Chapter 10

The International Monetary and Financial Environment

International Business
Strategy, Management & the New Realities

by
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Learning Objectives

1. Currencies and exchange rates in international business
2. How exchange rates are determined
3. Development of the modern exchange rate system
4. The international monetary and financial systems
5. Key players in the monetary and financial systems

Currencies and Exchange Rates

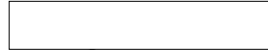
- There are some 175 currencies in use around the world.
- Currency regimes are simplifying- numerous countries in Europe use the euro, and a few countries, such as Panama, have adopted the U.S. dollar.
- **Exchange rate-** the price of one currency expressed in terms of another- is constantly changing. Issues:
  - When is the exchange rate decided upon- in advance or at a later date?
  - Which currency is used in the quoted purchase agreement?
  - Exchange rate fluctuations will impact the bottom line.

	Currency per one U.S. dollar	*U.S. dollars per unit of currency*
Australian dollar	$1.199	$0.834
Brazilian real	2.023	0.494
British pound	0.500	2.002
Canadian dollar	1.123	0.890
Chinese renminbi (yuan)	7.728	0.129
Euro	0.736	1.358
Indian rupee	4.650	0.024
Japanese yen	118.470	0.008
Mexican peso	10.969	0.091
New Zealand dollar	1.340	0.746
Norwegian kroner	5.966	0.168
Singapore dollar	1.512	0.661
Saudi Arabian riyal	3.750	0.267
South African rand	7.073	0.141
Turkish lira	1.334	0.750

Exhibit 10.1

Exchange Rate Quotations against the U.S. Dollar, April 23, 2007

SOURCE: www.x-rates.com

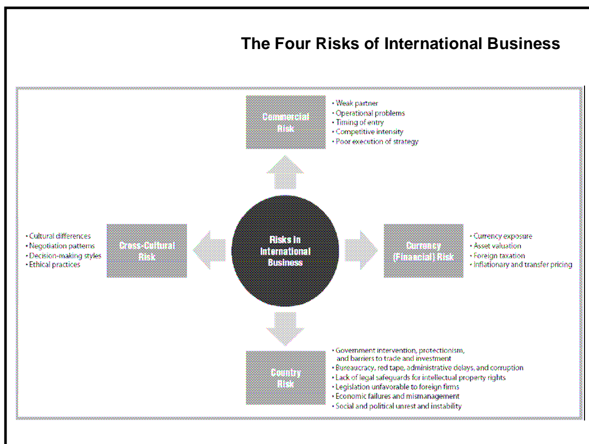


Currency Risk

Currency risk -arises from changes in the price of one currency relative to another→ complicates cross-border transactions → impacts firms with foreign currency obligations (one of the four types of risks in international business

- If supplier's currency appreciates; you may need to hand over a larger amount of your currency to pay for your purchase.
- If buyer's currency depreciates; you may receive a smaller payment amount in your currency (sales price was expressed in the customer's currency).

The Four Risks of International Business



Convertible and Nonconvertible Currencies

Convertible currency- can be readily exchanged for other currencies.

- ***Hard currencies-*** most convertible currencies- universally accepted, e.g. U.S. dollar, Japanese yen, Canadian dollar, British pound, and the European euro.
- Most transactions use these currencies and nations prefer to hold them as reserves because of their strength and stability.

Nonconvertible- not acceptable for international transactions

- **Bartering -** in some developing economies, currency convertibility is so strict that firms sometimes receive payments in the form of products rather than cash.

Capital Flight

Capital flight- -sale of holdings in the nation's currency or conversion into a foreign currency- this is the reason that governments impose restrictions on currency convertibility - to preserve their supply of hard currencies- capital flight diminishes a country's ability to service debt/ pay for imports.

