

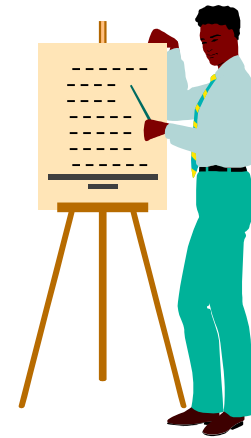
Topic

3

International Financial Markets



Chapter Objectives



- **To describe the background and corporate use of the following international financial markets:**
 - α foreign exchange market,
 - α Eurocurrency market,
 - α Eurocredit market,
 - α Eurobond market, and
 - α international stock markets.

Motives for Using International Financial Markets

- The markets for real or financial assets are prevented from complete integration by barriers such as tax differentials, tariffs, quotas, labor immobility, communication costs, cultural differences, and financial reporting differences.
- Yet, these barriers can also create unique opportunities for specific geographic markets that will attract foreign investors.

Motives for Using International Financial Markets

- **Investors invest in foreign markets:**
 - to take advantage of favorable economic conditions;
 - when they expect foreign currencies to appreciate against their own; and
 - to reap the benefits of international diversification.

Motives for Using International Financial Markets

- **Creditors provide credit in foreign markets:**
 - ⌘ to capitalize on higher foreign interest rates;
 - ⌘ when they expect foreign currencies to appreciate against their own; and
 - ⌘ to reap the benefits of international diversification.

Motives for Using International Financial Markets

- **Borrowers borrow in foreign markets:**
 - to capitalize on lower foreign interest rates;
and
 - when they expect foreign currencies to depreciate against their own.

Foreign Exchange Market



- **The foreign exchange market allows currencies to be exchanged in order to facilitate international trade or financial transactions.**
- **The system for establishing exchange rates has evolved over time.**
 - From 1876 to 1913, each currency was convertible into gold at a specified rate, as dictated by the *gold standard*.

Foreign Exchange Market



- α This was followed by a period of instability, as World War I began and the Great Depression followed.
- α The 1944 *Bretton Woods Agreement* called for fixed currency exchange rates.
- α By 1971, the U.S. dollar appeared to be overvalued. The *Smithsonian Agreement* devalued the U.S. dollar and widened the boundaries for exchange rate fluctuations from $\pm 1\%$ to $\pm 2\%$.

Foreign Exchange Market



- α Even then, governments still had difficulties maintaining exchange rates within the stated boundaries. In 1973, the official boundaries for the more widely traded currencies were eliminated and the *floating exchange rate system* came into effect.

Foreign Exchange Transactions



- There is no specific building or location where traders exchange currencies. Trading also occurs around the clock.
- The market for immediate exchange is known as the ***spot market***.
- The ***forward market*** enables an MNC to lock in the exchange rate at which it will buy or sell a certain quantity of currency on a specified future date.

Foreign Exchange Transactions



- Hundreds of banks facilitate foreign exchange transactions, though the top 20 handle about 50% of the transactions.
- At any point in time, arbitrage ensures that exchange rates are similar across banks.
- Trading between banks occurs in the *interbank market*. Within this market, foreign exchange brokerage firms sometimes act as middlemen.

Foreign Exchange Transactions



- **The following attributes of banks are important to foreign exchange customers:**
 - α competitiveness of quote
 - α special relationship between the bank and its customer
 - α speed of execution
 - α advice about current market conditions
 - α forecasting advice

Foreign Exchange Transactions



- Banks provide foreign exchange services for a fee: the bank's **bid** (buy) quote for a foreign currency will be less than its **ask** (sell) quote. This is the **bid/ask spread**.
- $\text{bid/ask \% spread} = \frac{\text{ask rate} - \text{bid rate}}{\text{ask rate}}$
- Example: Suppose bid price for £ = \$1.52, ask price = \$1.60.

$$\text{bid/ask \% spread} = (1.60 - 1.52) / 1.60 = 5\%$$

Foreign Exchange Transactions



- **The bid/ask spread is normally larger for those currencies that are less frequently traded.**
- **The spread is also larger for “retail” transactions than for “wholesale” transactions between banks or large corporations.**

Interpreting Foreign Exchange Quotations

- Exchange rate quotations for widely traded currencies are frequently listed in the news media on a daily basis. Forward rates may be quoted too.
- The quotations normally reflect the ask prices for large transactions.

