





# Foreword

Writing the textook itself was an enormous task, over and above my regular work as a teacher, researcher, supervisor and administrator. Fortunately, as far as exercises were concerned I could fall back to a large extent on the predecessor book, Sercu-Uppal's *International Financial Markets and the Firm*. For many of these, there were even typed-up solutions extant, even though I must admit that much of the teacher's manual of that book was mysteriously lost. The bulk of the original work, fifteen years ago, had been done by Marian Kane, who was accordingly listed as the 1995 Manual's author. For the revision, I could enlist the help of Thi Ngoc Tuan Bui, Fang Liu, and Thi Tuong Van Nguyen; even R. V. Badrinath provided some questions. I thank them all very warmly.

It seems likely that this set of solutions will turn out to be less than perfect. If you disagree with an answer shown here, please feel free to mail me at [piet.secru@econ.kuleuven.be](mailto:piet.secru@econ.kuleuven.be), thus earning yourself many karma points and, who knows, perhaps even a reincarnation as a professor in Leuven.

Blanden, March 8, 2009



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## Chapter 1

# Why does the Existence of Borders Matter for Finance?

[No exercises]



## Chapter 2

# International Finance: Institutional Background

### Quiz Questions

#### True-False Questions

1. If a country has a BOP deficit, the total of all BOP subaccounts is negative.
2. The current account is a record of all trade in goods and services, while the capital account is a record of direct and portfolio investment and unilateral transfers.
3. When the US private sector purchases more goods or makes more investments abroad than foreigners purchase or invest in the US during a year, the Federal Reserve (the US central bank) must make up for the shortfall.
4. All errors and omissions in the BOP are a result of black market transactions.
5. When a corporation purchases a company abroad, and the value of the firm appreciates over time, the NII and the capital account of the BOP is updated to reflect this change.
6. The BOP theory of exchange rate determination says that most changes in the exchange rate are due to the arrival of new information about the future.
7. 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.
8. BOP theory is flawed because it assumes that investors only invest in risk-free domestic and foreign assets.



























































































## Chapter 8

# Currency Options (1): Concepts and Uses

### Quiz Questions

#### True-False Questions

1. The only difference between European-style and American-style options is that European-style options are traded only in Europe while American options are traded only in the us.
2. The buyer of an option has an obligation to purchase the underlying asset in the case of a call, or sell in the case of a put, while the seller of an option has the right to deliver in the case of a call, or take delivery in the case of a put.
3. A put offers the holder of an asset protection from drops in the underlying asset's value, while a call provides protection from an increase in the underlying asset's price.
4. The intrinsic value of a call is its risk-adjusted expected value.
5. The immediate exercise value of an option is its value alive.
6. If a call's strike price exceeds the spot rate, the call is in the money.
7. If an in-the-money put has positive value, its value is based purely on time value.
8. A European-style call will always be at least as valuable as a comparable American call.
9. An option is always at least as valuable as the comparable forward contract.













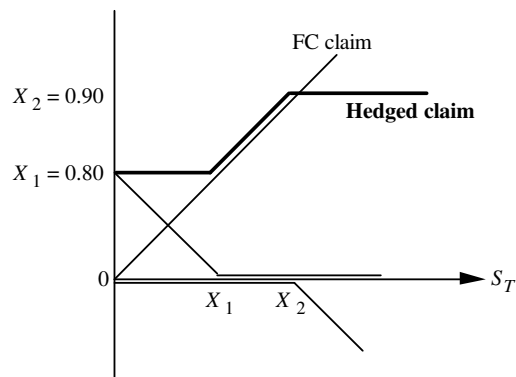












Banks usually choose  $X_1$  and  $X_2$  such that the value of the total package is zero, like for a forward contract, or positive. You could, of course, construct contracts with a negative value (when the value of the call you write exceeds the value of the put, you buy—so that, on balance, the bank pays you something). A cylinder is also called a “collar” or “forward range”; the range  $[X_1, X_2]$  is negotiable. The options are European, not American. When  $X_1 = X_2 = X$ , the forward range collapses to a forward contract with forward price  $X$ .



















## Chapter 10

# Do We Know What Makes Forex Markets Tick?

[no exercises]



## Chapter 11

# Do Forex Markets Themselves See What's Coming?

### Quiz Questions

#### True-False Questions

1. Technical forecasting models analyze microeconomic variables in an attempt to forecast future changes in the exchange rate.
2. Fundamental analysis models analyze macroeconomic variables in an attempt to forecast future changes in the exchange rate.
3. By a “technical correction,” one means that investors underreact to bad news so that the exchange rate does not drop as low as it should. This means that demand must fall further, in order to correctly value a foreign currency in terms of the home currency.
4. If the exchange rate bottoms out (that is, it hits a low point but begins to rise again), and then increases again by  $x$  percent, we can make substantial (and low-risk) profits by buying foreign currency—even when paying “retail” bid-ask spreads.
5. Because we cannot make significant profits from predicting the exchange rate based on past information, the exchange markets are weak-form efficient.
6. Runs tests have confirmed that positive changes in the exchange rate tend to be followed by positive changes, and negative changes by negative changes. This is consistent with the conclusions from autocorrelation tests.
7. The results from runs tests and autocorrelation tests provide unambiguous evidence that the foreign exchange market is inefficient.