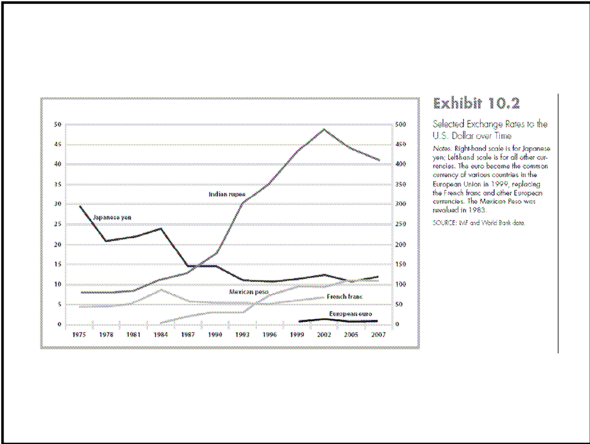
- **1979-1983**, some $90 billion left Mexico when foreign lenders lost confidence in the Mexican economy and investors took their money out of the country.
- **2007**- Ecuador's president, Rafael Correa:
  - Dismissed 57 opposition members of Congress
  - Expropriated Occidental Petroleum (2006), previously Ecuador's largest foreign investor
  - Correa's unpredictable actions have panicked foreign investors and Ecuador's wealthier citizens, who withdrew millions of dollars from the country.

Foreign Exchange Markets

- **Foreign exchange-** all forms of internationally-traded monies including foreign currencies, bank deposits, checks, and electronic transfers.
- **Foreign exchange market**- the global marketplace for buying and selling national currencies

Exchange Rates Are in Constant Flux:

- **1985-** Japanese yen was trading at 240 yen to the U.S. dollar.
- **1988**- Trading - 125 yen to the dollar- appreciation of almost 50%. Result:
- Decrease in Japanese exports → more expensive in U.S. dollar terms.
- Increase in U.S. exports to Japan → increased buying power.
- Management must monitor exchange rates constantly and devise strategies to optimize firm performance in light of strong and weak currencies.



Consolidation of European Currencies into Euro

- **EURO-1999**- 11 member states in the European Union switched to a single currency- the euro- eliminating exchange rate fluctuations (physical coins and banknotes came into circulation in 2002).
- The foreign exchange market has become so large and fluid that even major governments have difficulty controlling exchange rate movements.

How Exchange Rates are Determined

In a free market, the "price" of any currency (rate of exchange) is determined by supply and demand:

- The greater the supply of a currency, the lower its price
- The lower the supply of a currency, the higher its price
- The greater the demand for a currency, the higher its price
- The lower the demand for a currency, the lower its price
- **Euro appreciation:** If the euro/dollar exchange rate goes from one euro = \$1.25 to a new rate of one euro = \$1.50 → due to increased demand for euros or decreased supply of euros, the euro becomes expensive to U.S. customers, and fewer BMWs may be sold.
- **Euro depreciation:** If the euro/dollar exchange rate goes from one euro = \$1.25 to a new rate of one euro = \$1.00 → the euro then becomes cheap to the U.S. consumer, and more BMWs may be sold.

Factors Influencing Supply and Demand of a Currency

Factors that influence the supply and demand for a currency:

1. Economic growth
2. Interest rates and inflation
3. Market psychology
4. Government action

1. Economic Growth

Economic growth is the increase in value of the goods and services produced by an economy.

- Typically measured as the annual increase in real GDP, where inflation rate is subtracted from the economic growth rate to obtain a more accurate measure.
- Innovation and entrepreneurship drive business activity and demand.
- The **central bank** (regulates the money supply, issues currency and manages the exchange rate) to accommodate economic growth

2. Interest Rates and Inflation

Inflation **-** increased prices of goods/services→ money buys less than before.

- Countries such as Argentina, Brazil, and Zimbabwe have had long periods of ***hyperinflation-*** persistent annual double/triple-digit rates of price increases.
- With high-inflation, the purchasing power of the currency is constantly falling.
- Interest rates and inflation are positively related (high inflation=high interest).
- Investors expect to be compensated for an inflation-induced decline in the value of their money- if inflation is running at 10 percent→ banks have to pay *more* than 10 percent interest to attract deposits.