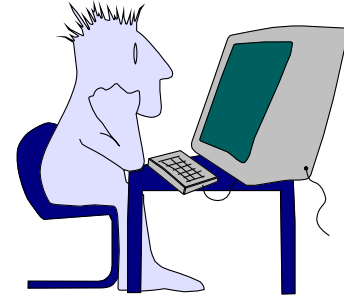
Interpreting Foreign Exchange Quotations

- ***Direct quotations*** represent the value of a foreign currency in dollars, while ***indirect quotations*** represent the number of units of a foreign currency per dollar.
- Note that exchange rate quotations sometimes include IMF's special drawing rights (SDRs).
- The same currency may also be used by more than one country.

Interpreting Foreign Exchange Quotations

- A ***cross exchange rate*** reflects the amount of one foreign currency per unit of another foreign currency.
- Value of 1 unit of currency A in units of currency B = $\frac{\text{value of currency A in \$}}{\text{value of currency B in \$}}$

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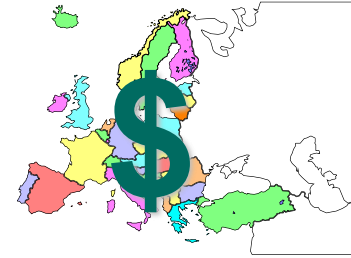


- **Check out these foreign exchange sites:**
 - α <http://pacific.commerce.ubc.ca/xr/>
 - α <http://sonnet-financial.com/rates/full.asp>
 - α <http://www.oanda.com/>

Currency Futures and Options Market

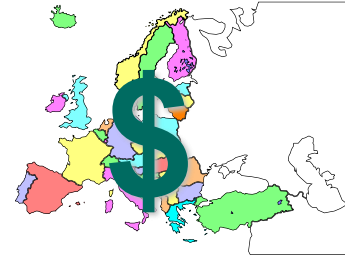
- A ***currency futures contract*** specifies a standard volume of a particular currency to be exchanged on a specific settlement date. Unlike forward contracts however, futures contracts are sold on exchanges.
- ***Currency options contracts*** give the right to buy or sell a specific currency at a specific price within a specific period of time. They are sold on exchanges too.

Eurocurrency Market



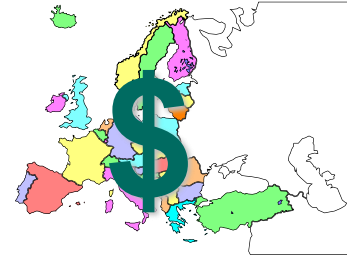
- U.S. dollar deposits placed in banks in Europe and other continents are called ***Eurodollars***.
- In the 1960s and 70s, the Eurodollar market, or what is now referred to as the ***Eurocurrency market***, grew to accommodate increasing international business and to bypass stricter U.S. regulations on banks in the U.S.

Eurocurrency Market



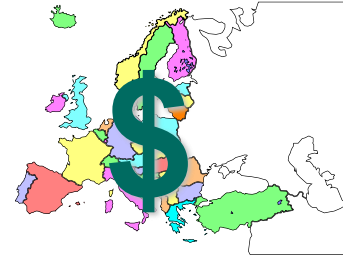
- The Eurocurrency market is made up of several large banks called ***Eurobanks*** that accept deposits and provide loans in various currencies.
- For example, the Eurocurrency market has historically recycled the oil revenues (petrodollars) from oil-exporting (OPEC) countries to other countries.

Eurocurrency Market



- Although the Eurocurrency market focuses on large-volume transactions, there are times when no single bank is willing to lend the needed amount.
- A *syndicate* of Eurobanks may then be composed to underwrite the loans. Front-end management and commitment fees are usually charged for such syndicated Eurocurrency loans.

Eurocurrency Market



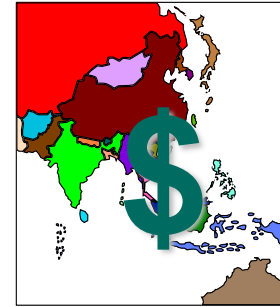
- The recent standardization of regulations around the world has promoted the globalization of the banking industry.
- In particular, the *Single European Act* has opened up the European banking industry.
- The 1988 *Basel Accord* signed by G-10 central banks outlined common capital standards, such as the structure of risk weights, for their banking industries.

