result in the same costs of borrowing.

4. None of the above.

Score: 10.0 / 10.0

Question 7 (10 marks)

Sakura Bank in London is quoting 9% on 12-month Eurodollar deposits. It is also quoting 5 FF/$ and 5.25 FF/$ for spot and 12-month forward French francs. If you ask for a quote on depositing French francs, what rate do you think they will quote?
The dollar is appreciating in the forward market, so the Eurodollar interest rate should be lower than the Euro-franc interest rate. Roughly, the interest rate differential equals the forward premium, which is .25/5=5%, so the French rate is about 5% higher than the dollar rate. (4) is the closest.

More precisely, we know the link between spot and forward rates and Eurocurrency rates is given by the interest-rate-parity theorem:

\[(1+Rus)^n = \frac{Spot(1+R-ff)^n}{Forward}\]

In this case,

\[R-ff=\frac{(1+0.09)*5.25/5-1}{14.45%}\]

Score: 10.0 / 10.0

Question 8 (10 marks)

As the Branch Manager of the New York branch of Bank of West Indies, you want to determine the effective cost of domestic deposits to compare it with offshore funding. Here are the facts: the interest rate you offer your CD customer is 15%, and there is a 5% reserve requirement. On top of that, there is a 1/12% FDIC fee. So what is the effective cost?
The cost is calculated like this:
Effective cost = (interest rate + FDIC fees)/(1 - reserve requirement)
= (15% + 1/12%)/(1-5%) = 15.88%

Score: 10.0 / 10.0

Question 9 (10 marks)

You are a wealthy Nigerian. Your broker calls to tell you of an interesting opportunity to buy an Asian Development Bank triple-A Euro Eurobond at a discount from par of 2%. The bond has an annual coupon of 5.6% and will mature in exactly 5 years and 2 months. He offers to sell you five bonds, each with a face value of €5,000.

How much money changes hands if you buy the bond? State the amount to the nearest Euro with no commas or anything. (Example: 12345)

Student Response: 25667
Correct Answer: 25667

General Feedback:

The bond has an annual coupon of {c}% and will mature in exactly 5 years and 2 months. He offers to sell you five bonds, each with a face
value of E5,000, at a discount from par of 2%.

Formula: 5*5000*((1-.02)+(({c}/100)*10*30/360)

Score: 10.0 / 10.0

Override Mark: [ ]
Comments:

Question 10 (10 marks)

Eurobonds are normally listed on an exchange in Luxembourg or a similar location because:

(Pick one or more)

33.0% 1. listing in such places is cheap
Correct

33.0% 2. there is no withholding tax
Correct

-33.0% 3. trading on such an exchange creates liquidity

34.0% 4. some investors are permitted to own only listed securities
Correct

-33.0% 5. these exchanges are unregulated

Score: 10.0 / 10.0

Override Mark: [ ]
Comments:
Question 11 (10 marks)

Credit Agricole, a French bank, has issued a four year Dutch Guilder Eurobond at 7.35% annual with 1% up front issuance costs. If the Guilder/dollar swap rate is 7.50%, what LIBOR-based floating cost of funds can Christiana attain? (Use the sample swap quotation sheet if necessary.)

0.0% 1. LIBOR - 0.152%
100.0% 2. LIBOR + 0.155%
Right.

We will do this by first ignoring the up-front issuance costs. To avoid currency risk on the coupon, Christiana would wish to match the 7.35% it pays on the Eurobond with an equal receipt of 7.35% from the swap (check this by drawing the diagram). Since the swap rate is 7.50%, we need to figure out how the 0.15% difference translates to a saving on Christiana's floating payments. From the swap quotation sheet, the U.S. dollar swap rate is (8.01+0.76) = 8.77%. Using the formula in the chapter to convert the DFl basis points to dollar basis points: (BP$)/(1+0.0877) = (0.0015)/(1+0.075) i.e. BP$ = 0.152% Therefore Christiana would pay LIBOR - 0.152% disregarding the up front cost. The up front cost of 1% could be annuitized using the $ fixed rate of 8.77%. The annuity formula can be applied directly to yield an annual dollar coupon rate of 0.307%. Therefore, Christiana's LIBOR-based cost of funds will be:

LIBOR - 0.152% + 0.307% = LIBOR + 0.155%

0.0% 3. LIBOR - 0.164%
0.0% 4. LIBOR + 0.165%
0.0% 5. None of the above

Score: 10.0 / 10.0

Override Mark: 

Comments:
Question 12 (10 marks)

Peruvian Brady Bonds are quoted in the market at the following prices:

<table>
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<tr>
<th></th>
<th>Bid</th>
<th>Offer</th>
<th>Collateral</th>
<th>Cshflw</th>
<th>Stripped</th>
<th>Dura</th>
<th>Spread</th>
<th>USRate</th>
<th>DVBP</th>
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<td>62.50</td>
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<td>0.0</td>
<td>0.012</td>
<td>12.12</td>
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<td>54.50</td>
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<td>0.4</td>
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<td>4.34</td>
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<tr>
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<td>17.4</td>
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<td>7.39</td>
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<td>6.45</td>
</tr>
<tr>
<td>DISC</td>
<td>59.00</td>
<td>64.00</td>
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<td>2.2</td>
<td>5.20</td>
<td>2.23</td>
<td>1.89</td>
</tr>
</tbody>
</table>

Based on the table, which of the Peruvian bonds seems to be the best investment? Why?

- 0.0% 1. The Past Due Interest bonds
- 0.0% 2. The Front Loaded Interest Reduction Bonds
- 0.0% 3. The Par bonds
- 100.0% 4. The Discount bonds
- 0.0% 5. Cannot tell from the data given

General Feedback:

The discount bonds have the highest yield after the value of the guaranteed part, the principal and the first two interest payments, has been stripped out.

Score: 10.0 / 10.0
Quiz Mark Adjustment:  
General Quiz Comments:  

Total Score: 95.0 / 100 = 95.0%