Exercise Handbook

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LIUC Università Cattaneo

Table of Contents

Exercise XXXII

In the 1990s, Russia was attempting to import more goods, but had little to offer to other countries in terms of potential exports. In addition, Russia's inflation rate was high. Explain the type of pressure that these factors placed on the Russian Ruble (**Do not forget to justify your claim**).

Exercise XXXIII

ABC Bank expects that the MXP will depreciate against the USD from its spot rate of 0.15 $\frac{USD}{MXP}$ to 0.14 in 1 year. The following interbank borrowing and investing rates (p.a.) exist:

Currency	Lending	Borrowing
MXP	8.5%	8.7%
USD	8.0%	8.3%

Assume that ABC Bank has a borrowing capacity of either 10 mio USD or 70 mio MXP in the interbank market, depending on which curremcy it decides to borrow.

1. Are there any profit opportunities to exploit?
2. Suppose now that all the preceding information holds with one exception: MXP is expected to appreciate against the USD from its spot rate of 0.15 $\frac{USD}{MXP}$ to 0.17 in 1 year. How would your answer change?

Exercise XXXIV

The following information is available:

- you have USD 500,000 to invest
- the current spot rate of the Moroccan Dirham is 0.11 USD
- the 60-day fwd rate of the Moroccan Dirham is 0.18 USD
- the 60-day interest rate in the US is 1%
- the 60-day interest rate in Morocco is 2%

What is the profit for a US investor who conducts covered interest arbitrage?

Exercise XXXV

Assume that the annual interest rate in the US is equal to 4%, while interest rate in France is equal to 6%.

- Based on IRP, what should the fwd premium/discount of the Euro be?
- If the Euro spot rate is 1.10 USD, what should the one-year fwd rate of the Euro be?

Exercise XXXVI

Jim, a US-speculator, buys a GBP call option with a strike price of 1.4 USD and a December settlement date. Jim pays a premium of 0.12 USD per unit for the call option. Each option calls for the delivery of 31,250 GBP.
Just before the expiration date, the spot rate of the GBP reaches 1.41 USD: Jim thus decides to exercise the call option and to sell the pounds straightaway to a local bank.

- Determine Jim's profit or loss (**Do not forget to show all intermediate steps**).
- Assume that Linda is the seller of the option purchased by Jim and suppose further that Linda would purchase GBP only if and when the option is exercised. Determine her profit or loss (**Do not forget to show all intermediate steps**).

Exercise XXXVII

1. The terrorist attack of 9.11 caused expectations of a weaker US economy. Explain how these expectations could have affected US interest rates and therefore have affected the fwd rate premium/discount on various foreign currencies.
2. Why would a US investor consider covered interest arbitrage in France when French interest rates are lower than the US rates (**Do not forget to support your claims with a detailed explanation**)?

Exercise XXXVIII

You go to a bank and are given the following quotes:

- You can buy 1 EUR for 14 MXP. The bank will pay you 13 MXP for 1 EUR.
- You can buy 1 USD for 0.9 EUR. The bank will pay you 0.8 EUR for 1 USD.
- You can buy 1 USD for 10 MXP. The bank will pay you 9 MXP for 1 USD.

You have 1,000 USD at your disposal. Are there any profitable opportunities to exploit?
Would this be arbitrage or speculation? Why (**Do not forget to support your claims with a detailed explanation**)?