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- **Learn more about the Single European Act at http://europa.eu.int/abc/treaties_en.htm.**
- **Details about the 1988 Basel Accord can be found at <http://www.bis.org/publ/bcbs04a.htm>.**
Check out the new Basel Capital Accord (2001) at <http://www.bis.org/publ/bcbsca.htm> too.

Eurocurrency Market



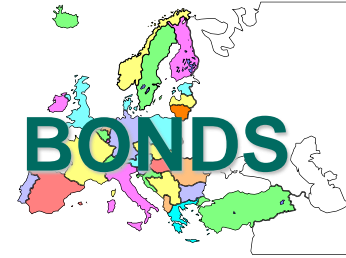
- The Eurocurrency market in Asia is sometimes referred to separately as the *Asian dollar market*.
- The primary function of banks in the Asian dollar market is to channel funds from depositors to borrowers.
- Another function is interbank lending and borrowing.

Eurocredit Market



- Loans of one year or longer are extended by Eurobanks to MNCs or government agencies in the ***Eurocredit market***. These loans are known as ***Eurocredit loans***.
- Floating rates are commonly used, since the banks' asset and liability maturities may not match - Eurobanks accept short-term deposits but sometimes provide longer term loans.

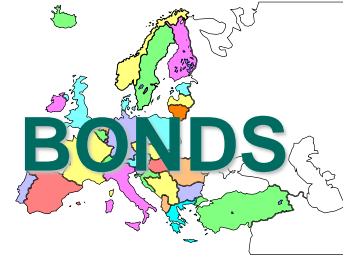
Eurobond Market



There are two types of international bonds.

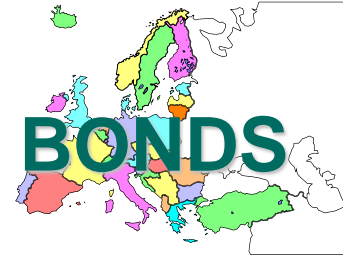
- ① Bonds denominated in the currency of the country where they are placed but issued by borrowers foreign to the country are called *foreign bonds* or *parallel bonds*.
- ② Bonds that are sold in countries other than the country represented by the currency denominating them are called *Eurobonds*.

Eurobond Market



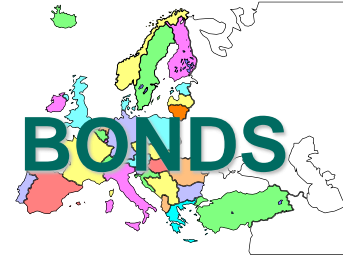
- The emergence of the Eurobond market is partially due to the 1963 Interest Equalization Tax imposed in the U.S.
- The tax discouraged U.S. investors from investing in foreign securities, so non-U.S. borrowers looked elsewhere for funds.
- Then in 1984, U.S. corporations were allowed to issue bearer bonds directly to non-U.S. investors, and the withholding tax on bond purchases was abolished.

Eurobond Market



- **Eurobonds are underwritten by a multinational syndicate of investment banks and simultaneously placed in many countries through second-stage, and in many cases, third-stage, underwriters.**
- **Eurobonds are usually issued in bearer form, pay annual coupons, may be convertible, may have variable rates, and typically have few protective covenants.**

