CHAPTER 9
INTERNATIONAL FINANCIAL MARKETS

LEARNING OBJECTIVES:
1. Discuss the purposes, development, and financial centers of the international capital market.
2. Describe the international bond, international equity, and Eurocurrency markets.
3. Discuss the four primary functions of the foreign exchange market.
4. Explain how currencies are quoted and the different rates given.
5. Identify the main instruments and institutions of the foreign exchange market.
6. Explain why and how governments restrict currency convertibility.

CHAPTER OUTLINE:

Introduction
International Capital Market
  Purposes of National Capital Markets
    Role of Debt
    Role of Equity
  Purposes of the International Capital Market
    Expanding the Money Supply for Borrowers
    Reducing the Cost of Money for Borrowers
    Reducing Risk for Lenders
  Forces Expanding the International Capital Market
  World Financial Centers
    Offshore Financial Centers
Main Components of the International Capital Market
  International Bond Market
    Types of International Bonds
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  International Equity Market
    Spread of Privatization
    Economic Growth in Developing Countries
    Activity of Investment Banks
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Foreign Exchange Market
  Functions of the Foreign Exchange Market
    Currency Conversion
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    Currency Speculation
How the Foreign Exchange Market Works
  Quoting Currencies
    Direct and Indirect Rate Quotes
    Calculating Percent Change
    Cross Rates
  Spot Rates
A comprehensive set of specially designed PowerPoint slides (designated ‘PPT’ below) is available for use with Chapter 9. These slides and the lecture outline below form a completely integrated package that simplifies the teaching of this chapter’s material.

**Lecture Outline**

1. **INTRODUCTION**
   This chapter explores the structure of international financial markets. The two interrelated systems that comprise the international financial markets are the international capital market and the foreign exchange market.

2. **INTERNATIONAL CAPITAL MARKET**
   A *capital market* is a system that allocates financial resources in the form of debt and equity according to their most efficient uses. Its main purpose is to provide a mechanism to borrow or invest money efficiently.

   A. **Purposes of National Capital Markets (PPT #3)**
      Help individuals and institutions borrow money from lenders; intermediaries exist to facilitate financial exchanges.
      1. **Role of Debt**
         a. Loans in which borrower repays borrowed amount (the principal) plus interest. Company debt normally takes the form of *bonds*—debt instruments specifying the timing of principal and interest payments.
b. Holder of a bond (the lender) can force the borrower into bankruptcy if payment is not made on a timely basis. Bonds to fund investments are issued by private-sector companies and by municipal, regional, and national governments.

2. Role of Equity
   a. Equity is part ownership of a company in which the equity holder participates with other part owners in the company’s financial gains and losses. Equity normally takes the form of stock—shares of ownership in a company’s assets that give shareholders a claim on the company’s future cash flows.
   b. Shareholders may be rewarded with dividends—payments made out of surplus funds—or by increases in the value of their shares. They may also suffer losses due to poor company performance—and thus decreases in the value of their shares. Dividend payments are not guaranteed, but decided by the company’s board of directors and based on financial performance.
   c. Shareholders can sell one stock and buy another or liquidate exchange stock for cash. Liquidity refers to the ease with which bondholders and shareholders convert investments into cash.

B. Purposes of the International Capital Market (PPT #4)
The international capital market is a network of individuals, companies, financial institutions, and governments that invest and borrow across national boundaries. Large international banks gather excess cash of investors and savers around the world and then channel it to global borrowers.

1. Expanding the Money Supply for Borrowers
   a. Companies unable to obtain funds from investors in the domestic market seek financing in the international capital market.
   b. Essential for firms in countries with small or developing capital markets or emerging stock markets.
   c. An expanded supply of money benefits small companies that might not get financing under intense competition for capital.

2. Reducing the Cost of Money for Borrowers
   a. An expanded money supply reduces the cost of borrowing. The “price” reflects supply and demand. Excess funds create a buyer’s market, forcing interest rates lower.
   b. Projects regarded as infeasible because of low expected returns might be viable at a lower financing cost.

3. Reducing Risk for Lenders
   a. The international capital market expands the available set of lending opportunities. Investors reduce portfolio risk by spreading their money over many debt and equity instruments.
   b. Investing in international securities benefits investors because some economies are growing while others are in decline.

