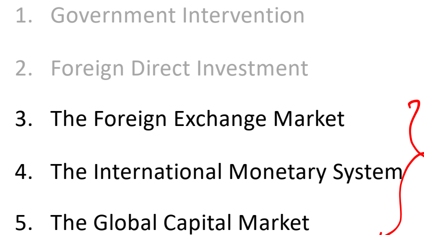
Agenda

Foreign Investment Environment

1. Government Intervention
2. Foreign Direct Investment
3. The Foreign Exchange Market
4. The International Monetary System
5. The Global Capital Market



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The Foreign Exchange Market

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What Is The Nature Of The Foreign Exchange Market?

- The foreign exchange market is a global network of banks, brokers, and foreign exchange dealers connected by electronic communications systems
  - the average total value of global foreign exchange trading in March, 1986 was just $200 billion, in April, 2010 it hit $4 trillion per day
  - the most important trading centers are London, New York, Zurich, Tokyo, and Singapore
  - the market is always open somewhere in the world—it never sleeps

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Do Exchange Rates Differ Between Markets?

- High-speed computer linkages between trading centers mean there is no significant difference between exchange rates in the differing trading centers
- If exchange rates quoted in different markets were not essentially the same, there would be an opportunity for **arbitrage**
  - the process of buying a currency low and selling it high
- Most transactions involve dollars on one side—it is a **vehicle currency**
  - 85% of all foreign exchange transactions involve the U.S. dollar
  - other vehicle currencies are the euro, the Japanese yen, and the British pound
  - China's renminbi is still only used for about 0.3% of foreign exchange transactions

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How Are Exchange Rates Determined?

- Exchange rates are determined by the demand and supply for different currencies
- Three factors impact future exchange rate movements
  - A country's price inflation ✓ 5% 0.5%
  - A country's interest rate ✓ 8% 1%
  - Market psychology ✓

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How Do Prices Influence Exchange Rates?

- The **law of one price** states that in competitive markets free of transportation costs and barriers to trade, identical products sold in different countries must sell for the same price when their price is expressed in terms of the same currency
  - otherwise there is an opportunity for arbitrage until prices equalize between the two markets
- **Purchasing power parity theory (PPP)** argues that given relatively **efficient markets** (a market with no impediments to the free flow of goods and services) the price of a "basket of goods" should be roughly equivalent in each country
  - predicts that changes in relative prices will result in a change in exchange rates

wheat, salt, sugar, cheese, vegetable, meat, manpower → Big Mac Index $5 ≃ ₹350 70 80

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How Do Prices Influence Exchange Rates?

Inflation. ↑Salary → ↑Demand → Prices ↑ RBI → Samsung → $ ↑

- A positive relationship exists between the inflation rate and the level of money supply
  - when the growth in the money supply is greater than the growth in output, inflation will occur
- PPP theory suggests that changes in relative prices between countries will lead to exchange rate changes, at least in the short run
  - a country with high inflation should see its currency depreciate relative to others

inflation.

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How Do Interest Rates Influence Exchange Rates?

Interest Rate ↑ → Saving ↑ Spending ↓ → Demand ↓ → Imports ↓ → $ ↓

- The **International Fisher Effect** states that for any two countries the spot exchange rate should change in an equal amount but in the opposite direction to the difference in nominal interest rates between two countries

Repo Rate — Interest Rate ↑ → Savings. Money Supply ↑ → Demand. Crude Oil

- In other words:

$$[(S_1 - S_2) / S_2] \times 100 = i_\$ - i_¥$$

  - where $i_\$$ and $i_¥$ are the respective nominal interest rates in two countries (in this case the U.S. and Japan), S_1 is the spot exchange rate at the beginning of the period and S_2 is the spot exchange rate at the end of the period

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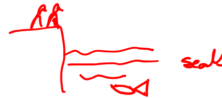
How Does Investor Psychology Influence Exchange Rates?

Penguin Effect.