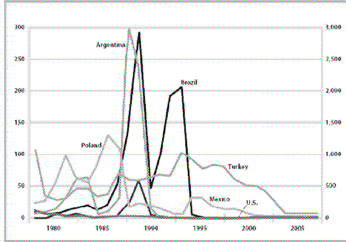


Exhibit 10.3

Inflation in Selected Countries, 1980–2005

Note: Chart shows annual percentage rate of inflation. Right-hand scale is for Argentina, Brazil, and Poland; left-hand scale is for all the other countries.

SOURCE: International Monetary Fund (www.imf.org)

Causes of Inflation

Inflation occurs when:

1. Demand grows more rapidly than supply; or
2. The central bank increases the money supply faster than output.

- **Example**- mid-1990s- Brazil- inflation was running at over 400 percent per year- triggered by sizeable increases in the national money supply.
- The link between interest rates and inflation, and between inflation and currency value, implies a relationship between interest rates and the currency.
- **Example-** if interest rates in Japan are high, foreigners buy Japan's interest-bearing investment opportunities (e.g. bonds and deposit certificates); investment from abroad will increase demand for the Japanese yen- the higher the price of the yen.

3. Market Psychology

Market psychology - the behavior of investors affects exchange rates.

- Investors may engage in *herding behavior* and/or *momentum trading*.
- **Herding**- driven by a need for consensus- the tendency of investors to mimic each others' actions,
- **Momentum trading** - investors buy stocks whose prices have been rising and sell stocks whose prices have been falling- usually carried out using computers that are set to do massive buying/selling when asset prices reach certain levels.
- Herding and momentum trading tend to occur in the wake of financial crises.
- **Example- 2001**- Argentina- experienced a massive flight of capital investment when the government announced it would default on its international bank loans.

4. Government Action

- When currency is expensive, exports decrease.
- When currency is cheap, exports increase.
- Currency depreciation undermines consumer and investor confidence, weakens the nation's ability to pay foreign lenders, possibly leading to economic and political crisis.
- Governments intervene to influence the value of their own currencies, e.g., the Chinese government regularly intervenes in the foreign exchange market to keep the renminbi undervalued, helping to ensure that Chinese exports remain strong.

Valuation of Currency Affects Trade Surplus or Deficit

- **Trade surplus**- country's exports exceed its imports- may result when currency is undervalued.
- **Trade deficit-** nation's imports exceed its exports - causing a net outflow of foreign exchange.
- ***Balance of trade*** - the difference between the monetary value of a nation's exports and its imports.
- **Example-** Germany exports cars to Kenya; car importer in Kenya pays the exporter in Germany, resulting in a surplus item in Germany's balance of trade and a deficit in Kenya's balance of trade.
- If the total value of Kenya's imports from Germany is greater than the total value of Kenya's exports to Germany, then Kenya would have a **trade deficit** with Germany.

Managing Balance of Payments

- **Balance of trade** drivers: prices of goods manufactured at home, exchange rates, trade barriers, and the method used by the government to measure the trade balance.
- **Devaluation**- is a government action to reduce the official value of its currency, relative to other currencies- aimed at deterring imports and reducing the trade deficit.
- **Balance of payments-** is the nation's balance sheet of trade, investment, and transfer payments with the rest of the world. It represents the difference between the *total* amount of money coming into and going out of a country.
- **Example-** Japanese MNE builds a factory in China- money flows out of Japan and into China to build the factory, generating a deficit item for Japan and a surplus item for China.
- Balance of payments is also affected by: citizens donating money to a foreign charity; government providing foreign aid; tourists spending money abroad.