C. Forces Expanding the International Capital Market (PPT #5)
1. Information Technology
   Reduces time and money needed to communicate globally. Electronic trading after close of formal exchanges facilitates fast response times.
2. Deregulation
Increases competition, lowers cost of financial transactions, and opens many national markets to global investing and borrowing. Continued growth depends on further deregulation.

3. Financial Instruments
Increased competition is creating the need to develop innovative financial instruments. **Securitization** is the unbundling and repackaging of hard-to-trade financial assets into more liquid, negotiable, and marketable financial instruments, or securities.

D. World Financial Centers (PPT #6)
Three most important financial centers are London, New York, and Tokyo.
1. Offshore Financial Centers
   Country or territory where financial sector features few regulations and few, if any, taxes. They: (1) are economically and politically stable; (2) are advanced in telecommunications; (3) offer large amounts of funding in many currencies; and (4) provide a less costly source of financing.
   a. **Operational Centers** see a great deal of financial activity (e.g., London for currencies; Switzerland for investment capital).
   b. **Booking Centers** are usually located on a small, island nation or territory with favorable tax and/or secrecy laws. Funds pass through on their way to large operational centers. Typically are offshore branches of domestic banks used to record tax and currency exchange information.

3. MAIN COMPONENTS OF THE INTERNATIONAL CAPITAL MARKET

A. International Bond Market (PPT #7)
Consists of all bonds sold by issuing companies, governments, and other organizations **outside their own countries**. Buyers include medium- to large-size banks, pension funds, mutual funds, and governments.
1. Types of International Bonds
   a. **Eurobond**
      Issued outside the country in whose currency it is denominated (e.g., Issued in Venezuela in U.S. dollars, and sold in Britain, France, and Germany). It accounts for 75-80% of all international bonds. Absence of regulation reduces the cost of issuing a bond but increases its risk.
   b. **Foreign Bond**
      Sold outside borrower’s country and denominated in currency of country in which it is sold (e.g., Yen-denominated bond issued by German carmaker BMW in Japan’s bond market). It accounts for 20-25% of all international bonds. Issuers must meet certain regulatory requirements and disclose details about company activities, owners, and upper management.
2. Interest Rates: A Driving Force
   a. Borrowers from newly industrialized and developing countries borrow money from nations where interest rates are lower.
   b. Investors in developed countries buy bonds in newly industrialized and developing nations to obtain a higher return.
c. Many emerging countries see the need to develop their own national markets. Volatility in currency market hurts projects that earn funds in those currencies and pay debts in dollars.

B. International Equity Market (PPT #8)
Consists of all stocks bought and sold outside the issuer’s home country. Companies and governments issue equity and buyers include other companies, banks, mutual funds, pension funds, and individuals.
1. Spread of Privatization
   a. A single privatization often places billions of dollars of new equity on stock markets.
   b. Increased privatization in Europe is expanding worldwide equity. European Union integration has made investors willing to invest in stocks from other European nations.
2. Economic Growth in Developing Countries
   a. Growth in newly industrialized and developing countries contributes to growth in the international equity market.
   b. Because of a limited supply of funds in emerging economies, the international equity market is a major source of funding.
3. Activity of Investment Banks
   a. Investment banks facilitate the sale of stock worldwide by bringing together sellers and large potential buyers.
   b. Becoming more common than listing a company’s shares on another country’s stock exchange.
4. Advent of Cybermarkets
   a. Stock markets that have no central geographic location, but consist of online global trading activities that allow listing of stocks worldwide for electronic 24-hour trading.

C. Eurocurrency Market (PPT #9)
1. All the world’s currencies banked outside their countries of origin are called Eurocurrency and trade on the Eurocurrency market (e.g., U.S. dollars in Tokyo are called Eurodollars. British pounds in New York are called Europounds). Characterized by large transactions involving only the largest companies, banks, and governments.
2. Four Sources of Deposits:
   • Governments with excess funds from prolonged trade surplus.
   • Commercial banks with excess currency.
   • International companies with excess cash.
   • Extremely wealthy individuals.
3. Eurocurrency market is valued at around $6 trillion, with London accounting for about 20 percent of all deposits.
4. Appeal of the Eurocurrency Market
   a. Complete absence of regulation lowers costs. Banks charge borrowers less and pay investors more but still earn profit.
   b. Low transaction costs because transactions are large.
   c. Interbank interest rates are interest rates that the world’s largest banks charge one another for loans. London Interbank Offer Rate (LIBOR) is the interest rate charged by London banks to other large banks borrowing Eurocurrency. London Interbank Bid Rate
(LIBID) is the interest rate offered by London banks to large investors for Eurocurrency deposits.