Eurobond Market

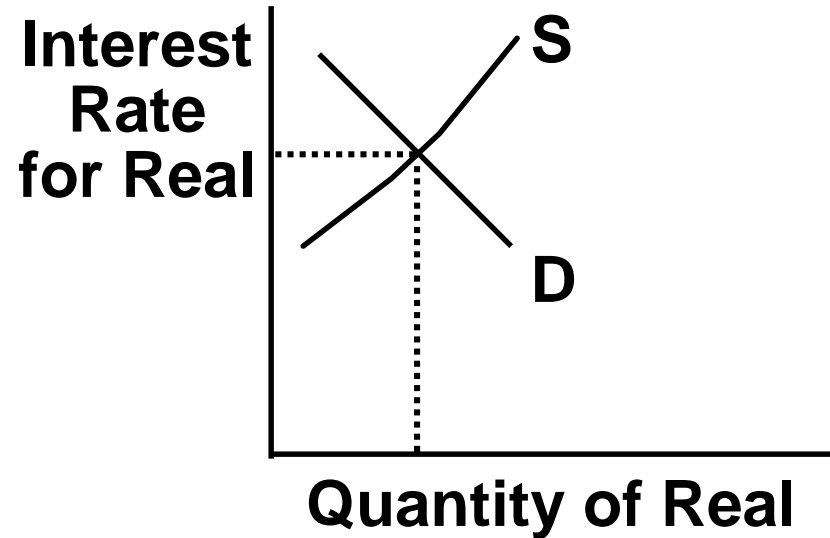
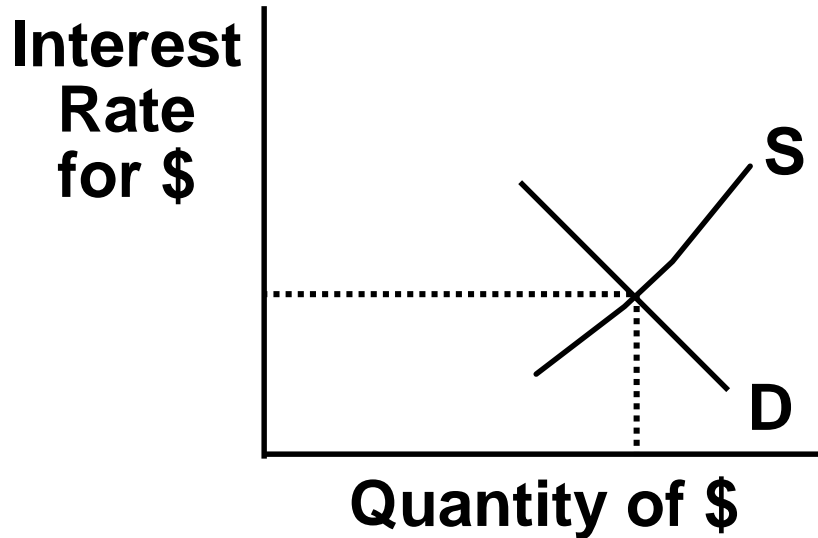


- **Interest rates for each currency and credit conditions in the Eurobond market change constantly, causing the popularity of the market to vary among currencies.**
- **About 70% of the Eurobonds are denominated in the U.S. dollar.**
- **In the secondary market, the market makers are often the same underwriters who sell the primary issues.**

Comparing Interest Rates **Among Currencies**

- **Interest rates vary substantially for different countries, ranging from about 1% in Japan to about 60% in Russia.**
- **Interest rates are crucial because they affect the MNC's cost of financing.**
- **The interest rate for a specific currency is determined by the demand for and supply of funds in that currency.**

Why U.S. Dollar Interest Rates Differ from Brazilian Real Interest Rates

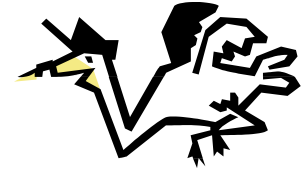


- The curves are further to the right for the dollar because the U.S. economy is larger.
- The curves are higher for the Brazilian Real because of the higher inflation in Brazil.

Comparing Interest Rates **Among Currencies**

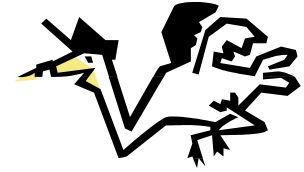
- **As the demand and supply schedules change over time for a specific currency, the equilibrium interest rate for that currency will also change.**
- **Note that the freedom to transfer funds across countries causes the demand and supply conditions for funds to be somewhat integrated, such that interest rate movements become integrated too.**

International Stock Markets



- In addition to issuing stock locally, MNCs can also obtain funds by issuing stock in international markets.
- This will enhance the firm's image and name recognition, and diversify the shareholder base. The stocks may also be more easily digested.
- Note that market competition should increase the efficiency of new issues.

International Stock Markets



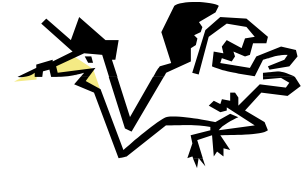
- Stock issued in the U.S. by non-U.S. firms or governments are called ***Yankee stock offerings***. Many of such recent stock offerings resulted from privatization programs in Latin America and Europe.
- Non-U.S. firms may also issue ***American depository receipts (ADRs)***, which are certificates representing bundles of stock. ADRs are less strictly regulated.