Development of the Modern Exchange Rate System

- The years before World War II were characterized by turmoil in the world economy- despite decades of rising international trade.
- The Great Depression and the war witnessed a collapse of the international trading system.
- Following the war, countries initiated a framework for international monetary and financial systems stability.
- **1944** - 44 countries negotiated and signed the Bretton Woods agreement.
- **Bretton Woods** accord (fixed exchange rate system) pegged the value of the U.S. dollar to an established value of gold, at a rate of **$35** per ounce.
- The U.S. government agreed to buy and sell unlimited amounts of gold in order to maintain this fixed rate.

The Bretton Woods Agreement

- Each of Bretton Woods' other signatories agreed to establish a par value of its currency in terms of the U.S. dollar and to maintain this pegged value through central bank intervention.
- Thus, the Bretton Woods system kept exchange rates of major currencies **fixed** at a prescribed level, relative to the U.S. dollar and to each other.
- **1960s (late)- Demise of the Bretton Woods** agreement- the U.S. government employed deficit spending to finance both the Vietnam War and expensive government programs.

Demise of the Bretton Woods System

- Rising government spending stimulated the economy and U.S. citizens began spending more on imported goods, aggravating the U.S. balance of payments.
- The U.S. acquired trade deficits with Japan, Germany, and other European countries- eventually demand for U.S. dollars exceeded their supply so that the U.S. government could no longer maintain an adequate stock of gold.
- This situation put pressure on governments in Europe, Japan, and the U.S. to revalue their currencies, a solution that nobody wanted.
- **1971**- President Nixon suspended the link between the U.S. dollar and gold and withdrew the U.S. promise to exchange gold for U.S. dollars = this was the end of the Bretton Woods system.
- U.S. government budget and trade deficits persist to the present day.

The Bretton Woods Legacy

- Bretton Woods instituted the concept of international monetary cooperation, especially among the central banks of leading nations.
- It established the idea of fixing exchange rates within an international regime so as to minimize currency risk.
- It created the **International Monetary Fund** (IMF) and the **World Bank**.
- **IMF** is an international agency that aims to stabilize currencies by monitoring the foreign exchange systems of member countries, and lending money to developing economies.

The World Bank

- **World Bank**: An international agency that provides loans and technical assistance to low and middle-income countries with the goal of reducing poverty.
- Bretton Woods established the importance of **currency convertibility**, in which all countries adhere to a system of multilateral trade and currency conversion. Member countries agree to refrain from imposing restrictions on currency trading and agree not to engage in discriminatory currency arrangements.
- **This principle is an important aspect of the trend toward global free trade that the world is experiencing today.**

The Exchange Rate System Today

- Following the Bretton Woods collapse, major currencies were freely traded, with their value floating according to supply and demand.
- The official price of gold was formally abolished.
- Fixed and floating exchange rate systems were given equal status.
- Countries were no longer compelled to maintain specific pegged values for their currency.
- Current exchange rate systems: the floating and fixed systems

The Floating Exchange Rate System

- Most advanced economies use the floating exchange rate system.
- Each nation's currency floats independently, according to market forces without government intervention.
- **Examples-** Canadian dollar, the British pound, the euro, the U.S. dollar, and the Japanese yen—float independently on world exchange markets- exchange rates are determined daily by supply and demand.
- If a country is running a trade deficit, the floating rate system allows for this to be corrected more naturally than on a fixed exchange rate regime.

The Fixed Exchange Rate System (Pegged Exchange-Rate System)

- The value of a currency is set relative to the value of another at a specified rate (or the value of a basket of currencies).
- It is the **opposite** of the floating exchange rate system.
- As the reference currency value rises and falls, so does the pegged currency.
- Many developing economies and some emerging markets use this system.
- **Examples-** China pegs its currency to the value of a basket of currencies. Belize pegs the value of its currency to the U.S. dollar.