5. Downside of Eurocurrency market is greater risk due to a lack of government regulation. Still, Eurocurrency transactions are fairly safe because of the size of the banks involved.

4. FOREIGN EXCHANGE MARKET

- Market in which currencies are bought and sold and in which currency prices are determined. Exchange rates reflect the size of the transaction, the trader conducting it, general economic conditions, and sometimes, government mandate.
- If the British pound is quoted in U.S. dollars at $1.6296, the bank may bid $1.6294 to buy British pounds and offer to sell them at $1.6298. The difference is the bid–ask spread; banks buy low and sell high, earning profits from the bid–ask spread.

A. Functions of the Foreign Exchange Market (PPT #10)

1. Currency Conversion
   Companies use the foreign exchange market to convert currencies.

2. Currency Hedging
   Insuring against potential losses that result from adverse changes in exchange rates. Companies use it to: (1) lessen the risk of international transfers; and (2) reduce exposure in transactions where a time lag exists between billing and receipt of payment.

3. Currency Arbitrage
   Instantaneous purchase and sale of a currency in different markets for profit. Common among experienced foreign exchange traders, large investors, and firms in arbitrage business.
   a. *Interest arbitrage* is the profit-motivated purchase and sale of interest-paying securities denominated in different currencies. Companies use interest arbitrage to find higher interest rates abroad in government treasury bills, corporate and government bonds, and even bank deposits.

4. Currency Speculation
   Purchase or sale of a currency with the expectation that its value will change and generate a profit. Much riskier than arbitrage because the value, or price, of currencies is quite volatile.

5. HOW THE FOREIGN EXCHANGE MARKET WORKS

A. Quoting Currencies (PPT #11-14)
   Two components to every quoted exchange rate: the *quoted currency* and the *base currency*. In (¥/$), the yen is the quoted currency, the dollar is the base currency. The quoted currency is always the *numerator*, and the base currency is always the *denominator*.

1. Direct and Indirect Rate Quotes
   a. In ¥ 117/$, the yen is the quoted currency; this is called a *direct quote* on the yen and an *indirect quote* on the dollar.
   b. In $0.0085/¥, the dollar is the quoted currency; this is called a direct quote on the dollar and an indirect quote on the yen.
   c. This formula derives a direct quote from an indirect quote:

\[
\text{Direct Quote} = \frac{1}{\text{Indirect Quote}}
\]
Indirect Quote

And, for deriving an indirect quote from a direct quote, use:

\[
\text{Indirect Quote} = \frac{\text{1}}{\text{Direct Quote}}
\]

2. Calculating Percent Change
   a. Exchange rate risk can jeopardize profits from current and future international transactions. Managers minimize this risk by tracking percent changes in exchange rates.
   b. Take \( P_n \) as the exchange rate at the end of a period (a currency’s \textit{new} price), and \( P_o \) as the exchange rate at the beginning of that period (a currency’s \textit{old} price). Percent change in the value of the currency is calculated with the following formula:

\[
\text{Percent change (\%)} = \frac{P_n - P_o}{P_o} \times 100
\]

c. Suppose on February 1, the exchange rate between the Polish zloty (PLZ) and the U.S. dollar was PLZ 5/$. On March 1, the exchange rate stood at PLZ 4/$.

What is the change in the value of the base currency—the dollar?

\[
\text{Percent change (\%)} = \frac{4 - 5}{5} \times 100 = -20\%
\]

3. Cross Rate
   Exchange rate calculated using two other exchange rates. Used when no access to the exchange rate between two nation’s currencies, but have exchange rates for each nation’s currency with that of a third nation. Cross rates between two currencies can be calculated using either currency’s indirect or direct exchange rates with another currency.

B. Spot Rate (PPT #15)
   Exchange rate that requires delivery of a traded currency within two business days. The spot market helps companies to:
   - Convert income from sales abroad into the home-country currency.
   - Convert funds into the currency of an international supplier.
   - Convert funds into the currency of a country in which it will invest.
   1. Buy and Sell Rates
      The spot rate is available only to banks and foreign exchange brokers. Small businesspeople exchanging currencies at their local bank receive a \textit{buy rate} (the bank’s rate to buy a currency) and an \textit{ask rate} (the bank’s rate to sell a currency). For example, if a bank quotes you an exchange rate between Mexican pesos and US dollars of Peso 5.6789/95 per $, it will buy dollars at Peso 5.6785/$ and sell them at Peso 5.6795/$.