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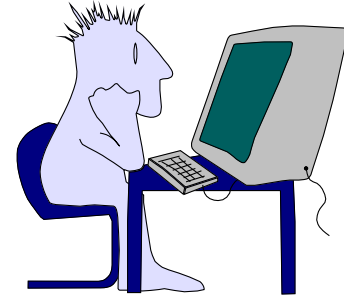
- Check out the performance of ADRs at <http://www.adr.com>.

International Stock Markets



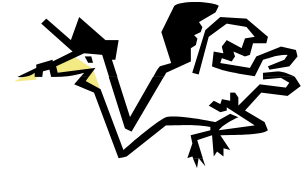
- **The locations of the MNC's operations can influence the decision about where to place stock, in view of the cash flows needed to cover dividend payments.**
- **Market characteristics are important too. Stock markets may differ in size, trading activity level, regulatory requirements, taxation rate, and proportion of individual versus institutional share ownership.**

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- **For a summary of the performance of various stock markets, refer to**
http://www.worldbank.org/data/wdi2001/pdfs/tab5_3.pdf
- **Visit the stock exchanges at:**
 - http://dir.yahoo.com/Business_and_Economy/Business_to_Business/Financial_Services/Exchanges/Stock_Exchanges/
 - <http://www.aex.nl/finance/beurzen.html>

International Stock Markets



- **Electronic communications networks (ECNs) have been created to match orders between buyers and sellers in recent years.**
- **As ECNs become more popular over time, they may ultimately be merged with one another or with other exchanges to create a single global stock exchange.**

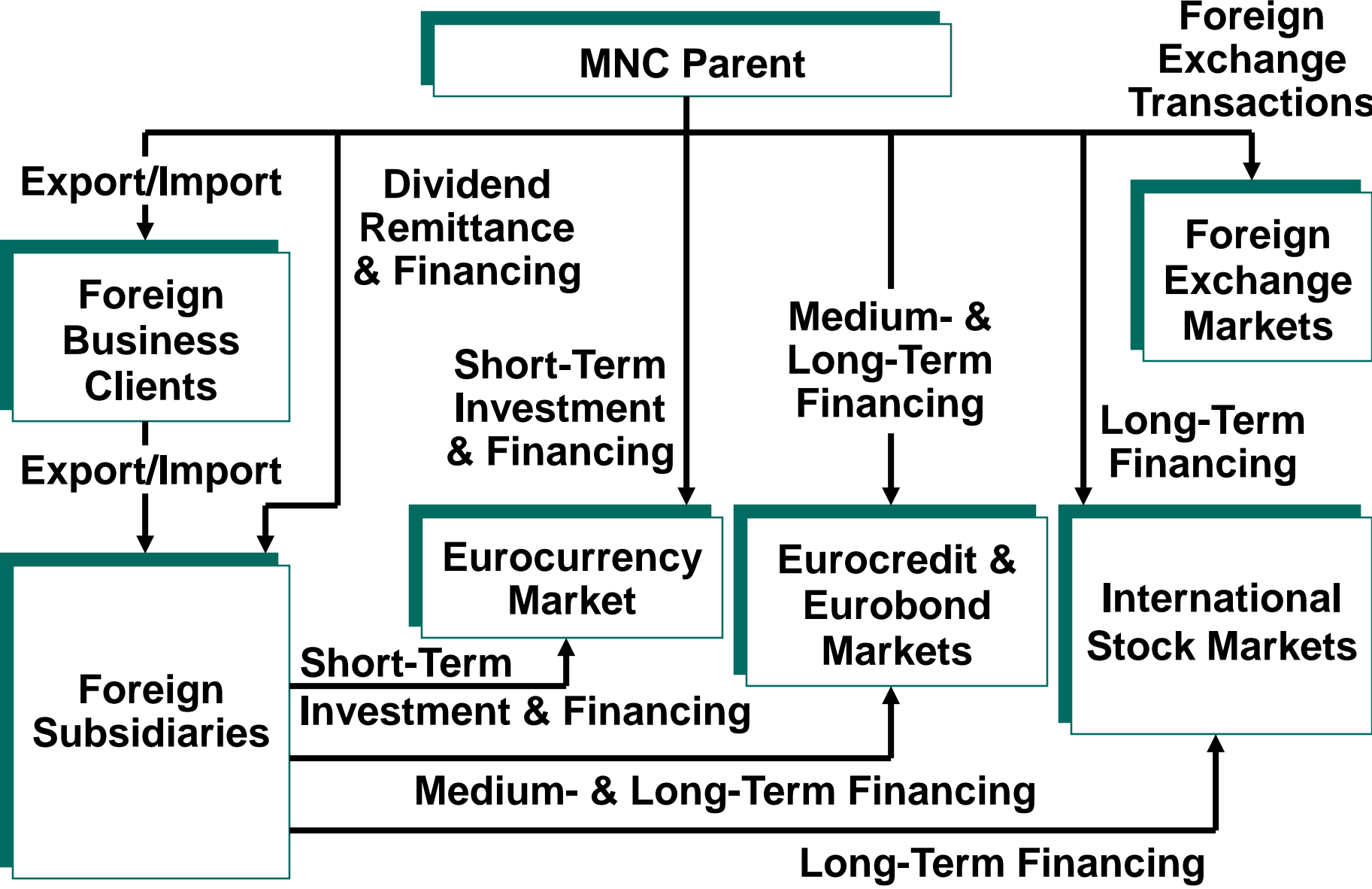
Comparison of International Financial Markets