The Pegged Exchange Rate

- To maintain the peg, the governments of these countries intervene in currency markets to buy and sell dollars and other currencies, in order to maintain the exchange rate at a fixed, preset level.
- **Advantages:** greater stability, predictability of exchange rate movements, promotes greater certainty and stability within a nation's economy.
- ***Dirty float* - hybrid-** At times, countries adhere to neither system, but try to hold the value of their currency within some range - the currency value is determined by market forces, but the central bank intervenes occasionally in the foreign exchange market to maintain the value of its currency relative to a major reference currency.

Which Exchange Rate System Is Preferred?

Many economists believe floating exchange rates are preferable to fixed exchange rates because floating rates more naturally respond to, and represent, the supply and demand for currencies in the foreign exchange market.

The International Monetary and Financial Systems

- **International monetary system** refers to the institutional framework, rules, and procedures by which national currencies are exchanged for one another.
- **Global financial system** refers to the collection of financial institutions that facilitate and regulate the flows of investment and capital funds worldwide- it incorporates the national and international banking systems, the international bond market, all national stock markets, and the market of bank deposits denominated in foreign currencies.
- Key players - finance ministries, national stock exchanges, commercial banks, central banks, the Bank for International Settlements, the World Bank, and the International Monetary Fund.

The International Monetary System

- The international monetary system governs exchange rates that affect the financial activities of governments and businesses.
- **Example-** if a U.S. investor buys stocks on the London Stock Exchange, the exchange rate of the British pound to the U.S. dollar will impact earnings.

Global Financial System

- The global financial system is built on the activities of firms, banks, and financial institutions, all engaged in ongoing international financial activity.
- **1960s** (since) - grown in volume and structure, becoming more efficient, competitive, and stable- **1990s** accelerated with the opening of Russia/China.
- Massive cross-national flows of capital- mostly in the form of pension funds, mutual funds, and life insurance investments- are driving equity markets.
- **1960s-** FDI-related funds; **New Trend**- portfolio investments abroad
- **2005 –** 15% of U.S. equity funds invested in foreign stocks.

Financial Flows

- **Advantages of financial flows-** developing economies- increases their foreign exchange reserves, reduces their cost of capital, and stimulates local financial markets.
- The **growing integration** of financial and monetary global activity is due to:
  - The evolution of monetary and financial regulations worldwide.
  - The development of new technologies and payment systems, and the use of the Internet in global financial activities.
  - Increased global and regional interdependence of financial markets.
  - The growing role of single-currency systems, e.g, euro.

Risks in Global Financial Flows

Financial risks linked to the globalization of financial flows:

- Capital flows are much more volatile than FDI-type investments. It is much easier for investors to withdraw and reallocate liquid capital funds than FDI funds, which are directly tied to factories and other permanent operations.
- **Contagion**: tendency of a financial or monetary crisis in one country to spread rapidly to others due to worldwide financial integration (e.g. crisis in East Asia in the late 1990s- capital flight made an already dire economic crisis worse).
- Financial instability is worsened when governments fail to adequately regulate and monitor their banking and financial sectors.

Key Players in the Monetary and Financial Systems

Key players operate at the levels of the firm, the nation, and the world.

1. The Firm

- Cross-border transactions require firms to deal with sums of foreign exchange.
- International customers make payments to firms.
- Firms must convert foreign earnings, investment, franchising, licensing or speculation (profiting from exchange rate fluctuations).
- Other international players- life insurance companies, savings and loan associations, stockbrokers that manage pensions and mutual funds, nontraditional financial institutions, e.g. Western Union.