## Chapter 12

# (When) Should a Firm Hedge its Exchange Risk?

### Quiz Questions

#### True-False Questions

1. In perfect markets, a manager's decision to hedge a firm's cash flows is irrelevant because there is no exchange rate risk.
2. In perfect markets, a manager's decision to hedge a firm's cash flows is irrelevant because the shareholders can hedge exchange risk themselves.
3. If a large firm keeps track of the exposure of each of its divisions, the firm has better information about each division, and is therefore better able to make decisions.
4. If a firm does not have a hedging policy, the managers may insist on higher wages to compensate them for the risk they bear because part of their lifetime future wealth is exposed to exchange rate risk.
5. If the firm does not have a hedging policy, the managers may refuse to undertake risky projects even when they have a positive net present value.
6. The risk-adjusted expected future tax savings from borrowing in your local currency always equals the present value of the expected tax savings from borrowing in a foreign currency.
7. The cost of hedging is roughly half of the difference between the forward premium and the spot exchange rate.
8. A reinvoicing center assumes the exchange rate risk of the various subsidiaries of a multinational corporation if it allows each subsidiary to purchase or sell











































(b) Liquidity

A. Options tend to have high volatility and big right-skewness, that is, their pay-offs would have been abnormal even if the underlying assets had been Normal. Low liquidity means either longer liquidation intervals or more price pressure when liquidating in a hurry; either increases the maximum losses.



## Chapter 15

# Managing Credit Risk in International Trade

### Quiz Questions

#### True-False Questions

1. Trade on open account, with payment after or on delivery, is the standard way of doing business internationally among unrelated parties without an established business relationship because this method of payment has proven its value in domestic trade.
2. Under payment on or after delivery, most of the risks are borne by the exporter.
3. Under payment before shipment, the exporter bears only the risk of contract cancellation prior to shipment.
4. Suppose that, under payment upon delivery, the importer does not accept the goods. Then the exporter has no problem whatsoever, as he still is in possession of the goods.
5. In international trade, there often is a relatively large time gap between production outlays and payment by the final customer. However, it does not generally matter who provides this working capital. In addition, the issue of how to finance working capital is entirely separable from the issue of how the payment is structured.
6. Discounting a bill is similar to selling the bill for a price equal to the discounted value of the nominal (future) value.
7. Discounting a bill simply means giving an advance on the bill equal to the discounted value of the nominal (future) value. In addition, the discounter receives the bill as security for the payment.











## Chapter 16

# International Fixed-Income Markets

### Quiz Questions

The questions also cover interest forwards and futures, which were discussed in the appendix to Chapter 4.

### True-False Questions

1. The abolition of the Interest Equalization Tax, Regulation Q, the cold war, and the us and uk foreign exchange controls have taken away most of the reasons why euromarkets exist. As a result, we can expect these markets to decline in the near future.
2. Without the us trade deficit, the euromarkets would have developed more slowly.
3. With a floating-rate loan, the bank is free to adjust the interest rate at every reset date in light of the customer's creditworthiness.
4. One of the tasks of the lead bank under a syndicated bank loan is to make a market, at least initially.
5. The purpose of using a paying agent is to reduce exchange risk.
6. Caps and floors are options on interest rates. Because interest rates are not prices of assets, one cannot price caps and floors using an option pricing model that is based on asset prices.
7. Because euroloans are unsecured, the spread over the risk-free rate is a very reliable indicator of the borrower's general creditworthiness.



















## Chapter 19

# Setting the Cost of International Capital

### Quiz Questions

#### True-False Questions

1. The entire NPV analysis can be conducted in terms of the host (foreign) currency if money markets and exchange markets are fully integrated with the home market.
2. The entire NPV analysis can be conducted in terms of the host currency if money markets, stock markets, and exchange markets are fully integrated with the home market.
3. Forward rates can be used as the risk-adjusted expected future spot rates to translate the host-currency cash flows into the home currency. The home-currency cash flows can then be discounted at the appropriate home-currency discount rate if money markets and exchange markets are fully integrated with the home market.
4. Regardless of the degree of market integration, the host-currency expected cash flows can always be translated into the home currency (by multiplying them by the expected spot rate), and then discounted at the home-currency discount rate.
5. Regardless of the degree of market integration, the host-currency expected cash flows can always be translated into expected cash flows expressed in home currency. The home-currency cash flows can then be discounted at the home-currency discount rate that takes into account all risks.
6. If you use the forward rate as the risk-adjusted expected spot rate, there is















## Chapter 20

# International Taxation of Foreign Investments

### Quiz Questions

#### True-False Questions

1. The term “permanent establishment” (PE) is just tax-speak for “branch.” That is, every branch is a PE and vice versa.
2. As soon as there is a permanent physical presence abroad, there is a PE.
3. A PE has a separate accounting system, while a branch does not.
4. If a person lives or earns income in more than one country, there may be double taxation.
5. The source principle says that any person earning money in a particular country is taxable in that country on his or her worldwide income.
6. Withholding taxes are levied by the host country on the taxpayer’s worldwide income.
7. The legal basis for withholding taxes on non-labor income paid to foreigners is the residence principle.
8. The Capital Import Neutrality principle says that the foreign branch ought to be taxed as if it were a locally owned company.
9. The Capital Export Neutrality principle says that the foreign branch ought to be taxed as if it were a locally owned company.



















