- The **bandwagon effect** occurs when expectations on the part of traders turn into self-fulfilling prophecies - traders can join the bandwagon and move exchange rates based on group expectations
  - investor psychology and bandwagon effects greatly influence short term exchange rate movements
  - government intervention can prevent the bandwagon from starting, but is not always effective

Sri Lanka
Pakistan



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Should Companies Use Exchange Rate Forecasting Services?

- There are two schools of thought   Fx   30   60   180

1. The **efficient market school** - forward exchange rates do the best possible job of forecasting future spot exchange rates, and, therefore, investing in forecasting services would be a waste of money
2. The **inefficient market school** - companies can improve the foreign exchange market's estimate of future exchange rates by investing in forecasting services

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Should Companies Use Exchange Rate Forecasting Services?

1. An **efficient market** is one in which prices reflect all available information
   - if the foreign exchange market is efficient, then forward exchange rates should be unbiased predictors of future spot rates

- Most empirical tests confirm the efficient market hypothesis suggesting that companies should not waste their money on forecasting services

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Should Companies Use Exchange Rate Forecasting Services?

2. An **inefficient market** is one in which prices do not reflect all available information
   - in an inefficient market, forward exchange rates will not be the best possible predictors of future spot exchange rates and it may be worthwhile for international businesses to invest in forecasting services

- However, the track record of forecasting services is not good

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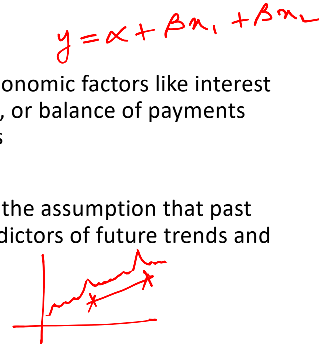
How Are Exchange Rates Predicted?

- Two schools of thought on forecasting:

1. **Fundamental analysis** draws upon economic factors like interest rates, monetary policy, inflation rates, or balance of payments information to predict exchange rates
2. **Technical analysis** charts trends with the assumption that past trends and waves are reasonable predictors of future trends and waves



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Are All Currencies Freely Convertible?

- A currency is **freely convertible** when a government of a country allows both residents and non-residents to purchase unlimited amounts of foreign currency with the domestic currency
- A currency is **externally convertible** when non-residents can convert their holdings of domestic currency into a foreign currency, but when the ability of residents to convert currency is limited in some way
- A currency is **nonconvertible** when both residents and non-residents are prohibited from converting their holdings of domestic currency into a foreign currency

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Are All Currencies Freely Convertible?

- Most countries today practice free convertibility
  - but many countries impose restrictions on the amount of money that can be converted
- Countries limit convertibility to preserve foreign exchange reserves and prevent **capital flight**
  - when residents and nonresidents rush to convert their holdings of domestic currency into a foreign currency
  - most likely to occur in times of hyperinflation or economic crisis

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Are All Currencies Freely Convertible?

- When a currency is nonconvertible, firms may turn to **countertrade**
  - barter-like agreements where goods and services are traded for other goods and services
  - was more common in the past when more currencies were nonconvertible, but today involves less than 10% of world trade

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What Do Exchange Rates Mean For Managers?

- Managers need to consider three types of foreign exchange risk

1. **Transaction exposure** - the extent to which the income from individual transactions is affected by fluctuations in foreign exchange values
   - includes obligations for the purchase or sale of goods and services at previously agreed prices and the borrowing or lending of funds in foreign currencies
2. **Translation exposure** - the impact of currency exchange rate changes on the reported financial statements of a company
   - concerned with the present measurement of past events
   - gains or losses are "paper losses"
   - they are unrealized

What Do Exchange Rates Mean For Managers?

3. **Economic exposure** - the extent to which a firm's future international earning power is affected by changes in exchange rates
   - concerned with the long-term effect of changes in exchange rates on future prices, sales, and costs

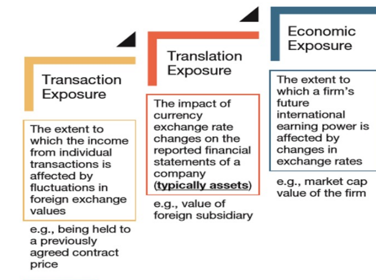

FIGURE 6.10 Foreign exchange risk Foreign exchange entails three types of risk: transaction exposure, translation exposure, and economic exposure.