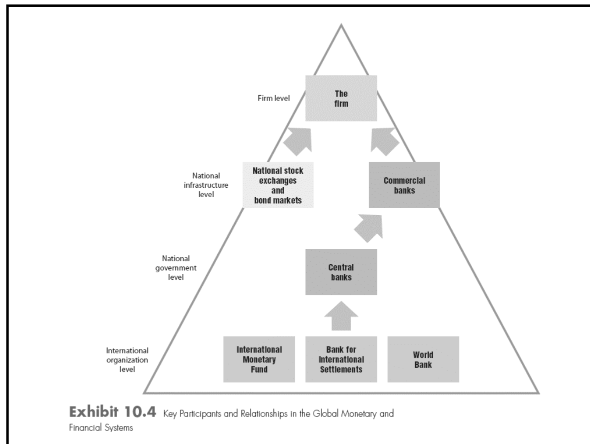


Exhibit 10.4 Key Participants and Relationships in the Global Monetary and Financial Systems

2. National Stock Exchanges and Bond Markets

Stock exchange -facility for the trading of securities- shares, trust funds, pension funds, and corporate/government bonds.

- IT has revolutionized stock market functioning- with many electronic exchanges
- Each country sets its own rules for issuing and redeeming stock.
- Trade on a stock exchange is by members only.
- MNEs - list on a number of exchanges to maximize access to capital.
- Capital structure of markets varies, and becoming increasingly integrated:
- Japan- most shares held by corporations
- Britain and the U.S. - most shares held by individuals

Bond Markets

Bonds- debt that corporations and governments incur by issuing interest-bearing certificates in order to raise capital and finance long-term investments.

- **Example-** Several European telecommunications providers, such as Telecom Italia, Deutsche Telecom, and France Telecom issued international bonds.
- ***Institutional investors***—managers of pensions, mutual funds, and insurance companies- most important players today- drive global capital markets.
- **Example-** the Government Pension Investment Fund of Japan, one of the world's largest, has over $1 trillion of assets.

3. Commercial Banks

- Banks- most important function- lend money to finance business activity, play a key role in nations' money supplies, and exchange foreign currencies.
- Commercial banks- e.g. Bank of America, Mizuho Bank in Japan, and BBVA in Spain- circulate money and engage in a wide range of international transactions.
- Banks- regulated by national and local governments, which have a strong interest in ensuring the solvency of their national banking system.

Types of Banks

- ***Investment banks*** underwrite sale of stocks/bonds; advise on mergers.
- ***Merchant banks*** -provide capital to firms in the form of shares.
- ***Private banks*** manage the assets of the very rich.
- ***Offshore banks***- located in low taxation/regulation jurisdictions, such as Switzerland or Bermuda.
- ***Commercial banks*** deal mainly with corporations or large businesses.
- Many banks are MNEs themselves, such as Citibank, Britain's HSBC, and Spain's BBVA.
- Smaller banks participate in international business by interacting with larger, ***correspondent banks*** (large bank that maintains relations with other banks).

Banks As Key Players

- In some countries, banks are owned by the state and are extensions of government; in other countries, banks face little regulation.
- Density of banks is another distinction:
  - Canada, Sweden, and the Netherlands each has only five banks controlling more than 80% of all banking assets.
  - Germany, Italy, and the U.S. - the top five banks control less than 30% of all banking assets
- Banks also charge different rates for their services:
  - Italy **-** the annual price of core banking services- over $300
  - U.S. - $150
  - China and the Netherlands - $50

4. Central Banks

- Regulates the money supply and credit, issues currency, manages the rate of exchange and controls the financial reserves held by private banks.
- It implements monetary policy by increasing or decreasing the money supply through:
  1. Buying and selling money in the banking system;
  2. Setting interest rates to commercial banks; or
  3. Buying and selling government securities.

Intervention by the Central Banks

- **Example-** the Federal Reserve Bank of the United States (the Fed) formulates and conducts U.S. monetary policy by influencing the money supply and credit conditions in the U.S. economy. The Fed's main goal is to keep inflation low.
- **Monetary intervention** (conducted by the Central Bank) - involves buying and selling government securities to maintain a certain currency exchange rate.
- If the Fed wanted to support the value of the U.S. dollar, it might buy dollars in the foreign exchange market.

5. The Bank for International Settlements

1930- Established- is an international organization based in Basel, Switzerland.