- **The foreign cash flow movements of a typical MNC can be classified into four corporate functions, all of which generally require the use of the foreign exchange markets.**
- ① **Foreign trade. Exports generate foreign cash inflows while imports require cash outflows.**

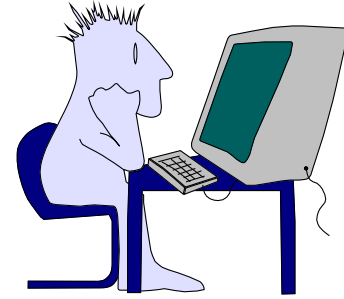
Comparison of International Financial Markets

- ② Direct foreign investment (DFI). Cash outflows to acquire foreign assets generate future inflows.**
- ③ Short-term investment or financing in foreign securities, usually in the Eurocurrency market.**
- ④ Longer-term financing in the Eurocredit, Eurobond, or international stock markets.**

Foreign Cash Flow Chart of an MNC

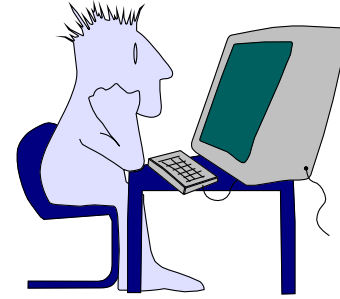


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- **For the latest information from financial markets around the world, visit:**
 - α <http://www.bloomberg.com/>
 - α <http://finance.yahoo.com/>
 - α <http://money.cnn.com/>
 - α <http://www.reuters.com/>

Online Application



- Find out how these offices regulate the U.S. financial markets.