How Can Managers Minimize Exchange Rate Risk?

- To minimize transaction and translation exposure, managers should

1. buy forward
2. use swaps
3. lead and lag payables and receivables
   - lead and lag strategies can be difficult to implement

How Can Managers Minimize Exchange Rate Risk?

- **Lead strategy** - attempt to collect foreign currency receivables early when a foreign currency is expected to depreciate and pay foreign currency payables before they are due when a currency is expected to appreciate
- **Lag strategy** - delay collection of foreign currency receivables if that currency is expected to appreciate and delay payables if the currency is expected to depreciate

How Can Managers Minimize Exchange Rate Risk?

- To reduce economic exposure, managers should

1. Distribute productive assets to various locations so the firm's long-term financial well-being is not severely affected by changes in exchange rates
2. Ensure assets are not too concentrated in countries where likely rises in currency values will lead to increases in the foreign prices of the goods and services the firm produces

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How Can Managers Minimize Exchange Rate Risk?

- In general, managers should

1. Have central control of exposure to protect resources efficiently and ensure that each subunit adopts the correct mix of tactics and strategies
2. Distinguish between transaction and translation exposure on the one hand, and economic exposure on the other hand
3. Attempt to forecast future exchange rates
4. Establish good reporting systems so the central finance function can regularly monitor the firm's exposure position
5. Produce monthly foreign exchange exposure reports

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The International Monetary System

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What Is The International Monetary System?

- The **international monetary system** refers to the institutional arrangements that countries adopt to govern exchange rates
- A **floating exchange rate system** exists when a country allows the foreign exchange market to determine the relative value of a currency
  - the U.S. dollar, the EU euro, the Japanese yen, and the British pound all float freely against each other
  - their values are determined by market forces and fluctuate day to day

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What Is The International Monetary System?

- A **pegged exchange rate system** exists when a country fixes the value of its currency relative to a reference currency
  - Many Gulf states peg their currencies to the U.S. dollar
- A **dirty float** exists when a country tries to hold the value of its currency within some range of a reference currency such as the U.S. dollar
  - China pegs the yuan to a basket of other currencies
- A **fixed exchange rate system** exists when countries fix their currencies against each other at some mutually agreed on exchange rate
  - **European Monetary System (EMS)** prior to 1999

1$ ≈ Rs 30

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What Was The Gold Standard?

- The **gold standard** refers to a system in which countries peg currencies to gold and guarantee their convertibility
  - The gold standard dates back to ancient times when gold coins were a medium of exchange, unit of account, and store of value
    - payment for imports was made in gold or silver
  - Later, payment was made in paper currency which was linked to gold at a fixed rate
  - In the 1880s, most nations followed the gold standard
    - $1 = 23.22 grains of "fine" (pure) gold
  - The **gold par value** refers to the amount of a currency needed to purchase one ounce of gold

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Why Did The Gold Standard Make Sense?

- The great strength of the gold standard was that it contained a powerful mechanism for achieving balance-of-trade equilibrium by all countries
  - when the income a country's residents earn from its exports is equal to the money its residents pay for imports
  - It is this feature that continues to prompt calls to return to a gold standard
- The gold standard worked well from the 1870s until 1914
  - but, many governments financed their World War I expenditures by printing money and so, created inflation
- People lost confidence in the system
  - the demand on gold for their currency put pressure on countries' gold reserves and forced them to suspend gold convertibility
  - By 1939, the gold standard was dead

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What Was The Bretton Woods System?

- In 1944, representatives from 44 countries met at Bretton Woods, New Hampshire, to design a new international monetary system that would facilitate postwar economic growth
- Under the new agreement
  - a fixed exchange rate system was established
  - all currencies were fixed to gold, but only the U.S. dollar was directly convertible to gold
  - devaluations could not to be used for competitive purposes
  - a country could not devalue its currency by more than 10% without IMF approval

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What Institutions Were Established At Bretton Woods?