- Banking services- central banks and assists with monetary policy development.
- Ensures that central banks maintain reserve assets and capital/asset ratios above prescribed international minimums- to avoid over-indebtedness.

6. The International Monetary Fund (IMF)

- Headquartered in Washington, D.C., IMF determines the code of behavior for the international monetary system.
- It promotes international monetary cooperation, exchange rate stability, and encourages countries to adopt sound economic policies- critical functions.
- Governed by 184 countries, the IMF stands ready to provide financial assistance in the form of loans and grants to support policy programs intended to correct **macroeconomic** problems.

The IMF in Action

- **Example- 1997-1998** Asian financial crisis, the IMF pledged $21 billion to assist South Korea to reform its economy, restructure its financial and corporate sectors, and recover from recession.
- **Special Drawing Right** (SDR) - a special type of international reserve used by central banks to supplement their existing reserves in transactions with the IMF.
- **Example-** a central bank might use SDRs to purchase foreign currencies to manage the value of its currency on world markets.
- SDR- based on a basket of currencies -the euro, the Japanese yen, the U.K. pound, and the U.S. dollar- very stable.

The IMF's Role in Handling Monetary Crises

Currency crisis:

- Results when the value of a nation's currency depreciates sharply or when its central bank must expend substantial reserves to defend the value of its currency, thereby pushing up interest rates.
- More common in smaller countries- may be due to loss of confidence in the national economy or speculative buying/selling of the currency.

The IMF's Role in Handling Monetary Crises

Banking crisis:

- Results when domestic and foreign investors lose confidence in a nation's banking system, leading to widespread withdrawals of funds.
- **Example**- **1930s** U.S. - the Great Depression, millions of people panicked about their savings and rushed to withdraw funds.
- Banking crises usually occur in developing economies with inadequate regulatory/institutional frameworks- and can lead to exchange rate fluctuations, inflation, abrupt withdrawal of FDI funds, and economic instability.

The IMF's Role in Handling Monetary Crises

Foreign debt crisis

When national governments borrow excessive amounts of money from banks or sell government bonds.

Examples:

- China's total foreign debt now exceeds $200 billion. However, the debt is manageable because China has a huge reserve of foreign exchange.
- Argentina's foreign debt has reached 150% of the country's GDP. In the effort to pay off the debt, financial and other resources are used that might be otherwise used for investing in more important national priorities.
- Governments draw huge sums out of the national money supply, which reduces the availability of these funds to consumers and firms.

Technical Assistance and Training by the IMF

- The IMF offers technical assistance and training - by setting fiscal policy, monetary and exchange rate policies, and supervising and regulating banking and financial systems.
- The IMF also provides loans to help distressed countries in recovery-and is frequently criticized because its prescriptions often require painful reforms.
- **Examples**- the IMF may recommend that state economic enterprises be downsized or the government should give up subsidies or price supports.
- The IMF argues that any country in an economic crisis usually must undergo substantial restructuring, e.g. deregulation of national industries or privatization.

The World Bank

- Originally known as the *International Bank for Reconstruction and Development*, the initial purpose of the World Bank was to provide funding for the reconstruction of Japan and Europe following World War II.
- **World Bank-** aims to reduce world poverty- is active in a range of development projects- water, electricity, and transportation infrastructure.
- World Bank is a specialized agency of the United Nations and has more than 100 offices worldwide.
- 184 member countries are jointly responsible for World Bank financing.

Agencies of the World Bank

- The *International Development Association* loans billions of dollars each year to the world's poorest countries.
- The *International Finance Corporation* works with the private sector to promote economic development.
- The *Multilateral Investment Guarantee Agency* encourages FDI to developing countries by providing guarantees against noncommercial losses.
- The IMF and the World Bank often work together.
- **IMF** focuses on countries' economic performance and makes **short-term** loans to help stabilize **foreign exchange**.
- **World Bank** emphasizes longer-term development and the reduction of poverty and makes **long-term** loans to promote **economic development**.