C. Forward Rate (PPT #16)
Exchange rate at which two parties agree to exchange currencies on a specified future date. Represent traders’ and bankers’ expectations of a currency’s future spot rate. Used to insure against unfavorable changes in exchange rates.

1. Forward Contract
   a. Requires exchange of an agreed-upon amount of a currency on an agreed-upon date at a specific exchange rate. Belong to a family of financial instruments known as derivatives.
   b. Commonly signed for 30, 90, and 180 days into the future, but customized contracts are also possible.
   c. A currency is trading at a premium when its forward rate is higher than its spot rate, and is trading at a discount when its forward rate is lower than its spot rate.

D. Swaps, Options and Futures (PPT #17)
   Three other types of currency instruments are used in the forward market.
   1. Currency Swap
      Simultaneous purchase and sale of foreign exchange for two different dates. Used to reduce exchange-rate risk and lock in a future exchange rate. Can be viewed as a complex forward contract.
   2. Currency Option
      Right, or option, to exchange a specific amount of a currency on a specific date at a specific rate. Used to hedge against exchange-rate risk or obtain foreign currency at a favorable rate.
   3. Currency Futures Contract
      Contract requiring the exchange of a specific amount of currency on a specific date at a specific exchange rate, with all conditions fixed and not adjustable.

6. FOREIGN EXCHANGE MARKET TODAY
   Electronic network of foreign exchange traders, currency trading banks, and investment firms among major financial centers. Single-day trading volume on the foreign exchange market (currency swaps and spot and forward contracts) is more than $1.2 trillion—roughly the yearly gross domestic product of Italy.

A. Trading Centers (PPT #18)
   UK, US, and Japan account for half of all global currency trading. London dominates the foreign exchange market for historic and geographic reasons.

B. Important Currencies
   A vehicle currency is used as an intermediary to convert funds between two other currencies. Currencies most often involved in currency transactions are the U.S. dollar, British pound, Japanese yen, and European Union euro.

C. Institutions of the Foreign Exchange Market (PPT #19)
   1. Interbank Market
      Market where the world’s largest banks exchange currencies at spot and forward rates. Banks act as agents for clients and turn to foreign exchange brokers, who maintain networks to obtain seldom traded currencies.
   2. Securities Exchanges
Specialize in currency futures and options transactions. Securities brokers facilitate currency transactions on securities exchanges. Transactions on securities exchanges are much smaller than those in the interbank market and vary with each currency.

3. Over-the-Counter (OTC) Market
Consists of a global computer network of foreign exchange traders and other market participants, but with no central trading location. Major players in the OTC market are large financial institutions and investment banks. The OTC market has grown because of several benefits:
- Businesspeople search for the institution that provides the best (lowest) price for transactions.
- It offers greater opportunities for designing customized transactions.

7. CURRENCY CONVERTIBILITY
A convertible (hard) currency is one that trades freely in the foreign exchange market, with its price determined by the forces of supply and demand. But some countries do not permit the free convertibility of their currencies.

A. Goals of Currency Restriction (PPT #20)
1. Preserve nation’s hard currencies to repay debts owed to other nations.
2. Preserve hard currencies to pay for imports and finance trade deficits.
3. Protect a currency from speculators.
4. Keep individuals and businesses from investing in other nations.

B. Policies for Restricting Currencies (PPT #21)
- Nation’s central bank must perform all foreign exchange transactions.
- Government controls amount of foreign currency leaving the country by requiring importers to obtain import licenses.
- Implement systems of multiple exchange rates that specify higher rates on the imports of certain goods or on the imports from certain nations.
- Issue import deposit requirements that require businesses to deposit certain percentages of their foreign exchange holdings in special accounts before being granted import licenses.
- Issue quantity restrictions that limit the amount of foreign currency that individuals can take out of the country when traveling abroad.

1. Countertrade
Exchange of goods or services between two parties without the use of money. International companies can circumvent currency convertibility restrictions and yet conduct business.

8. BOTTOM LINE FOR BUSINESS
Key components of international financial markets are the international bond, equity, and Eurocurrency markets. Continued growth in the international capital market is expected. It is crucial that managers understand the fundamentals of exchange rates and how the foreign exchange market is structured. The next chapter covers how market forces (including interest rates and inflation) affect exchange rates. We explore the roles of government and international institutions in managing movements in exchange rates.