- The Department of the Treasury
<http://www.ustreas.gov/>

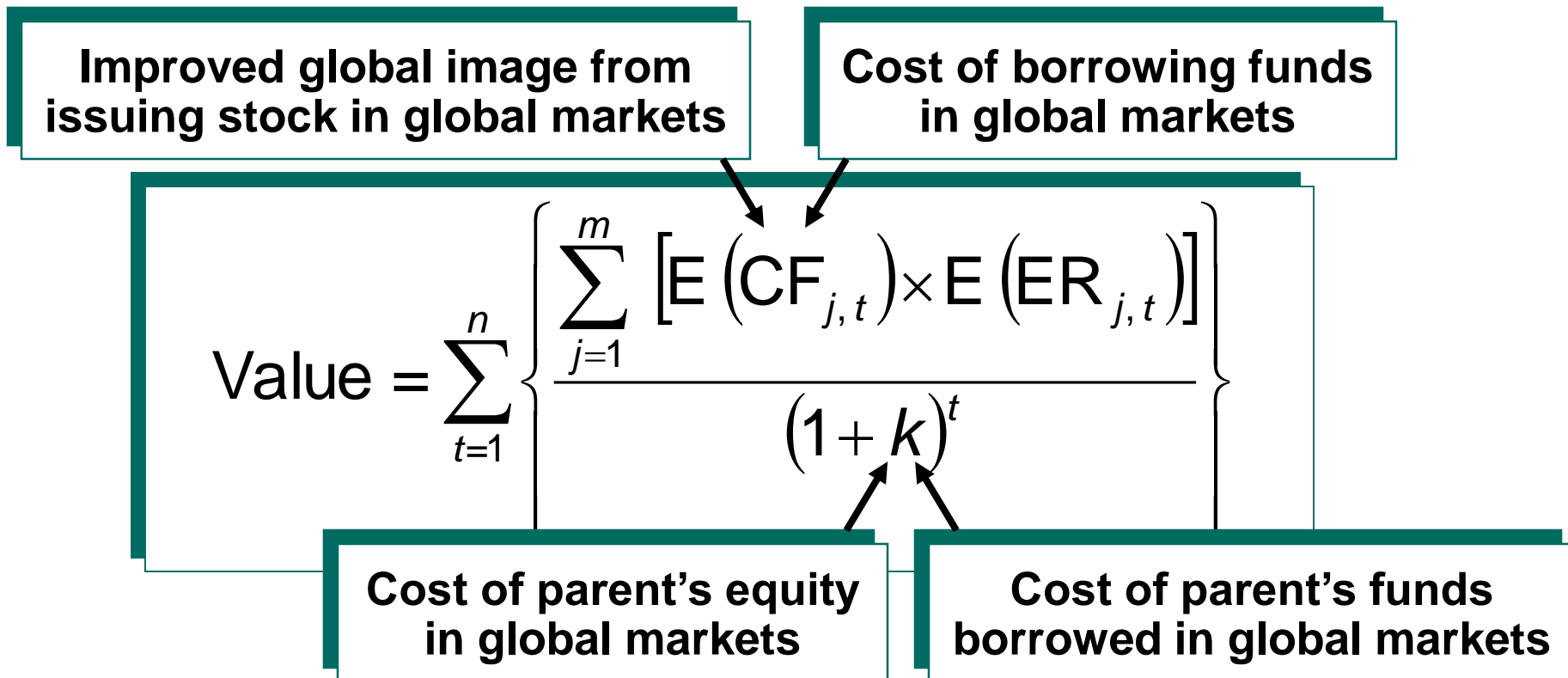


- The Federal Reserve System
<http://www.federalreserve.gov/>



- The Securities and Exchange Commission
<http://www.sec.gov/>

Impact of Global Financial Markets on an MNC's Value

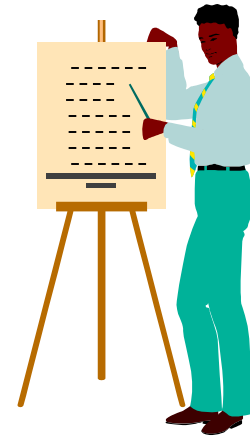


$E(CF_{j,t})$ = expected cash flows in currency j to be received by the U.S. parent at the end of period t

$E(ER_{j,t})$ = expected exchange rate at which currency j can be converted to dollars at the end of period t

k = weighted average cost of capital of the parent

Chapter Review



- **Motives for Using International Financial Markets**
 - Motives for Investing in Foreign Markets
 - Motives for Providing Credit in Foreign Markets
 - Motives for Borrowing in Foreign Markets

Chapter Review

- **Foreign Exchange Market**
 - ⌘ History of Foreign Exchange
 - ⌘ Foreign Exchange Transactions
 - ⌘ Interpreting Foreign Exchange Quotations
 - ⌘ Currency Futures and Options Markets

Chapter Review

- **Eurocurrency Market**
 - Development of the Eurocurrency Market
 - Composition of the Eurocurrency Market
 - Syndicated Eurocurrency Loans
 - Standardizing Bank Regulations within the Eurocurrency Market
 - Asian Dollar Market
- **Eurocredit Market**

Chapter Review

- **Eurobond Market**
 - Development of the Eurobond Market
 - Underwriting Process
 - Features
- **Comparing Interest Rates Among Currencies**
 - Global Integration of Interest Rates

Chapter Review

- **International Stock Markets**
 - Issuance of Foreign Stock in the U.S.
 - Issuance of Stock in Foreign Markets
- **Comparison of International Financial Markets**
- **How Financial Markets Affect An MNC's Value**