- The Bretton Woods agreement also established two multinational institutions
- The **International Monetary Fund (IMF)** to maintain order in the international monetary system through a combination of **discipline** and **flexibility**
- The **World Bank** to promote general economic development
  - also called the **International Bank for Reconstruction and Development (IBRD)**

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What Institutions Were Established At Bretton Woods?

1. The **International Monetary Fund (IMF)**
   - fixed exchange rates stopped competitive devaluations and brought stability to the world trade environment
   - fixed exchange rates imposed monetary discipline on countries, limiting price inflation
   - in cases of fundamental disequilibrium, devaluations were permitted
   - the IMF lent foreign currencies to members during short periods of balance-of-payments deficit, when a rapid tightening of monetary or fiscal policy would hurt domestic employment

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What Institutions Were Established At Bretton Woods?

2. The **World Bank**
   - Countries can borrow from the World Bank in two ways
   - Under the IBRD scheme, money is raised through bond sales in the international capital market
     - borrowers pay a market rate of interest - the bank's cost of funds plus a margin for expenses.
   - Through the International Development Agency, an arm of the bank created in 1960
     - IDA loans go only to the poorest countries

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Why Did The Fixed Exchange Rate System Collapse?

Vietnam War.

- Bretton Woods worked well until the late 1960s

Nixon.

23 ¥ $1

25 ¥ $1

- It collapsed when huge increases in welfare programs and the Vietnam War were financed by increasing the money supply and causing significant inflation
  - other countries increased the value of their currencies relative to the U.S. dollar in response to speculation the dollar would be devalued
- However, because the system relied on an economically well managed U.S., when the U.S. began to print money, run high trade deficits, and experience high inflation, the system was strained to the breaking point
  - the U.S. dollar came under speculative attack

50s60s.

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What Was The Jamaica Agreement?

- A new exchange rate system was established in 1976 at a meeting in Jamaica
- The rules that were agreed on then are still in place today
- Under the Jamaican agreement
  - floating rates were declared acceptable
  - gold was abandoned as a reserve asset
  - total annual IMF quotas - the amount member countries contribute to the IMF - were increased to $41 billion – today they are about $767 billion

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What Has Happened To Exchange Rates Since 1973?

- Since 1973, exchange rates have been more volatile and less predictable than they were between 1945 and 1973 because of
  - the 1971 and 1979 oil crises
  - the loss of confidence in the dollar after U.S. inflation in 1977-78
  - the rise in the dollar between 1980 and 1985
  - the partial collapse of the EMS in 1992
  - the 1997 Asian currency crisis
  - the global financial crisis of 2008–2010; sovereign debt crisis of 2010–2011

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Which Is Better – Fixed Rates Or Floating Rates?

- Floating exchange rates provide

Interest rate

1. Monetary policy autonomy
   - removing the obligation to maintain exchange rate parity restores monetary control to a government
2. Automatic trade balance adjustments
   - under Bretton Woods, if a country developed a permanent deficit in its balance of trade that could not be corrected by domestic policy, the IMF would have to agree to a currency devaluation
3. Help countries recover from financial crises

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Which Is Better – Fixed Rates Or Floating Rates?

- But, a fixed exchange rate system

1. Provides monetary discipline
   - ensures that governments do not expand their money supplies at inflationary rates
2. Minimizes speculation
   - causes uncertainty
3. Reduces uncertainty
   - promotes growth of international trade and investment

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Who Is Right?

- There is no real agreement as to which system is better
- We know that a Bretton Woods-style fixed exchange rate regime will not work
- But a different kind of fixed exchange rate system might be more enduring
  - could encourage stability that would facilitate more rapid growth in international trade and investment

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What Type of Exchange Rate System Is In Practice Today?

