Quiz 2 (10/02/03) Review

A. Topics that we’ve covered so far:

I’m listing them in chronological order. I’ve placed these topics in three categories (A) – very important; (B) medium importance; (C) lower priority. Note that the topics placed in category B must be understood in order to make sense of any of the A and C category topics. I’ve also created a new class: A+ for concepts that I think are totally fundamental. If you can’t do the A+ concepts, you can’t do anything in the other sections. I’m sure you’d have figured that out on your own but it merits repetition.

Chapter 5

1. BOP (flow) approach exchange rate determination (A+)
2. Asset market (stock) approach to exchange rate determination (A+)
   a. Monetary approach to exchange rate determination
   b. Portfolio-balance approach to exchange rate determination
3. Effects of macroeconomic shocks on forex (A)
4. Forecasting techniques (B)
5. Anatomy of the Asian crisis (B) & of the Russian and Brazilian crises (C)

Chapter 6

1. Structure and market participants of the forex market (A+)
2. Types of transactions on the forex market (A+)
3. Spot, Forward, & Swap transactions terminology (B)
4. Types of quotes (A)
5. Forward quotes (A)
6. Cross rates and Intermarket arbitrage (A+)

Chapter 7

1. Futures vs. forwards (A+, in essence why would you use one tool vs. the other?)
2. Margin requirements for futures (C)
3. Futures terminology (A, b/c without it how can you do anything w/ futures or options?)
4. Options terminology (strike price, premium, break-even price, out-of-the-money, at-the-money, in-the-money options) (A+)
   
   Note: from points 5 and 6 we have covered only the spot and forward market speculation, the rest will not be included on the quiz.
5. Types of options: American vs. European and Long & Short Call, Long & Short Put (A+)
6. Spot market, forward market, & option market speculation (A+)

B. Quiz Format/Structure

25 minutes. You will not be allowed a crib sheet w/notes. I will put on the exam sheet the formulas for forward premium and discount & for computing percentage change in the
exchange rates (if you will need them). You will need a calculator. (I’ll bring one or two spares – depending on what I can round up – but you shouldn’t count on them.)

I reserve the right to include among the five questions one relevant question from the replies on chapters five, six, & seven 😊.

C. Sample Quiz
I promise I will send you the answers to it by Friday evening 😊.

*Question 1. (4 points)*
Please answer only one of the two questions.

1. As we know, Hong Kong has a fixed exchange rate regime (currency board). Suppose Hong Kong runs consistently BOP surpluses. If we believe in the BOP approach to exchange rate determination, what will we expect happening to the HK$/US$ rate? Why?

*or*

2. Why surplus in the current account will lead to an appreciation of the home currency, if we believe in the portfolio-balance approach to exchange rate determination?

*Question 2. (4 points)*
Please answer only one of the two questions.

1. Who are the main participants in the forex market (give me at least three of them). Briefly describe why are they in the market (e.g for profit, speculation, hedging purposes).

*or*

2. Suppose the bid quote for the spot rate is Yen 118.27/ $ and the quote for the 90-days forward is −140 points. What is the outright 90-days forward quote? What is the percentage forward premium/discount on the yen?

*Question 3. (4 points)*
Please answer only one of the two questions.

1. Suppose you have the following quotations

<table>
<thead>
<tr>
<th>Bank</th>
<th>Quotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuji Bank, Tokyo</td>
<td>¥120/$</td>
</tr>
<tr>
<td>Credit Suisse First Boston, New York</td>
<td>SF 1.60/$</td>
</tr>
<tr>
<td>Swiss First Bank, Zurich</td>
<td>¥80/ SF</td>
</tr>
</tbody>
</table>

Assume that you have an initial SF 1,000,000. What is the cross-rate of Yen/SF? Compare it w/ Swill First Bank Yen/SF quote. Any triangular arbitrage opportunity? If yes, sketch briefly an arbitrage. If no, why?
Note: no need for numerical answer, full credit given for setting up calculation & showing where to plug in the given info.

or

2. Suppose you have $10 million and wish to speculate on the Euro 😊. Current 30-day forward is $0.90/EUR. You believe that spot in 30-days will be $0.844/EUR. Can you make an arbitrage profit? If yes, show how. If no, why?

Question 4. (4 points)
Please answer only one of the two questions.

1. Give me three differences b/n futures and forward contracts.

or

2. Suppose you wish to speculate on the British pound futures, traded @ Chicago Mercantile Exchange. The following quotations are available:

<table>
<thead>
<tr>
<th>Brit Pound Futures, US$/pound</th>
<th>Contract = 62,500 pounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maturity</td>
<td>Settle price</td>
</tr>
<tr>
<td>Mar</td>
<td>1.4228</td>
</tr>
<tr>
<td>June</td>
<td>1.4162</td>
</tr>
</tbody>
</table>

If you sell ten (10) March pound futures, and the spot rate @ maturity is $1.398/pound, what is the value of your position at maturity?

Note: since we have not covered the material for options completely, the following question will NOT be given on the quiz. I will adjust the content of question 5 appropriately.

Question 5. (4 points)
Please answer only one of the two questions.

1. What type(s) of options would be in-the-money if the current spot price were greater than the exercise (or strike) price? (i.e. short or long, put or call) Give a brief payoff diagram(s) of the option(s) of choice.

or

2. Suppose that you have choice of two options on the US$/ Singapore $ exchange rate:

<table>
<thead>
<tr>
<th>90-days maturity European options</th>
<th>Strike Price</th>
<th>Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Put</td>
<td>$0.65/S$</td>
<td>$.00003/S$</td>
</tr>
<tr>
<td>Call</td>
<td>$0.65/S$</td>
<td>$.00046/S$</td>
</tr>
</tbody>
</table>

a. Suppose spot rate is $0.60/S$. If you expect an appreciation of the S$ to $0.70/S$, which option will you buy?
b. What will be the profit for the option of choice if the spot rate in 90-days is indeed $0.70/S$?
Note: no need for numerical answer, full credit is given for just setting up the calculation and showing where to plug in the given info.

Good luck with your studies!