

Lecture Notes for International Financial Markets and Institutions*

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Lecture Notes for Chapter 1

International Financial Markets and Institutions

Chapter 1

Outline: Course aims, summary of finance, international issues

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Road Map

1 Outline: Course aims, summary of finance, international issues

2 Preliminaries: Conventions, notation, and basic concepts

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3 The spot market for foreign exchange

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Part B The behaviour of exchange rates

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6 Aspects of the international monetary system

7 The behaviour of spot and forward exchange rates

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1.1 Course aims

Take basic concepts of time and uncertainty and apply them in an international context to:

- Asset Pricing/Capital Markets – how do financial markets determine asset prices?

E.g.

- calculating the value of a cashflow or GBP 1 M to a Canadian investor whose home currency is CAD.
- theories attempting to explain the behaviour of exchange rates
- basic knowledge about the international financial system
- some understanding of currency crises—causes and effects

We shall cover **very little**

- Corporate Finance – how do companies make financial decisions?

E.g.

- Should HSBC invest in setting up a call centre in Bangalore or Vancouver for dealing with North American customers' telebanking?
- Should a Canadian company which is due to receive USD 1M in 1 years time hedge this cashflow and if so, how?

1.1.1 Asset Pricing/Capital Markets

The main aims of asset pricing are:

- Computing optimal portfolios.
- Valuing assets which can be replicated by the no-arbitrage principle.
- Valuing assets which cannot be replicated via equilibrium techniques, e.g. CAPM.

We shall concentrate on the first two: using portfolio theory to understand the exchange rate and learning how to value futures, forwards and options on FX rates.

1.1.2 Corporate Finance

The main aims of corporate finance are to understand:

- Which investments should a firm take?
- How should a firm use its assets?
- How should a firm finance its investments?
- Which risks should a firm hedge and how should it hedge them?

We shall focus on the second part of the last aim: how to hedge FC cashflows. In doing so we shall apply what we have learnt about valuing assets from asset pricing.

1.1.3 Why are international considerations important?

International finance involves:

- Extra risk factors:
 - FX risk – paying and receiving foreign currency cashflows involves FX risk.
 - Country risk – not all countries are politically very stable and ownership rights may not be enforceable.

- Understanding how the pricing of risk is affected by international considerations beyond FX and country risk:
 - Product markets across countries are not fully open.
 - Not all capital markets are fully open.
 - Taxes and differences in tax codes across countries.

In this course, we shall focus on FX risk.

1.2 Course Outline

1. Outline

- What is finance about?
- Why are international considerations important?

2. Preliminaries

- Review of NPV analysis
 - Key importance of timing of cashflows and their riskiness.
 - When discounting a cashflow to compute its present value, the discount factor you use will depend on when the cashflow occurs (time) and how risky it is.
- Random variables
- Expected values
- Certainty-equivalents (risk-adjusted expectations)
- Variance and standard deviation – measuring risk
- Covariance and correlation – which risks or parts of risks are priced?
- Diversification, systematic and unsystematic risk, CAPM.
 - Diversification eliminates unsystematic risk – only systematic risk is priced.
 - The β of a stock measures its systematic risk.

3. The spot market for foreign exchange
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9. Currency crises
10. The market for currency futures
11. The market for currency options

12. Summary of international finance

Numbering and highlighting conventions

- All sections, examples, tables, figures, and equations are numbered, and the first part of the number is the chapter number. For example, the number of this section is “1.2,” where the “1” refers to the chapter number.
 - Important formulas and paragraphs of text are placed in a box so that they can be identified easily.
- Important points (items that the reader should take note of) are highlighted with the use of the right-arrow, such as the one used for this text.