- Various exchange rate regimes are followed today
  - 21% of IMF members follow a free float policy
  - 23% of IMF members follow a managed float system
  - 5% of IMF members have no legal tender of their own
    - excludes Euro Zone countries
  - the remaining countries use less flexible systems such as pegged arrangements, or adjustable pegs

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What Is A Pegged Rate System?

- A country following a **pegged exchange rate system** pegs the value of its currency to that of another major currency
  - popular among the world's smaller nations
  - imposes monetary discipline and leads to low inflation
  - adopting a pegged exchange rate regime can moderate inflationary pressures in a country

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What Is A Currency Board?

- Countries using a **currency board** commit to converting their domestic currency on demand into another currency at a fixed exchange rate
  - the currency board holds reserves of foreign currency equal at the fixed exchange rate to at least 100% of the domestic currency issued
  - the currency board can issue additional domestic notes and coins only when there are foreign exchange reserves to back them

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What Is The Role Of The IMF Today?

- Today, the IMF focuses on lending money to countries in financial crisis
- There are three main types of financial crises:

1. Currency crisis
2. Banking crisis
3. Foreign debt crisis

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What Is The Role Of The IMF Today?

- **A currency crisis**
  - occurs when a speculative attack on the exchange value of a currency results in a sharp depreciation in the value of the currency, or forces authorities to expend large volumes of international currency reserves and sharply increase interest rates in order to defend prevailing exchange rates
    - Brazil 2002
- **A banking crisis**
  - refers to a situation in which a loss of confidence in the banking system leads to a run on the banks, as individuals and companies withdraw their deposits
- **A foreign debt crisis**
  - is a situation in which a country cannot service its foreign debt obligations, whether private sector or government debt e.g. Greece and Ireland 2010

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What Was The Mexican Currency Crisis Of 1995?

- The Mexican currency crisis of 1995 was a result of
  - high Mexican debts
  - a pegged exchange rate that did not allow for a natural adjustment of prices
- To keep Mexico from defaulting on its debt, the IMF created a $50 billion aid package
  - required tight monetary policy and cuts in public spending

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What Was The Asian Currency Crisis?

- The 1997 Southeast Asian financial crisis was caused by events that took place in the previous decade including
  1. An investment boom - fueled by huge increases in exports
  2. Excess capacity - investments were based on projections of future demand conditions
  3. High debt - investments were supported by dollar-based debts
  4. Expanding imports – caused current account deficits

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What Was The Asian Currency Crisis?

- By mid-1997, several key Thai financial institutions were on the verge of default
  - speculation against the baht
- Thailand abandoned the baht peg and allowed the currency to float
  - The IMF provided a $17 billion bailout loan package
    - required higher taxes, public spending cuts, privatization of state-owned businesses, and higher interest rates
- Speculation caused other Asian currencies including the Malaysian Ringgit, the Indonesian Rupaih and the Singapore Dollar to fall
  - The IMF provided a $37 billion aid package for Indonesia
    - required public spending cuts, closure of troubled banks, a balanced budget, and an end to crony capitalism
  - The IMF provided a $55 billion aid package to South Korea
    - required a more open banking system and economy, and restraint by chaebol
- These devaluations were mainly driven by
  - excess investment and high borrowings, much of it in dollar-denominated debt
  - a deteriorating balance of payments position

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How Has The IMF Done?

- By 2012, the IMF was committing loans to 52 countries in economic and currency crisis
- All IMF loan packages require tight macroeconomic and monetary policy
- However, critics worry
  - the "one-size-fits-all" approach to macroeconomic policy is inappropriate for many countries
  - the IMF is exacerbating **moral hazard** - when people behave recklessly because they know they will be saved if things go wrong
  - the IMF has become too powerful for an institution without any real mechanism for accountability

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What Does The Monetary System Mean For Managers?

