International Financial and Foreign Exchange Markets

Cross Rates and Bid/Ask Quotations

Balance of Pavments

Exercise Handbook

March 30, 2018



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Exercise I

Fill in the cross rates in the table below:

	Α	В	С	D	Е
Α	—	5.2			
В					
C			—		9.5
D			6	—	
E	4.5				—

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Exercise II

Fill in the cross rates in the table below:

	Α	В	C	D	Ε
Α	—	4.5			
В				2	
C	3.05		—		
D				—	5
E					—

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Exercise III

Given the following bid-ask quote:

	Bid	Ask
$\frac{A}{B}$	220	240

At what exchange rate will:

- Mr. Smith purchase A?
- Mr. Brown sell A?
- Mrs. Green purchase B?
- Mrs. Jones sell B?



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Exercise IV

Consider the following bid-ask quotes:

	Bid	Ask
$\frac{A}{B}$	1.35	1.37
$\frac{A}{C}$	0.71	0.76

Please find the $\frac{B}{C}$ bid-ask quote (intermediate computations).

Now suppose that another market maker publishes the following quotes for the $\frac{B}{C}$ rate:

	Bid	Ask
$\frac{B}{C}$	0.575	0.579

Would there be arbitrage opportunities? If so, how would you exploit them (assuming you have 100B at your disposal)?

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Exercise V

Fill in the table below (please, **show all the relevant computations**):

	Bid	Ask
<u>CZJ</u> GBP	35.10	35.17
<u>DKK</u> GBP	9.004	9.009
<u>EUR</u> GBP	1.2066	1.2069
<u>NOK</u> GBP	12.1526	12.153
DKK EUR		
EÛŘ NOK		
<u>GBP</u> CZJ		

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Once you have filled in the table above, answer the questions below:

- Find the bid-ask spread for the $\frac{EUR}{GBP}$ quote.
- How much would you lose if you converted 1500 NOK into CZJ, then into EUR and finally back into NOK?

Exercise VI

True or false? Please, explain.

- If a country has a BOP deficit, the total of each BOP sub-account is negative.
- The current account is a record of all trade in goods and services, while the capital account is a record of portfolio investment and unilateral transfers.
- Under a fixed exchange rate regime, if a country's private sector sells abroad more than it purchases, the central bank must sell foreign exchange.
- All errors and omissions in the BOP are a result of black market transactions



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Exercise VII

Multiple choice. **Please, explain**. Assume H = home country, DC = domestic currency, F = foreign country and FC = foreign currency. All else being equal, an increase in income in F leads to:

- 1. an increase in consumption in H, and therefore an increase in imports, resulting in an appreciation of the DC.
- a decrease in consumption in H, and therefore an increase in exports, resulting in a depreciation of the DC.
- 3. an increase in consumption in F, and therefore an increase in imports, resulting in an appreciation of the DC.
- an increase in consumption in F, and therefore an increase in imports, resulting in a depreciation of the DC.

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Exercise VIII

Multiple choice. **Please, explain**. Assume H = home country, DC = domestic currency, F = foreign country and FC = foreign currency. All else being equal, a decrease in prices in F leads to:

- 1. an increase in exports to H, and therefore an appreciation of the DC.
- 2. an increase in exports to H, and therefore a depreciation of the DC.
- 3. an increase in consumption in F, and therefore an increase in imports, resulting in an appreciation of the DC.
- 4. a decrease in consumption in F, and therefore a decrease in imports, resulting in a depreciation of the DC.

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