- Managers need to understand how the international monetary system affects

1. **Currency management** - the current system is a managed float - government intervention can influence exchange rates
   - speculation can also create volatile movements in exchange rates
2. **Business strategy** - exchange rate movements can have a major impact on the competitive position of businesses
   - need strategic flexibility
3. **Corporate-government relations** - businesses can influence government policy towards the international monetary system
   - companies should promote a system that facilitates international growth and development

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The Global Capital Market

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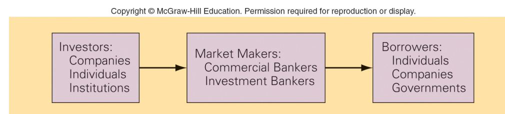
Why Do Capital Markets Exist?

- Capital markets bring together investors and borrowers
  - **investors** - corporations with surplus cash, individuals, and non-bank financial institutions
  - **borrowers** - individuals, companies, and governments
  - **markets makers** - the financial service companies that connect investors and borrowers, either directly (investment banks) or indirectly (commercial banks)
  - capital market loans can be equity or debt



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What Makes the Global Capital Market Attractive?

- Today's capital markets are highly interconnected and facilitate the free flow of money around the world
- Borrowers benefit from the additional supply of funds global capital markets provide
  - lowers the **cost of capital**
  - the price of borrowing money or the rate of return that borrowers pay investors
- Investors benefit from the wider range of investment opportunities
  - diversify portfolios and lower risk
- But, volatile exchange rates can make what would otherwise be profitable investments, unprofitable

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Why Is the Global Capital Market Growing?

- Two factors are responsible for the growth of capital markets

1. **Advances in information technology**
   - the growth of international communications technology and advances in data processing capabilities
     - 24-hour-a-day trading
     - so, shocks that occur in one financial market spread around the globe very quickly
2. **Deregulation by governments**
   - has facilitated growth in international capital markets
     - governments have traditionally limited foreign investment in domestic companies, and the amount of foreign investment citizens could make
     - since the 1980s, these restrictions have been falling

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Why Is the Global Capital Market Growing?

- Deregulation began in the U.S., then moved to Great Britain, Japan, and France
  - Many countries have dismantled capital controls making it easier for both inward and outward investment to occur
- The 2008-2009 global financial crisis raised questions as to whether deregulation had gone too far
  - **Question**: Are new regulations for the financial services industry needed?

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What Is the Global Bond Market?

- Bonds are an important means of financing for many companies
  - the most common bond is a fixed rate which gives investors fixed cash payoffs
- The global bond market grew rapidly during the 1980s and 1990s and continues to do so in the 20th century

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What Is the Global Equity Market?

- The global equity market allows firms to

1. Attract capital from international investors
   - many investors buy foreign equities to diversify their portfolios
2. List their stock on multiple exchanges Corporate Governance.
   - this type of trend may result in an internationalization of corporate ownership
3. Raise funds by issuing debt or equity around the world
   - by issuing stock in other countries, firms open the door to raising capital in the foreign market
     - gives the firm the option of compensating local managers and employees with stock
     - provides for local ownership
     - increases visibility with local stakeholders

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How Do Exchange Rates Affect the Cost of Capital?

- Adverse exchange rates can increase the cost of foreign currency loans
- Although it may initially seem attractive to borrow foreign currencies, it may be less attractive when exchange-rate risk is factored in
  - firms can hedge their risk by entering into forward contracts
  - but this will also raise costs
- Firms must weigh the benefits of a lower interest rate against the risk of an increase in the real cost of capital

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What Do Global Capital Markets Mean for Managers?

- Growth in global capital markets has created opportunities for firms to borrow or invest internationally
  - firms can often borrow at a lower cost than in the domestic capital market
  - firms must balance the cost savings against the foreign-exchange risk associated with borrowing in foreign currencies
- Growth in capital markets offers opportunities for firms, institutions, and individuals to diversify their investments and reduce risk
  - again though, investors must consider foreign exchange rate risk
- Capital markets are likely to continue to integrate, providing more opportunities for business

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Recap

- The Foreign Exchange Market
  - Hedging against risk
- The International Monetary System
  - Gold Standard - Exchange rate
  - Currency crises
- The Global Capital Market
  - Advantages

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